

Appendix G

Landscape Character Type G: Major Chalk Valley Sides

The landscape type encompasses the valley sides/slopes which enclose and provide the setting for the major valley floodplains (landscape type F). The boundaries are defined by the change in slope to the flat floodplain and by the crest of the slope, as seen in the view from the valley floor.

Description

Key Characteristics

- Valley sides of varying steepness enclosing the major river floodplains and linking to the adjacent downland. The sides are often indented by dry valleys, and occasionally form steep chalk cliffs.
- An expansive large-scale landscape containing, and providing the setting for, the floodplain. Some slopes provide excellent views down onto the floodplain revealing the patterns of the river channel and meanders that are not perceptible at ground level.
- Soils support arable land on shallower slopes, where large 20th century fields represent extensive re-organisation of the landscape. A mix of pasture/chalk grassland, scrub and woodland occupies steeper slopes.
- The valley sides frequently contain rural roads running along the contour above the floodplain and have formed a link between the Weald and the sea from the earliest prehistoric periods up to the present day. Minor lanes and unsurfaced tracks typically descend the valley sides.
- A string of nucleated villages and ports, of medieval origin, lie along the lower slopes of the valleys, positioned to exploit the varied riverine and downland resources, and surrounded by early enclosures of late medieval origin.
- Typical building materials include flint, red brick, timber and clay tiles.
- Woodlands along the lower slopes are particularly distinctive and form a strong wooded edge to the floodplain.
- Away from the roads, the valley sides form a tranquil, rural setting to the floodplain.

Physical Landscape

G.1 The *Major Chalk Valley Sides* are the sides of the deep U-shaped valleys that cut through the Chalk beds of the South Downs. These valleys were most likely deepened and enlarged by periglacial erosion to leave steep chalk slopes often indented by dry valleys, and occasionally forming steep chalk cliffs.

G.2 The underlying chalk geology has given rise to Brown Rendzina soils which are characterised by their shallow, well drained, calcareous and silty nature. Where the valley sides

are shallow, the land generally has a good agricultural land capability, with the majority of the land being classified as Grade 3 in Defra's Agricultural Land Classification (good-moderate quality agricultural soils) and are dominated by large fields of arable crops. The steeper slopes support areas of pasture, unenclosed chalk grassland or hanger woodland. Woodlands linked by hedgerows along the lower slopes mark the edge of the floodplain.

Perceptual/Experiential Landscape

G.3 This landscape type is of apparent large and expansive scale as a result of the large scale of the valleys and their open rolling valley sides, with extensive views encompassing and looking down onto the floodplain and river. The geometric field patterns, resulting from planned enclosure, contrast with the sinuous woods, which provides texture and create shadows on the valley side. This is a landscape of contrasts where the exposed upper valley sides contrast with the deep, hidden and wooded coombes.

G.4 Despite the intensity of agricultural production in less steep areas, the low noise levels, sense of 'naturalness' arising from the presence of open downland, and absence of overt built human impact contribute to a sense of remoteness and tranquillity across much of the valley sides.

G.5 Roads frequently follow the valley side, above the floodplain, making these landscapes easily accessible on foot and by car. Most notable in terms of access is the network of rural roads that link the villages along the lower valley sides and connect to areas of land in public ownership. There are also some areas of open access land coinciding with areas of chalk downland on the steeper valley sides.

G.6 Landmark buildings set against the imposing backdrop of steep valley sides have been a focus for artistic inspiration. Constable (1776-1837) painted Arundel Castle set on the valley side above the River Arun. The elegant Gothic chapel of Lancing College and the imposing medieval fortress of Amberley Castle have also formed subjects for paintings.

Biodiversity

G.7 The valley sides are typically dominated by a mixture of arable land, open improved pasture grassland and interspersed with occasional woodland, wet grassland (that extends up from the river floodplain) and chalk grassland (extending down from the chalk downland). Occasional chalk pits occur along the valley sides (particularly in the Ouse Valley), and many of these former pits are of significant geological interest.

G.8 The woodlands associated with these valley sides are of particular ecological value, being a priority habitat and many are recognised as statutory and non-statutory designated sites. Of particular note is the large area of Arundel Park SSSI, which comprises an old deer park dominated by chalk grassland with dense or scattered scrub and mature semi-natural woodland. This site is considered to be one of the

most important sites in the country for invertebrates, and also supports a diverse range of breeding birds.

G.9 Some grassland areas located in the southern section of the Cuckmere valley are strongly influenced by their coastal location and include an area of the Seaford to Beachy Head SSSI.

Key Biodiversity Features	Importance
Semi-natural deciduous woodland	Includes nationally important sites such as Arundel Park, together with many non-statutory woodland sites.
Chalk grassland (extending down valley sides from the chalk downland)	Chalk grassland supports important populations of vascular plants, birds and invertebrates.
Mosaic of arable land, open improved pasture grassland and interspersed with occasional woodland and wet grassland (that extends up from the river floodplain)	Provides an important habitat mosaic.

G.10 Many parts of the valley sides are identified by Natural England as providing potential for connecting existing BAP Priority Habitats such as woodland and chalk grassland to provide effective habitat networks.

G.11 Extensive areas of BAP Priority Habitats, particularly calcareous grassland, are identified as providing effective habitat networks in Natural England's National Habitat Networks Mapping Project¹. Many adjacent areas are identified as being suitable for restoration and in others work is already underway to restore habitats, including chalk grassland. Network Enhancement Zones extend across the *Open Downs* type and identify where land is suitable for the creation of connecting habitats.

Historic Character

G.12 The slopes vary in steepness, with the more gentle slopes suitable for settlement. Numerous finds of Palaeolithic and Mesolithic artefacts have been discovered along the valley sides. Evidence for prehistoric occupation is scarcer, due to suitable deposits being buried beneath later colluvial deposits. The fertile soils were identified by the Anglo-Saxons, who established a string of settlements along the lower slopes of the valleys, positioned to exploit the varied riverine and downland resources.

¹ Natural England (2018). National Habitat Networks Mapping Project

G.13 By the medieval period, the area formed an integral part of a sophisticated and efficient agrarian landscape based around sheep-corn husbandry. Nucleated villages were established along the lower valley slopes. The villages were surrounded by open fields, with woodland and downland pastures towards the extremities of the parishes. The rich meadowland forming the valley floor would have been an important component in this integrated mixed farming regime.

G.14 The valley sides are now mostly occupied by a series of enclosed fields, a mixture of planned and informal fields. The planned areas reflect 20th century expansion of arable farming onto land which was formerly sheepwalk, but also remodelling of earlier enclosed land. Some of the surviving medieval settlements are still surrounded by early enclosures of late medieval origin. There are also some areas of designed parkland, and some of the steeper slopes still remain as unenclosed downland.

during the 18th-19th centuries, and are set within large regular field systems that have replaced earlier patterns.

G.16 Building materials are typically flint, red brick, timber and clay tiles.

Key Features of the Historic Environment	Importance
Finds of Palaeolithic and Mesolithic artefacts	Indicate long history of settlement in the valleys.
String of settlements along the lower slopes of the valleys	Evidence of settlements being positioned to exploit the varied riverine and downland resources.
Nucleated settlements	Indicative of medieval manorial system based around open fields.
Early enclosures around settlements	Indicative of relative prosperity of character area, allowing early response to changing economic and social conditions.
Modern enclosures	Evidence for major reorganisation of landscape.

Settlement Form and Built Character

G.15 The settlement pattern is characterised by strings of nucleated settlements along both sides of the valley, linked by rural roads which follow the edges of the floodplains. This conforms to English Heritage's rural settlement designation of East Wessex Sub-Province within the South-eastern Province. Some of the settlements on the lower valley sides are medieval ports, which thrived when the rivers were used as transport routes between the Low Weald and the sea. The typical settlement form is of mid-late Anglo-Saxon origin, and comprises nucleated groups of former farmsteads situated around the church and manor house, and set within groups of fields enclosed in the later medieval period but originally forming open fields farmed on a communal basis. Scattered isolated farmsteads derive from more recent enclosures

Evaluation

Ecosystem Services in the Major Chalk Valley Sides

G.17 Ecosystem services are the benefits people and society get from the natural environment. The *Major Chalk Valley Sides* provides:

Provisioning	<ul style="list-style-type: none"> ■ Food provision – arable crops, fodder crops for livestock and improved pasture for sheep, beef and dairy cattle and pigs. ■ Timber provision – woodlands. ■ Water availability – valley slopes drain water from the downs into the main rivers.
Regulating	<ul style="list-style-type: none"> ■ Regulating water quality – water filters through soils to recharge aquifers; the way the area is managed affects water quality (water quality can be adversely affected by pollution from agricultural activity, urban and road run-off and sewage leakage). ■ Regulating water flows – winterbournes can flow at times of high rainfall. ■ Regulating soil quality and soil erosion – permanent vegetation cover such as permanent pasture and woodland can result in better soil quality and reduce soil erosion (sloping ground increases the risk of soil erosion). ■ Climate regulation - carbon sequestration and storage benefits in woodland along valley sides. ■ Air quality regulation – woodlands regulate local air quality. ■ Pollination – unimproved and semi-improved grasslands on valley sides are important nectar sources for pollinating insects.
Cultural	<ul style="list-style-type: none"> ■ Sense of place – the valleys have a distinct sense of place and are important transport and communication corridors through the chalk downs ■ Tranquillity – the valley sides are generally tranquil, especially away from the main settlements and transport corridors. ■ Recreation – typically good footpaths links and some areas of open access/ country parks.
Supporting	<ul style="list-style-type: none"> ■ Biodiversity - chalk grassland and deciduous woodland.

Sensitivities

G.18 This landscape type has many sensitive physical and aesthetic/perceptual features that are vulnerable to change, as set out in the table below:

Key Landscape Sensitivities	
1.	The intact chalk valley sides and occasional steep chalk cliffs that are vulnerable to quarrying operations.
2.	The rural road network that is vulnerable to heavy traffic and pressures relating to road upgrades and 'improvements'.
3.	The nucleated villages that are indicative of the medieval manorial system based around open fields. Views to church spires that are visible across the landscape are an important feature.
4.	The historic ports (Arundel and Lewes) and their relationship to the river.
5.	The intact early enclosures around the medieval villages that remain and are vulnerable to boundary loss or lack of management.
6.	The consistency in building materials including flint, red brick, timber and clay tiles which create a consistent, unified and intact character.
7.	The remnant areas of chalk grassland on steeper slopes that are of great biodiversity interest and are vulnerable to changes in management particularly decline in grazing.

Key Landscape Sensitivities	
8.	The deciduous woodlands and network of hedgerows on the lower slopes that form a strong wooded edge to the floodplain
9.	The tranquil, rural character of the landscape which forms a setting to the major river floodplains
10.	The dark skies associated with the South Downs International Dark Skies Reserve which are vulnerable to light sources.
11.	The visibility of this landscape from opposite valley sides and from the adjacent downs increases the visual sensitivity of the valley sides. From within the valleys, the valley crests are seen against an open sky and are particularly visually sensitive

Change – Key Issues and Trends

Past Change

G.19 Past change includes:

Past Change	
1.	Conversion of the original chalk grasslands and medieval fields, to large arable fields and introduction of large steel framed agricultural buildings over the last 70 years resulting in a more open landscape and modern visual intrusions.
2.	Invasion of scrub into areas of remaining chalk grassland as a result of decline in grazing pressure.
3.	Quarrying of chalk and introduction of industrial buildings, including cement works, detracting from the tranquillity of the valleys.
4.	Creation of cuttings associated with transport corridors, altering the natural landform of the valley sides.
5.	Positive change in the form of conversion of arable land back to pasture and creation and management of chalk grassland habitats as a result of ongoing policies and incentives.

Future Landscape Change

G.20 Agricultural management will be driven by agricultural policy and is uncertain. However, the likely future changes are set out in the table below:

Future Change	
1.	Agricultural production is likely to continue to intensify on the shallower valley slopes with amalgamation of farms and potential new large-scale farm buildings.
2.	The steeper slopes which are currently in pasture, or chalk grassland, may become more marginal and vulnerable as grazing continues to decline. On the other hand, there may also be positive landscape change arising from regimes to promote enhanced environmental management of chalk grassland habitats. Sustained grazing management will be critical to the success of these schemes.
3.	There may be decline in the structure of valley side woodlands that are not in active management.
4.	Changes in arable crops and soil management systems in response to climate change – including more drought tolerant crops or biomass fuel crops and low or no-tillage systems which could alter the open character of the valley sides.
5.	If Net Zero commitments are implemented, it is likely that there will be key changes to land use, including a reduction in grazing land to free up land for other uses such as bioenergy crop planting (and low-grade biomass production), arable crops and woodlands (related to afforestation initiatives).
6.	Changes to the species composition of habitats as a result of climate change, particularly chalk grasslands - possibly resulting in a greater abundance of species (positive) but also potential for spread of more competitive grasses (negative).
7.	Potential increase in pests and pathogens resulting from climate change, as well as continued loss of trees to existing pests and pathogens e.g. loss of elm due to Dutch Elm disease and loss of ash due to Ash dieback.

Future Change	
8.	Drought conditions leading to withdrawal of arable land from cropping and reversion to semi-natural grassland, particularly in areas of thin soils such as the chalk valley sides (positive).
9.	Drought conditions putting stress on the valley side woodlands and increased storms could resulting in damage to the woodlands as well as erosion of soils.
10.	Climate change may result in increased fire risk in areas of grasslands, scrub and woodland during hot, dry periods.
11.	In response to climate change, the pursuit of renewable energy may result in demand for wind energy development on the crests of the valley sides, which could affect the sense of remoteness associated with the valleys.
12.	Pressure for expansion of existing settlements with suburban character and, and development of houses in the countryside, affecting the sense of rurality, and dark skies and introducing non-native species.
13.	Pressure for equestrian development with associated subdivision of fields into horse paddocks, poor land management, construction of stable buildings and tracks and installation of lights and mirrors, eroding the rural character of the landscape and dark skies.
14.	Continued demand for chalk quarrying and road upgrades/ widening.
15.	Farm diversification including uses for camping and festivals affecting sense of tranquillity and causing erosion.

Broad Management Objective and Landscape Guidelines

G.21 The overall objective should be to conserve the bold chalk landforms, the simple uncluttered landscape pattern and the historic villages which provide a rural setting to the major river floodplains.

Guidance for Landscape Management

- A.** Conserve the intact chalk valley sides and steep chalk cliffs, avoiding prominent cuttings or quarrying operations that would interrupt the natural shape of the land.
- B.** The continued conversion of arable land to grassland would be a beneficial change, particularly on upper valley sides – seek to extend and link chalk grassland habitats to create unified swathes of open grazed grassland which enhance the dramatic profile of the valley sides.
- C.** Ensure active management of areas of chalk grassland, through selective scrub clearance and introduction of long-term grazing in those areas (avoiding over-grazing). Monitor effects of climate change on calcareous grassland and increase grassland/ habitat diversity to increase resilience to climate change.
- D.** Manage areas of deciduous valley side woodland to ensure a diverse species and age structure by thinning, coppicing, and replanting as necessary. This will minimise risk of damage as a result of increased storms and high winds. Monitor impacts of climate change on the woodlands.
- E.** Monitor and control the spread of non-native invasive species such as Cotoneasters *Cotoneasters spp.* on the chalk grassland or Rhododendrons *Rhododendron ponticum* in the hanger woodlands (refer to the SDNP INNS Strategy) and monitor occurrence and abundance of new pests and diseases.
- F.** Plan for the succession of veteran trees in parklands.
- G.** Use green cover crops, no/low-tillage or contour ploughing and vegetated buffer strips around fields in arable areas and avoid over grazing grassland areas to minimise soil erosion. Minimise use of pesticides.
- H.** Consider effects on panoramic views from the valley sides and crests when considering woodland planting or felling.
- I.** Conserve the rural character of the road network, avoiding road ‘improvements’ that would change the character of the winding lanes.
- J.** Conserve the tranquil, rural character of the landscape, and its function as a rural setting and containment to the major river floodplains.
- K.** Raise awareness of risks of fire, especially in vulnerable areas and encourage responsible behaviour to minimise risks.

Guidance for Integrating Development into the Landscape

- A.** Maintain the nucleated character of the medieval villages and the early enclosures that surround them. Maintain uncluttered views to church spires.
- B.** Conserve the rural character of the road network, avoiding road ‘improvements’ that would change the character of the winding lanes.
- C.** Encourage sympathetic re-use of any traditional farm buildings that may become redundant so as to maintain their external fabric, appearance and setting. Refer to guidance contained in the Historic Farmsteads study.
- D.** Ensure farm diversification activities, and equestrian activities, do not adversely affect the sense of tranquillity and cause soil erosion.
- E.** Planting could be used on lower valley sides to soften the existing settlement fringes.
- F.** Ensure recreational facilities are well integrated into the landscape through careful siting and design, and using indigenous planting.

- G.** Maintain the open and undeveloped valley crest skylines – avoid siting of buildings, telecommunication masts, power lines and wind turbines on the sensitive skyline.
- H.** Consider panoramic views from the valley sides and crests and up from the valley floor, as well as views to and from the *Open Downlands*, in relation to any proposed change, taking note of representative views identified in the View Characterisation and Analysis².
- I.** Encourage methods to store water run-off to minimise flooding of the rivers in times of heavy rain and storms.
- J.** Conserve areas of dark skies, taking account of the technical guidance note dark skies technical advice note: <https://www.southdowns.gov.uk/wp-content/uploads/2018/04/TLL-10-SDNPA-Dark-Skies-Technical-Advice-Note-2018.pdf>.
- K.** Manage recreational use and ensure recreational facilities and signage are well integrated into the landscape by means of siting, materials and design.
- L.** Consider effects of any development both within and beyond the National Park boundary. In addition to being visible in views from the South Downs, secondary effects such as light spill, noise and increased traffic will all have an impact on the special qualities of remoteness and tranquillity associated with the *Open Downlands*.

Woodland strategy and suitable species

G.22 The LCT is predominantly arable and pasture farmland with occasional deciduous woodland, with 6.58km² of woodland, majority broadleaved, covering approximately 13% of the LCT. Woodland occurs predominantly on the steeper valley sides alongside pasture, chalk grassland and scrub, often in wooded coombes, or along the edge of the floodplain. The LCT has the potential to extend and create links between existing woodland, particularly the ancient woodland hangers. New areas of planting would be appropriate where these do not conflict with chalk grassland conservation and enhancement. Consider new native woodland planting, particularly on lower slopes to reduce soil erosion, avoiding harsh edges which are visually intrusive on the valley sides.

G.23 Appropriate plant species may be informed by the National Biodiversity Network Gateway, relevant Biodiversity Action Plans and biological records from the relevant Biological Records Centre.

G.24 Ensure any purchased plant stock is through reputable nurseries, operating the Plant Health Assurance Scheme (once it has been trialled) to protect against the risk of *Xylella fastidiosa* and other plant health risks.

Character Areas	
There are four <i>Major Chalk Valley Sides</i> in the South Downs. These are all located within the valley bottoms of the large U shaped valleys that cut through the eastern half of the South Downs.	
G1:	Cuckmere Valley Sides
G2:	Ouse Valley Sides
G3:	Adur Valley Sides
G4:	Arun Valley Sides
G5:	Itchen Valley Sides

² LUC. 2015 South Downs National Park: View Characterisation and Analysis

G1: Cuckmere Valley Sides

Location and Boundaries

The Cuckmere Valley is the easternmost of the wide gaps that cut through the South Downs. The bottom edge of each valley side is clearly defined by the change in topography to the flat floodplain - this also coincides with the extent of underlying river alluvium. The upper edge of the valley is defined by the crest of the slope and has been drawn along the apparent skyline of the valley as seen from the valley bottom. The valley extends north-south between the National Park boundary to the north and the shoreline at Cuckmere Haven to the south. There are views from the valley sides over the Cuckmere floodplain.

Key Characteristics

- The Cuckmere Valley is the easternmost of the deep U-shaped valleys that cuts through the chalk of the South Downs.
- The valley sides are indented by dry valleys, which are particularly well developed along the eastern edge of the valley, and steep chalk cliffs at 'High and Over', etched with a chalk carving of a white horse.
- An expansive large-scale landscape containing and providing the setting for the Cuckmere floodplain. Some slopes provide excellent views down onto the floodplain revealing patterns of the river channel and meanders that are not a perceptible at ground level.
- The valley sides support a network of rural roads and have formed a link between the Weald and the sea from the earliest prehistoric periods up to the present day.
- A string of nucleated villages of medieval origin, such as Farley and Litlington, lie along the lower slopes of both sides of the valley, positioned to exploit the varied riverine and downland resources, and surrounded by early enclosures of late medieval origin. The small market town of Alfriston is located to the north of the valley.
- Typical building materials include flint, red brick, timber and clay tiles.
- Fertile soils support arable land on shallower slopes, where large 20th century fields represent extensive re-organisation of the landscape. Pasture, chalk grassland and woodland occupy steeper slopes.
- Hedgerows and trees are features of the lower valley sides. Woodlands along the lower slopes are particularly distinctive and form a strong wooded edge to the floodplain. Friston Forest is an extensive area of beech woods and coniferous plantations.
- Good access to the valley sides by car, bicycle and on foot with a network of rural roads, which forms part of Sustrans' National Cycle Network, part of the Seven Sisters Country Park and the South Downs Way National Trail.
- A tranquil, rural setting to the Cuckmere floodplain.

Specific Characteristics Unique to the Cuckmere Valley Sides

G.25 The Cuckmere Valley is the only valley that meets the sea within the study area. This is reflected in the southern part of the character area possessing a range of nationally important coastal habitats, including maritime grassland, foreshore and chalk cliffs, including part of the Seaford to Beachy Head SSSI.

G.26 The valley sides have a particularly well developed system of dry valleys along their eastern edge with subsequent contrast between the exposed upper valley sides and deep, hidden coombes. This character area also includes

distinctive steep chalk cliffs at 'High and Over' – where a white horse is etched into the steep downland above the cliffs.

G.27 The sloping valley sides of the River Cuckmere are dominated by a mixture of open improved pasture grassland and arable land, interspersed with occasional woodland and wet grassland that extends up from the river floodplain. Wet ditches frequently dissect the fields, and many of these are at least seasonally wet and support fringes of marginal vegetation. The valley is also notable for supporting an important, and increasing, population of elm, and includes a number of mature specimens trees. Unique to this character area is the extensive area of beech woods at Friston Forest -

this extensive 20th century plantation extends from the open downs onto the eastern valley slopes and is designated as a LWS.

G.28 Most notable in terms of access is the network of rural roads that link the villages along the lower valley sides and connect to areas of land in public ownership, for example at Friston Forest where there are opportunities for walking and cycling. The Seven Sisters Country Park provides further recreational opportunities. The road along the eastern side of the valley forms part of Sustrans' National Cycle Network (National Route No.2). The South Downs Way National Trail passes through Alfriston before crossing to the eastern valley side where it continues southwards to the sea. There are further opportunities for way-marked walks, and a Youth Hostel, at Frog Firle. There are also some areas of open access land coinciding with areas of chalk downland on the valley side.

G.29 This valley contains nucleated settlements along both sides of the valley, typical of the landscape type - one village, Alfriston, is well-placed on the river and developed into a small market town and trading settlement. Former open fields associated with the, now shrunken, medieval settlements of Chyngton, Sutton and Exceat have been eradicated by large modern fields. In contrast, the surviving medieval settlements in the remainder of the character area e.g. Lullington, Litlington, and Westdean are still surrounded by early enclosures of late medieval origin.

Sensitivities Specific to the Cuckmere Valley Sides

G.30 All of the landscape and visual sensitivities listed in the landscape type evaluation apply to this character area. Specific to this character area are:

Key Landscape Sensitivities	
1.	The Litlington White horse at 'High and Over' which is a distinctive landmark on the valley side.
2.	Valley side woodland that forms part of the Seaford to Beachy Head SSSI, and the population of Cuckmere elms.
3.	Beechwoods at Friston Forest that provide diverse habitats.
4.	Panoramic views over the floodplain and valley from 'High and Over' and the Seven Sisters Country Park.

Change Specific to the Cuckmere Valley Sides

G.31 In addition to the generic changes listed in the landscape type evaluation, specific changes to this area include:

Forces for Change	
1.	Loss of a significant elm population, which lies within the East Sussex Dutch Elm Control Area.
2.	Potential loss of beechwoods due to climate change.

Landscape Management/Development Considerations Specific to the Cuckmere Valley Sides

G.32 In addition to the generic landscape management and development considerations for this landscape type, the following landscape management considerations are specific to this character area:

- a. Conserve the Litlington white horse as a landmark feature.
- b. Monitor the elm population in the Cuckmere Valley and support their conservation as distinctive features of the valley.
- c. Monitor the beechwoods and their response to climate change to ensure their survival as a feature.
- d. Consider effects on panoramic views from High and Over and the Seven Sisters Country Park when considering any change to the valley. Refer to guidance in the View Characterisation and Analysis report³.

³ LUC. 2015 South Downs National Park: View Characterisation and Analysis

G2: Ouse Valley Sides

Location and Boundaries

The *Ouse Valley Sides* enclose the *Ouse Floodplain*, a particularly wide floodplain that cuts through the South Downs between Lewes in the north and Newhaven in the south. The bottom edge of each valley side is clearly defined by the junction with the flat floodplain - this also coincides with the extent of underlying river alluvium. The upper edge of the valley is defined by the crest of the slope and has been drawn along the apparent skyline of the valley as seen from the valley bottom. To the north the valley meets the scarp north of Lewes, and to the south the valley sides meet the National Park boundary which also coincides with the urban edge of Newhaven. There are views from the valley sides over the Ouse floodplain.

Key Characteristics

- Valley sides carved from chalk, varying from extremely steep at the north and south ends, to very shallow in the middle.
- Severe cuttings and quarries around Cuilfail and along the A26 and A27 on the edge of Mount Caburn form white scars in the landscape.
- Fertile soils support arable land on the shallower slopes above Lewes Wild Brooks where large 20th century fields represent extensive re-organisation of the landscape.
- Pasture, chalk grassland and woodland occupy steeper slopes close to Newhaven, Lewes and on the edges of Mount Caburn.
- The valley sides support an extensive road network, including the A27 (and its junctions), the A26 (which passes through the Cuilfail Tunnel), and a minor road along the western valley side.
- Minor lanes and unsurfaced tracks descend the valley sides – many of these are now public rights of way that allow access up onto the adjacent downs.
- A string of nucleated villages of medieval origin, lie along the lower slopes of the western valley side where the slopes are less steep e.g. Kingston near Lewes, Iford, Northease, Rodmell, and Southease. These are surrounded by a field pattern of early enclosures.
- Lewes is an historic port, located on the steep valley side alongside the River Ouse. Typical building materials in Lewes include flint, red brick, timber and clay tiles. Lewes Castle is a landmark.
- Woodlands along the lower slopes are particularly distinctive and form a strong wooded edge to the floodplain.
- Away, from the roads, the valley sides form a tranquil, rural setting to the floodplain.

Specific Characteristics Unique to the Ouse Valley Sides

G.33 The physical characteristics of the *Ouse Valley Sides* are typical of their landscape type, in that the chalk sides exhibit great variation in the steepness of slope. The valley sides are extremely steep above Cliffe where the Cuilfail Tunnel takes the A26 through the chalk valley side. The steep slopes have also been quarried for chalk which has left white scars on the valley side. Many of these former pits are of significant geological interest, including nationally important sites such as Southerham Grey Pit SSSI and Southerham Work Pit SSSI. Occasional small areas of chalk grassland also extend into this character area from the adjacent open

downland, for example Kingston Escarpment and Iford Hill SSSI, and Lewes Downs SSSI.

G.34 In contrast, the shallow valley sides around Lewes Wild Brooks support an extensive area of arable crops in large 20th century fields. Combined with areas of permanent pasture and ditches, this area provides important habitat for a range of farmland birds.

G.35 Another distinctive feature of this character area is the amount of built development on the valley sides – this is mostly associated with the historic port of Lewes, positioned at the junction between the Downs and Weald. Most notable in terms of access is the extensive road system. The South

Downs Way National Trail also crosses the valley sides providing access by foot to the adjacent downs. This combination of built development and traffic erodes the sense of tranquillity in this character area.

G.36 In addition to Lewes, this valley contains nucleated settlements along its western side, from Kingston near Lewes in the north to Piddinghoe in the south. Small blocks of 18th-19th century enclosure survive south of Kingston and west and south of Beddingham.

Sensitivities Specific to the Ouse Valley Sides

G.37 All of the landscape and visual sensitivities listed in the landscape type evaluation apply to this character area. Specific to this character area are:

Key Landscape Sensitivities	
1.	The small blocks of 18 th -19 th century enclosure south of Kingston and west and south of Beddingham.
2.	Former chalk pits of significant geological interest, including nationally important sites such as Southerham Grey Pit SSSI and Southerham Work Pit SSSI.
3.	Views of Lewes Castle.

Change Specific to the Ouse Valley Sides

G.38 In addition to the generic changes listed in the landscape type evaluation, specific changes to this area include:

Forces for Change	
1.	Infrastructure improvements and road widening associated with the A26 and A27.
2.	Development pressures associated with Lewes, such as strategic sites at Old Malling Farm.
3.	Further chalk quarrying operations.
4.	Intensification of agriculture and amalgamation of fields.

Landscape Management / Development Considerations Specific to the Ouse Valley Sides

G.39 In addition to the generic landscape management and development considerations for this landscape type, the following landscape management considerations are specific to this character area:

- a. Encourage the creative restoration of redundant chalk quarries, exploiting the potential for geological interest, nature conservation, and recreation, and ensuring they blend with their surroundings.
- b. Conserve the small blocks of 18th-19th century enclosure south of Kingston and west and south of Beddingham.

Landscape Management / Development Considerations Specific to the Ouse Valley Sides

G.40 The following development considerations are specific to this character area:

- a. Avoid further chalk quarrying operations that would be highly visible.
- b. Ensure any infrastructure 'improvements' are sensitive to topography and dark night skies – minimise land take and ensure any proposals are integrated effectively into the landscape through ground modelling and native planting.
- c. Ensure that any built development in and around Lewes is limited in extent, maintains the historic character of the settlement (built as a port), minimises impact on topography, maintains views to Lewes Castle, and maintains the dark night skies.
- d. Outside Lewes maintain the character of the rural nucleated villages surrounded by areas of 18th-19th century enclosure.
- e. Maintain a consistent palette of built materials – including flint, red brick, timber and clay tile.
- f. Consider views from the South Downs when planning any change – refer to guidance in the View Characterisation and Analysis report⁴.

⁴ LUC. 2015 *South Downs National Park: View Characterisation and Analysis*

G3: Adur Valley Sides

Location and Boundaries

The *Adur Valley Sides* enclose the *Adur Floodplain* that cuts through the South Downs between Upper Beeding in the north and Shoreham in the south. The bottom edge of each valley side is clearly defined by a marked change in topography to the flat floodplain - this also coincides with the extent of underlying river alluvium. The upper edge of the valley is defined by the crest of the slope and has been drawn along the apparent skyline of the valley as seen from the roads in the valley bottom. To the north the valley sides form a transition to the scarp footslopes, and to the south the valley sides meet the National Park boundary at the A27. There are views from the valley sides over the Adur floodplain.

Key Characteristics

- Valley sides carved from chalk, relatively steep along their whole length. The large disused chalk quarry at Shoreham Cement Works forms a white scar in the landscape.
- Pasture, chalk grassland and woodland occupy steeper slopes, for example at Mill Hill and Anchor Bottom – these are important for biodiversity.
- The valley sides support an extensive road network, including the A283 on the eastern valley side and Coombes Road in the western valley side.
- Minor lanes and unsurfaced tracks descend the valley sides – many of these are now public rights of way that allow access up onto the adjacent downs.
- A string of shrunken medieval villages lie along the lower slopes of the western valley side e.g. Botolphs, Coombes, Applesham Farm. These are surrounded by early enclosures.
- Woodlands along the lower slopes are particularly distinctive and form a strong wooded edge to the floodplain.
- Away, from the roads, the valley sides form a tranquil, rural setting to the floodplain.
- The prominent Gothic chapel of Lancing College is a particularly distinctive landmark standing at the southern end of the Adur valley. The chimney of the Shoreham Cement Works is also a key landmark feature.

Specific Characteristics Unique to the Adur Valley Sides

G.41 The physical characteristics of the *Adur Valley Sides* are typical of their landscape type, being carved from the underlying chalk bedrock. The large disused chalk quarry at Shoreham Cement Works is a particularly notable feature of the Adur Valley and reveals the underlying bedrock as a white scar on the valley side. The chimney of the adjacent cement works is a major feature on the valley side. A further distinctive feature of this character area is the Gothic chapel of Lancing College which stands at the southern end of the valley – there are clear views of this landmark, which stands in an open setting against the steep backdrop of the valley side, from much of the southern half of the valley as well as from the coastal plain to the south.

G.42 Although dominated by arable agriculture, the area has retained significant ecological interest, particularly associated with the small areas of chalk grassland and woodland which occur on the steeper slopes. Notable examples are at Mill Hill

and Anchor Bottom. In the wider landscape, habitats such as permanent pasture, arable land and hedgerows provide locally important ecological features.

G.43 Most notable in terms of access is the road system - the A283 runs along the eastern valley side and the minor Coombe Road runs along the western side providing access by car the length of the valley. Parking alongside the A283 gives access to the South Downs Way National Trail which descends to the river floodplain to the west and up onto the adjacent downs to the east.

G.44 In this character area the medieval villages on the valley sides have shrunk down to the size of small hamlets (Coombes and Botolphs) or single farms (Applesham and Erringham). The absence of villages is notable and gives the valley a remote and tranquil character.

G.45 Unique to this character area is the historic salt-making industry which thrived from Saxon times until the 14th century

– salt-making was associated with Applesham, Coombes, Annington and Botolphs. The presence of small raised mounds on the adjacent floodplain provides evidence of this industry.

Sensitivities Specific to the Adur Valley Sides

G.46 All of the landscape and visual sensitivities listed in the landscape type evaluation apply to this character area.

Specific to this character area are:

Key Landscape Sensitivities	
1.	The small blocks of 18 th -19 th century enclosure around the medieval settlements of Botolphs, Coombes, Applesham and Erringham.
2.	The swathes of chalk grassland and woodland on steep valley sides at Mill Hill and Anchor Bottom.
3.	Views to the Gothic chapel of Lancing College which stands as a major landmark at the southern end of the valley.
4.	Panoramic views from parking area and nature reserve at Mill Hill.

Change Specific to the Adur Valley Sides

G.47 In addition to the generic changes listed in the landscape type evaluation, specific changes to this area include:

Forces for Change	
1.	Future change associated with the identification of Shoreham Cement Works due to its identification as a site of for sustainable mixed use development in the Local Plan.

Landscape Management / Development Considerations Specific to the Adur Valley Sides

G.48 In addition to the generic landscape management and development considerations for this landscape type, the following landscape management considerations are specific to this character area:

- a. Encourage the creative restoration of the redundant chalk quarry and Shoreham Cement Works, exploiting the potential for geological interest, nature conservation, education, and recreation, and ensuring they blend with their surroundings.

- b. Conserve the small blocks of 18th-19th century enclosure around the medieval settlements of Botolphs, Coombes, Applesham and Erringham.
- c. Seek opportunities for creation of additional chalk grassland sites on steep valley sides, linking them to existing chalk grassland at Mill Hill and Anchor Bottom.

G.49 The following development considerations are specific to this character area:

- a. Ensure the development of Shoreham Cement Works as a mixed use development is sensitive to the site's location on a steep valley side in an area of dark skies. The chimney is a landmark in the valley – redevelopment of the site provides an opportunity to provide a new landmark.
- b. Maintain views to the Gothic chapel of Lancing College and its open setting which stands as a major landmark at the southern end of the valley. Refer to guidance in the View Characterisation and Analysis⁵.
- c. Conserve links between the valley side settlements and the adjacent floodplain landscape through historic interpretation (the role of Applesham, Coombes, Annington and Botolphs in the salt-making industry on the floodplain) and physical/visual connections.
- d. Consider views from the parking area and nature reserve at Mill Hill in planning any change.

⁵ LUC. 2015 *South Downs National Park: View Characterisation and Analysis*

G4: Arun Valley Sides

Location and Boundaries

The *Arun Valley Sides* enclose the floodplain of the River Arun that cuts through the South Downs between Amberley in the north and Arundel in the south. The bottom edge of each valley side is clearly defined by a marked change in topography to the flat floodplain - this also coincides with the extent of underlying river alluvium. The upper edge of the valley is defined by the crest of the slope and has been drawn along the apparent skyline of the valley as seen from the roads in the valley bottom. To the north the valley sides form a transition to the scarp footslopes, and to the south the valley sides meet the National Park boundary. There are views from the valley sides over the Arun floodplain.

Key Characteristics

- Valley sides carved from chalk, relatively steep along their whole length, and deeply indented by a system of dry valleys.
- Disused chalk quarries above Amberley, relating to the production of lime in the 19th century, are now recognised for their biodiversity interest and are designated as a LWS.
- Pasture, chalk grassland and woodland occupy steeper slopes, for example at Peppering Down, Warningcamp Hill and New Down, and Coombe Wood – these are important for biodiversity and often provide open public access.
- The eastern valley side is composed of large-scale arable fields while the western valley side, by comparison, consists largely of surviving early enclosures of late medieval date, reflecting the histories of land use and ownership.
- Arundel Park, a major 18th century landscape park, has a major influence on the wooded character of the western valley sides.
- The valley sides contain a fragmented road network of narrow rural lanes which often end in dead ends.
- A string of villages are located along the lower valley sides e.g. Houghton, North Stoke, South Stoke, Offham, Burpham, Wepham, surrounded by fields enclosed in the later medieval period.
- Includes the northern outskirts of the town of Arundel, a former port on the Arun. Arundel Castle is a particularly distinctive landmark standing at a commanding position at the southern end of the Arun valley.
- The limited road network ensures the valley sides provide a tranquil, rural setting to the River Arun and its floodplain.

Specific Characteristics Unique to the Arun Valley Sides

G.50 The physical characteristics of the *Arun Valley Sides* are typical of their landscape type, being carved from the underlying chalk bedrock and indented by dry valleys. However, this character area is unique in that its eastern and western valley sides exhibit different characteristics. While the eastern valley side has an agricultural history typical of the generic landscape type (an efficient agrarian landscape based on sheep-corn husbandry), the poorer soils on the western valley have historically been associated with woodland and Arundel Park, a major 18th century landscape park. The character of the valley sides are now subtly different on each side – the eastern valley side exhibits large scale (20th century) fields in arable use on land which was formerly sheepwalk while the western valley side consists largely of surviving early enclosures of late medieval date and woodland associated with Arundel Park.

G.51 The woodlands are of particular biodiversity value as exemplified by the large number of statutory and non-statutory woodland sites on the valley sides. This includes a large area of Arundel Park SSSI, which comprises an old deer park dominated by chalk grassland with dense or scattered scrub and mature semi-natural woodland. This site is considered to be one of the most important sites in the country for invertebrates, and also supports a diverse range of breeding birds. A number of woodland LWS's also occur including Coombe Wood.

G.52 Elsewhere, steeper areas support areas of chalk grassland and permanent pasture, for example at Peppering Down, Warningcamp Hill and New Down. These sites are important for biodiversity supporting a wide range of characteristic chalk grassland plant species, as well as providing important areas for open public access.

G.53 This character area has a fragmented road system which restricts access by car – the large amount of land in private ownership, particularly along the western valley side inhibits access further. However, connections to and from adjacent landscapes are provided by minor roads and public rights of way, including the South Downs Way National Trail which crosses the valley above Houghton. There is also a Youth Hostel at Warningcamp.

G.54 The settlement pattern in this valley is typical of the *Major Chalk Valley Sides* landscape type, exhibiting a string of medieval villages along the length of the valley e.g. Houghton, North Stoke, South Stoke, Offham, Burpham, and Wepham. These are surrounded by small blocks of late medieval and 18th-19th century enclosure.

G.55 This character area includes the northern outskirts of the historic port and town of Arundel as well as Arundel Castle, a particularly distinctive landmark standing at a commanding position at the southern end of the Arun Valley.

Sensitivities Specific to the Arun Valley Sides

G.56 All of the landscape and visual sensitivities listed in the landscape type evaluation apply to this character area. Specific to this character area are:

Key Landscape Sensitivities	
1.	Early enclosures of late medieval date on the western valley side.
2.	The tranquil character of the valley resulting from incomplete and minor road systems.
3.	The small blocks of late medieval and 18 th -19 th century enclosure around the medieval settlements of Houghton, North Stoke, South Stoke, Offham, Burpham, and Wepham.
4.	The swathes of chalk grassland and woodland on steep valley sides, for example at Peppering Down, Warningcamp Hill and New Down, and Coombe Wood.
5.	The historic designed parkland landscape at Arundel Park.
6.	Views to Arundel Castle, a particularly distinctive landmark standing at a commanding position at the southern end of the Arun Valley.

Change Specific to the Arun Valley Sides

G.57 In addition to the generic changes listed in the landscape type evaluation, specific changes to this area include:

Forces for Change	
1.	Pressure for development including village expansions and loss of fields,
2.	Further growth of Arundel and changes within the town that could impact on the wider landscape of the valley.

Landscape Management / Development Considerations Specific to the Arun Valley Sides

G.58 In addition to the generic landscape management and development considerations for this landscape type, the following landscape management considerations are specific to this character area:

- a. Conserve small blocks of late medieval and 18th-19th century enclosure around the medieval settlements of Houghton, North Stoke, South Stoke, Offham, Burpham, and Wepham and the late medieval enclosures on the western valley side.
- b. Seek opportunities for creation of additional chalk grassland sites, linking them to existing chalk grassland at Peppering Down, Warningcamp Hill and New Down.
- c. Maintain the wooded character of the western valley side as distinct from the east - manage areas of deciduous valley side woodland to ensure a diverse species and age structure by thinning, coppicing, and replanting as necessary.
- d. Support the River Arun Heritage project, which aims to re-connect people with the heritage of the River Arun.
- e. Conserve the tranquil character of this valley – encourage access on foot/bicycle rather than by car. Consider providing parking facilities close to the main road approaches to the valley.

G.59 The following development considerations are specific to this character area:

- a. Maintain views to Arundel Castle, a particularly distinctive landmark standing at a commanding position at the southern end of the Arun Valley. Refer to guidance in the View Characterisation and Analysis report⁶.
- b. Ensure any development within the town of Arundel is assessed in terms of its impact on the composition of the town as seen from the wider valley – consider views of the town from local public rights of way and roads in assessing proposals.

⁶ LUC. 2015 *South Downs National Park: View Characterisation and Analysis*

G5: Itchen Valley Sides

Location and Boundaries

This character area includes the valley sides of the River Itchen downstream of New Alresford. The boundaries of the valley sides are defined by topography with the lower boundary drawn along the edge of the floodplain and the upper boundary drawn roughly along the apparent skyline of the valley sides as seen from the valley floor.

Key Characteristics

- Smoothly rounded valley sides carved from chalk, generally less steep than the valley sides of the major chalk valleys in east of the National Park.
- Shallow well drained, calcareous silty soils support intensive arable cultivation on shallower slopes of the valley sides. Other areas are pasture.
- Field patterns are a mixture of informal fieldscapes resulting from piecemeal enclosure and formal fieldscapes resulting from planned enclosure – the smaller fields are around settlements.
- Generally little woodland, but some distinctive belts along the edge of the floodplain and on steeper slopes e.g. ancient woodland at Beech Hill.
- A sequence of villages and settlements occur along the lower valley sides, linked by roads which run parallel to the floodplain – many are designated as conservation areas and some are associated with designed landscapes.
- The large landscape park at Avington, which is listed on the English Heritage register, is the most notable of the designed landscapes but others exist at Bambridge Park, Twyford Lodge, Worthy Park, Itchen Stoke House and Ovington House.
- Crossed by the M3 and A roads which interrupt the otherwise tranquil valley landscape.

Specific Characteristics Unique to the Itchen Valley Sides

G.60 The Itchen Valley Sides are smoothly rounded and less steep than the valley sides of the chalk valleys in the eastern half of the National Park.

G.61 The valley sides support arable cultivation with some pasture. The enclosure pattern is a mixture of informal fieldscapes resulting from piecemeal enclosure and formal fieldscapes resulting from planned enclosure. Smaller fields are located close to the villages. There is relatively little woodland, although distinctive tree belts mark the edge of the floodplain and an area of ancient woodland exists at Beech Hill. There is also woodland associated with historic parkland.

G.62 The importance of the valley for settlement is expressed through the remains of some bowl barrows (on the valley side above Compton Lock and 200m east of Twyford Pumping Station), a Roman Villa at Twyford, an Anglo-Saxon cemetery in Worthy Park, and a moated site 300m south east of Compton House.

G.63 The settlement pattern today is typical of the type with a sequence of nucleated and linear settlements on the valley sides above the floodplain: Itchen Stoke, Ovington, Avington,

Itchen Abbas, Martyr Worthy, Easton, Abbots Worthy, Twyford (and Winchester which is outside the National Park). Many of these historic villages are designated as conservation areas and contain many listed buildings, illustrating the historic importance and architectural interest present within these settlements.

G.64 There are a number of designed landscapes on the valley sides including the large landscape park at Avington, which is listed on the English Heritage register, and other smaller parks/ gardens at Bambridge Park, Twyford Lodge, Worthy Park, Itchen Stoke House and Ovington House.

G.65 Although the valley has an overall tranquil quality this is disrupted in place by the audible 'hum' of traffic. The character area is crossed in two locations by the M3 and in several places by A roads. Hockley viaduct (a Victorian brick built structure with a concrete core) which once linked the Didcot, Newbury and Southampton railway with the Great Western Railway is now disused but remains an important landmark feature. There is also a disused railway line between Winchester and Alresford.

G.66 The Itchen Valley Way allows public access all along the valley and to places of interest.

Sensitivities Specific to the Itchen Valley Sides

G.67 All of the landscape and visual sensitivities listed in the landscape type evaluation apply to this character area. In addition, specific to this character area are:

Key Landscape Sensitivities	
1.	Historic villages and designed landscapes parks which provide a sense of history.
2.	The panoramic views over the valley from St Catherine's Hill also increase the sensitivity of the valley to change.

- c. Consider the panoramic views from St Catherine's Hill (in adjacent character area) in relation to any change within the Itchen Valley. Refer to guidance in the View Characterisation and Analysis report⁷.
- d. Seek to limit further encroachment of suburban influences (such as fencing) around village properties and conserve areas of flint walling which are particularly distinctive features of a number of settlements.

Change Specific to the Itchen Valley Sides

G.68 In addition to the changes listed in the landscape type evaluation, specific changes to this area include:

Forces for Change	
1.	Continued pressure for built development on the outskirts of existing settlements, affecting the nucleated and historic character of settlements and resulting in increased lighting.
2.	Continued road upgrades and expansions.

Landscape Management / Development Considerations Specific to the Itchen Valley Sides

G.69 In addition to the generic landscape management and development considerations for this landscape type, the following management considerations are specific to this character area:

- a. Conserve the historic designed parkland landscapes that are characteristic of the valley sides.
- b. Seek to conserve/ reinstate grassland and woodland on the valley sides to stabilise soils.

G.70 The following development considerations are specific to this character area:

- a. Ensure that any future traffic regulation and road upgrades associated with the M3, A34 and A31 are integrated into the rural valley landscape and ensure any signage is sensitively detailed.
- b. Maintain the nucleated form of villages and avoid extending linear development along roads. Minimise light spill from settlements.

⁷ LUC. 2015 *South Downs National Park: View Characterisation and Analysis*