Developing in the Forest of Marston Vale: Design Guidance Supplementary Planning Document

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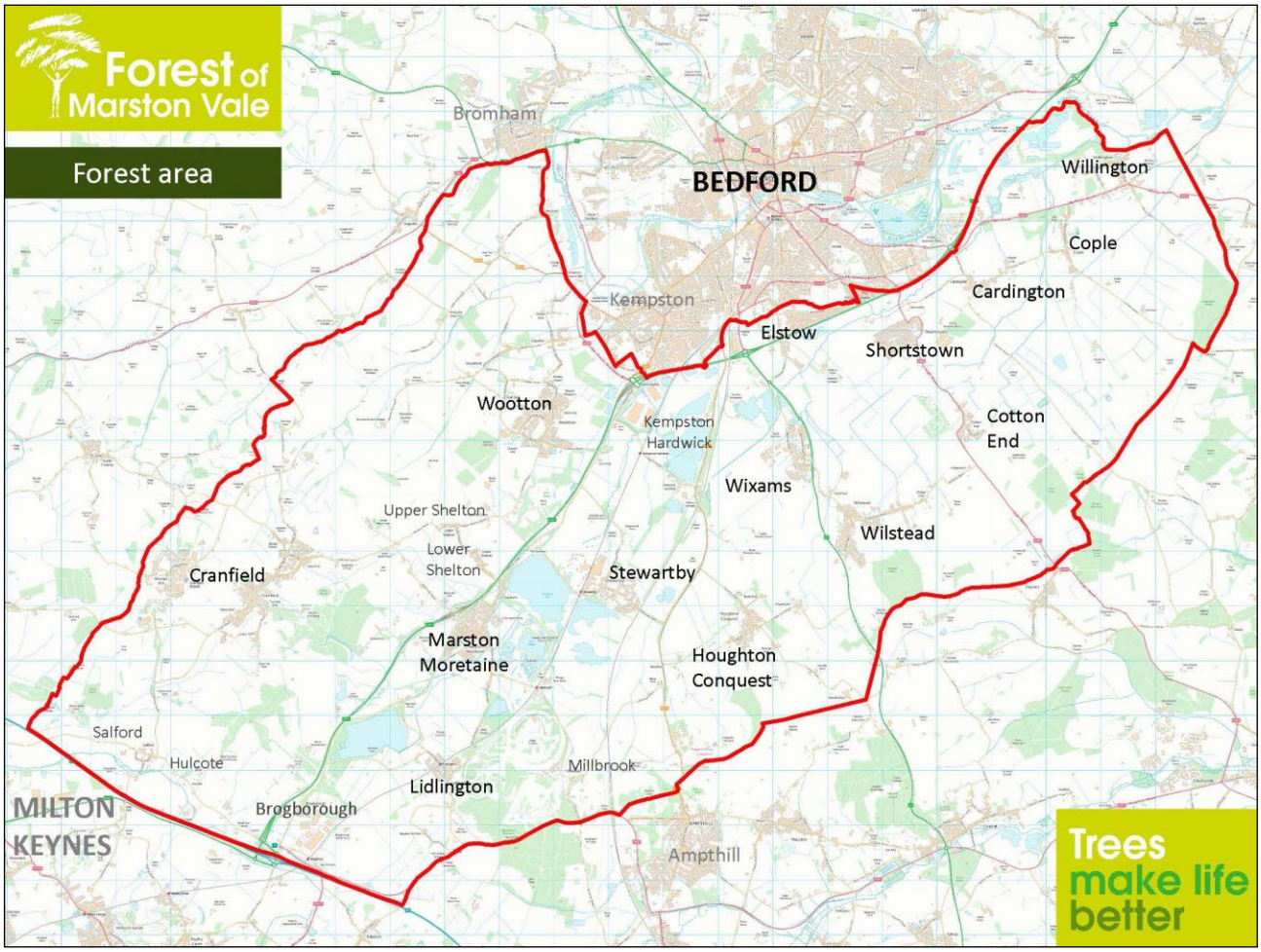
Prepared by Central Bedfordshire Council, Bedford Borough Council and the Forest of Marston Vale Trust

Contents

1. Purpose of the Guidance

This Development Design Guidance sets out how the planning polices for the Forest of Marston Vale will be implemented, as set out in the Central Bedfordshire Council and Bedford Borough Council Local Plans. It has been produced jointly by the Forest of Marston Vale Trust, Central Bedfordshire Council and Bedford Borough Council and adopted as a Supplementary Planning Document (SPD). The Guidance relates to the Forest of Marston Vale (as designated by Government as one of England's Community Forests) which covers 61 square miles between Bedford and Milton Keynes (see Figure 1 below).

Figure 1: Map showing the extent of the Forest of Marston Vale area



This document provides design guidance on the scale and type of green infrastructure, and built design principles, that are required in the Forest of Marston Vale area. Its purpose is to demonstrate how development can contribute positively to the creation of the Forest – both in creating attractive wooded settings and in its built form, to strongly tie new development with the Forest ethos, and its developing 'sense of place' across the designated Forest area (Forest of Marston Vale - Trees Make Life Better). The document is a Supplementary Planning Document (SPD) and will be a material consideration in the determination of development proposals in the Forest of Marston Vale area.

Reference should still be made to other design guidance for Central Bedfordshire and Bedford Borough, which sets out general principles for the design of new developments, as well as the National Design Guide and National Model Design Code.

2. Background

In 1991, the Government designated 61 square miles between Bedford and Milton Keynes as the Forest of Marston Vale, one of England's Community Forests and part of a bold and pioneering vision to use trees and woodlands to transform the prospects of damaged landscapes around major towns and cities. Together, England's Community Forests form the country's largest environmental regeneration initiative.

The vision for the Forest of Marston Vale is to deliver environmental regeneration through increasing tree cover to 30%, transforming perceptions of the once-degraded area to stimulate social and economic regeneration, whilst providing major landscape, recreation, biodiversity, and quality of life benefits. To drive that vision forward, the Forest of Marston Vale Trust was created by the founding partnership of the Local Authorities, Government agencies and local industry.

The core target for creating the Forest is increasing tree cover to 30% – around a ten-fold increase from the starting position in the early 1990's – as a means to transform the social, economic and environmental prospects of the area. By 2015, the Forest of Marston Vale Trust, working with local communities, landowners, businesses and partners, had already increased tree cover to over 15%.

Development and the planning system has a key role to play in creating the Forest of Marston Vale, as set out in the Forest Plan. The Forest area has long been identified as a key, strategic location for growth. The proposals for the Oxford-Cambridge Arc reiterate the area's potential as a strategic development corridor and are the latest example of the development pressure that has existed throughout the Forest's existence. The agreed, long-term vision for creating the Forest provides a strategic framework for influencing whatever change may come. Creating the Forest is about placemaking; it's about creating a new 'sense of place' and an opportunity to demonstrate how environmental regeneration can redefine an area and transform its prospects.

Across the Forest area significant amounts of new housing and employment development are proposed over the coming decades. Central Bedfordshire Council and Bedford Borough Council strongly support the development of the Forest and their Local Plans recognise the importance of integrating this new development into an enhanced, high quality landscape. Successfully achieved, this can bring substantial benefits to the area in the form of new jobs, a more diverse economy and substantial new wooded greenspace to benefit local people.

Developers who contribute to the Forest have much to gain. They will enhance the value of their development – in terms of quality, aesthetic, sustainability and climate resilience – as well as playing an important role in adding to the Forest's creation. In turn, this will change the look and feel of the area by delivering on the headline tree canopy cover target and help to create and a more attractive environment for future investment.

All new development has the potential to help create the Forest of Marston Vale, by reflecting the Forest context in accompanying woodland planning and landscaping proposals. Through the design of woodland and greenspace schemes developers will also meet broader planning policy requirements and deliver many other objectives of the Forest including: landscape enhancement, biodiversity enhancement and Net Gain; provision of new recreation facilities; health and wellbeing benefits for local people, through access to local greenspace; climate change adaptation; pollution control; and supporting flood mitigation.

Equally, integrating Forest-related features into the design of new developments (see section 4.2) will help to create a new identity that reflects the Forest of Marston Vale as a changing place. This will contribute strongly to sustainable built development that reflects the increasingly wooded local character being established through the creation of the Forest.

This Design Guidance is based upon the successful model for delivering Forest-related green infrastructure and design developed in the National Forest, through planning policy over the past 25 years. It provides a 'bridge' to help translate planning policy for the Forest of Marston Vale into achieving new Forest-related schemes on the ground.

Figure 2: Images depicting the Forest of Marston Vale

3. Policy context

The policy context for this Guidance is set out in national government policy and local policy:

National Policy:

- The National Planning Policy Framework (July 2021) - HM Govt: National Planning Policy Framework - GOV.UK (www.gov.uk);
- The National Design Guide (January 2021) – HM Govt: National design guide - GOV.UK (www.gov.uk)
- Our Green Future: Our 25 Year Plan to Improve the Environment – HM Govt: 25 Year Environment Plan - GOV.UK (www.gov.uk);

Local Policy and Guidance:

- Bedford Borough Council Local Plan 2030 - Local Plan 2030 · Bedford Borough Council;
- Central Bedfordshire Council Local Plan 2035 - Local Plan | Central Bedfordshire Council ;
- Minerals and Waste Local Plan 2005 - Microsoft Word - Minerals and Waste Local Plan 2005 with strikethroughs (centralbedfordshire.gov.uk)
- Forest of Marston Vale Forest Plan 2000 - Development | The Forest of Marston Vale Trust .
- Bedford Borough Council – Sustainable Development and Environmental Efficiency Strategy (SDEES)
- Central Bedfordshire Sustainability Plan (2020) - Central Bedfordshire Sustainability Plan (2020-2030)
- Central Bedfordshire Design Guide - Design Guide and Urban design | Central Bedfordshire Council

3.1 National Planning Policy Framework

The National Planning Policy Framework recognises the importance of trees in new developments. Paragraph 131 states that:

Trees make an important contribution to the character and quality of urban environments, and can also help mitigate and adapt to climate change. Planning policies and decisions should ensure that new streets are tree-lined, that opportunities are taken to incorporate trees elsewhere in developments (such as parks and community orchards), that appropriate measures are in place to secure the long-term maintenance of newly-planted trees, and that existing trees are retained wherever possible. Applicants and local planning authorities should work with highways officers and tree officers to ensure that the right trees are planted in the right places, and solutions are found that are compatible with highways standards and the needs of different users.

The Forest of Marston Vale is one of England's nationally designated Community Forests and has Government policy support in the National Planning Policy Framework. Paragraph 146 states that:

"The National Forest and Community Forests offer valuable opportunities for improving the environment around towns and cities, by upgrading the landscape and providing for recreation and wildlife. The National Forest Strategy and an approved Community Forest Plan may be a material consideration in preparing development plans and in deciding planning applications."

3.2 National Design Guide

The National Design Guide emphasises the important contribution that nature makes to the quality of a place and to quality of life. Paragraph 90 states that:

Nature contributes to the quality of a place, and to people's quality of life, and it is a critical component of well-designed places. Natural features are integrated into well-designed development. They include natural and designed landscapes, high quality public open spaces, street trees, and other trees, grass, planting and water.

The National Design Guide also confirms the important role that trees play in the design of new places including:

- Providing screening and privacy;
- Mitigating against the urban heat effect and providing shading to buildings, public spaces and gardens;
- Helping to create different character streets and spaces;
- Softening the visual impact of car parking;
- Improving air quality; and
- Contributing towards Biodiversity (and Biodiversity Net Gain).

3.3 25 Year Plan to Improve the Environment

Complementing the NPPF, the Government's 25 year Environment Plan also explicitly "supports Community Forests so that they can play a leading role in urban tree planting, to bring trees and green infrastructure to towns and cities across England" (page 48).

The benefits of green infrastructure in urban areas are specifically promoted (page 79) and the Plan includes the objective of "embedding an environmental 'net gain' principle for development, including housing and infrastructure" (page 32). The intent of this is to "put the environment at the heart of planning and development, to create better places to live and work" (page 32). This supports the Plan's objective of wanting "high environmental standards for all new builds" (page 35). Mirroring the spirt of this Design Guidance, the Plan also "wants to establish strategic, flexible and locally tailored approaches that recognise the relationship between the quality of the environment and development" (page 33).

The types of woodland and other green infrastructure advocated by the Forest of Marston Vale Trust, Bedford Borough Council and Central Bedfordshire Council (see section 4), are also

supported through the Plan's objectives to "increase woodland cover in England in line with our aspiration of 12% cover by 2060" (page 26) and "to maximise its many benefits" (page 47); and that "current planning policy in the planning system should provide biodiversity net gains where possible" (page 33).

3.4 Adopted Local Plans

Both Central Bedfordshire Council and Bedford Borough Council are long standing partners in the creation of the Forest of Marston Vale. Their administrative areas span, almost equally, the Forest area. Both authorities have included policies in their Local Plans supporting the Forest's creation for over 20 years. Proposals for development will be considered against all relevant policies within the Local Plan. Below are their key planning polices relating to the Forest and this Design Guidance, as set out in their Local Plans to 2030/35.

Bedford Borough Local Plan 2030:

Within the adopted Local Plan, Policy 36S: Forest of Marston Vale, states:

"Bedford Borough Council will continue to support the creation of the Forest of Marston Vale to deliver the environmentally led regeneration of the area. Development proposals within the Forest of Marston Vale area will be required to:

- *Demonstrate how they will deliver 30% tree cover across their development site. This can be achieved through a combination of new planting of trees, woodlands and hedgerows within development sites and;*
- *Contribute to the environmentally led regeneration of the Forest of Marston Vale, in line with the aims of the Forest Plan and;*
- *Demonstrate how their proposals reflect relevant design guidance (supplementary planning document) for development within the Forest of Marston Vale".*

Central Bedfordshire Local Plan 2035:

Within the adopted Local Plan, Policy EE9: Forest of Marston Vale, states:

"Central Bedfordshire Council will continue to support the creation of the Forest of Marston Vale to deliver the environmentally led regeneration of the area. Development proposals within the Forest of Marston Vale will be required to:

1. *Demonstrate how they will deliver 30% tree canopy cover, within the public realm, across their development site. This can be achieved through a combination of retaining and protecting existing trees, woodlands and hedgerows, and the on-site planting of new trees, woodlands and hedgerows; and*
2. *Contribute to the environmentally led regeneration of the Forest of Marston Vale, in line with the aims of the Forest Plan.*

Only where robust evidence agreed by the Council can demonstrate that 30% tree canopy cover cannot be delivered within the public realm on site, will alternative delivery mechanisms be considered."

Minerals and Waste Local Plan 2005:

Policy GE2 of the adopted Minerals and Waste Local Plan states:

All mineral and waste proposals in the Marston Vale should contribute to the improvement of the environment of the Vale. Proposals must demonstrate how they will assist in achieving the aims and objectives of the Forest Plan. In particular:

a) The County Council will ensure that the restoration of clay workings in the brickfields takes place in a reasonable timescale. In respect of already worked out areas the County Council will therefore support proposals that are in general accordance with MWLP policies, will hasten restoration and which will produce significant environmental improvements.

b) Proposals for new, extended or replacement brick manufacturing works will be expected to have an improved appearance, a reduced environmental impact, and in particular a marked reduction in the level of polluting emissions in comparison with the existing works.

3.5 Forest of Marston Vale Forest Plan

The Forest of Marston Vale Trust spearheads the creation of the Forest of Marston Vale. It was specifically established by the founding partnership of Government agencies and Local Authorities as the independent, charitable vehicle for driving forward the creation of the Forest. It works with national and local government, partners and local communities to implement the politically and publicly endorsed Forest Plan. The Plan provides the strategic framework and long-term vision for creating the Forest. The core target is to increase tree cover across the area from 3% to 30%. Since the early 1990s this has increased impressively to over 15%, as determined by an independent study, summarised in the 'Creating the green heart of Bedfordshire' document, which reviewed the progress in creating the Forest of Marston Vale to date[1].

The Forest is about much more than trees. It is about transforming the former despoiled landscape of clay workings, brick manufacturing and landfill, helping to boost the local economy and create a new 'sense of place' for future growth and local communities to enjoy. Independent research has evaluated the socio-economic and environmental benefits of the Forest's creation between 1995-2015 and demonstrates that annual benefits worth £12.83m are already being derived from the achievements to date[1] (see 'Creating the green heart of Bedfordshire' summary document).

[1] The quantification and valuation of the environmental, social and economic impacts of the Forest of Marston Vale (2017); Natural Capital Solutions

Figure 3: Tree growth within the Forest over 20 years

The Forest Plan highlights the following development-related policies:

"Land use decisions will clearly be important for the future of the Forest and such decisions will be taken by the planning authorities, in the context of the planning framework set out in the statutory development plans. No proposals in the Forest Plan can override the policies contained in these statutory plans. However, the Forest Plan should be:

- A material consideration used to inform the preparation of statutory development plans;
- A material consideration in determining planning applications for development within the Forest boundary; ..."

And further states that:

"The Forest Team will seek to secure meaningful on and off-site landscape gains from development schemes in the Community Forest. These should be appropriate to the scale and location of the development. This will be done by establishing good working relationships with planning officers and, where appropriate, developers and ensuring that Community Forest aims and objectives are fully understood."

The Forest Plan also clearly notes that:

"Development pressures will continue to cause controversy and impact upon communities within the Vale. An aim of the Forest Team will be to encourage landowners, developers and planning authorities to deliver Community Forest objectives and incorporate the principles of sustainability when considering further development."

Supporting these objectives, the Forest of Marston Vale Trust has a long-standing policy regarding development in the Forest area:

"While the Trust will support development that directly meets the objectives of the Forest, it is neutral on individual planning applications that do not directly conflict with the Forest's aims. Where development is planned, the Trust will work with developers and planners to secure a contribution to the Forest that is consistent with the Forest Plan and with the impact of the proposed development on the Vale".

3.6 Other relevant local guidance

In September 2020, Central Bedfordshire Council adopted a Sustainability Plan which sets out how the Council will become carbon neutral by 2030. The Sustainability Plan recognises the importance of planning policy in promoting sustainability and ensuring resilient, sustainable communities are established across the area. It also confirms that design guidance is an important tool in ensuring sustainability is fully embedded within new development. Trees make an important contribution to the character and quality of places and can also help mitigate and adapt to climate change.

Bedford Borough Council declared a climate emergency in March 2019 and pledged to make its own operations carbon neutral by 2030. It has developed a Carbon Reduction Delivery Strategy setting out how it will achieve this aim. As part of this strategy the Council has pledged to incorporate the carbon neutral ambition into all Council strategies, including the Local Plan 2040.

4. Design Guidance for development within the Forest of Marston Vale

Planning and development activities have important roles to play in the creation of the Forest of Marston Vale. As required by national and local planning policies (as summarised in section 3), all development proposals need to demonstrate how they will positively contribute to the creation of the Forest. In particular, applicants will be required to explain how they will deliver against the core 30% tree cover target which is central to creating the Forest. There are also several other ways in which a development proposal should also contribute to the creation of the Forest, including through the approach to design.

Drawing upon experience and precedent established over 20 years of working with planning and development activities within the Forest area, more detailed design guidance is provided in the following sections, which consider guidance on the delivery of the tree cover requirement and built design elements in turn.

4.1 Tree planting and Green Infrastructure requirements

This section presents the tree planting thresholds and quantities required in the Forest of Marston Vale, plus guidance on the options for the types of planting and Forest-related green infrastructure that are acceptable. This sets out how the 30% tree cover requirements in the Bedford Borough and Central Bedfordshire Local Plans should be achieved in the Forest area.

The inclusion of trees and woodland planting should be the default position when delivering green infrastructure as part of all development proposals and masterplans. At an early stage in the planning applications process, applicants should undertake an initial assessment of a site's landscape character, including existing trees, woodlands, hedgerows and other wildlife habitats, historic heritage assets and Public Rights of Way. This should be used as a basis for developing a network of Forest-related green infrastructure through the site. The network should be a combination of existing environmental assets, new tree, woodland and hedgerow planting and other habitat creation, that connects to adjoining ecological networks and footpaths, bridleway and cycleway routes.

Whilst the local policy requirement for tree cover for new development within the Forest of Marston Vale area is 30%, there are some parts of the 61 square mile Forest area that will not be suitable for planting, i.e. existing buildings, lakes, roads, railways and other infrastructure. An original land use study, produced in support of the Forest Plan, revealed that only 77% of the Forest area was available to accommodate the required level of tree planting. As such, in order to achieve the overall target of 30% tree cover across the whole Forest area, levels over and above the 30% requirement for new development will be encouraged and supported.

Whilst the Local Plan policy target is 30%, evidence shows that around 39% tree cover for new residential, commercial and leisure development would offer significant benefits in meeting the overarching 30% target for the whole area. As such, where opportunities exist higher levels of provision will be supported. For transport and minerals and waste schemes, even greater opportunities are available to deliver tree cover due to their strategic nature, and, as such, around 50% cover will be encouraged. The level of additional tree cover that could be achieved will depend on the nature of the scheme and in some circumstances this could be exceeded, particularly in relation to minerals and waste schemes for example.

The following thresholds, quantities and criteria will be applied to new developments:

Table 1: Tree planting requirements for new developments

Development type	Development threshold	Tree cover requirement	Basis of calculation	Maintenance period
Housing development	All schemes	Minimum of 30%; Up to 39% encouraged	Gross development area	5 years
Industrial, commercial and leisure developments	All schemes	Minimum of 30%; Up to 39% encouraged	Gross development area	5 years
Transport schemes	All schemes	Minimum of 30%; Around 50% encouraged	Gross scheme footprint	5 years
Minerals and Waste schemes	All schemes	Minimum of 30%; Around 50% encouraged	Gross site area	5 years

Note to table: The tree cover being achieved by any development proposal will be measured as a percentage of the gross development area, gross scheme footprint or gross site area (depending on the type of development). This typically means the tree cover being achieved within the 'red line' boundary of the development proposal.

The following key principles apply to all development types:

- On-site tree planting is the default requirement and expectation.
- All landscaping, including the provision of the minimum 30% tree cover, should be achieved on-site within the gross development area.
- The local planning authority will expect developers to have considered and provided for the requirement for 30% on-site tree cover in their land budgeting and initial development design processes.
- Developers will need to satisfy the local planning authority in any cases where meeting the on-site requirement is not possible, before considering the alternative approaches. In

circumstances where the 30% tree cover requirement cannot all be accommodated on-site, off-site tree planting will need to be undertaken: either on land to be provided by the developer in the Forest area; or on land controlled by the Forest of Marston Vale Trust or the Councils, subject to the developer securing their agreement.

- In exceptional circumstances, where there is a shortfall of on or off-site tree planting proposed by the developer, a contribution will be sought through a Section 106 Agreement, for tree planting and/or other Forest-related green infrastructure provision elsewhere in the Forest area (and preferably the relevant administrative area), subject to this alternative provision being delivered or approved by the Forest of Marston Vale Trust.

- All planting must be maintained by the developer for 5 years as part of an aftercare agreement with the local authority.

4.1.1 How to meet the 30% tree cover requirement – design options

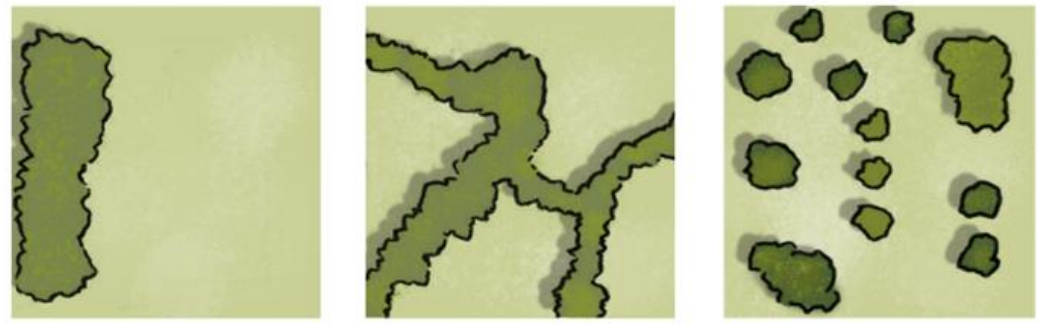
To create 30% tree cover and attractive wooded settings for new developments, the main emphasis will be on woodland-style planting, of at least 50% of the total landscaped area. However, open space and other landscaping with trees can also be included. On smaller developments, where planting large areas of woodland is limited, individual or small groups of trees can be accommodated in a range of ways.

The range of tree planting options that are acceptable are set out below, together with options to create other green infrastructure elements. When designed together, these will capture the 'spirit of place' that the Forest of Marston Vale Trust and local authorities aspire to for future developments in the Forest area. They highlight the wide range of opportunities for developers to provide varied environmental benefits and thereby play a part in enriching the Marston Vale environment. In practice there are likely to be opportunities to combine several options within one scheme. This will depend upon the character of the site and its surroundings and the overall aims of the scheme, which should be identified through the master planning process. Existing designations or features within a site or its surroundings may influence the type of tree planting that will be acceptable. For example, careful consideration will be needed to ensure tree planting proposals conserve and enhance heritage assets and their settings. For each option, it is important that the species of trees selected are appropriate for the spaces being created.

Woodland planting

Developments should seek to create blocks of woodland planting with a minimum size of 0.5 ha. Woodland planting can take different forms (figure 4) and should provide at least 50% of the total landscaped area of a specific development, where possible.

Figure 4: Woodland planting options



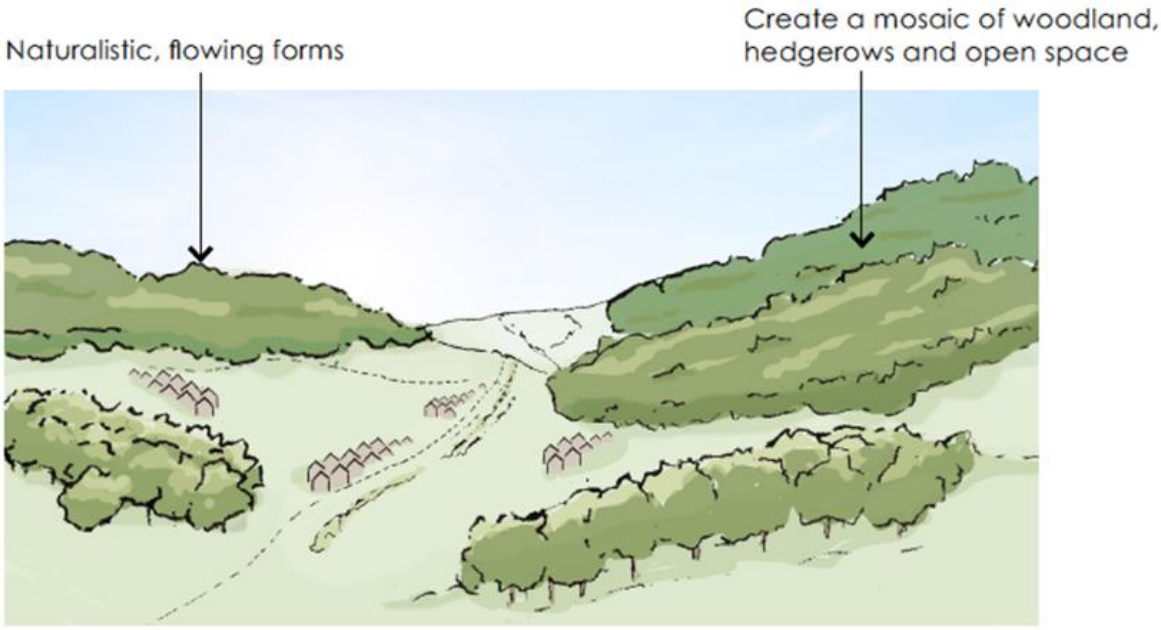
Concentrated Areas of Woodland

Connected Corridors of Woodland

Dispersed Woodland

Whilst the creation of the Forest of Marston Vale is rooted in transforming the landscape through increasing tree cover to 30%, consideration needs to be given to landscape character and the relationship with existing features of special value. Any blocks of woodland planting should therefore be sympathetic to its surrounding location, topography and neighbouring land uses.

Figure 5: Woodland planting within the wider landscape



Woodland Planting to respond to the topography, enhance and create landscape character.

Table 2: Woodland technical planting requirements

Scale/form	Size of trees	Species palette	Spacing and composition	Open space and layout	Typical planting stock and protection
≥0.5ha blocks	Small, medium, large	Native	• ≥ 1600 stems/ hectare; • Up to 25% woody shrubs	Up to 20% perimeter buffer habitat	• Seedlings/forest transplants/whips/cell grown; • Protection as appropriate

Shelterbelts

Shelterbelts should be used at the edge of developments or open spaces to provide shelter to housing and open spaces from prevailing winds. They should fit within, and be sympathetic to, the wider landscape to avoid being visually intrusive, by having a curved, natural edge for example.

Shelterbelts should be designed into developments at the outset to ensure sufficient space is identified to accommodate them, and their form and character should reflect the location within a development.

Shelterbelts can also frame and enclose developments and their linear nature, with low level vegetation, enables them to act as valuable wildlife corridors.

Figure 6: The use of shelterbelts within new developments

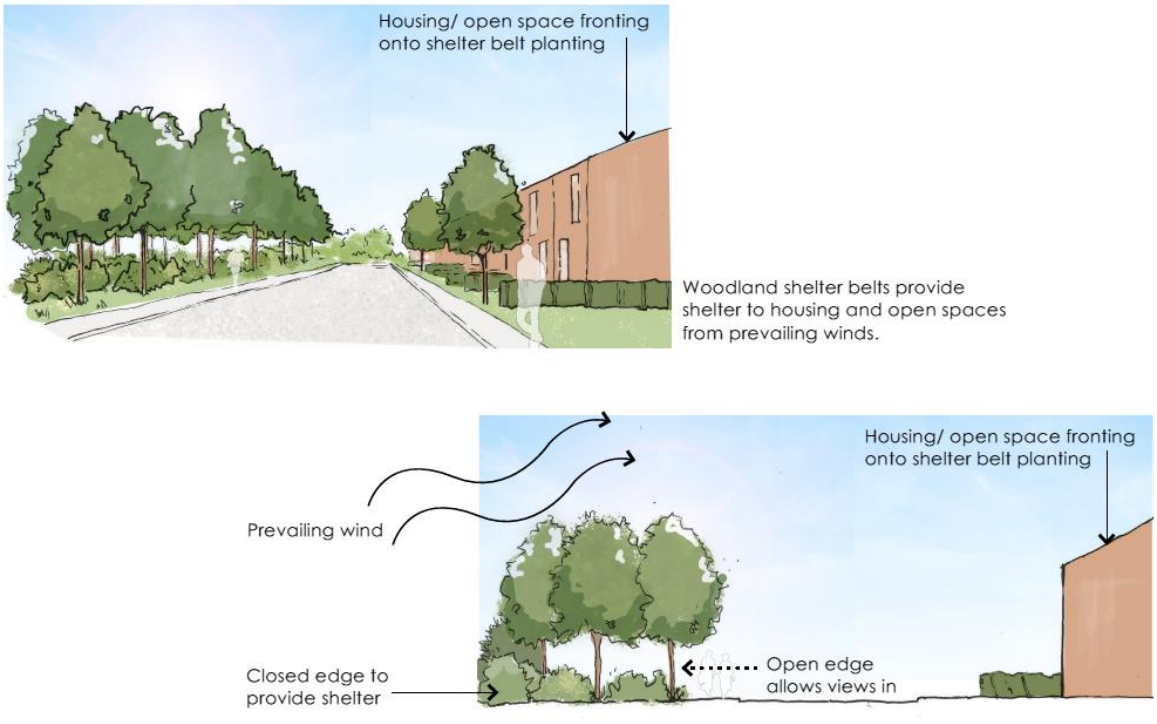


Figure 7: Shelterbelt distances

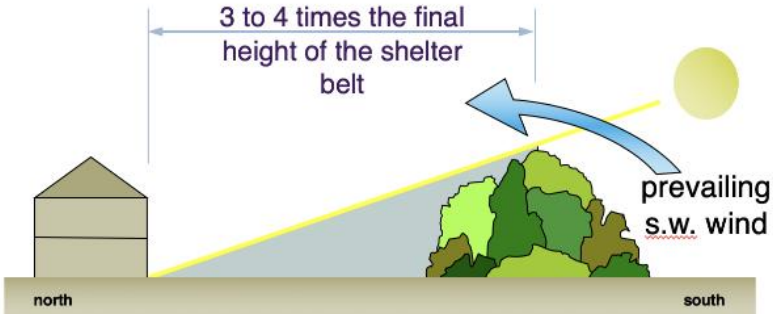


Table 3: Shelterbelt technical planting requirements

Scale/form	Size of trees	Species palette	Spacing and composition	Open space and layout	Typical planting stock and protection
Minimum width 20m	Small, medium, large	Native	• ≥ 1600 stems/ hectare; • Up to 25% woody shrubs	Up to 20% perimeter buffer habitat	• Seedlings/forest transplants/whips/cell grown; • Protection as appropriate

Spinneys and Copses

Spinneys and copses can be used to create connected pockets of wooded greenspace within developments. They have a more informal, natural character and can provide a transition between urban and rural spaces. They should also include scrub which provides valuable habitat and cover for wildlife.

Figure 8: The use of spinneys and copses within new developments

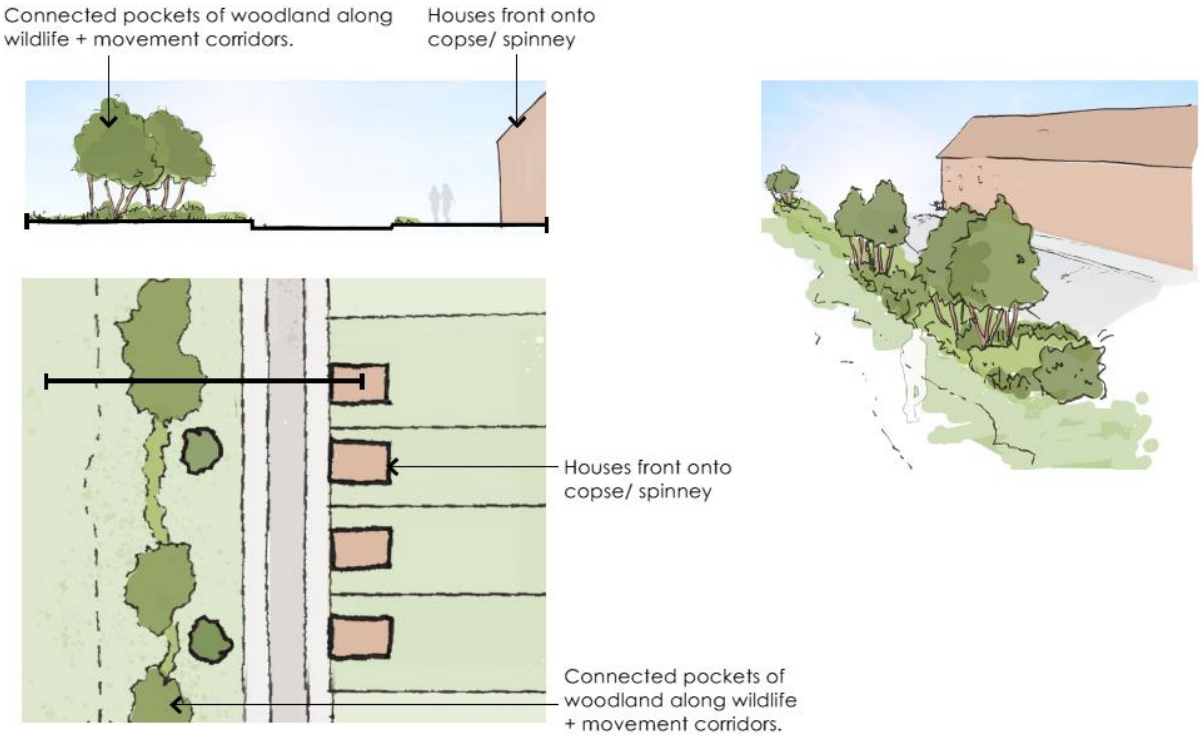


Table 4: Spinneys and copses technical planting requirements

Scale/form	Size of trees	Species palette	Spacing and composition	Open space and layout	Typical planting stock and protection
0.1-0.5 hectare blocks	Small, medium, large	Native	• ≥ 1600 stems/ hectare; • Up to 25% woody shrubs	Up to 20% perimeter buffer habitat	• Seedlings/forest transplants/whips/cell grown; • Protection as appropriate

Parkland

Parkland can be used within a development to provide a central space or feature, or at the edge of a development to provide a transition to the countryside.

Parklands are characterised by groups of trees or feature trees, connected along wildlife and movement corridors and set within grassland. They provide a transition between built development and areas of more substantial natural woodland.

Development should front onto parkland to enable views and enhance natural surveillance.

Parklands can also be used as part of the wider sustainable drainage system, and opportunities should be sought to deliver wet woodland due to its high level of biodiversity value.

Figure 9: Integrating parkland landscapes within new development

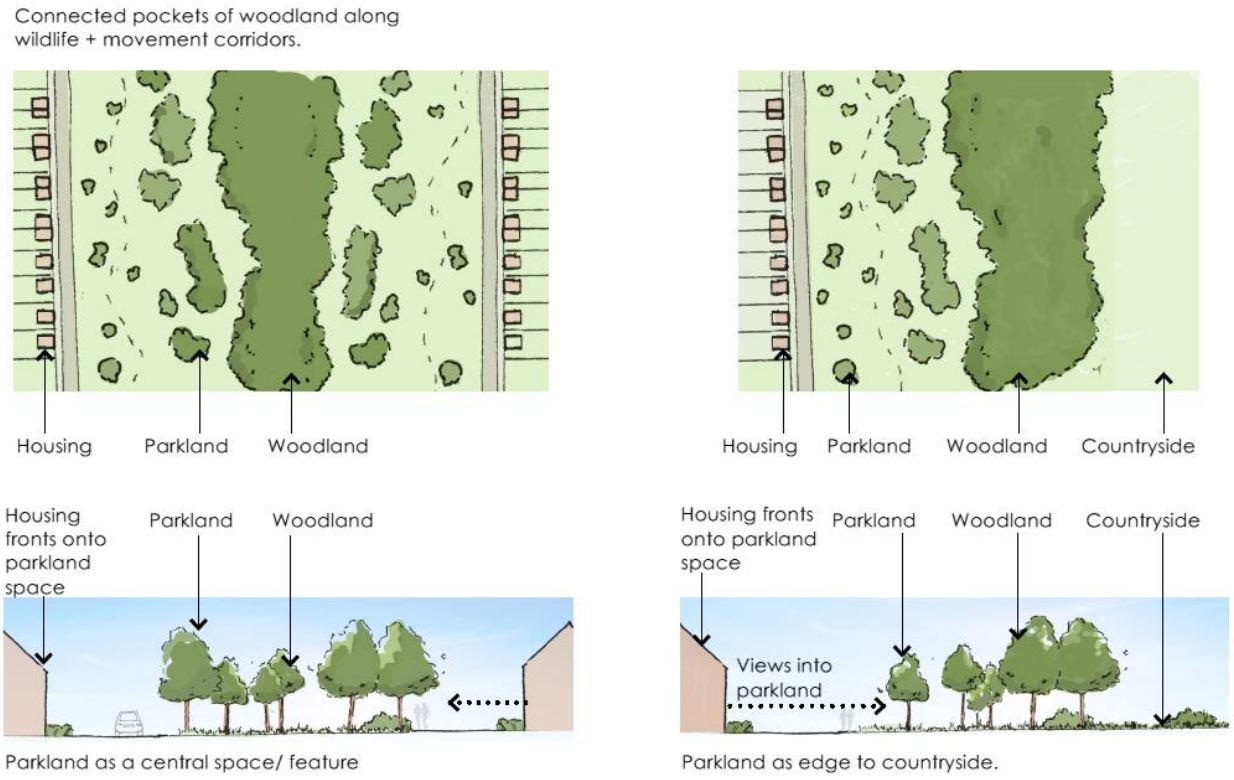


Table 5: Parkland technical planting requirements

Scale/form	Size of trees	Species palette	Spacing and composition	Open space and layout	Typical planting stock and protection
Individual or clusters of trees	Large	Native, Naturalised	• 10-25 trees/ hectare	Widely spaced, planted to achieve 10-20% canopy cover at maturity	• Whips/ Feathered/Half-standards; • Individual tree protection as appropriate

Orchards

Orchards should be comprised of local varieties of fruit trees and/or nutteries and can be accommodated within a variety of different public open spaces. They can be included as landscape features within areas of more formal open space, and located next to amenity spaces and allotments to provide a natural transition. They can also be included in more informal locations, providing an edge to woodland, spinneys and copses.

Figure 10: Community orchards within the public realm

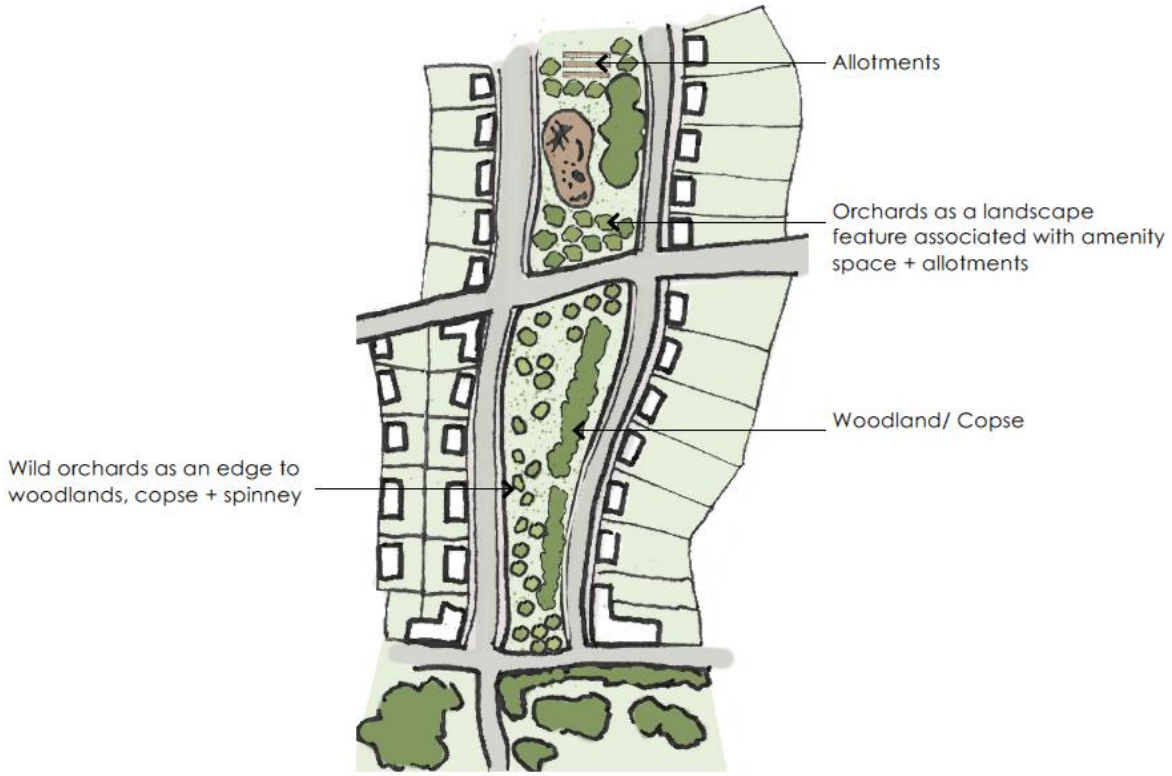


Table 6: Orchards technical planting requirements

Scale/form	Size of trees	Species palette	Spacing and composition	Open space and layout	Typical planting stock and protection
0.1-0.5 hectare blocks	Small	Native, Locally characteristic	• 100-400 trees/ hectare; • Mix of native fruit trees	Grouped, rows, or grid layout	• Whips/ Feathered/Half-standards; • Individual tree protection as appropriate

Street trees

New developments will be required to create tree-lined avenues, in accordance with paragraph 131 of the National Planning Policy Framework. Consideration needs to be given to the character and function of the street when selecting tree species, particularly in terms of the type and canopy spread. Opportunities should also be sought to integrate canopy forming trees within grass/soft landscape verges and bio-retention areas as part of the sustainable drainage system. Signature trees should be used in appropriate locations to create landmarks and focal points.

Figure 11: Street trees in new developments

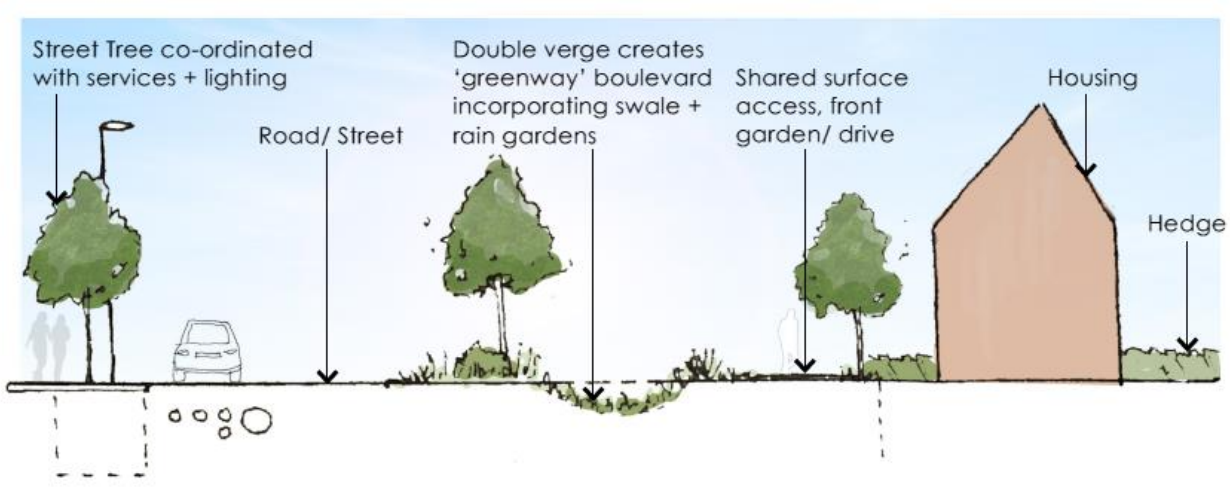


Table 7: Street tree technical planting requirements

Scale/form	Size of trees	Species palette	Spacing and composition	Open space and layout	Typical planting stock and protection
Individual or small groups of trees	Small, medium	Native, Naturalised, Non-native	• 10-25 trees/ hectare;	Widely spaced, planted to achieve 10-20% canopy cover at maturity	• Whips/ Feathered/Half-standards; • Individual tree protection as appropriate

Open space

Developments may provide a variety of formal and informal open spaces such as pocket parks, village greens and linear greenways. Open spaces should be connected to provide green corridors that maximise movement and support biodiversity. Trees should be used to punctuate and frame open spaces.

Figure 12: The use of trees within public open spaces

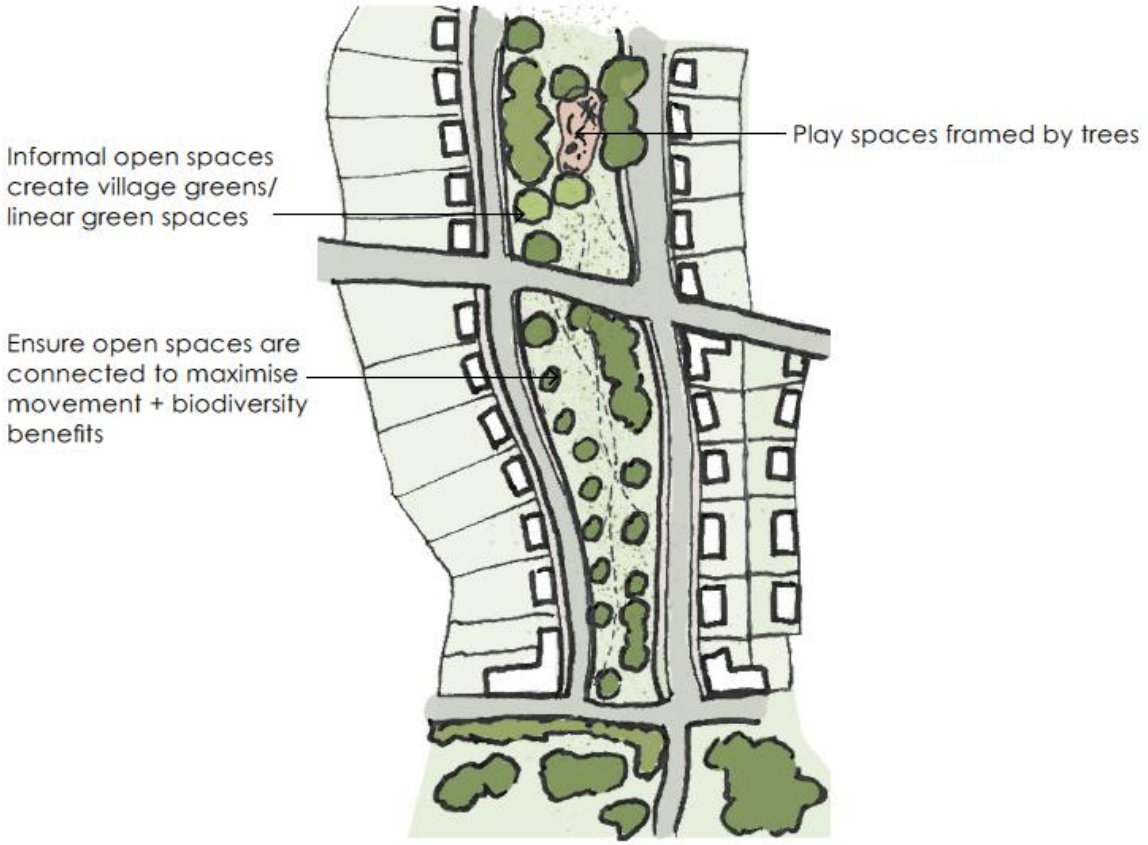


Table 8: Open space technical planting requirements

Scale/form	Size of trees	Species palette	Spacing and composition	Open space and layout	Typical planting stock and protection
Individual or small groups of trees	Medium, large	Native, Naturalised, Non-native	• 10-25 trees/ hectare;	Widely spaced, planted to achieve 10-20% canopy cover at maturity	• Whips/ Feathered/Half-standards; • Individual tree protection as appropriate

Hedgerows

Opportunities should be sought to retain and enhance existing hedgerows and plant new hedgerows.

Hedgerows are not just a rural feature and can be integrated within urban and formal environments. They can be used to define spaces, provide visual and audible screening and attenuate surface water. Their linear nature also provides connectivity for biodiversity.

Table 9: Hedgerows technical planting requirements

Scale/form	Size of trees	Species palette	Spacing and composition	Open space and layout	Typical planting stock and protection
Not applicable	Small, medium	Native, Locally characteristic	• ≥ 5 plants per linear metre; • Double-staggered row; • Trees included at 15m average spacing;	Minimum 2m herbaceous buffer strip each side along length	• Seedlings/forest transplants/ whips/ feathered; • Protection as appropriate

Garden trees

Trees within private gardens will not contribute towards the 30% tree cover requirement as their retention and maintenance cannot be guaranteed in the longer term. However, trees and shrubs within private gardens will be encouraged as they are beneficial to wildlife and the health and wellbeing of residents.

Consideration should be given to the design and form of garden spaces to facilitate opportunities for tree planting within rear, front and side boundaries. A coordinated approach will need to be taken to ensure any tree planting takes account of the location of services and building foundations.

Planting can take the form of small trees, native fruit and shrubs, and hedgerows will be encouraged as a form of boundary treatment.

Figure 13: Integrating trees and shrubs within private gardens

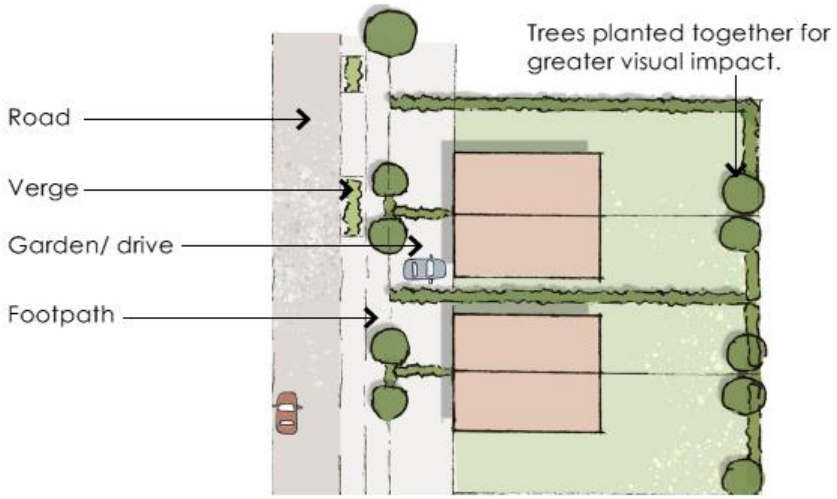


Table 10: Garden trees technical planting requirements

Scale/form	Size of trees	Species palette	Spacing and composition	Open space and layout	Typical planting stock and protection
Individual or small groups of trees	Small	Native, Naturalised, Non-native	• 10-25 trees/ hectare;	Widely spaced, planted to achieve 10-20% canopy cover at maturity	• Whips/ Feathered/ Half-standards; • Individual tree protection as appropriate

4.1.2 How to meet the 30% tree cover requirement – calculating tree cover

Given that there is a wide range of tree planting options which can be deployed within a development to achieve the 30% tree cover requirement, it is important to have clarity on how each type of planting will be measured so as to allow the overall percentage tree cover to be calculated. In addition, there is a need to differentiate between tree planting within the public realm – which can be used to satisfy the minimum 30% tree cover requirement – and options which deliver planting in private spaces – which cannot be used to satisfy the minimum 30% policy requirement but can contribute to the additional 9% tree cover the local authorities will encourage and support, to achieve the Forest of Marston Vale target of 39% tree cover across the area.

The following table provides the details of how options can be used and how the resulting tree cover is quantified.

Table 11: Contributions of design options towards 30% tree cover

Type of planting	Can be used towards 30% requirement	Can be used towards additional cover (over and above 30% target)	Basis of quantifying tree cover achieved
Woodland areas	Yes	Yes	Gross area of tree planting, including up to the 20% buffer of habitat beyond net area of actual tree planting.
Shelterbelts	Yes	Yes	Gross area of tree planting, including up to the 20% buffer of habitat beyond net area of actual tree planting.
Spinneys and copses	Yes	Yes	Gross area of tree planting, including up to the 20% buffer of habitat beyond net area of actual tree planting.
Parkland	Yes	Yes	Tree cover calculated by assuming typical semi-mature canopy diameter of 10m for large 'feature' trees.
Orchards	Yes	Yes	Tree cover calculated by assuming typical semi-mature canopy diameter of 5m for orchard trees.

Type of planting	Can be used towards 30% requirement	Can be used towards additional cover (over and above 30% target)	Basis of quantifying tree cover achieved
Street trees	Yes	Yes	Tree cover calculated by assuming typical semi-mature canopy diameter of 5m for street trees.
Open space	Yes	Yes	Tree cover calculated by assuming typical semi-mature canopy diameter of 10m for large 'feature' trees.
Hedgerows	Yes	Yes	Length of qualifying hedgerow planted to be assumed to be 5m in width once established, then converted to area in hectares.
Garden trees	No	Yes	Tree cover calculated by assuming typical semi-mature canopy diameter of 5m for garden trees.

For the avoidance of doubt, and as noted in section **Error! Reference source not found.**, Table 1, the tree cover being achieved by any development proposal will be measured as a percentage of the gross development area, gross scheme footprint or gross site area (depending on the type of development). In essence, this typically means the tree cover being achieved within the 'red line' boundary of the development proposal.

4.1.3 Forest related green and blue infrastructure

Trees and woodlands should be the default habitat when considering green infrastructure within the Forest of Marston Vale. The ongoing creation of the Forest of Marston Vale, and the delivery of the overall 30% tree cover target, will change the landscape characteristics of the Vale to a mosaic of habitat types, heavily influenced by trees and woodland. Development proposals should reference this emerging 'Forest' character in their selection of forms of green infrastructure, ensuring that it is 'Forest-related' and naturalistic in design. This includes the preferential adoption of nature-based solutions. New developments present the opportunity to deliver green infrastructure that links urban environments to rural environments.

- Wildlife habitats - management of existing wildlife habitats and creation of new habitats should be included in green infrastructure schemes, including wetlands, reedbeds, meadows, hedgerows and woodlands, as appropriate to the site.

- Green Infrastructure and Sustainable Drainage Schemes - these should be ecologically designed - as 'nature-based solutions' - to incorporate wetland habitats (including wet woodland and reedbeds). Appropriate solutions include rain gardens/bio-retention areas,

swales and attenuation features integrated within a natural landscape setting. Opportunities should be sought to integrate and enhance existing water features including ditches and watercourses as part of site wide Green Infrastructure. Natural flood management (NFM) approaches should be favoured and prioritised.

- Public access - well designed and waymarked routes should be included within woodland and green infrastructure schemes, to benefit walkers, cyclists, horse riders and disabled people, as appropriate to the site. The default route type should be bridleway, to maximise the public benefits derived.

- Historic heritage - protection, management and interpretation of heritage features should be incorporated within the open space elements of schemes.

4.1.4 Bedford to Milton Keynes Waterway Park

The Bedford to Milton Keynes Waterway Park is a proposed route that will link the Grand Union Canal in Milton Keynes to the River Great Ouse in Bedford, creating the first major new waterway in a century. It will be 16 miles in length and will establish a blue-green corridor which passes through the heart of the Forest of Marston Vale area, linking communities and creating a unique sense of identity and space.

The waterway channel and land adjacent to it will be set within a parkland green corridor to form the Waterway Park, which should be designed and planted in line with the objectives of the Forest of Marston Vale, contributing to the provision of at least 30% tree cover. The waterway will have an important role in managing water within the area, and the waterway park will also facilitate sustainable movement, recreation and connections between habitats.

This SPD should be used to inform the design of the wider parkland corridor. Specific guidance on the design and technical specifications of the waterway and land directly adjacent to the channel has been produced by the Bedford and Milton Keynes Waterway Trust.

4.2 Built Design Guidance

Complementing the tree planting and Green Infrastructure guidelines, this section sets out built design principles for the Forest of Marston Vale which can also deliver on Forest objectives, and the Council objectives set out in the respective Local Plans and other guidance, such as CBCs Sustainability Plan.

Developers are encouraged to create sustainable, design-led schemes that reflect local character and the influence of the Forest in creating a new 'sense of place' for the area. With growing concern about climate change, building for sustainability is also a necessity; and there are a variety of ways that developers can reduce a scheme's impact upon the environment. The guidance below sets out a suite of desirable Forest-related elements, which reflect the ethos of the Forest of Marston Vale and how new built design can contribute towards developing 'Forest character' across the area. This will help to 'tie' built development to the natural environment and emphasise a development's setting within the Forest.

4.2.1 Creating a 'Forest identity'

- Timber in design – developments should use and showcase timber in building design and for development site furniture. The preferential use of timber for features such as fencing, site

furniture, and signage infrastructure will reflect and reinforce the emerging Forest character and identity. All timber should be sustainably-sourced, and preferably also sourced locally.

- Wood fuel heating – developments should consider options for incorporating wood fuel heating systems, where appropriate, as part of renewable energy provision. The Governments Clean Air Strategy has resulted in new Eco Design 2022 Regulations that state all new log burners and wood-burning stoves must restrict their emissions to an agreed level. In other words, the old log burners can remain operational, but new ones must be more efficient and less polluting. Key points of the regulations are:

    - By 2022, only the cleanest (restricted emissions) log burner and stoves will be permitted for sale within the UK;

    - Rules will be put in place to restrict the use of unclean solid fuels; and

    - You will be allowed to continue using a log burner in your home. However, only the 'Ready to Burn' logs should be used.

- Green walls and roofs – where possible, developments should incorporate 'living' roofs and walls to benefit urban wildlife, provide localised air quality benefits and climate change mitigation. Naturalistic approaches to such planting schemes should be adopted preferentially.

- Public realm – development design should reflect a 'Forest' theme of trees, woodlands and timber through the approach to landscape design of formal green spaces.

- Sustainable Drainage Systems – these should be ecologically designed and 'Forest themed' (see section **Error! Reference source not found.**3).

- Access and connectivity – networks of greenways, bridleways, cycle routes and footpaths should be designed within developments to link new green spaces with residential neighbourhoods and workplaces, contributing to sustainable transport networks.

- Forest branding and signage – development should ensure the branding of new woodlands and green infrastructure as being part of the wider Forest, with signage provided to allow people to easily navigate their way around and make mental 'links' with the wider Forest landscape.

4.2.2 Building 'Greener'

To reflect the strong environmental credentials of the vision for creating the Forest of Marston Vale, and to help stimulate a local woodland economy, new developments should also incorporate the following broader environmental principles, as part of established good practice of 'building greener':

- Building materials – developments should use local and natural materials associated with the area in design of buildings and green infrastructure. By using timber only or a mixture of timber and brick on buildings reflects the historical land use (brickmaking industry) and the emerging Forest landscape. Using locally sourced timber to generate wood products and materials for use in developments – be it for park benches, fencing or structural grade timber – helps grow a local woodland economy, creating employment opportunities and promoting sustainable woodland management locally.

- Low carbon – developments should adopt low carbon building construction, with least cost to the planet. Using locally sourced timber within developments helps lock in the carbon stored within the wood. Woodland planting can be specifically used to sequester carbon as part of pursuing net zero development.

- Renewable energy - design for low energy use and efficiency, harnessing renewable energy resources wherever possible.

- Water use - design for water efficiency, including rainwater harvesting systems and grey water recycling.

- Building foundations - design foundations and groundworks to positively provide for and accommodate trees, especially long-living species.

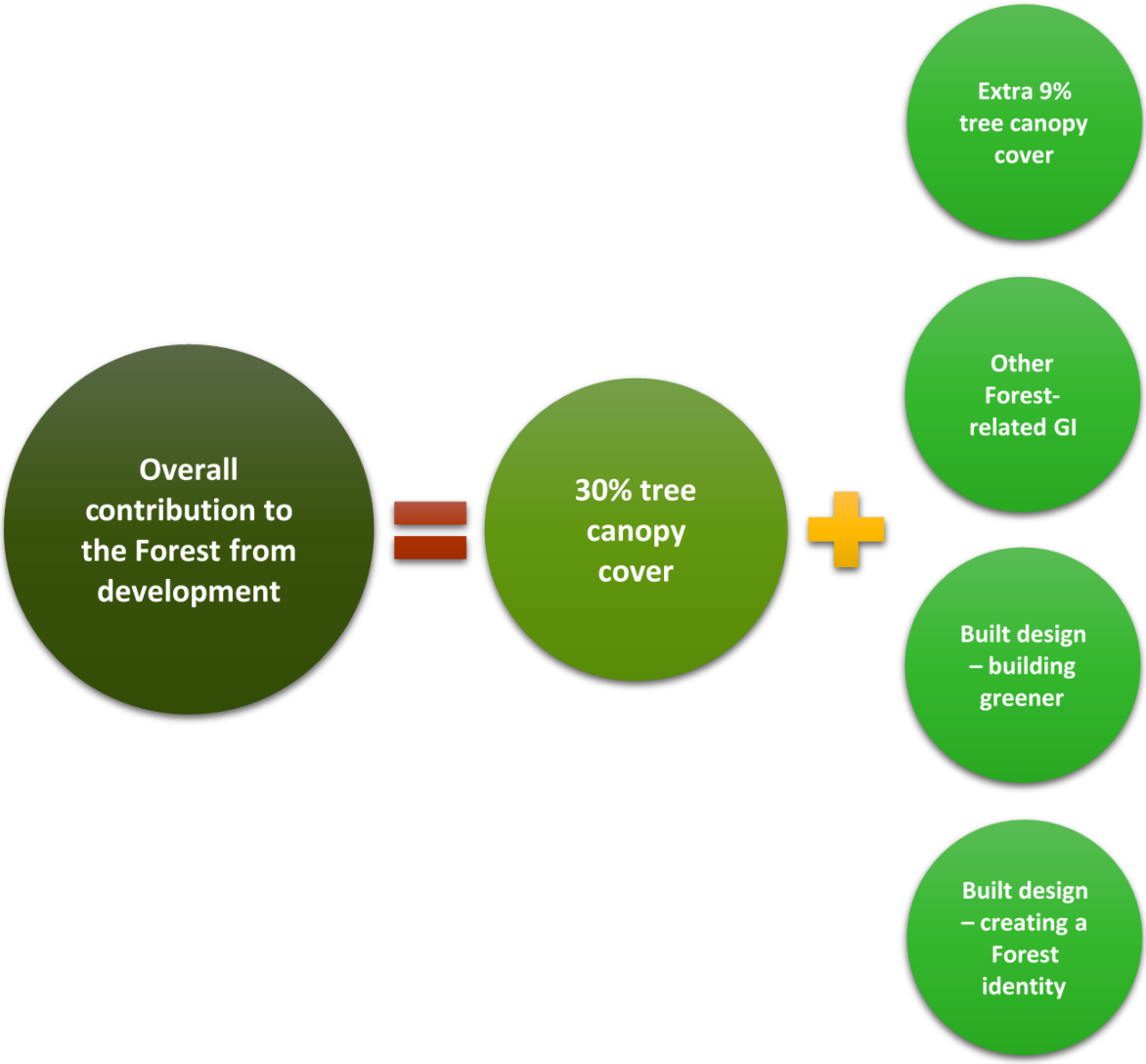
- Built design and green infrastructure - must function together, reinforcing one another to create quality of place.

5. Conclusion - defining the overall contribution to the Forest

All development within the Forest of Marston Vale area should positively contribute to the creation of the Forest in a meaningful and proportionate way. It ensures that any land use change due to development plays its part in creating the Forest.

This Development Design Guidance defines the range of options available to developers to ensure that their development proposals contribute to the creation of the Forest, and so comply with the national and local planning policies requiring this. All development must demonstrate how it delivers the minimum 30% tree cover requirement, incorporating trees in a range of ways across the entire development. Applicants will be encouraged to deliver up to 39% for residential, industrial, commercial and leisure developments and around 50% for transport and minerals and waste schemes, to assist the Forest of Marston Vale Trust in achieving their overall target of 30%. It is important that all parties are clear on how these elements all combine to define the overall contribution to the Forest from any development. The following diagram provides a visual representation of how this works:

Figure 14: Diagram showing the delivery of the Forest of Marston Vale



Further Information

For further information related to this Supplementary Planning Document please contact:

Central Bedfordshire Council

Bedford Borough Council

Forest of Marston Vale Trust