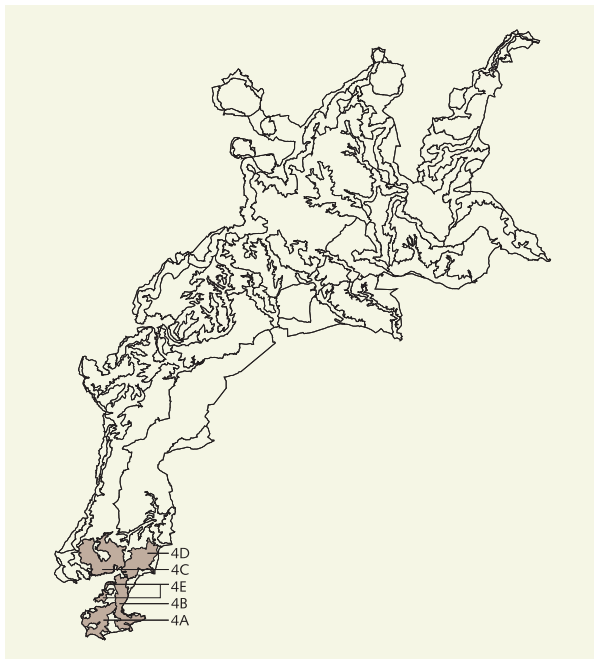


## 4 ENCLOSED LIMESTONE VALLEY

### Character Areas

- 4A Cam and Wellow Brook Valleys
- 4B Bathampton and Limpley Stoke
- 4C Lam Brook and St Catherine's Brook Valleys
- 4D Lower By Brook Valley
- 4E Perrymead Slopes



### Key Characteristics

- Moderately broad but enclosed river valleys with steep sides separated by areas of Low Limestone Plateaux and High Wold Dip-Slope;
- strong physical enclosure of valleys creates a secluded character;
- rural character with local influences from large urban centres;
- significant areas of woodland, of which a number are ancient semi-natural woodlands particularly on upper and steeper slopes;
- area under both arable and pastoral use, together with areas of rough pasture and scrub;

- fields of varying sizes, dependent on slope, mainly enclosed by hedgerows with frequent hedgerow trees;
- road networks following valleys bottoms connecting settlements and ascending valley sides to more isolated dwellings;
- industrial heritage of the valleys signified by the presence of railways, mills and canal network within Avon Valley;
- impressive features of Victorian engineering; and
- surviving vernacular structures such as terraces of weavers' cottages.

### Landscape Character

Distinct areas of the Enclosed Limestone Valley Landscape Type occur in the most southern section of the Cotswolds AONB, to the south, east and north of Bath, the southernmost valleys forming sections extending to the south and the west beyond the AONB boundary. The landscape type is represented by valley systems that form part of the network of watercourses that flow into the River Avon. A discrete area of the Enclosed Valley type also overlooks Bath. Here, the close proximity and views of urban areas influences local landscape character.

The Enclosed Limestone Valleys are characterised by moderately broad, steep sided river valleys separated by areas of Low Limestone Plateaux (Landscape Character Type 13) and High Wold Dip-Slope (Landscape Character Type 9). The physical enclosure of the valleys and relatively sparse settlement patterns has resulted in a secluded character. However, in some areas transportation routes along the valley floor give the valleys a busier and more developed character. Large settlements outside the

AONB boundary such as Bath, Batheaston, Bathampton and Bradford-on-Avon also exert a strong urbanising influence on local landscape character.

Land cover within the valleys is a combination of both arable and pastoral use, although arable land is more frequently found on lower slopes where growing conditions are more hospitable and soils are deeper. Areas of rough pasture and scrub are located on steeper slopes, together with significant woodland blocks that vary in size and form. Fields size also varies, and mainly enclosed by a network of hedgerows with frequent hedgerow trees.

The valley floors are generally flat or gently sloping, giving way to undulating valley sides that progressively increase in steepness. The present form of the valleys is a direct response to the nature of the underlying geology with the Oolitic limestone underlying the steeper upper slopes, and older Lias Group Clays forming the more gentle slopes. The steep valley sides and woodland create a sense of seclusion, and generally contain views along the valley. The upper slopes can be quite open, however, allowing views over the valley landform.

Hamlets and villages within the Enclosed Limestone Valleys are located on the valley sides, in particular on the upper slopes where they are generally dispersed and linear, with villages also extending along the valley bottoms adjacent to springlines. The close proximity of large settlements has an urbanising influence on the perimeter of the landscape type and particularly in the Perrymead Slopes Landscape Character Area, which rise above the eastern fringes of Bath. Predominant building materials include limestone with clay tiles and sometimes slate roofs and rendered finishes, with a number of dwellings dating from the Georgian period. In the Lam Brook and St Catherine's Brook character area Oolitic Limestone is a particularly characteristic building material used for both buildings and walls. A network of meandering roads connects villages along the valley floor, and also to other minor routes leading up the valley sides to dwellings on the upper slopes. Such lanes are typically within deep-set cuttings resulting in characteristic sunken lanes or holloways, with old hedge banks and tall hedgerows creating a sense of enclosure.

### Physical Influences

The underlying geology within the Enclosed Limestone Valleys generally comprises Middle Jurassic Oolitic Limestones and Lias Group sandstone and limestone occurring at the tops of the valleys, and valley sides consisting of Lias Group Clays. A band of Fuller's Earth outcrops locally between the Inferior and Great Oolite. More recent deposits of alluvium occur in the valley bottoms alongside the watercourses. The juxtaposition of limestone above the more unstable clays has given rise to occasional rotational slippage on the valley sides, and along with the effects of weathering and erosion, has resulted in their rounded and undulating landform. The principal soils within the valleys are calcareous clays that are typically used for grazing, and occasionally for arable use, in particular on more gentle slopes.

The valleys form part of a wider radial system of watercourses that feed into the River Avon. The north-east flowing Cam and Wellow Brooks meet at Midford to form the Midford Brook, which subsequently joins the River Avon east of Monkton Combe in the vicinity of the Dundas Aqueduct. At the southern edge of the AONB a network of small watercourses feed into the north flowing Frome, which joins the River Avon east of Freshford and Limpley Stoke. This short section of the Frome Valley that lies within the designated area, together with the west and then north flowing Avon valley forms a well-defined physical unit. The Kennet and Avon Canal follows the valley bottom, parallel to the course of the river. To the north of Bath the rivers flow southwards, joining the Avon at Batheaston. This complex system of incised valleys has resulted in a series of convoluted limestone plateaux between the valleys. The rivers and brooks that meander across the valley floor can be quite deep in places with steep sides, and are often marked by groups of willow or alder. The valleys range in height, with their highest point at approximately 200m AOD (below Bathampton Down), and at their lowest point adjacent to the watercourses at approximately 30m AOD.

On the steeper slopes of the valley sides and valley tops, there are some significant blocks of woodland, which in some areas extend down the valley sides creating a sense of enclosure within the valley. The blocks vary in size and form considerably, and are primarily deciduous plantations, although a number of coniferous blocks can be found. A large proportion of the woodland is registered as ancient woodland, with a limited number also being designated as SSSI. Also located on the steeper slopes are areas of scrub and rough pasture, together with some areas of calcareous grassland, giving way to improved pasture and arable land on lower and gentler slopes. The pattern of sizes vary from larger fields on the slopes to smaller fields on the valley

floor and are mainly enclosed by a hedgerow network which is maintained to varying degrees, to include well maintained, clipped hedgerows and tall, overgrown boundaries. However, local variations in this broad pattern exist. For example in the Bathampton and Limpley Stoke character area medium sized fields on the valley floor are characteristic and in the Lam Brook and St Catherine's Brook character area a significant number of small fields are evident on the valley sides. Hedgerow trees are frequent and contribute to the overall wooded feel of the valleys. Stonewalls occur most frequently in the northern section of the character type, replacing hedgerows which predominate in the south. Located on the upper slopes are areas of calcareous grassland, although they also extend onto the lower slopes in areas. There is evidence of a decline or change in agricultural practices in some areas with a less manicured and managed appearance arising from lack of hedge maintenance and outgrown hedgerows. In contrast, hedgerow removal has occurred in some areas of the valleys, most notably where arable farming is practised, resulting in the opening up of the landscape and enabling wider views across and along the valleys.

### Human Influences

In common with other parts of the Cotswolds, it is likely that there has been continuous human habitation within the valleys since the prehistoric period and they form part of a wider network of communication routes. Indeed recent excavations in the meadows near Bathampton have revealed occupation from at least the Iron Age through to the Roman and Medieval periods. The suitability of the lower valley sides for cultivation, the sheltered location, and a plentiful supply of water, would have been attractive to early man. However, the main evidence of human occupation is the remnants of industrialisation, and the significant influences that occurred during the 18th to 20th centuries. Located along the valley bottoms are a number of mills, Brunel's Great Western Railway which dates to the middle of the 19th century, and two canals comprising the Kennet and Avon Canal (built by John Rennie and completed in 1810), and the Somerset Coal Canal (authorised in 1794 and surveyed by John Rennie with help from William Smith, the 'Father of English Geology'). The canals were promoted by the mine owners of the North Somerset coalfields as a cheaper means of transporting their coal to markets in Bath and the surrounding area rather than by pack horses, or horse and cart.

Whilst railways and canals form important communication routes, there are also a number of significant roads running through the landscape, although they are primarily confined to the valley bottoms. Smaller, minor roads set within deep cuttings run up the valley slopes and connect village

settlements and isolated dwellings. The use of Cotswold stone is prevalent throughout the landscape type, influencing the appearance and sense of unity within the small-scale historic settlements that occur within the landscape type. Villages and smaller hamlets constructed primarily from limestone with stone slate roofs as well as some red clay tiles are generally located on the hillsides and steeper upper slopes and can be quite dense in areas, although linear villages and hamlets extend along the valley floor. Scattered farmsteads and isolated dwellings, often nestled in sheltered wooded locations, are frequently situated adjacent to minor roads along steeper valley sides.

A significant number of rights of way cross the area, with many focused along the valley bottoms, although a number also run along and up the steep valley sides.

### Character Areas

#### 4A

#### Cam and Wellow Brook Valleys



This Character Area to the south of Bath comprises the valleys of the Cam and Wellow Brooks which run from west to east joining at Midford to become Midford Brook. Separating the two moderately wide and steep valleys is an area of low limestone plateau. Land use within the valleys is a mixture of arable, improved pasture and short term ley, and permanent pasture, with generally an equal proportion of each, although arable tends to be in more localised blocks on gentle slopes. Fields can be small and irregularly shaped, although larger ones located on the higher and shallower slopes are more regular in shape. The valley is moderately wooded primarily with deciduous species in significant woodland blocks such as Cleaves Wood, which is an ancient woodland and a SSSI. In areas around Combe Hay and Tucking Mill, woodland extends

down the valley creating irregular shaped blocks. However, a number of smaller scattered areas of woodland are more regular in shape.

There are a number of features of interest within the area including Midford Castle, a Grade I listed building located on the valley side, north of Midford Brook. Adjacent to the Brook is the Limestone Link, a long distance footpath that utilises the line of the former railway and provides access along the length of the Cam Valley to Midford and beyond to the River Avon in the adjacent Bathampton and Limpley Stoke Character Area (4B). Further reminders of the area's industrial past are the remnants of the Somerset Coal Canal. The line of the Wellow Brook formed part of the Stop Line Green, also known as the Bristol Outer Defence Line, an anti-tank defence set up to protect Bristol during the Second World War.

### 4B Bathampton and Limpley Stoke



In the vicinity of Bathampton and Limpley Stoke the River Avon valley, and a short section of its tributary the Frome, is characterised by a broad yet steep, and often well-wooded valley. Woodland blocks within the valley are significant, cloaking the upper slopes and valley tops creating a wooded backdrop to surrounding Landscape Types and Areas. In many areas the woodland extends down the valley sides, although only reaches the course of the Avon or Kennet and Avon Canal in limited areas. A large proportion of the woodland is deciduous, although some coniferous blocks can be found at Friary Wood, Conkwell Wood, Warleigh Wood and woodland west of Claverton Down, with many hectares being designated as ancient woodland.



Whilst there is generally an even proportion of arable and pastoral land within the Enclosed Limestone Valleys, in the Bathampton and Limpley Stoke Character Area pastoral land predominates, although large sections of arable land are present, in particular south of Bathford. Many of the field patterns throughout the valleys reflect more recent adjustment of earlier enclosures. However, areas of medieval enclosure can be found alongside the River Frome and the River Avon, between Claverton and Bathford. Evidence of late medieval enclosures of steep sided cultivation terraces can also be found, for example below Warleigh Wood. Fields are generally enclosed by hedgerows, with mature oaks and other trees being common features.

A number of distinctive structures are also associated with the rivers, canals and railway notably the Dundas Aqueduct, completed in 1798 and the Claverton Pumping Station, constructed in 1813. Brown's Folly located on the edge of Farleigh Rise provides a prominent feature within the landscape and there are a number of World War II remnants throughout the area, in particular pillboxes that can be found at Woodside near Freshford.



Whilst much of the landscape in the character area is rural, large settlements beyond the AONB boundary (Bradford on Avon, Bathampton and Batheaston) exert a strong influence on local landscape character. Major transportation routes and associated transportation architecture, which occur in a corridor along the base of the valley, also exert a subtle influence on rural landscape character.

#### 4C

##### Lam Brook and St Catherine's Brook

The valleys are drained by two main watercourses, the Lam Brook to the west, and St Catherine's Brook to the east both of which are fed by a number of small tributaries arising from springlines on the steep upper valley slopes, and creating a complex indented valley landform. The valleys steeply dissect the surrounding areas of the High Wold Dip-Slope plateau and are separated by a residual area of High Wold Dip-Slope comprising Charmy Down and Henley Hill. The main valleys of the Lam Brook and St Catherine's Brook have steep sides, with the tributary valleys being smaller in scale and narrower than the main channel. These valleys are also remote and secluded near their source, although the upper reaches of the Lam Brook, comprising the Hamswell valley, forms a broad open bowl. A number of reservoirs are located along the valley bottoms, including Monkswood Reservoir and at Chilcombe Bottom, located within tributary valleys to the west of the St Catherine's Brook valley.

Land use within the valleys is predominantly pastoral on the steeper slopes, with areas of both arable and pastoral land on lower valley sides and the valley floor. Fields are generally small to medium in size cutting across the valley sides and are irregularly shaped, especially on steeper slopes. Enclosing the fields are hedgerows that are both overgrown and gappy, and well trimmed often creating a square profile. Where hedgerows are particularly gappy, especially on steeper slopes, post and wire fences can be found reinforcing the boundary. Post and wire fences also occur as boundary features adjacent to roadsides.

Within the St Catherine's Brook valley woodland cover provides an important feature and is mainly confined to the steep upper slopes or along watercourses. The majority of woodland is broadleaved, with the exception of a large coniferous plantation east of St Catherine's Court; large proportions are also ancient in origin. Hedgerow trees and wooded cloughs on the valley sides, together with areas of scrub encroachment on steeper slopes contribute to wooded areas within the valleys. In contrast to the heavily wooded St Catherine's Brook Valley, the Lam Brook Valley is notably more open, particularly in its upper reaches. Extensive areas of calcareous and mesotrophic grassland create a matrix of



land uses within the woodland blocks, and are likely to have developed in areas where woodland clearance has occurred, making way for the establishment of diverse grasslands. The diversity and importance of grassland within the St Catherine's Valley and around Monkswood has been recognised through their designation as a SSSI.

Settlement pattern and form is largely dictated by landform with villages such as Langridge and Northend running along valley sides frequently close to springlines. Other dwellings include isolated farmsteads and hamlets that are spread along the slopes, again close to springlines. Despite the valleys having an intimate relationship with the City of Bath and Batheaston, they remain relatively rural in character, with the upper reaches distinctly isolated. Urban influences such as light industrial development including storage yards can, however, be found within St Catherine's Valley. Oolitic Limestone is particularly evident and a characteristic construction material used in numerous buildings and stone walls.

With the exception of the A46(T) dividing the two valleys, the remaining roads within the character area comprise a network of minor roads extending along the valley bottom and lower slopes and up the valley sides, often in shallow depressions onto the High Wold. There are a number of footpaths extending down the valley sides and along the valley floor including the Limestone Link, which is a 58km (36 mile) route linking the limestone areas of the Cotswolds to those of the Mendips. Created in 1989 by the Yatton Ramblers, parts of the route may coincide with an old stone transport route into Bath.

There are a number of historic features of interest within the valleys. Little Solsbury Hill is a flat topped domed promontory rising to 100m AOD situated between the two valleys, with extensive views over Bath and the River Avon. Located on the summit of the hill is a Bronze Age and Iron Age hill fort. Surrounding the hill on the upper slopes is a band of calcareous and mesotrophic grassland. St Catherine's Court provides another interesting feature within St Catherine's Valley. It comprises a Grade II\* manor house and gardens dating from the late medieval period to early 17th century, with terraced gardens and planting dating from the 19th century. Evidence of ancient field systems can be found in the most northern point of the Lam Brook Valley along with a tumulus, west of Tadwick.

### 4D

#### Lower By Brook Valley



The Lower By Brook Valley Character Area is located to the east of the Lam Brook and St Catherine's Brook Character Area. The valley is drained by the Lower By Brook, which flows south-westwards to join the River Avon at Batheaston. Smaller tributaries such as Lid Brook flow into the watercourse creating an indented landform. The main valley is fairly broad, with narrower tributary valleys.

Land use is a combination of both arable and pastoral land, although the latter predominates. The medium sized irregular fields are enclosed with hedgerows, with frequent hedgerow trees in some areas. Woodland within the valley is sparse, although where it does occur it is generally confined to the upper slopes and valley rims. Broadleaved species dominate with the exception of an area of coniferous planting west of Kingsdown. Around a third of the woodland is also ancient in origin. Calcareous and mesotrophic grassland is restricted within the area, with only a small area located east of Batheaston.



Although it is likely that settlement pattern was once restricted by landform, it has now extended up the valley slopes. The settlements of Box, Box Hill and Ashley have developed along the valley slopes south of the A4 and are connected by a network of minor roads along which scattered dwellings are also located. Development north of the A4 is less extensive and consists mainly of scattered dwellings along a network of minor roads criss-crossing the valley side. As well as extending along the lower and mid valley slopes, settlement is also located on the valley rims, for example at Kingsdown and the outer edges of Colerne.

Along with the A4, which largely follows the course of the By Brook, the A365 extends up the valley side from Box. Other routes within the valley consist only of minor roads. Travelling through the character area is the main line railway which that enters the area north of Box before continuing along the valley floor into Batheaston and then Bath.

Features of interest in the valley include Shockerwick House and grounds, which are Grade I listed and include 18th century parkland. The House is located south-west of the village of Middlehill overlooking the By Brook. Underground quarries can also be found within the area, most notably at Box. Perhaps the most impressive landscape feature, however, is the Box Tunnel. The two mile long tunnel was Isambard Brunel's most difficult engineering problem when building the London to Bristol line. The tunnel was completed in 1841 and is so straight that it has been said that on some days the sun shines through the complete length of the tunnel.

**4E****Perrymead Slopes**

This Character Area is a continuation of the Bathampton and Limpley Stoke Landscape Character Area and is located on the eastern edge of Bath and separated into two discrete areas by the outer edges of Bath and the University campus. Despite some areas being undeveloped, views over Bath and the influence of suburban sprawl, have had a significant influence on local landscape character.

Bath lies in a valley where the River Avon cuts through the limestone plateau of the southern Cotswolds. The encircling hills have been influential in the development of the city and provide a dramatic backdrop to the buildings. Conversely the hills around Bath provide vantage points from which the dramatic architecture and its relationship to the wider landscape can be appreciated. The international importance of Bath is recognized by its inscription as a World Heritage Site.

Located to the south east of Bath centre is the southern section of the Character Area, which comprises the eastern slopes of the valley in which Bath has been developed. Land use on the valley sides consists of pastoral land with scattered blocks of deciduous and mixed woodland, of which the latter is confined to the eastern edge with a section also identified as ancient woodland. Limited areas of calcareous grassland also occur in the south-eastern corner of the Character Area.



Settlement within the southern section consists of a number of dwellings along minor roads and whilst it is limited, the urban influence of Bath is significant. Cutting through the area is the main A3062 and a number of minor roads that roads which connect Bath with areas of the High Wold Dip-Slope. A notable landscape feature is Prior Park and College. Within the boundaries of the 18th century landscape garden, pasture predominates,

although there are areas of ornamental planting. The gardens, inspired by the entrepreneur and philanthropist Ralph Allen from 1734 until 1764, lie in a dramatic steep valley that runs to the very edge of Bath. The mansion in Prior Park was built around 1740 and now contains a college. On the upper slopes of the valley rough pasture with scrub and woodland are also characteristic.

The northern section of the Perrymead Slopes consists of pastoral land with areas of scrubby pasture and deciduous woodland in roughly equal amounts. Around half of the woodland is ancient. Although there is no settlement, and only a minor road crosses the area, again the influence of Bath is significant.