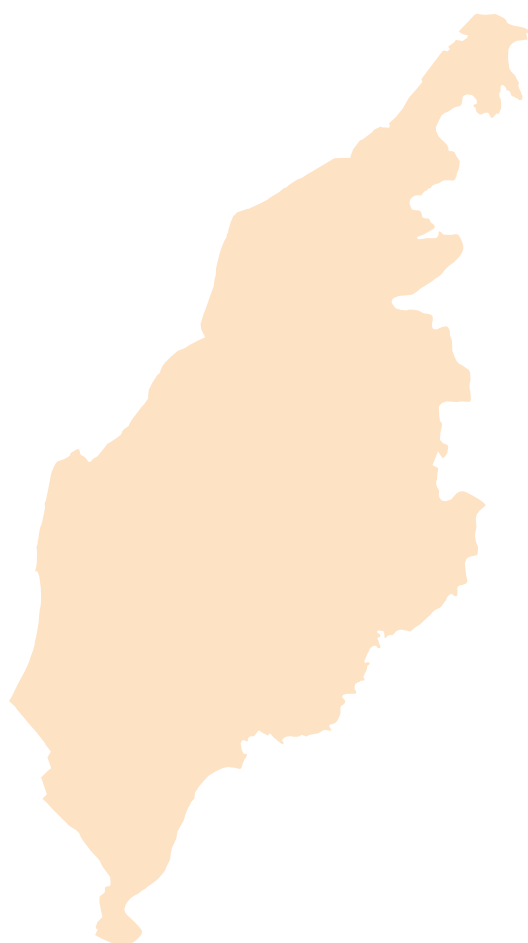




## Area 20

### Piling Levels

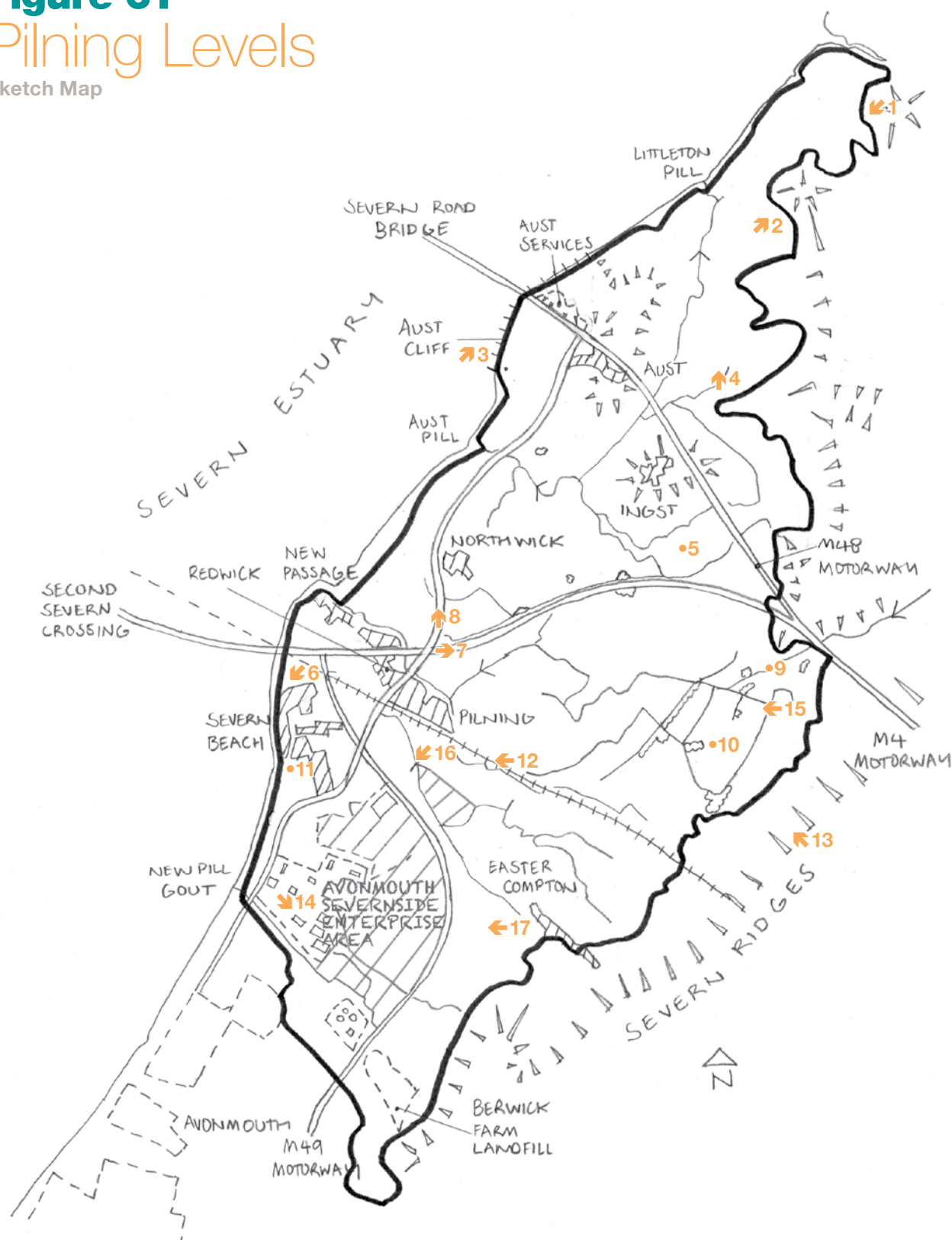


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## Figure 61 Piling Levels

Sketch Map



Key

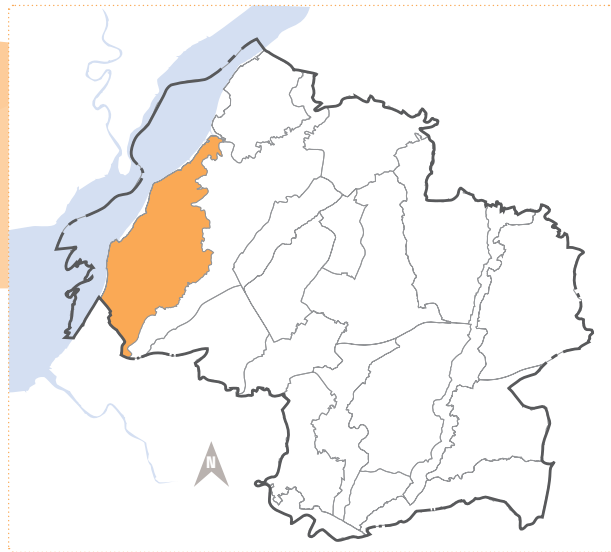
17 Photograph viewpoints

Scale: not to scale

## Area 20

### Pilning Levels

**The Pilning Levels is an area of contrasts, with a largely flat, semi-enclosed to open agricultural landscape, divided by rhines and linear transport routes across the central and northern area, and extensive areas of industry and warehousing in the south.**



## Key Characteristics

- The rural part of the character area comprises a flat, simple landscape of medium to small, regular and irregular shaped fields, with a mix of pasture (some with ridge and furrow) and arable fields. Criss-crossed by rhines, clipped and some overgrown hedges, with occasional strong tree belts, withy beds, orchards, scattered mature trees and pollards.
- Strong visual influence of the estuary, and areas of the levels that provide overwintering habitat for birds associated with the international and national designations on the Severn Estuary.
- Neutral, calcareous and marshy grassland across the levels provide visual texture and support a diverse range of flora, while arable areas provide nesting and winter stubble provides foraging opportunities for farmland birds including Amber and Red listed species.
- Outliers at Ingst and Aust form prominent low hills.
- Scattered wooded areas contribute to greater enclosure of landscape in some areas as well as providing habitat for notable species including European Protected Species.
- Semi-enclosed to open landscape, with occasional long distance views from slightly elevated vantages, west towards South Wales & Forest of Dean and east towards the Severn Ridge.
- Numerous major roads, including the M4, M48, M49 and A403 and a railway line bisect the Levels landscape. Infrastructure, embankments and bridges form prominent features above natural ground level, however the associated cuttings and planting has over time achieved some absorption of these into the wider landscape framework.
- Limited clustered settlements and scattered farms, mainly on higher ground, with much of the area of the rural Levels landscape being relatively unpopulated.

## Key Characteristics

- An expanding and evolving complex of industrial, power generation, chemical works and distribution warehouses are prominent to the south and continuing into the adjacent Bristol City Council area.
- The two Severn Bridges are prominent to the west beyond the area. Several powerlines and supporting towers crossing the area are also prominent.

### Location

The Piling Levels landscape character area is located on the south western edge of the South Gloucestershire area, to the north west of Bristol.

Its southern limits follow the South Gloucestershire Authority boundary, although the character of this area does continue southwards into the Bristol Council area towards Avonmouth.

The eastern and north eastern boundaries follow an often subtle transition in landform, land cover and drainage pattern, between the flat Levels' landscape and the rising ground of the Severn Ridges, largely following the 10m contour, although in some places the topographic change is imperceptible.

To the west, the boundary follows the sea wall and rock outcrop at Aust. Here there is a clear transition between the fields of the Levels and the warth salt marsh and intertidal areas of mudflats, where the open expanses of the Estuary are dominant. (See Figure 64).

### Physical Influences

The geology of this area is predominantly Alluvial, with Alluvial Gley soils typical of the lowland Levels' landscape. This creates a low lying flat landscape, the topography generally below 10 metres a.o.d. Occasional outcrops of harder rocks, such as sandstone or Carboniferous limestone, create outliers such as at Ingst and Aust, which rise above the flat Levels, forming small isolated hills, between approximately 25 metres and 40 metres a.o.d. Both outliers are dissected by the M48,

with Aust Cliff a prominent feature on the western boundary, facing the Severn Estuary. Aust Cliff is designated an SSSI and RIGS, for its outcropping geological formation and fossil bed.

A major characteristic of this area is the sea wall to the west and pattern of man-made drainage ditches, locally called rhines. Some rhines date back to medieval times, with other phases of construction during the Napoleonic era and First World War. These phases in land drainage reclaimed areas of marshland, to improve agricultural production. The pattern of rhines gives some indication of their date of construction, the more regular patterns representing the most recent areas of drainage. The rhine system is controlled by sluices in the sea wall, which discharge into tidal pills and the Estuary beyond.

In places, 'gryps' (comprising a linear shallow bank landform similar to ridge and furrow), provide drainage to the system of rhines.

Many of the rhines are named on the OS 1:25,000 Explorer series maps, indicating the significance of the drainage features. However, many more have local names, contributing to the identity and colour of the area.

The lowland Levels' landscape is contained to the east by the rising land of the Severn Ridge and to the west is defined by the sea wall, with the Severn shoreline and Estuary beyond.

The sea wall comprises a grass covered earth embankment up to 2m high above the adjacent natural ground level and connects with the Binn

Wall at New Passage. Flood defences have been a feature along the edge of the Estuary for some considerable time, with map evidence indicating the sea wall has been in existence since at least the mid 18th century. The wall could be much earlier, with one section within the Bristol Authority area dating to the Saxon period.

Within this very flat landscape, the railway embankment of the South Wales to London line and to a lesser degree, road and overbridge embankments, form significant raised physical features, which segment the Levels and are superimposed over the older drainage and agricultural patterns.

Artificially raised ground at Berwick Farm landfill site lies adjacent to the southern boundary, with earth bunds reaching 20 metres above existing ground level.

### Land Cover

Much of the Pilning Levels landscape character area is covered by a mix of small to medium, regular and irregular shaped fields of pasture and limited arable use (Photo 1 & 4). Fields are more variable and irregular in shape between Aust and Pilning. The fields are defined by clipped and overgrown hedges, with occasional mature trees or pollarded trees of oak, willow and ash (Photo 5). Occasionally, fences replace the hedgerow structure.

Dead elm trees are evident within some hedgerows, often within drier, more elevated areas of the Levels.

Ridge and furrow is a common subtle feature, evident within many unimproved fields within the Levels. Gryps, created for field drainage, are also evident and form low banks which spread out from the centre of fields. They appear similar to ridge and furrow, but tend to be straighter, shorter and shallower. Beneath the visible landscape the underlying soil layers were gradually laid down over time and are of significant archaeological potential. Much of the area is unsurveyed and there are therefore the potential for significant

finds going back to pre-historic times across the historic landscape of the Levels.

Small, square or rectangular woodland blocks, with some withy beds of hazel or willow coppice, are frequently scattered centrally, with occasional linear tree belts of alder and poplar (Photo 13 & 15). Linear tree and shrub planting also lines significant lengths of the motorways, with blocks of tree planting cloaking junctions and the embankments around the overbridges. At the Western Approaches development a strong framework of rhynes, ponds and tree and shrub planting have replaced to former agricultural landscape.

Small areas of common land often fringe the country lanes and farmsteads, in the form of verges.

Small orchards are scattered throughout the rural area, associated with farms.

The regular, linear vegetation structure is largely defined by the underlying pattern of rhynes, which flows towards the Severn Estuary (Photo 13 & 9). Local small scale features include rhine aqueducts, where one watercourse is carried over another by bridge (Photo 10).

Adjacent to New Passage and the sea wall lies a former rifle range, comprising open grassland, firing range and extensive danger area, which extends over part of the sea wall/public footpath and over Northwick Warth, within the adjacent character area. The boundary of the site is largely indistinct and variously formed by hedgerows of the adjacent agricultural land use and a section of the sea wall.

Berwick Farm landfill site lies to the south of the former Severnside Chemical Works site, adjacent to the southern boundary. Following completion of landfill operations, a new raised landform has created a number of broad hills up to 20 metres above existing ground level.

Much of the southern part of the character area is covered by an extant 1957/8 planning permission for a range of industrial related uses. This is an

area of ongoing development and redevelopment for a range of warehousing, industrial and energy generation uses.

### Biodiversity

The mosaic of grassland and pastoral farmland with some woodland and a criss-crossing of rhynes, and scattered ponds connected by wildlife corridors including rhines and hedgerows make the Pilning Levels an important habitat for a diverse range of species. The incorporation of woodland, rhine and other habitat areas and corridors into the early phases of the development at Western Approaches ensured continuity of habitat through this development area.

The Pilning Levels includes 100 hectares of woodland scattered across the area mainly represented by small copses including orchards with a larger area of woodland located within the eastern extent of the area. Key species likely to be associated with the broadleaved woodland include bats and dormice both of which are present across the District and are UK priority species with associated Biodiversity Action Plans (BAP).

There are several SNCs comprising a mosaic of habitats including three for their neutral, calcareous and marshy grassland and two for woodland. In addition Impool, Middle and Upper Compton, The Pill and Olveston Mill rhines are also designated. This designation recognises the importance of these habitats within the national context for flora and fauna, and the network of hedgerows and rhines provides good connectivity. The diverse grassland habitat supports a range of invertebrates which in turn provide a food source for mammals including bats.

There are many watercourses including rhines criss-crossing the landscape through this area. These will support a diverse range of species from aquatic macro-invertebrates to fish and watervoles. Ponds and pools within the area will support amphibians such as great crested newts (a European Protected Species).

The majority of the agricultural land use within this area is pastoral farmland with small areas in arable use. The former provides roosting and foraging opportunity for the overwintering birds associated with the Severn Estuary, including those associated with its international and national designations.

The areas of arable farmland provide ground nesting and the winter stubble provides foraging opportunity for ground nesting farmland birds including those listed as Globally Threatened Red listed species.

### Settlement and Infrastructure

There are no major settlements within this area, although a number of villages and hamlets are present. There are some parts within the central eastern and northern area that are relatively unpopulated and crossed by no or few roads.

There is a history of land reclamation in the Levels dating back to Roman and mediaeval times.

Small settlements are either clustered on higher ground, as found at Aust and Ingst, or have typically developed along linear routes as seen at Easter Compton, Pilning, Redwick and New Passage as well as at Severn Beach. Northwick forms an exception, comprising a clustered pattern within the flat Levels.

Farms and farmsteads are scattered at frequent intervals within the Levels, often on the edges of small commons, surrounded by drainage ditches and connected by a network of minor roads and lanes.

The older village of Aust and hamlets of Ingst and Northwick, form clustered settlements of Pennant sandstone farms and cottages, with churches at Aust and Northwick.

The linear village of Easter Compton, comprising Pennant sandstone, brick and rendered houses, extends onto the lower slopes of the Severn Ridges.



The concentration of several settlement centres on the western boundary, have diverse form and content, reflecting a number of development phases.

- Severn Beach and Pilning owe part of their growth to the railways, with Severn Beach once a popular beach resort.
- Pilning has a dense pattern of stone, render and brick houses, clustered at road intersections. Severn Beach has a regular block pattern of largely mid to late 20th century brick housing (Photo 11) and a couple of static caravan parks.
- New Passage and Redwick comprise a linear pattern of Pennant and Old Red Sandstone cottages, large houses and older brick houses.
- To the south east of Pilning, along the B4055, lie two isolated linear groups of brick terraced cottages.
- Aust Motorway Services Area includes a car park, service and petrol station. The former service station building has been converted (now the Motion Picture Media Centre) and forms a large white rectangular building with low roof, which is located near the edge of Aust Cliff facing the Estuary.

The Binn Wall between New Passage and Severn Beach is a concrete/stone sea defence wall (Photo 6), originating in the early 17th century or even earlier. It connects to the more extensive, grass embankment sea wall along the western boundary.

The Severnside area is in transition with some of the chemical works having gone (Photo 14 & 17), and large areas of new development emerging. Large scale, light coloured warehouse buildings of the expanding Western Approach Distribution Park (Photo 12 & 16) and the later Tesco development on the east side of the M49, are present to the south east of Severn Beach. Both these developments cover extensive areas, and together extend southwards to the large industrial complex at Avonmouth, beyond this character area.

A small former industrial estate is located adjacent to the sea wall at Littleton Pill, in an isolated position to the north west of Littleton-upon-Severn. The site comprises a small cluster of warehouses and adjacent pools (the site of the former Littleton Brickworks).

The M4, M48 and M49 motorways all cross the area, largely on embankments, segmenting the rural landscape (Photo 7) and continuing across the Severn Estuary over the two Severn Bridges (the Severn Road Bridge (Photo 3), and the Second Severn Crossing). The A403 runs north to south, partly along the edge of the Estuary, connecting the M48 to Avonmouth in the south.

The London-Swansea (South Wales to Bristol) railway crosses the area east to west, on embankment to Pilning Station, before passing into a deep cutting to enter the Severn Tunnel. Some metal storage containers are grouped together at Pilning Station, which is located on high embankment.

The area is also crossed by numerous lanes and roads, including the B4055 which connects Easter Compton to Pilning. These are often raised slightly above the Levels' landscape. Many of the minor lanes connecting villages or hamlets inland terminate at the Estuary edge.

There are two major recreational routes which give access across the area. One of a series of Circular Rides makes use of both rural highways and public rights of way, running extensively throughout the area. The Jubilee Way also crosses the area from west to east, from Littleton-upon-Severn, connecting the Severn Way (which runs along the Estuary) to the Cotswold Way in the east of South Gloucestershire. There is also a low density, but extensive, public footpath network connecting settlements, with some areas devoid of coverage.

Overhead powerlines, supported on steel pylons, cross the landscape along several prominent corridors, north to south and east to west, while the National Grid sealing end compound is tucked in below the east side of the hill at Aust

just uphill from the sea wall. A central part of the character area west to east, between Ingst and Pilning, remains free of pylon lines.

### Landscape Character

The Pilning Levels comprise a flat, semi-enclosed to fairly open lowland area, with frequent and characteristic views eastwards to the Severn Ridges and more distant views north westwards, towards the Severn Estuary, South Wales and Forest of Dean. Longer distance views south west to the Exmoor coastline are visible in clear weather. Slightly elevated vantage points at Aust, Ingst and along the sea wall give views of the Estuary itself and the islands to the south west.

The area is largely a rural, agricultural landscape, with a simple vegetation structure comprising predominately clipped hedges, some overgrown, with frequent scattered mature hedgerow trees. Clipped low hedges allow some middle to long distance views, with mature hedgerow trees variously containing views, or providing semi-enclosure, structure, visual texture and depth to views. The pattern of rhines has significantly influenced the landscape structure, their position and form emphasised by the hedgerows and the varying textured vegetation which follow them. A regular, angular pattern is most evident and typical of the area, with a more subtle, irregular curvilinear pattern to the south and west of Ingst.

Ridge and furrow and gryps are also subtle features within many pastoral fields and are most visually apparent on the sloping ground of the outliers, although they are present more widely within unimproved pasture within the area.

Centrally and towards the eastern boundary, linear woodland and frequent square/rectangular small woodland blocks and withy beds, formally arranged within the regular rhine pattern, are particularly evident. Here, woodland forms a prominent focus within views (limiting wider views), comprising a dense vegetation mass and strong vertical element, contrasting with the flat landform and generally lower vegetation structure elsewhere.

Mature pollarded trees to the north and south, open rhines edging country lanes and forming a 'moated' appearance around some farms, broad grassland verges of common land along some lanes and scattered small orchards near farms, are distinct local features of the Levels' landscape.

The outliers on which Aust and Ingst are located and the adjoining low bluffs and hills which edge the Severn Ridges, including Cowhill, Red Hill, Catherine Hill and Spaniorum Hill, form distinctive features, within or edging an otherwise flat landscape (Photo 2). Small, largely traditional settlement is located on elevated ground of the outliers. It is well integrated due to the small scale, pattern and form of development, which is nestled within shallow depressions in the landform and contained by a strong vegetation pattern, which connects to the wider landscape.

The church at Aust forms a local landmark, visible above the adjacent vegetation, with large modern agricultural sheds at Ingst locally prominent due to their open setting and their forming a built feature on the skyline in some views.

The Severn Ridges to the east greatly influences this area, providing visual containment, emphasising the rural character context and providing a means of visual orientation from within the remoter parts of this area. The ridges of South Wales and the Forest of Dean to the west have slightly less influence, separated by the wide Estuary, but nevertheless, provide a backdrop and skyline to views from near the western boundary. In the north of the area, beyond Aust, the Severn Ridges and the presence of the sea wall, combine to contain a narrow strip of low lying land, creating a slightly more enclosed area with a visually remote character. Further south, the easterly Severn Ridges and scarp edge form a prominent backdrop, emphasising the flatness and expansiveness of this area.

Open views across this regular patterned landscape are possible from many points, including key views from raised ground, such as the low hills at Aust and Ingst, the surrounding



Severn Ridges, motorways, overbridges (Photo 7 & 8), railway (Photo 12), local roads and Severn Bridges across the Estuary.

Views from within the area emphasise the large scale nature of the Levels, producing an exposed character in places.

Whilst elevated man-made structures, overbridges and open stretches of the motorways etc. provide the opportunity for key views across the area, these features also physically project above the flat Levels and have an influence upon its character.

Overbridges, comprising medium scale earthworks to approach roads, elevated bridges and bridge parapets, form prominent local features, given their scale, elevation and landform profile, which are artificial features within the largely flat and undeveloped Levels. However, maturing woodland planting is helping to reduce the prominence of the motorway and its structures, and provides some continuity with the wider rural vegetation pattern.

Motorway embankments are generally fairly low in elevation, but due to the low lying nature of the surrounding landscape typically curtail longer views across the Levels. Although traffic movement and noise is locally prominent, wider effects upon the Levels reduced by outlying raised land and the often strong intervening structure of hedgerow trees and occasional woodland blocks.

The railway embankment between the Severn Ridges and Piling also forms a raised barrier, which physically and visually separates this part of the Levels from the wider area. This visual containment contributes to a rural and relatively remote character within the locality. Passing trains however form an occasional transient, visible and audible feature.

The two Severn Bridges, in the adjoining Severn Shoreline and Estuary area, contribute to regional identity and form striking landmarks within occasional middle distance and local views from

the Levels, from where these large sweeping structures are seen against the expanse of open sky, beyond the Levels.

Some 2km north of this area, on the edge of the Levels, Oldbury Power Station forms a large scale, light coloured, rectangular complex of buildings, within views from Aust, Ingst and the Levels to the north. Within these views and at this distance the complex forms a simple, large structure visible against the sky, highly prominent on the edge of the Estuary and Levels and seen in close proximity to the lower hills of the Severn Ridges, or dwarfing the Levels' vegetation. Within this context, the scale of the buildings are very apparent.

The older, largely small scale, traditional settlement of villages, hamlets and farmsteads are generally well integrated within the locally strong vegetation framework. The lack of settlement in some areas, few roads or other infrastructure, plus strong vegetation framework create a particular perception of remoteness and sense of place.

The villages of Severn Beach and New Passage, in contrast, form areas of more recent regular dense housing, with limited integration along their edges (Photo 6). These villages are particularly prominent within views from the Bin Wall /sea wall and longer views from the Estuary warths, in the adjoining character area, from where the settlement edges are exposed and prominent, with little vegetation framework. The Bin Wall sea defences in this locality form a hard structure and stark boundary between this area and the Severn Shoreline and Estuary.

The grass covered earth bank, which forms more extensive sections of the sea defence, creates a strong linear 'horizon' and skyline within local views from the Levels in the immediate vicinity and a visual barrier to views of the Estuary and shoreline. From a greater distance, the adjacent field vegetation helps mask this linear form. The Severn Way, which runs along the sea wall for significant lengths affords the walker panoramic views across the adjacent landscape and across along the estuary, including of the Severn Bridges.

Large numbers of over wintering birds drawn to the Severn Estuary, are often a seasonal feature of the Levels, both in the fields and overhead.

The expanse of the Severn Estuary, although not visible from the majority of inland views, does reflect light and provides some 'lightness' to the edge of the area.

The southern area is heavily influenced by the extensive pattern of major road and rail infrastructure, radiating from New Passage and the evolving industrial and warehouse type structures at Severnside, (Photo 14 ). The Avonmouth Works continue this dominant industrial character beyond this character area, including the Seabank Power station with its tall chimneys and steam clouds. Wind turbines have become an increasingly prevalent features in this landscape. These various industrial features dominate open views to the south, often dwarfing the existing relatively small scale landscape structure of hedgerows and trees. The large scale structures are also visible from South Wales within distant views. The major roads also introduce visible movement and noise into the area.

The light coloured, large scale distributor sheds adjacent to the M49, which are within Phase I of the Western Approach Distribution Park, are also prominent from as far away as South Wales. Low angled morning and evening sunlight in particular accentuates the building façades and roofscape. The buildings are generally clearly visible against the darker landscape framework behind and in front, when viewed from the Severn Ridges and are similarly prominent within low level views, where the separate buildings appear to coalesce into a continuous built form. This is further accentuated when seen against the backcloth of the Severn Ridges.

This development has however developed a strong landscape structure of ponds, rhynes, footpaths and bridleways, as well as woodland and avenue planting being key features of the early phases of development.

The chimney at Cattybrook Brickworks is evident on the edge of the Severn Ridges, but is of considerably smaller scale in comparison with the industrial development on the levels.

Berwick Farm landfill site, with its large scale earthworks and present condition of disturbed ground and bare earth, forms a locally prominent artificial topographic feature within the flat Levels.

This landform differs from the outliers at Aust and Ingst, which form isolated hills with natural slope profiles and irregular outline. The hedgerow field pattern also extends over these features, responding to the shape of the landform, visually connecting these features to the wider agricultural field pattern and landscape. In contrast, the earthworks at Berwick Farm are constrained within a linear, regular shaped site, the angularity of the site emphasised by the hedgerow boundary. The landform is also aligned perpendicular to and separate from the Severn Ridge. The landfill site therefore has little visual similarity with the adjacent field pattern or local topographic features.

The Motion Picture Media Centre complex at Aust Service Station, adjacent to the first Severn Bridge, is visually prominent on higher ground on the skyline above Aust Cliff. It features predominantly in local views and more distant views from South Wales, due to its skyline setting, elevation, scale and colour.

The concentration of storage containers at the elevated Piling Station visually influences the local area. The railway embankment to the east in places forms an artificial horizontal skyline, physically containing northern or southerly views across the Levels. Passing trains are visually and audibly prominent, often visible above the adjacent vegetation.

The powerlines and pylons that cross the area, are significant vertical and linear elements, contrasting with the flat landscape within the largely undisturbed rural framework to the north and east of Aust. Elsewhere, their visual prominence is dependent upon the viewing

location and degree to which foreground and middle distance vegetation (varying from clipped hedges to overgrown hedges and tree belts) limit or focus views.

The former rifle range and danger area at New Passage is a visually low key land use, with some subtle differences to the adjacent agricultural Levels. The grassland site is visually open, with very limited structure, in part provided by drainage ditches, peripheral, intermittent or overgrown sections of the former hedgerow structure and the characteristic features associated with firing ranges, that is a large grass covered earth bund, clustered group of single storey buildings and an access road. The earth bund is a particularly prominent feature within local views from the Levels and Estuary and Severn Shoreline area, being taller than the adjacent sea wall and hedgerow vegetation.

The former industrial estate at Littleton Pill has some local visual impact, with the cluster of warehouse buildings evident from the sea wall and within more distant views from the higher ground of the Severn Ridges to the east.

### The Changing Landscape

The Piling Levels landscape character area is a largely rural landscape, retaining much of its historic pattern, agricultural land use, settlement and character. These features are most distinct and intact within the north and central areas, whilst they are greatly physically influenced and/or displaced to the south west by a variety of industrial and warehouse development. This includes the large scale industrial and warehouse type buildings, landfill operations, motorways, the railway, energy generation and powerline infrastructure and Avonmouth beyond this area, which are visually prominent.

This continues on into Avonmouth within Bristol City's boundary, and together the area is undergoing significant change having been designated as an Enterprise Area.

The strong rural character of a large part of the

area is reinforced by the rural Severn Ridges backcloth to the east, the rising slopes similarly containing very little settlement and no prominent development.

There is a strong, largely intact, landscape infrastructure of tree-lined hedges, pollarded trees, linear tree belts, ditches and rhines, providing enclosure across the agricultural landscape of the Levels, although horse keep with its introduction of fencing, stable and other structures and uses is eroding the character around some settlements.

The rhine drainage pattern, linked to the tidal pills, is essential to the agricultural viability and biodiversity of the area, maintaining the ground water level below that of the adjacent fields and providing aquatic habitat.

Hedgerows are generally actively managed with some limited hedgerows in variable condition, intermittent in cover or replaced with fencing.

The loss of mature hedgerow trees through Dutch Elm Disease has been particularly widespread across the Levels. As a result, and despite the existing vegetation framework, the character of the area is now significantly more open and windswept than in the middle of the 20th century. There is little evidence that these trees have been replaced: the cyclical regrowth and die-back of elm suckers mark the location of former mature trees, where management of hedgerows is infrequent. Where they occur, dead elms influence the condition, integrity and appearance of the landscape framework in the locality, affecting the degree of openness/enclosure.

Many farm orchards have been well maintained and are a distinctive and ecologically important feature of the area. Some, however, are ageing in structure and with presently no indication of tree replacement, there may be potential for some further loss of this feature.

The vegetation structure generally is not being supplemented by new planting to create succession and sustain it in the long term.

Without this, the existing strong framework and connectivity between habitats will decline in the future, resulting in a more open landscape and reduced biodiversity.

Great Crested Newts are vulnerable to any loss of habitat including the terrestrial habitat around ponds as well as the ponds themselves

More recent woodland planting has however been undertaken at Lower Knole Farm, in the east of the area below the Severn Ridge, as part of the Forest of Avon. It occupies an area of almost 60 hectares and will, in time, create a new woodland of a size that will contribute significantly to the landscape framework and diversity of habitat of the area. Located in a part of the Levels where the existing pattern of woodland comprises small blocks and linear tree belts, the new woodland will significantly change the character and landscape structure within the locality and within more distant views from the Severn Ridge.

However, many of the mature and over-mature oak and ash trees and linear poplar belts, which form an important component of the landscape framework, have few juvenile trees to perpetuate this in the long term. The regular pollarding of hedgerow trees (with concentrations to the north and south of the area) and coppicing of withy beds, is generally in decline, with the potential long term loss of these distinctive features. In addition, a decline in the management of hedgerows, if a widespread trend, has the potential to quickly erode the landscape infrastructure.

The continual pastoral land use of the Levels since medieval times has resulted in little ground disturbance. As a result, few surface finds, more normally associated with ploughed arable land, have been made. Although the archaeological value and content of the area is largely unknown, the peat within the Levels may contain evidence of early prehistoric activity, which could be of considerable significance, due to its national rarity. Development has the potential to result in significant impact on any archaeological resource.

Ridge and furrow is a subtle feature within many traditional pasture fields and is easily damaged by a change in land use to arable farming.

Older nucleated small settlement and farmsteads, on higher ground and punctuating the Levels, greatly contribute to the rural agricultural character. Their character, sympathetic setting and integration within the landscape is sensitive to change, which could affect this balance.

The M49 and M4 new links to the Second Severn Crossing have introduced more recent physical and visual change. The associated roadside and off-site planting is maturing and absorbing these features into the landscape, although forming a new vegetation pattern, largely dissimilar to the regular framework within the Levels, which relates to the drainage pattern.

Land raising for sea wall defences, rail and motorway embankments and the Berwick Farm landfill site, have formed significant landforms, which in places both physically and visually influence an otherwise flat landscape.

Land raising for future roads and buildings has the potential, as well as increasing the visual impact, to disturb the rhine system, as is evident from previous development. Other elements, such as road kerbs, concrete drainage structures, road bridges and fencing, all visually influence and erode the rural character.

The semi-enclosed to open nature of the Levels landscape is sensitive to change, particularly to the continued introduction of large scale built elements which, due to their massing and height, are visible over long distances. Such development is replacing the traditional landscape structure and rural character across the southern part of this character area:

An extensive area of the Levels south of the railway line was granted planning permission in 1957. It extends from the railway line south of Severn Beach, eastwards to Easter Compton, merging with Avonmouth to the south within the Bristol Authority area. It includes areas that have

already been developed, such as the chemical works at Severnside and the more recent first phase of development of the Western Approach Distribution Park to the north east, as well as substantial areas which are currently under development.

The Local Plan also identifies all the area west of the M49, covered by the existing planning consent and additional land, as a Safeguarded Employment Area and more recently as an Enterprise Area that straddles the Bristol South Gloucestershire boundary.

The Western Approach Distribution Park, which comprises large warehouses and extensive areas of hard standing, has retained some of the rhine system and associated vegetation within the development. In addition, the site layout, distribution of buildings and roads within a robust and high quality landscape setting, have allowed the implementation of a strong planting framework incorporating footpaths and bridleways and the creation of wetland habitats and wildlife habitat and connectivity via a rhine network. This has delivered a new landscape structure of habitat value that is used for walking and horse riding, and provide some setting and integration of the buildings into more distant views. However due to their large scale, mass and height the upper levels of the large warehouse buildings remain a prominent feature within local and more distant views.

Phase II of the development is ongoing, with a significant expansion of the existing site area, including a number of large warehouses, car parks, hard standings and roads, similar in scale to the existing development. The development is not however currently delivering the same robust landscape and habitat infrastructure, with the result that the landscape and design quality of the development is significantly lower. Further extensive areas of land to the south are currently being prepared for development. The substantial Tesco warehouse development more recently implemented to the east of the M49 under the 1957 consent, delivered virtually no landscape works or habitat creation and as a result intrudes

into views from Easter Compton, and sits in stark contrast to the quality of development delivered at Western Approaches Phase 1. Significant change and major developments are also taking place within the adjacent Bristol City levels, particularly at Avonmouth, although the remnant historic rural tract of landscape at Hallen Marsh stands in stark contrast to this and has the potential to provide valuable visual relief and habitat value.

The proposed growth and ongoing large scale development in this area will increase the visual prominence of development within local views from the sea wall to the west, adjacent roads and footpaths and in longer views from the Severn Ridges and South Wales. Given the anticipation of future change, the management of remaining open land and vegetation is often limited within this area giving a neglected feel to areas of land to the south and west of the A403 and M49.

Future development of this area will result in a further significant change in character, with an inevitable increased prominence of built features spread over an extensive area. This has the potential to affect the rural character of the adjacent Severn Ridge character area and the setting of the Second Severn Crossing, as well as that of the local area.

Where such development is accommodated within the existing landscape framework, physical disturbance to drainage and landscape structure will be lessened. However, large scale development over the consented area is inevitably resulting in loss of the present simple, open structure of the agricultural landscape and its replacement with new development. As a result of the openness of the historic planning permission, it is not possible to control the implementation of this consent, and developments are coming forward that lack a robust landscape infrastructure and are therefore more densely urban in character and lacking the green infrastructure that absorbed and provided amenity and biodiversity value in the early phase of development.

Development will however inevitably result in a landscape character which is essentially different from that of the surrounding area, which is largely based on low, horizontal structure and openness.

The high degree of wind exposure near the Estuary has generally hampered the establishment of shelter belts and planting, which would otherwise provide some integration to existing development. An encroachment of built elements, towards the coastal mudflats, would therefore detract from the simple open character of this adjacent area.

The visual exposure of the area to views from elevated points within and adjacent to it, both in South Gloucestershire, South Wales and Gloucestershire, from bridges and ridges, increases its sensitivity to change. Presently, existing large scale, light coloured, horizontal or vertical development is visible over long distances, affecting the character of these areas. Similarly, any change within the adjacent landscape character areas which is visible from the Levels, has the potential to visually influence and affect the character of this area.

This area and its surroundings is subject to a range of pressures for the generation of electricity, including gas and nuclear power stations as well as from wind turbines, including for example at Ingst.

The decommissioning of Oldbury Power Station (located in the adjacent Oldbury Levels character area), which ceased generation in 2012, and decommissioning, is likely to result in some ongoing changes to the structures surrounding the main reactor buildings and changes in the use of the site and remaining structures. The nomination of 150ha + of adjacent land as being potentially suitable for the delivery of a new nuclear power station would change and increase the built form in open views northwards into the adjacent Oldbury Levels character area.

The continual pastoral land use of the Levels since medieval times has resulted in little ground disturbance. As a result, few surface finds, more

normally associated with ploughed arable land, have been made. Although the archaeological value and content of the area is largely unknown, the peat within the Levels may contain evidence of early prehistoric activity, which could be of considerable significance, due to its national rarity.



## Landscape Strategy

- In both rural and urban areas, ensure the retention and enhancement of roosting and foraging opportunities for overwintering birds associated with the estuary including those related to the national and international designations.
- Protect and enhance the character and quality of the setting to and views of the Grade 1 listed original Severn Bridge.
- Preserve the tranquillity of the rural landscapes north of the M48.
- Ensure the active and long term management, maintenance and repair of the extensive drainage network of rhines, gryps and pills and their associated landscape features.
- All development proposals should have special regard to the significant archaeological potential of the historic landscapes of this character area.
- Ensure that any new development reinforces the distinctive rural character and biodiversity value of the remaining levels landscapes and their associated outcrops of higher ground in the central and northern part of the character area, including by:
  - Active management of hedgerows, withy beds and tree belts to help ensure the conservation of these key features and their biodiversity value and connectivity in the long term. This would contribute to strengthening the landscape framework for the long term, and, over time, help to replace the vegetation structure lost as a result of Dutch Elm Disease.
- Secure orchard restoration & re-planting to strengthen the presence of this locally characteristic feature of the levels landscape.
- Ensure that new development and present and future land use practices respect and conserve the historic landscapes, field systems and remaining areas of ridge and furrow.
- Negotiate to secure a robust and integrated landscape and ecological framework that is adequate to absorb large scale new buildings and creates a new high quality landscape for the Severnside development area.
- Ensure that development proposals retain or reprovide the habitat and wildlife connectivity provided by the distinctive rhine network.
- Any new vertical elements should be co-located with commercial development and should avoid eroding the open and undisturbed characteristics of rural landscapes.
- Where new development in the levels landscape is considered appropriate carefully consider materials and the colour of finishes to ensure maximum integration with the character and appearance of the landscape, waterscape and skies, including in views from high ground, from the levels and from and across the estuary.





1 View south west from St Arilda's church tower to Severn Bridge. Typical grazing country. Some hedgerows are gone but many are left. Cider apple orchard in blossom to the right.



2 View north east to Cowhill. Hills like this are typical along the edge of the levels where higher land of the Severn Ridges peters out.



3 View looking north to the Severn Bridge and wooded slopes / cliff line behind Old Passage. The road forms the edge of the Levels with the Estuary shoreline / warth.



4 Looking north from Red Hill over the Levels to wooded higher ground at Littleton-upon-Severn. Pastureland with drainage rhine within middle distance.



5 Pollarded willows in Mead Lane leading to Wildacre Wood, a nature reserve owned by The Woodland Trust. Willows formerly an important source of wood.



6 Residential edge at Severn Beach behind the flood defence wall, with industrial structures of Avonmouth in the distance, beyond this area.



7 M4 heading eastwards from New Passage, with associated earthmounds, over bridges, lighting, gantries and new planting. Cover to the left and denser vegetation patterns associated with smaller fields closer to the Estuary.



8 From Northwick Bridge over M4, looking towards the Severn Bridge.



9 Sandy Bank Rhine.



10 Almondsbury Rhine Aqueduct.



11 Severn Beach.





**12** From Pilning Station looking towards Western Approach Distribution Park, with powerlines and chemical works at Severnside Works.



**13** View from the Severn Ridge over the Pilning Levels, with regular field patterns influenced by rhines. Square and linear woodland belts to the right.



**14** Severnside Chemical Works (opened 1958/59). **Now demolished.**



**15** Woodland within the Levels: Square Covert on the left, Old Withy Bed within the gap and a linear belt further right.



**16** The Western Approach Distributor Park seen from the B4064 with towers of the Avon Works behind.



**17** Distant view of the Severnside Chemical Works, across the Levels from Church Farm, near Easter Compton.

**18** The landscaped spine road through the early phases of the Western Approach Business Park (now known as 'G Park'), incorporating multi user paths, amenity areas and ponds, rhines, woodland and avenue planting, providing a robust landscape setting to large scale warehouse and manufacturing uses.



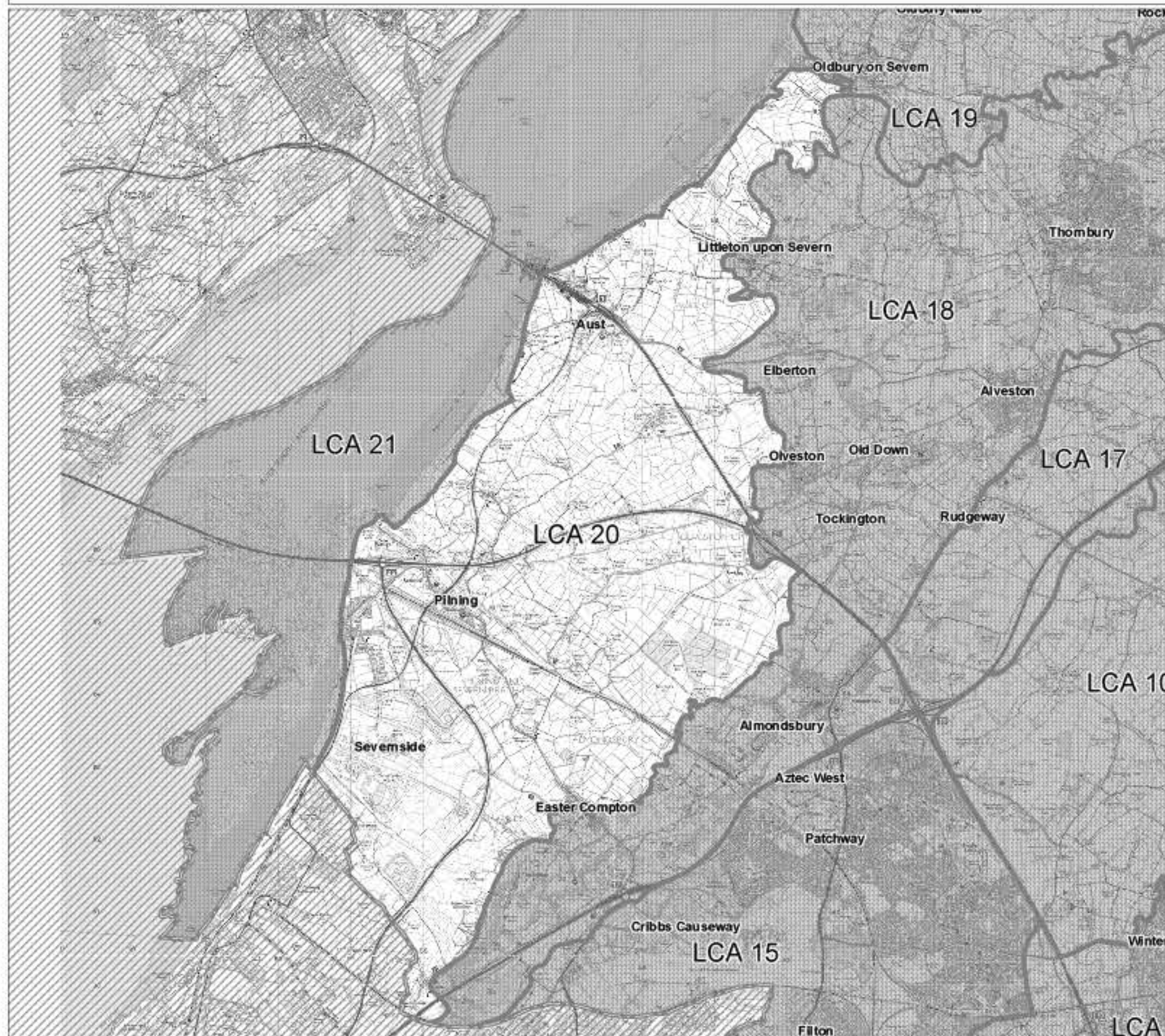
**19** Later phases of the G Park development have been built under the 1957/8 consents include little in the way of planting or amenity provision, resulting in a landscape that although dissected by rhines is dominated by very large scale buildings along with their associated security fencing, roads, parking and other urban uses.



**Figure 62 – Area 20**  
Pilning Levels – Sheet 2



## LANDSCAPE CHARACTER AREAS



### Legend

— South Gloucestershire Boundary

□ Landscape Character Area

The Landscape Character Area boundary shown on this map is indicative, sometimes marking a distinct change, but more often representing a transition in character with adjacent areas.

Similar attributes may therefore be evident within adjacent areas. (For further information refer to Report Section 4.1)



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**Figure 63**  
**Area 20**  
Pilning Levels