

SDNP Landscape and Visual Impact Appraisal and assessment of effects on access to the SDNP

A27 Arundel: Route option 3

April 2017



Looking south from Amberley Mount towards Arundel Castle

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1. Introduction

- 1.1. During 2015 the SDNPA was invited to meet with representatives from Highways England to be informed and consulted about the proposals to fund and deliver improvements to the A27 corridor through government funding.

A number of improvement schemes along the A27 were discussed including Arundel, East of Lewes, Worthing and Chichester.

2. Purpose of Study

- 2.1. This study considers the summary likely landscape and visual impacts of the route options for upgrading the A27 through Arundel,
- 2.2. Impacts on the PRow network / connectivity with the SDNP are assessed as part of this study.
- 2.3. This study has been undertaken prior to public consultation in order to inform SDNPA members and officers of likely impacts on the SDNP where they can be predicted at this stage in the process. It is notable that detailed design information will not be developed until the preferred route is selected following the public consultation process.

3. Scope

- 3.1. This is not a complete Landscape and Visual Impact Assessment, although the process of analysis broadly follows the GLVIA3 Landscape and Visual Impact Assessment guidance recommendations. Landscape and Visual effects have been considered from a combination of desktop study and fieldwork based on the information available at the present time. It will differ from the assessment carried out by Highways England as it follows a different set of criteria and methodology. The methodology in this study is reflecting Landscape and Visual effects on the SDNP and its setting, and it is written and undertaken with this focus.

4. South Downs National Park - background

- 4.1. The National Park covers an area of over 1600km² and is a highly diverse and varied landscape. It was designated as National Park in 2010, the area having been previously designated as the Sussex Downs Area of Outstanding Natural Beauty and the East Hampshire Area of Outstanding Natural Beauty (AONB). Both AONB designations were revoked on 31 March 2010.
- 4.2. National Parks were designated originally under the National Parks and Countryside Act of 1949 and subsequently the Environment Act 1995 which revised the original legislation and set out two statutory purposes for National Parks in England and Wales:
 - *Conserve and enhance the natural beauty, wildlife and cultural heritage;*
 - *Promote opportunities for the understanding and enjoyment of the special qualities of National Parks by the Public*

When pursuing these purposes in National Parks, there is also a duty to:

- *Seek to foster the economic and social wellbeing of local communities within the National Parks*

In cases where there is conflict between the two *purposes* the Sandford principle will apply – that is, the first *purpose* takes priority.

5. Status of Development Plan documents

5.1. In accordance with recommended guidance a short section of this report considers the planning context of the area of study. It is understood that the preferred route for the A27 improvement scheme, will go through the Infrastructure planning procedure, rather than through the local authority planning process. The proposals will be submitted to the Planning Inspectorate for approval of a Development Consent Order (DCO) on the grounds of national interest. It is not known how much weight is given to local plan policy in the DCO process. Nonetheless, it is considered appropriate to acknowledge the relevant development plan policies applicable to land within the South Downs National Park, and outside the National Park under the Planning policy jurisdiction of Arun District Council (relating to the A27 Arundel section) Relevant policy documents are as follows:-

- South Downs Local Plan (Preferred Options version, September 2015).
- Arun District Local Plan (2003)
- Arun Local Plan 2011 – 2031 (Publication version, October 2014)
- Arundel Neighbourhood Plan 2014 – 2029 (Made version, 2014)
- Horsham District Core Strategy and General Development Control Policies (2007)
- Amberley Neighbourhood Development Plan (Referendum version, 2017)

6. Methodology for assessment of landscape and visual effects

- 6.1. The assessments of landscape and visual effects take into account a range of criteria in accordance with the GLVIA3. The potential effects of the proposed road improvement options are measured against the existing Baseline Conditions. The significance of potential landscape and visual effects are determined as a factor of the receptor's sensitivity combined with the magnitude of the landscape or visual change that the receptor would experience.
- 6.2. A systematic approach has been taken to assess the effects of the proposed road improvement options on the overall character of the surrounding landscape and the visual experience from within that landscape. The computation of this assessment is recorded in a matrix form, in Appendix II.
- 6.3. Assessment of the effects on the footprint and the immediate vicinity of the proposed re-alignment routes and the on-line road improvement option has not been undertaken quantitatively, as the physical and visual effects would be inherently wholesale (or at least very high in magnitude). Accordingly, computation of these effects would inevitably identify highly significant impacts, and it is therefore considered appropriate to discuss these effects in a narrative way, rather than systematically.

6.4. Similarly, the need for a systematic assessment of the potential implications of the road improvements for connectivity to the wider PRow network, and the relationship that has to the SDNPA's Statutory Purposes. It is considered appropriate to discuss these effects in a narrative way, rather than systematically.

6.5. Baseline Conditions

6.6. In relation to the systematic assessment of the potential effects of the proposed road improvement options, photographs of each of the representative viewpoints are included in Appendix III, although these are best viewed separately in Windows photoviewer for the best resolution. (Link to be added). These are arranged into groups relating to visual experiences that are similar in nature, and in location. These also relate broadly to landscape character areas as identified by the published landscape character assessments. Each of these groups (as a composite of the representative viewpoints) is considered as a single visual receptor.

6.7. In assessing the baseline conditions, the following is taken into consideration, with relevant notes made in the assessment matrix in Appendix II:-

- *Landscape receptor key components* (i.e. the components of Landscape Character Area that have a relationship to the receptor being considered). In addition to the broader landscape characteristics, other specific factors are noted where relevant, considering the following:-
 - Identification of the Historic Landscape Character types, and heritage assets and the overall context in relation to character. Impacts on Heritage assets are considered in study undertaken by Nexus Heritage, appended to this study.
 - Identification of the Biodiversity assets in the area of search. The degree to which they are affected is assessed in a separate report.
 - Identification of the pattern of the landscape, including the general arrangement of settlements and the surrounding fieldscapes.
 - Degree to which tranquillity is part of the experience of being in the landscape. 'Tranquil and unspoilt places' is one of the Special Qualities of the SDNP, Tranquillity is assessed through considering a combination of hearing and not hearing things and seeing and not seeing things – it is not only about noise. Any signs of human activity can erode tranquillity. In LVIA, 'Scenic quality' is term given to landscapes that appeal to all the senses. These are perceptual qualities which can only be judged subjectively. However, as they are more than just an assessment of visual effect, they are considered as a factor of assessing Landscape effects, rather than Visual effects.
- *Visual receptor key components* (i.e. a description of what the viewer is seeing (the view composition)).

6.8. Sensitivity

6.9. This is a combination a receptors value and its susceptibility to change.

- *The relative value* attached to a landscape or a particular view by society can be understood through relevant designations, published material (such as a promoted beauty spot), recognised cultural and historic associations etc. Within this study, landscape and visual receptors are generally considered to have higher values

attached, as a virtue of the National Park designation, or by association as the setting of a National Park.

- *Susceptibility to specific landscape change* identifies the ability of the receptor to accommodate a proposed development without undue consequence for maintaining the baseline situation, or the achievement of landscape planning policy or strategies. Within this study, the implication of the proposed A27 improvements in relation to achieving the SDNPA's statutory purposes is a consideration for each receptor's susceptibility to landscape change.
- *Susceptibility to specific visual change* identifies the occupation or activity of the visual receptor, and the extent their attention or interest is likely to be focussed on the visual amenity afforded at that location. Within this study, visual receptors are generally considered to be people engaged in outdoor recreation (e.g. walking, horse-riding, cycling) whose attention or interest is likely to be focused on the landscape. Accordingly, these receptors are recorded as having a high level of susceptibility to change.

6.10. Magnitude of change

6.11. This is the degree to which the Landscape or Visual Baseline Conditions (specifically considering the key components of landscape character, key landscape features or, key components of a view composition) would be changed by the proposed development, including a judgement as to whether the change would be beneficial or adverse.

6.12. Assessing the potential magnitude of change takes into consideration the size or scale of the change (eg. the proportion of the loss of the key landscape components or features, the degree to which the experience of the landscape is altered, and the proportion of view composition altered by the loss or addition of key visual components). Also taken into consideration are the extent of the change (the geographical footprint of landscape effects, or the distance of any visual interconnectivity and the angle of view in relation to the visual receptor's main activity). LVIA also makes judgements on the duration and reversibility of the potential effects, although in relation to every receptor in this study the road improvements are considered to be long-term, and not reversible.

6.13. Significance of effects

The combination of landscape sensitivity and the magnitude of change concludes the assessment by assessing the level of significance of the likely effects as shown in the table below:

		Sensitivity of Landscape		
		HIGH	MEDIUM	LOW
	Major adverse	Major Adverse Significance	Major/Moderate adverse significance	Moderate adverse significance

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Magnitude of change/landscape effect	Moderate adverse	Major/Moderate adverse significance	Moderate adverse significance	Moderate/Minor adverse significance
	Minor adverse	Moderate adverse significance	Moderate/Minor adverse significance	Minor adverse significance
	Negligible	No Significance	No Significance	No Significance
	Minor beneficial	Minor beneficial significance	Minor beneficial significance	Minor beneficial significance
	Moderate beneficial	Moderate beneficial significance	Moderate beneficial significance	Moderate beneficial significance
	Major beneficial	Major beneficial significance	Major beneficial significance	Major beneficial significance

7. Landscape Baseline (A27 Arundel section)

7.1. Context and background

In accordance with the Guidelines for Landscape and Visual Impact Assessment (GLVIA3) the first stage of an assessment is to establish the baseline information from which the impacts of any change in the landscape can then be assessed. The following section describes the wider context of the study area. There are a series of maps included in Appendix I which show a range of contextual information for the study area. This includes information on the Biodiversity, Public Rights of Way network, Historic Environment, Floodzone, Historic Landscape Character, Landscape character, Tranquillity, Topography and promoted viewpoints. These help to explain the broad landscape characteristics of the area of search centred on the proposed A27 improvement options south of Arundel.

7.2. Landscape Character

7.3. In addition to National and District level landscape character assessments, two LCA documents have considered the Landscape character of the area taken as being the baseline context for the purposes of studying the effects of the proposed A27 road improvements south of Arundel. Accordingly, for the purposes of this study the South Downs Integrated Landscape Character Assessment 2011 (SDILCA), and the West Sussex Landscape Character Assessment 2004, together with the series of West Sussex Land Management Guidelines sheets. Together, the SDNPA and WSCC studies are considered to be the appropriate characterisation information covering the study area both within the SDNPA and the setting of the SDNPA.

7.4. The landscape character areas defined in the SDILCA and WSCC's Landscape Character Assessment are shown in Appendix I.

7.5. The following descriptions have been drawn from the key characteristics noted within the published studies in relation to each of the LCAs relevant to the SDNP and its setting;

7.5.1. Goodwood to Arundel Wooded Estate Downland, B1 (SDILCA)

Key characteristics (inter-alia) are as follows:-

- Folded downland topography masked by large woodland blocks including oak, birch and holly on the thicker soils, and beech dominating on thinner soils.
- A landscape transformed in the 18th century with the establishment of great landed estates of Goodwood and Arundel, with much of the downland bought up to create vast holdings and planted up with woodland for economic and aesthetic reasons.
- Woodland is interlocked with straight-sided, irregular open arable fields linked by thick hedgerows.
- Rare survival of ancient settlement, field systems and other archaeological features beneath the woodland, for example the earthworks at Rewell Wood.
- Large number of designed parkland landscapes and remnant deerparks with important visual influences – estate walls, avenues, follies as at Arundel [and others]
- A deeply rural secluded landscape with large tracts devoid of roads and settlement. However, parking places, signed walks, picnic sites, a good network of public rights of way and Goodwood Country Park provide many opportunities for recreational use of the landscape.

7.5.2. Arun Valley Sides, G4 (SDILCA)

Key characteristics are as follows:-

- 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 a SNCI.
- 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.

7.5.3. Arun and Lower Rother Floodplain, F4 (SDILCA)

Key characteristics (inter-alia) are as follows:-

- Flat valley floor of the large U-shaped Arun Valley that forms a gap in the South Downs at Arundel, and including the floodplain of the Lower Rother up to Midhurst.
- A landscape of apparent large and expansive scale as a result of the flat landform, consistent pasture land cover, lack of vertical elements and far-reaching views across the open floodplain. Views are contained by the adjacent valley sides.
- Contains the meandering course of the tidal River Arun, which flows between artificial flood banks, and the lower reaches of the River Rother.
- Artificially straightened sections of river associated with an industrial history.
- Historic stone bridges across the River.
- Periodically waterlogged silty soils support permanent pasture, within fields reclaimed from the floodplain, giving the floodplain a lush, pastoral character and supporting an important ecological flora.
- The floodplain is etched by a geometric grid of narrow channels ('wet fences') which divide pastures.
- Groups of willows and alders occur sporadically alongside the river and drainage channels providing important visual and ecological features.
- General absence of settlement.
- The low incidence of woodland and trees results in a large scale, open landscape with extensive views across the floodplain.
- **Impressive views to Arundel Castle at the 'mouth' of the valley.**

7.5.4. Arun to Adur Open Downs, A3 (SDILCA)

Key characteristics (inter-alia) are as follows:-

- Vast open rolling upland chalk landscape of blunt, whale-backed Downs.
- Furrowed by extensive branching dry valley systems which produce deep, narrow, rounded coombes
- Dominated by large scale irregular fields of arable and pasture (of 20th century date) bounded by visually permeable post and wire fencing or sparse thorn hedgerows creating a very open landscape supporting a range of farmland birds. Hedgerows and tracks survive from the earlier manorial downland landscape.
- Significant areas of unimproved chalk grassland which support nationally scarce plant species.
- Occasional scrub and woodland on steeper slopes and beech clumps on hill tops contribute to biodiversity and provides visual texture in the landscape.
- A landscape managed for country sports (game shooting) which preserves the shape and form of the landscape and creates a distinctive landcover including small woodlands and game cover plots.
- Large open skies ensure that weather conditions are a dominant influence creating a dynamic, landscape, with considerable seasonal variation.
- A strong sense of remoteness and tranquillity with pockets of deep remoteness associated with hidden dry valleys.
- Large number of prehistoric and later earthworks, including causewayed enclosures, long barrows and round barrows, providing a strong sense of historical continuity.
- Good public access with a network of public rights of way and open access land.
- The typical settlement form is relatively late in origin, and comprises isolated farmsteads of 18th-19th century. The individual farmsteads are often prominent features in the landscape.
- Building materials are typically flint, red brick and clay tiles, with more modern materials used in farm buildings.

7.5.5. Angmering and Clapham Wooded Estate Downland, B4 (SDILCA)

Key characteristics (inter-alia) are as follows:-

- Comprises a chalk dipslope, exhibiting a strong and distinctive topography of rolling hills, and an outlying chalk ridge at Highdown Hill, separated by a narrow clay vale.
- Slightly acidic heavy soils support large expanses of ancient woodland, much of which may have originated before the medieval period. The extensive woodland cover creates a distinctive dark horizon in views from the A27.
- Woodland, including ornamental plantations together with game coverts, is interlocked with straight-sided, open arable fields linked by hedgerows – much of this land has been rationalised since the Second World War.
- The clay vale between the chalk dipslope and the outlying chalk ridge at Highdown Hill was probably assarted from the late Saxon period onwards, producing the irregular patchwork of early enclosures still visible around Ecclesden Farm (east of Angmering).
- Bronze Age and Iron Age earthworks at Highdown Hill provide a strong sense of historical continuity.
- A low density of dispersed settlement, characterised by scattered farmsteads –most of 18th-19th century origin, with some of medieval origin representing shrunken hamlets. Chalk flint is the dominant building material, often edged with red brick.
- A deeply rural secluded landscape with large tracts devoid of roads and settlement.
- Constantly changing views with some views across to Arundel Castle to the west and other views across the open downland to the north and the coastal plain to the south.

7.5.6. Fontwell Upper Coastal Plain, SC8 (WSCC LCA)

Key characteristics (inter-alia) are as follows:-

- A transitional landscape.
- Clear views to the higher ground of the Downs to the north.
- A good cover of woodland and trees, with a high percentage of ancient woodland.
- Mainly gently undulating farmland enclosed by woods with numerous hedgerows.
- Pattern of small to medium sized pastures, arable fields, livestock farming and market gardening.
- Winterbourne chalk streams emanate from this area.
- Wealth of historic landscape features including... ancient woodlands.
- Area is well settled with scattered pattern of rural villages and farmsteads
- Intimate hidden valleys at Binsted.
- Winding hedged or wooded lanes.

7.5.7. Chichester to Yapton Coastal Plain, SC9 (WSCC LCA)

Key characteristics (inter-alia) are as follows:-

- Low lying flat open landscape.
- A low density of hedgerows and hedgerow trees with occasional shelterbelts.
- Large-scale arable farming and market gardening. Extensive farms with both traditional and modern farm buildings and silos.
- **Long views to Arundel and the Downs**
- The relatively open character of much of the area allows long views so that village church towers are important landmarks in views.
- Frequent urban fringe influences of horse paddocks, light industry and disused airfields, with busy minor and major roads.
- Light industry in the countryside at Ford.

7.5.8. Lower Arun Valley, SC10 (WSCC LCA)

Key characteristics are as follows:-

- Extensive areas of drained pasture and floodplain.
- Wide wandering river course throughout, with meanders increasing in size to the south. Tidal character up to Pallington Lock.
- Meandering river, fed by rifes and dykes with adjacent reed beds.
- Stretches of engineered concrete river banks.
- Very shallow valley sides, consisting of slightly undulating farmland or the urban edge of the coastal development, in particular Littlehampton.
- Little riverside vegetation.
- Intrusive surrounding suburban activities.
- Prominent railway on embankment.
- Extensive high level views onto the area.
- Key close dramatic views of Arundel (castle, Roman Catholic cathedral, parish church, clustered hillside housing) from the south.
- Seaward views from elevated positions.
- **Long views of river valley towards the Chalk Downs and Arundel from the south.**

7.5.9. Littlehampton and Worthing Finges, SC11 (WSCC LCA)

Key characteristics (inter-alia) are as follows:-

- Low lying flat open landscape.
- Dominant urban fringe with Littlehampton. Settlement edge sharply contrasts with adjacent open countryside.
- Medium scale arable farming and market gardening, with clusters of greenhouses.
- Meandering rife and straight drainage ditches.
- A low density of native hedgerows and hedgerow trees, interspersed with shelterbelts, single species hedges or individual standards planted using tall trees such as Poplar, Monterey Pine and Tulip trees.
- Nucleated villages such as at Poling. Mixed building materials of flint, brick, half timber and stone.
- **Long views to the Downs.**
- Busy minor and major roads.
- Industry in the countryside.

7.5.10. Angmering Upper Coastal Plain, SC12 (WSCC LCA)

Key characteristics (inter-alia) are as follows:-

- Very gently undulating landform more intricate in the east, encompassing the distinctive landscape of Highdown Hill (an isolated chalk hill).
- Strong network of hedgerows, hedgerow trees and medium to large blocks of woodlands.
- Pattern of small to medium-sized pastures and arable fields.
- Wealth of historic landscape features including historic parklands, many ancient woodlands and earthworks.
- Apart from the busy A27, roads are mostly winding hedged or wooded lanes.
- Criss-crossed by numerous rural tracks, byways and rights of way.

- 7.6. In summary, the landscape setting of the proposed A27 improvement routes to the south of Arundel is very varied, with 10 distinct Landscape Character Areas (as defined by the Landscape Character Assessments published by SDNPA and WSCC) potentially affected. The Arun District Council Landscape Character Assessment divides this landscape into even more Landscape Character Areas, each with distinct characteristics.
- 7.7. The study area centres around the Arun valley, which is a major feature of the landscape. Many of the key characteristics of the valley bottom continue southwards of the SDNP boundary, clearly demonstrating a relationship of this lower valley to the SDNP, recognising it as the setting, and relevant to the SDNPA in considering the effects of any development which may affect its statutory purposes. The flat valley floor is a floodplain, periodically waterlogged. The River Arun is contained between artificial flood banks, meandering along the length of the valley floor, increasing in size to the south. Far reaching views are afforded from within the valley, contained by the valley sides. Arundel Castle is a key focal point of views both from the north, and from the south where the Castle is seen against a backdrop of the downs. Throughout the valley floor the floodplain has been reclaimed to create permanent pasture (with a rare feature of 'wet-fences' forming a geometric grid of pasture in the upper valley). Similarly, throughout the lower valley outside the SDNP there is an absence of woody vegetation.
- 7.8. The Arun valley sides north of Arundel form a tranquil setting to the River Arun and its floodplain. They rise from the valley floor relatively steeply, with deep indentations formed by dry valleys. They contain pasture with chalk grassland. Woodland occupies steeper slopes. To the eastern valley sides large-scale arable fields occur, whereas on the western side a

wooded character prevails (with surviving early enclosures of late medieval date, and Arundel Park, a major 18th century landscape park). A string of villages are found along the valley sides, surrounded by fields enclosed in the later medieval period. These are accessed by a fragmented road network of narrow rural lanes, which often end in dead-ends. Arundel Castle is a very distinctive landmark located in the Arun valley sides landscape character area, standing at a commanding position where the wider lower valley narrows, becoming the upper valley.

- 7.9. Another distinct landscape character area continuing to rise up to the east of the valley side is the Open downland south of the ridgeline at Amberly Mount, Rackham Hill, Springhead Hill and Kilthurst Hill. This deeply secluded landscape has good public access, although still remote from settlement and any road network. The irregular fields of arable and pasture are large, making the character very open in nature. This vast landscape of rolling upland is dynamic, with considerable seasonal variation. Some of the unimproved chalk grassland supports nationally scarce plant species. In contrast, the steeper slopes, including deep, narrow, rounded coombes (hidden dry valleys) have occasional scrub and woodland, with beech clumps on hill tops. This landscape also contains a large number of prehistoric and later earthworks.
- 7.10. The downland rising up from the western valley side is similar to that of the east in many respects (such as the sense of seclusion / good public access / irregular pattern of arable and pastoral fields / wealth of archaeological earthworks). However, this downland is considerably more vegetated, with large woodland blocks including Binstead Wood and Rewell Wood, and thick hedgerows where fields do occur. It also contains Arundel Park, which is a designed parkland landscape / remnant deerpark with important visual influences such as estate walls, avenues and follies (such as Hiorne Tower).
- 7.11. South of the SDNP boundary the landscapes of the upper coastal plain (both to the east and the west of the Arun valley) continue some of the characteristics of this more vegetated downland. Here the undulating farmland (formed of small to medium-sized pastures and arable fields) is well vegetated with woodland blocks, treebelts and thick hedgerows. To the west of the Arun valley the area is described by the WSCC Landscape Character Assessment as a 'transitional landscape' with scattered rural villages and farmsteads, and intimate hidden valleys / winding lanes.
- 7.12. The further south in the study area, (including the southern part of the Lower Arun Valley, and lower coastal plain (to the west of the Arun Valley), and Littlehampton urban fringe (to the east of the Arun Valley) the more influenced the landscape becomes by adjacent suburban activities. Here the relationship between the landscape and the SDNP is reduced, though these areas are included in the study as they still benefit from a visual interconnectivity with the downs, as a backdrop to Arundel.
- 7.13. Similarly, the landscape of Highdown Hill, a little over 8km to the east of the Arun Valley is included in the study due to the visual interconnectivity afforded from there with Arundel, the Arun Valley and potentially the routes of the re-aligned A27 highway crossing the valley. Highdown Hill is an outlying chalk ridge within the SDNP. One of its defining characteristics is its remarkable panoramic views, across to Arundel Castle in the west, open downland in the north, and the coastal plain to the south. It also provides a strong sense of historical continuity due to the presence of Bronze Age and Iron Age earthwork. Otherwise,

the character of Highdown hill is generally one of woodland, interlocked with straight-sided, open arable fields linked by hedgerows.

7.14. Tranquillity

Tranquillity is one of the Special Qualities of the SDNP described as 'Tranquil and unspoilt places'. Tranquillity is an imprecise concept to plot, measure and evidence, being identified in the benchmark CPRE National study of 2008 as a combination of 'hearing' and 'seeing' and 'not hearing' and 'not seeing' features, which consist of 44 negative and positive qualities. The resulting scoring system is based on analysis of the content of 500 x 500m squares using OS mapping and aerial photography. It is difficult to analyse the scoring of squares as the score totals do not set out how each square has been scored for all of the 44 qualities. Therefore it is not considered useful for precisely assessing likely impacts of development. In accordance with next generation Tranquillity Studies which have sought to develop the CPRE methodology to a more robust evidence - SDNP has undertaken a review of the CPRE data through a ground proofing programme and produced an adjusted dataset.

7.15. A map of the study area showing tranquillity scores is included in Appendix I of this report. Broadly speaking it shows high levels of tranquillity in the landscape away from settlement and the existing A27. Realignment of the A27 would have impacts on Tranquillity which could be both positive and negative depending on the route.

7.16. For the purposes of this study the LCA descriptions, field work and common sense have been relied on to inform the assessment table and provide information about tranquillity.

7.17. It is worth noting that vehicular noise can have implications for levels of tranquillity, and changes to the baseline conditions of vehicular noise emissions (i.e. the re-alignment of a road and therefore the re-positioning of the source of noise emissions) could be a significant part of the identified landscape effects. However, variable environmental factors such as prevailing wind can both mask noise from a certain source (i.e. road noise), or conduit noise towards a receptor. The prevailing wind in the study area is from the south west. The road noise from the A27 is therefore generally carried northwards into the SDNP.

7.18. PROW, Access and Floodzone

The PROW network is an important key characteristic of the landscape setting of the proposed A27 improvements to the south of Arundel. It is also one of the most direct ways that the SDNP's second statutory purpose is achieved as enjoyment of the special qualities of the SDNP is often experienced from the PROW network.

7.19. The extent of PROW, Access and Floodzone in the study area is set out on map iii in the Appendix I

7.20. Historic Landscape Character Assessment

The Pan Sussex Historic Landscape Characterisation study was completed by Dr Nicola Bannister in 2010. It shows that the landscape setting of the A27 road improvements to the south of Arundel demonstrates a variety of time-depth, and for a notable proportion of this landscape there has been a continuity in its pattern for several hundred years.

7.21. Historic Environment

Refer to appended study by Nexus Heritage

7.22. Biodiversity

Refer to Ecological Study by Hampshire Biodiversity Records Centre

7.23. Key landscape features within the study area

- A very diverse, variable landscape, centred on a flat valley floor / floodplain
- Far reaching views, particularly to Arundel and the Downs in the north
- Arundel Castle is a particularly distinctive landmark
- Arundel Park is a major 18th century designed parkland landscape and remnant deer park with important visual influences – estate walls, avenues and follies (such as Hiorne Tower)
- In places, a wooded landscape (notably Binstead Wood and Rewell Wood.
- In places, an undulating farmland, (with small to medium-sized pasture and arable fields, with hedgerow field boundaries, and tree cover)
- In places, a rolling topography of vast, open upland with large-scale pastoral fields
- Generally tranquil and rural
- Deep, narrow, rounded coombes in the downland, and intimate hidden valleys in the upper coastal plain
- A large number of prehistoric and later earthworks
- Geometric grid of rare 'wet fences' dividing the reclaimed floodplain as permanent pasture
- Some areas of ecologically important flora, in the floodplain, and also unimproved chalk grassland on the open downs

8. Visual baseline (A27 Arundel section)

- 8.1. Viewpoints to inform this study have been selected drawing from the SDILCA, the SDNP Viewshed Study, together with observations in the field.
- 8.2. Viewpoints have been researched which identify locations both within and outside the SDNP from where changes to the existing landscape would be potentially visible and where the viewpoint is representative of a range of views and experiences within the landscape. The study is not exhaustive and there are further viewpoints which could be researched pending further information from Highways England.
- 8.3. Zone of Theoretical Visibility plotting has been undertaken based on the outline route information provided by Highways England. Where possible this has taken into account the elevated sections of the route options, and lowered sections (modelled at existing grade) where this information has been made available. ZTVs are based on the 5km Digital Terrain Model to a radius distance of 5km from the plotting points. These are shown in Appendix IV
- 8.4. ZTV have been produced for the off-line re-alignment (Option 3). The ZTV plots use points at 200m intervals along the length of the route options, with additional points where grade separation occurs at junctions.
- 8.5. The ZTV's represent bare-earth scenarios only and do not take account of above ground features such as trees woodland and buildings.
- 8.6. The ZTV plots have been used firstly to identify areas of zero visibility. Secondly, the reading of the plots with PROW routes both within and to/from the SDNP, tourist destination locations, biodiversity and cultural heritage designations, settlement edges & important

locations within them has been undertaken to establish a study area for fieldwork. Field study has been undertaken to verify visibility and to take photographs for indicative purposes.

9. Summary of potential effects on the range of receptors identified (A27 Arundel section):-

9.1.1. General note regarding the design information provided to date

Our assessment of potential effects is made on the basis of design information provided by Highways England, and accordingly there is a direct relationship between the accuracy of the design information and the reliability of our assessment. The design drawings provided by Highways England are in a low resolution electronic format, lacking legibility in places. Furthermore, technical drawings have not been provided for the western part of Options 3 and 5B, and as such the design intent regarding the interface between the proposed A27 alignment options and surrounding landscape features is not known. Therefore, the assessment below is in-part subjective, and based on some assumptions. It should be regarded only as a high-level account of the potential effects, if interfaces between the proposed road improvements and surrounding landscape features are not positively addressed by the highway designers.

9.2. Potential effects on the footprint and the immediate vicinity of the proposed A27 Arundel improvement options

Refer to Appendix IV

9.2.1. Land form

The physical changes to the landform required to facilitate the various road improvement options are summarised as follows:-

Route option 3 would create a new highway, with a wide footprint, across the flat topography of the Arun valley floodplain. The full 2.3km extent of the highway design for which technical drawings have been provided would be raised on an embankment over the floodplain. Close to the railway line (which would be crossed by the new carriageway via a bridge over) the embankment would be 5m higher than the surrounding natural topography. In the centre of the valley floor / floodplain the embankment would be 2m higher than the surrounding flat natural topography. To the west of this, where the new carriageway would cross the River Arun, and the Ford Road, via 2 bridges over) the embankment would be 6m higher than the surrounding flat natural topography.

These embankments would be significant adverse physical interventions in the landscape, particularly considering the stark contrast with the flat landscape surroundings.

Westwards of Tortington Priory, technical drawings have not been provided for the benefit of this assessment.

9.2.2. Vegetation

The physical changes to vegetation within the landscape required to facilitate the various road improvement options are summarised as follows:-

Route options 3 would require the removal of some native hedgerows within the footprint of the new carriageway across the valley floor, and similarly the partial felling of 3 tree-belts within the agricultural landscape between Crossbush junction and the railway line.

Further to the west, route option 3 would require the clearance of several more hedgerow surrounding the agricultural fields and Tortington Lane, between Tortington Priory and the

southern edge of the woods at Tortington Common. This vegetation clearance would not be a physical change within the SDNP. At the point where the option 3 road improvement alignment would enter into those woods (and also enters the SDNP), extremely adverse physical interventions in the landscape would clearly be caused by clearing vegetation along a 1.9km course through Tortington Common / Binsted Wood (which is recorded in Natural England's inventory of ancient woodland). The width of the proposed road improvement has not been indicated in the design information provided by Highways England to-date. However, it has been estimated that the road improvement scheme would require clearance of approximately 24ha of woodland vegetation. This would consist not only of the coniferous plantation treecover, but perhaps more significantly would of course also erase the rich and varied woodland understorey flora and fauna.

9.3. Potential effects of the proposed A27 Arundel improvements options on the Public Right of Way network and connectivity to the SDNP

9.3.1. Arundel off-line re-alignment route (Option 3)

The proposed road improvement Option 3 crosses the existing courses of public footpaths 2207, 206, 3403, 3404, 342, 347 (in 2 places), and 3400, and also bridleway 338. Furthermore, the Option 3 road improvement also crosses 2 rural lanes (Binsted Lane and Tortington Lane), and Ford Road, each of which could be considered as potential recreational routes used NMU, (though perhaps not pedestrians in the case of Ford Road). 6 of these 12 interfaces with existing recreational routes are within the SDNP, although the remaining 6 could certainly be regarded as being in the setting of the SDNP, and providing connections to a wider PRow network that conveys NMU into the SDNP.

Technical drawings of the Option 3 road improvement proposals have not been provided, although it is considered that the eastern part of Option 3 (from Crossbush junction to Tortington Priory) would replicate (either identically, or in principle) Option 5A, for which we do have technical drawings. As such, our analysis is made on the basis of reviewing the Option 5A technical drawings for the eastern part of the road re-alignment route, and on the basis of assumptions only for the western part of the road re-alignment route (from Tortington Priory to the driveway leading to Havenwood Park caravan site, where the proposed-route would tie-in to the existing A27).

For the eastern part the Option 3 route, crossing the Arun valley floor / floodplain, the technical drawings show that public footpath 2207 would be carried over the proposed carriageway on a new footbridge. Similarly, the proposed road improvement would not cause any severance of Ford Road, which would be continue as at present, with the re-aligned A27 carriageway carried over it on a new bridge. However, the technical drawings do not make clear what the design intent is in regard to public footpath 206. It should be noted that this public footpath is positioned at the top of the flood bank. The technical drawings indicate that the level difference between the top of this flood defence bank, and the centre of the proposed carriageway at the same position would be just over 2m. Allowing for the road / bridge construction, it is thought to be very unlikely that sufficient head clearance would be available for pedestrians to pass under the proposed bridge, on top of the flood bank on the existing alignment of public footpath 206. A diversion of the footpath off the flood bank here (in order to increase the head clearance) would be problematic, as the adjacent land is floodplain, known to periodically flood (hence the position of the footpath on top of the flood bank, above the floodplain).

It should also be noted that a stakeholder consultation exercise facilitated by Arun District Council has put forward footpath 206 as a potential riverside cycle route connecting the NCN2 at Littlehampton to the town of Arundel and beyond to the Downs and the wider SDNP.

Given the deficiencies of the technical design consideration given to-date, we consider that the implementation of road improvement Option 3 would effectively hinder access to the SDNP, as public footpath 206 would be severed, or at least its viable use (on a modified alignment) would be restricted to times when the floodplain is not in flood, unless the design of the bridge crossing is revised to allow sufficient head clearance over the footpath.

For the western part of the Option 3 route, in the absence of technical design information we assume that the proposed road would be constructed approximately at grade.

Outside of the SDNP the route it would take crosses the existing public footpaths 3403 and 3404, and Tortington Lane. We have no information regarding the intended interface between the proposed road and the recreation routes. However, for the purposes of this assessment we consider that the proposed road improvement scheme has the potential to sever them, or hinder their use. As these routes are close to the SDNP, and feed into the SDNP (directly, in the case of Tortington Lane), we consider that the proposed Option 3 road improvement could either block access to the SDNP or hinder it, at the points where the proposed road re-alignment would interface with public footpaths 3403 and 3404 and Tortington Lane.

Within the SDNP, the option 3 route would cross the existing public footpaths 342, 347 then cross Binsted Lane, then Bridleway 338 (known as Old Scotland Lane), then public footpaths 347 and then the road improvement scheme ties-in to the existing A27 alignment at the same location as public footpath 3400. Of particular note, Bridleway 338, Binsted Lane and footpath 342 provide logical east-west connections between Walberton (outside the SDNP) and Arundel with the SDNP just beyond. It is thought that these have the potential to be key routes for recreational users

We have no information regarding the intended interface between the proposed road and the recreation routes. However, for the purposes of this assessment we consider that the proposed road improvement scheme has the potential to sever the 6 recreational routes within the SDNP (as referred to above), or hinder their use.

Other footpaths through Binsted Wood / Tortington Common take a roughly north-south alignment. Whilst these don't make logical connections between communities, they nevertheless have the potential to enhance the experience of recreational users within the SDNP. At present, this experience is truncated by the existing course of the A27. This causes a disconnect between the woodlands of Binsted Wood and Tortington Common (to the south of the existing A27) and Rewell Wood (to the north of the existing A27). These woodlands north and south of the existing A27 clearly relate to each other in terms of landscape character, and are key components of the Wooded Estate Downland (SDILCA B1). The severance caused by the existing A27 is a major detriment to the understanding and enjoyment of the special qualities of the SDNP by the Public.

However, the proposed realignment of the A27, as per the Option 3 road improvement scheme could provide opportunities to reverse the existing severance of the landscape.

Providing connectivity between footpath 347 (south of the A27) and bridleway 386 (north of the A27, and between footpath 3400 (south of the A27) and footpath 388 (north of the A27) would be a tangible and welcome benefit to the SDNP, and the promotion of the understanding and

enjoyment of its special qualities. However, the design information provided by Highways England to-date do not give any indication that the enhancement of north-south PRoW connections have been considered or are intended as part of the road improvement scheme. This would be a missed opportunity.

Indicative NMU proposals associated with the Option 3 road improvement scheme have not been provided, although it is considered likely that they would follow the same principles as indicated in relation to the Option 5A road improvement scheme. These suggest that a shared cycle and pedestrian lane would be created along the route of the existing A27 (alongside a local road (i.e. a downgrading of the existing A27), stretching from Crossbush (in the East) to the driveway leading to Havenwood Park caravan site, where the proposed-route would tie-in to the existing A27. The option 5A indicative proposals also shows a new bridleway to be formed alongside the shared cycle and pedestrian lane, westwards of No. 57a Chichester Road (i.e. where the existing A27 becomes a dual carriageway, west of Arundel). The indicative NMU proposals drawing also shows that the shared cycleway, pedestrian land and bridleway would connect to Bridleway 386 (on the northern side of the adjacent road (existing A27)). Connections to the south are thought to be unlikely in relation to the Option 3 road improvements, given the close proximity of the proposed carriageway.

The new stretch of bridleway, connected to the existing bridleway 386 would represent an improvement to the connectivity of routes available of horse users, allowing their movement from Slindon (and further west), through Rewell Woods, and onwards (via the local road, on the alignment of the existing A27) into Arundel, where horseriders could then return to Slindon via bridleway 415 (through the Waterwoods).

Whilst the intended bridleway link would be beneficial, the broader NMU indicative proposals seem to facilitate east-west NMU movement, but fail to address (and by no means enhance) NMU movement in a north-south direction of travel (and connections to the SDNP).

9.4. Potential effects of the proposed A27 Arundel improvement options on the overall character of the surrounding landscape and the visual experience from within that landscape.

The summary table below sets out the outcomes of the assessment of landscape and visual effects (calculated as a combination of the overall sensitivity of the visual or landscape receptors and their magnitudes of anticipated change).

Receptor		Potential effects of the Arundel shorter off-line re-alignment route (Option 3)
SDILCA F4: Arun and Lower Rother Floodplain	Landscape	MODERATE ADVERSE
WSCC LCA SC10: Lower Arun Valley	Landscape	MAJOR ADVERSE (relating to the SDNP)
SDILCA G4:	Landscape	NEUTRAL

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Arun Valley Sides		
WSCC LCA SC8: Fontwell Upper Coastal Plain	Landscape	MAJOR / MODERATE ADVERSE (relating to the SDNP)
WSCC LCA SC12: Angmering Upper Coastal Plain	Landscape	MODERATE ADVERSE (relating to the SDNP)
WSCC LCA SC9: Chichester to Yapton Coastal Plain	Landscape	NEUTRAL (relating to the SDNP)
WSCC LCA SC11: Littlehampton and Worthing Finges	Landscape	NEUTRAL (relating to the SDNP)
SDILCA A3: Arun to Adur Open Downs	Landscape	NEUTRAL
SDILCA B1: Goodwood to Arundel Wooded Estate Downland	Landscape	MAJOR ADVERSE
SCILCA B4: Angmering and Clapham Wooded Estate Downland (<i>Highdown Hill</i>)	Landscape	NEUTRAL
Receptor group 1 Arun to Adur Open Downs (<i>Springhead and Rackham Hills, and Wepham Down</i>)	Landscape	MINOR / MODERATE ADVERSE
	Visual	MODERATE ADVERSE
Receptor group 2 Angmering and Clapham Wooded Estate Downland (<i>Including Highdown Hill</i>)	Landscape	MINOR / MODERATE ADVERSE
	Visual	MODERATE ADVERSE
Receptor group 3 Arun valley floor	Landscape	MAJOR ADVERSE (relating to the SDNP)
	Visual	MAJOR ADVERSE
Receptor group 4 Arun valley floor / coastal plain	Landscape	NEUTRAL (relating to the SDNP)
	Visual	NEUTRAL
Receptor group 5 Lyminster / Crossbush valley side	Landscape	MODERATE ADVERSE (relating to the SDNP)
	Visual	MODERATE ADVERSE

Receptor group 6 Binstead Wood / Tortington Common	Landscape	MAJOR ADVERSE
	Visual	MAJOR ADVERSE
Receptor group 7 Tortington / Binsted / Walberton farmland	Landscape	MODERATE ADVERSE (relating to the SDNP)
	Visual	MINOR / MODERATE ADVERSE
Receptor group 8 Arundel Wooded Estate Downland	Landscape	MINOR / MODERATE ADVERSE
	Visual	MODERATE ADVERSE

10. Conclusions

Arundel section: Option 3

- 10.1. The Option 3 scheme would have far-reaching implications for the landscape and visual context of the SDNP. Whilst half of the Landscape Character Areas within the study area were found to be subject to 'neutral' effects as a consequence of Option 3, the other effects were found to be between 'moderate adverse' to 'major adverse'. The effects on the Arun Valley and Binsted Wood / Tortington Common are of particular note.
- 10.2. The creation of a causeway approximately 2km in length, stretching across the width of the lower Arun Valley floor from the arable fields south of Priory Farm, Tortington (in the west) to the pastoral fields south of Priory Farm, Crossbush (in the east), would require an embankment over the valley floor throughout that length, including elevations of up to 6m to bridge over Ford road, and up to 5m to bridge over the railway, and 2m over the centre of the valley floor. This would fundamentally change the key characteristics of the flat valley floor, interrupting its continuous expanse between the railway (in the south at Ford and the east between Arundel junction and Arundel station) and the town of Arundel. This physical change would have implications for the experience of far reaching views towards the chalk downs and Arundel. There would also be physical implications for the Permanent pasture reclaimed from the floodplain. These landscape components are contiguous between the lower Arun Valley floor (outside of the SDNP) and the upper Arun Valley floor (within the SDNP). Accordingly, landscape change within the setting of the SDNP could compromise the ability to understand the special qualities if the SDNP landscape nearby. Alternatively, the change as experienced indirectly from within the SDNP would read as an intrusion within a continual landscape character. As the context of the SDNP would be adversely effected, it is thought that this could also compromised the ability to understand the special qualities of the SDNP from within it's boundary.
- 10.3. Although the downgrading of the road along the existing alignment of the A27 could be regarded as a positive intervention locally, the intrusion of vehicle movement and road

noise would merely be displaced further south rather than reduced. Whilst this could be regarded as slightly beneficial for the valley within the SDNP to the north of the existing A27, the valley within the setting of the SDNP (to the south of the existing A27) would not experience that benefit.

- 10.4. A long section of the proposed road improvement option 3 passes through part of Tortington Common / Binsted Wood, within the SDNP, stretching approximately 1900m from the woodland edge where it abuts an agricultural field just east of Tortington Road, to the driveway leading to Havenwood Park caravan site, just off the existing A27 at the northern edge of the wood. Near to its northern extent a relatively short section of the proposed road re-alignment would emerge from the woods into a pastoral field.
- 10.5. Certain assumptions have had to be used in assessing this part of the road improvement route, since technical details have not been provided. However, the route alignment is known, and therefore it is possible to say that the proposed road would cut through continuous and successive woodland compartments along almost all of this section, of which all compartments are registered on the Natural England inventory as ancient replanted woodland. It is assumed that the proposed road would be constructed approximately at grade, extending through the woodland's gently undulating topography, with numerous meandering drainage ditches. The woodland broadly consists of coniferous plantation, and a understorey with a particular wealth of flora and fauna all contributing to an interesting and varied landscape experience. The woodland is well served by public footpaths, bridleways and rural lanes, all of which provide opportunities for recreation. In particular Old Scotland Lane (a bridleway) is particularly noteworthy, as an ancient trackway. The landscape experience throughout the woodland on the PRoW / rural lane network is one of deep seclusion.
- 10.6. The potential movement of vehicles and road noise have clear implications for enjoyment of the scenic value of the woodlands and adjacent pastoral landscape, (eroding the sense of deep seclusion / tranquillity). Aside from experiential changes, the proposed road improvement option 3 would have inevitable physical implications, including the loss of ancient woodland (extending to approximately 24ha).
- 10.7. Whilst it is not known what the nature of the interface between the various PRoW's and rural lanes with the proposed A27 would be, it should be noted that the proposed road alignment crosses 3 public footpaths, a bridleway and a rural lane. This is likely to impede the use of these recreational routes, or sever them altogether, with adverse consequences for the wider network of these routes throughout the woodland, and erosion of the otherwise good public access that is considered to be a key baseline component.
- 10.8. Although the downgrading of the road along the existing alignment of the A27 could be regarded as a positive intervention locally, with regards to Binsted Wood / Tortington Common as a whole the intrusion of vehicle movement and road noise would merely be displaced further south rather than reduced. Any physical changes along the alignment of the existing A27 are unlikely to have notable implications for Binsted Wood / Tortington Common.
- 10.9. Assessing the baseline landscape and visual conditions observed in the field has confirmed that changes to the key landscape visual components as a consequence of route Option 3 would be felt most adversely by receptors within the Arun Valley and within Binsted Wood / Tortington Common.

1. References

South Downs Local Plan (Preferred Options version, September 2015).

Adur District Local Plan (1996)

Adur Local Plan (Amendments to the Proposed submission version, 2016)

Arun District Local Plan (2003)

Arun Local Plan 2011 – 2031 (Publication version, October 2014)

Arundel Neighbourhood Plan 2014 – 2029 (Made version, 2014)

Horsham District Core Strategy and General Development Control Policies (2007)

Amberley Neighbourhood Development Plan (Referendum version, 2017)

South Downs Integrated Character Assessment: Land Use Consultants, 2011

Landscape Character Assessment of West Sussex, 2003, with accompanying Land management guidelines

Sussex Historic Landscape Character Assessment, 2010, Nicola Bannister

SDNP Viewshed Study 2015 Land Use Consultants

Appendix VI (2)

Potential effects of the proposed A27 Arundel section, shorter off-line re-alignment (Option 3), on the overall character of the surrounding landscape and the visual experience from within that landscape.

Receptor	Key baseline components	Relative value	+	Sensitivity Susceptibility to specific landscape / visual change (inc. relationship to SDNPA Statutory Purposes)	=	Sensitivity	Magnitude of change	Significance of effects
SDILCA F4: Arun and Lower Rother Floodplain	<i>Key components (landscape):-</i> <ul style="list-style-type: none"> Flat valley floor / floodplain, periodically waterlogged (Consistent with SC10) Meandering course of the tidal River Arun, between artificial flood banks. (Consistent with SC10) Far reaching views contained by valley sides. (Consistent with SC10) <ul style="list-style-type: none"> Views towards Arundel Castle Permanent pasture reclaimed from the floodplain. (Consistent with SC10) <ul style="list-style-type: none"> Geometric grid of 'wet fences' Absence of woody vegetation. (Consistent with SC10) Valley is lush and pastoral in character, with ecologically important flora 	<ul style="list-style-type: none"> National Park designation. Rare 'wet fences' Ecologically important flora = (Very) High value	+	<ul style="list-style-type: none"> Option 3 would have no direct, physical implications for SDILCA F4. May have a limited effect on SDNPA's ability to fulfil both statutory purposes. In particular, possible implications for the 'far reaching views', with vehicle movement and road noise from the Option 3 route being apparent (locally) from within SDILCA F4. On balance = Moderate susceptibility to landscape change	=	HIGH landscape sensitivity	<i>Landscape change:-</i> No direct, physical implications for F4. However, the creation of a causeway stretching across the width of the lower Arun Valley floor may be apparent from parts of F4. (The nature of the change within the lower Arun Valley floor is described as part of the assessment of effects on SC10, below). The downgrading of the road along the existing alignment of the A27 would potentially reduce the intrusion of vehicle movements and road noise as experienced from F4. Instead, these intrusive elements would be displaced further to the south, at a greater distance from F4. However, it is unlikely that there would be any physical changes along the alignment of the existing A27 which would have notable implications for F4. Nevertheless, the physical changes associated with the proposed road improvement option 3 may have implications for the appreciation of several key landscape components which are clearly contiguous between F4 and SC10 (as described as part of the assessment of effects on SC10, below). In addition, the proposed road improvement Option 3 could have notable implications for the enjoyment of far reaching views from within F4 On balance = LOW ADVERSE magnitude of change	<i>Landscape effects:-</i> MODERATE ADVERSE
WSCC LCA SC10: Lower Arun Valley	<i>Key components, relating to SDNP (landscape):-</i> <ul style="list-style-type: none"> Flat valley floor / floodplain, periodically waterlogged (Consistent with F4) Meandering course of the tidal River Arun, between artificial flood banks. (Consistent with F4) <ul style="list-style-type: none"> Meanders and river width increasing in size Far reaching views contained by valley sides. (Consistent with F4) <ul style="list-style-type: none"> Views towards the chalk downs and Arundel Permanent pasture reclaimed from the floodplain. (Consistent with F4) <ul style="list-style-type: none"> Reclaimed areas extensive in size Absence of woody vegetation. (Consistent with F4) 	<ul style="list-style-type: none"> Setting of the National Park A broad consistency between key landscape components outside the SDNP, and those in the valley bottom within the SDNP = High value	+	<ul style="list-style-type: none"> Option 3 would have direct, physical implications for WSCC LCA SC10 (with its route stretching across the width of the LCA). It would fundamentally compromise key landscape components relating to the SDNP, such as the flat topography, far reaching views and permanent pasture. May have a limited effect on SDNPA's ability to fulfil its statutory purpose of 'promoting opportunities for the understanding and enjoyment of the special qualities', since the potentially compromised key components provide context to / relevant to the understanding of the SDNP landscape) 	=	HIGH landscape sensitivity	<i>Landscape change:-</i> The creation of a causeway approximately 2km in length, stretching across the width of the lower Arun Valley floor from the arable fields south of Priory Farm, Tortington (in the west) to the pastoral fields south of Priory Farm, Crossbush (in the east), would require an embankment over the valley floor throughout that length, including elevations of up to 6m to bridge over Ford road, and up to 5m to bridge over the railway, and 2m over the centre of the valley floor. This would fundamentally change the nature of the flat valley floor, interrupting its continuous expanse between the railway (in the south at Ford and the east between Arundel junction and Arundel station) and the town of Arundel. This physical change would have implications for the experience of far reaching views towards the chalk downs and Arundel. There would also be physical implications for the Permanent pasture reclaimed from the floodplain, and implications for the appreciation of landscape components that are clearly contiguous between SC10 and F4. As-such, there is potential for this landscape change within the setting of the SDNP to compromise the ability to understand the special qualities if the SDNP landscape nearby. Although the downgrading of the road along the existing alignment of the A27 could be regarded as a positive intervention locally, with regards to SC10 as a whole the intrusion of vehicle movement and road noise would merely be displaced further south rather than reduced, and any physical changes along the alignment of the existing A27 are unlikely to have notable implications for SC10. = (Very) HIGH ADVERSE magnitude of change (relating to the SDNP)	<i>Landscape effects:-</i> MAJOR ADVERSE (relating to the SDNP)

			On balance = High susceptibility to landscape change				
SDILCA G4: Arun Valley Sides	<i>Key components (landscape):-</i> <ul style="list-style-type: none">Relatively steep valley sides, deeply indented by dry valleysPasture, chalk grassland and woodland occupy steeper slopesEastern side = large-scale arable fieldsWestern side = wooded character. Surviving early enclosures of late medieval date / Arundel Park, a major 18th century landscape park.A string of villages surrounded by fields enclosed in the later medieval period.fragmented road network of narrow rural lanes which often end in dead-ends.tranquil, rural setting to the River Arun and its floodplainArundel Castle is a particularly distinctive landmark standing at a commanding position at the southern end of the Arun valley	<ul style="list-style-type: none">National Park designationArundel Park (Grade II* Registered historic park)Arundel Castle (Scheduled Monument / Conservation Area)Various scheduled monuments (archaeological earthworks)Ancient woodlands = (Very) High value	+ <ul style="list-style-type: none">Option 3 would have no direct, physical implications for SDILCA G4.May have a limited effect on SDNPA’s ability to fulfil both statutory purposes. In particular, possible implications for the overall scenic value, with vehicle movement and road noise from the Option 3 route being apparent (locally) from within SDILCA G4. On balance = Moderate susceptibility to landscape change	=	HIGH landscape sensitivity	<i>Landscape change:-</i> <p>No direct, physical implications for G4. However, the creation of a causeway stretching across the width of the lower Arun Valley floor may be apparent from parts of G4, though perhaps not from the more wooded western valley side. (The nature of the change within the lower Arun Valley floor is described as part of the assessment of effects on SC10, above).</p> <p>The downgrading of the road along the existing alignment of the A27 would potentially reduce the intrusion of vehicle movements and road noise as experienced from G4. Instead, these intrusive elements would be displaced further to the south, at a greater distance from G4. However, it is unlikely that there would be any physical changes along the alignment of the existing A27 which would have notable implications for G4. Nevertheless, the physical changes associated with the proposed road improvement option 3 may have implications for the appreciation of landscape components which are contiguous between G4 and SC12 (as described as part of the assessment of effects on SC12, below).</p> <p>On balance = NEGLIGIBLE magnitude of change</p>	<i>Landscape effects:-</i> NEUTRAL
WSCC LCA SC8: Fontwell Upper Coastal Plain	<i>Key components, relating to SDNP (landscape):-</i> <ul style="list-style-type: none">A ‘transitional landscape’Scattered rural villages and farmsteads / intimate hidden valleys / winding lanesWoody vegetationUndulating FarmlandViews of the downs (and Arundel)	<ul style="list-style-type: none">Setting of the National ParkA good level of consistency between key landscape components outside the SDNP, and those in the wooded estate downland within the SDNP = High value	+ <ul style="list-style-type: none">Option 3 would have some direct, physical implications for a relatively small part of WSCC LCA SC8 (with a relatively short section of the route passing the SC8 just south of Tortington Priory).It would fundamentally compromise key landscape components relating to the SDNP, such as woody vegetation, undulating farmland, winding lanes and views to the downs.May have a limited effect on SDNPA’s ability to fulfil its statutory purpose of ‘promoting opportunities for the understanding and enjoyment of the special qualities’, since the potentially compromised key components provide context to / relevant to the understanding of the SDNP landscape) On balance = Moderate susceptibility to landscape change	=	HIGH landscape sensitivity	<i>Landscape change:-</i> <p>A section of the proposed road improvement option 3 passes through part of SC8, just south of Tortington Priory, stretching approximately 780m from Ford Road in the east to the edge of Binsted Wood (also the SDNP boundary) in the west. Highways England technical drawings provided to-date do not detail much of this stretch of the proposed road improvement option 3, and it has therefore been necessary to make some assumptions to enable an assessment of effects to be made. It is assumed that the proposed road would be at grade, except immediately south of Tortington Priory where it banks up to meet a 7m high bridge over Ford Road. The road would cut through gently undulating farmland, clear their hedgerow field boundaries within its footprint, and cross Tortington Lane (though it is not known what the nature of the proposed A27’s interface with Tortington Lane would be). Similarly, it should be noted that the proposed A27 alignments crosses 2 public footpaths in this part of SC8. It is not known how the proposed A27 is intended to interface with these PRoW’s, although it is thought likely that their use would be impeded, or severed altogether, with adverse consequences for the wider network of recreational routes throughout the surrounding landscape and connecting with the SDNP.</p> <p>The movement of vehicles and road noise would become more apparent, with implications for enjoyment of the scenic relationship with the downs (and Arundel), which may be curtailed by the proposed road improvement scheme from a public footpaths 3403, 3404, and a limited number of positions (amongst tree-cover) along the southern part of Tortington Lane.</p> <p>The physical changes associated with the proposed road improvement option 3 would have implications for the experience of the ‘transitional landscape’. The physical changes may also have implications for the appreciation of landscape components which are contiguous between SC8 and B1 (e.g. the undulating Farmland and woody vegetation). As-such, there is potential for this landscape</p>	<i>Landscape effects:-</i> MAJOR / MODERATE ADVERSE (relating to the SDNP)

						change within the setting of the SDNP to compromise the ability to understand the special qualities of the SDNP landscape nearby. Downgrading the existing A27 is not likely to have any notable implications for SC8, since it’s route is wholly outside the LCA and any changes would therefore only be experienced indirectly and at some distance. On balance = MEDIUM ADVERSE magnitude of change (relating to the SDNP)	
WSSC LCA SC12: Angmering Upper Coastal Plain	<i>Key components, relating to SDNP (landscape):-</i> <ul style="list-style-type: none">Woody vegetationUndulating Farmland	<ul style="list-style-type: none">Setting of the National ParkSome consistency between key landscape components outside the SDNP, and those in the wooded estate downland within the SDNP = Moderate value	+	<ul style="list-style-type: none">Option 3 would have some direct, physical implications for a relatively small part of WSSC LCA SC12 (with a relatively short section of the route passing through the farmland just West of Crossbush junction).It would fundamentally compromise key landscape components relating to the SDNP, i.e. the woody vegetation, undulating farmland.May have a limited effect on SDNPA’s ability to fulfil its statutory purpose of ‘promoting opportunities for the understanding and enjoyment of the special qualities’, since the potentially compromised key components provide context to / relevant to the understanding of the SDNP landscape) On balance = Moderate susceptibility to landscape change	=	MODERATE landscape sensitivity <i>Landscape change:-</i> A section of the proposed road improvement option 3 passes through part of SC12, just south of Priory Farm, Crossbush, stretching approximately 400m from the existing A27 Crossbush junction in the east across 2 agricultural fields westwards. The Highways England technical drawings provided indicate that this stretch of road would be on an embankment in places elevated up to 1.5m over the surrounding fieldscape (rising up further still to meet the existing A27 junction at Crossbush). Highways England have also proposed a footbridge to carry PRoW 7 over the proposed carriageway within SC12, although no details of the height or form of that feature have been provided. The road would cut through gently undulating farmland, and clear their hedgerow / tree-belt field boundaries within its footprint. The movement of vehicles and road noise would become more apparent, especially from PRoW7 (eroding the sense of tranquillity experienced from that PRoW at present). The physical and experiential changes associated with the proposed road improvement option 3 would have implications for the appreciation of landscape components which are contiguous between SC12 and G4 (e.g. the tranquil, rural setting of undulating farmland and woody field boundaries). As-such, there is potential for this landscape change within the setting of the SDNP to compromise the ability to understand the special qualities of the SDNP landscape nearby. Although the downgrading of the road along the existing alignment of the A27 could be regarded as a positive intervention locally, with regards to SC12 as a whole the intrusion of vehicle movement and road noise would merely be displaced further south rather than reduced, and any physical changes along the alignment of the existing A27 are unlikely to have notable implications for SC12. On balance = MEDIUM ADVERSE magnitude of change (relating to the SDNP)	<i>Landscape effects:-</i> MODERATE ADVERSE (relating to the SDNP)
WSSC LCA SC9: Chichester to Yapton Coastal Plain	<i>Key components, relating to SDNP (landscape):-</i> <ul style="list-style-type: none"><u>Visual components only</u> (long views of the downs (and Arundel)). Considered within Receptor Group 4 below.	<ul style="list-style-type: none">Setting of the National ParkRelationship to the SDNP is visual only Scoped-out of landscape assessment		<ul style="list-style-type: none">Option 3 would have no direct, physical implications for LCA.Unlikely to have implications for SDNPA’s ability to fulfil its statutory purposes	Scoped-out of landscape assessment	<i>Landscape change:-</i> NIL (relating to the SDNP)	<i>Landscape effects:-</i> NEUTRAL (relating to the SDNP)
WSSC LCA SC11: Littlehampton and Worthing Finges	<i>Key components, relating to SDNP (landscape):-</i> <ul style="list-style-type: none"><u>Visual components only</u> (long views of the downs (and Arundel)). However, potential visual interconnectivity with the proposed Option 3 road improvements from areas within the LCA are curtailed by physical massing (tree-cover and built-form, around Lyminster).	<ul style="list-style-type: none">Setting of the National ParkRelationship to the SDNP is visual only		<ul style="list-style-type: none">Option 3 would have no direct, physical implications for LCA.Unlikely to have implications for SDNPA’s ability to fulfil its statutory purposes	Scoped-out of landscape assessment	<i>Landscape change:-</i> NIL (relating to the SDNP)	<i>Landscape effects:-</i> NEUTRAL (relating to the SDNP)

		Scoped-out of landscape assessment						
SDILCA A3: Arun to Adur Open Downs	<i>Key components (landscape):-</i> <ul style="list-style-type: none">Irregular fields of arable and pasture (consistent with B1)Open (consistent with B1)<ul style="list-style-type: none">Very open / vast / large-scale fieldsDeeply secluded / remote (consistent with B1)Good pubic access (consistent with B1)Large number of prehistoric and later earthworks (consistent with B1)Rolling uplandDeep, narrow, rounded coombes (hidden dry valleys)Unimproved chalk grassland which support nationally scarce plant speciesOccasional scrub and woodland on steeper slopes and beech clumps on hill tops.Dynamic landscape, with considerable seasonal variation	<ul style="list-style-type: none">National Park designation.Nationally scarce chalk grassland speciesVarious scheduled monuments (archaeological earthworks)Long views along the Arun valleyHigh level of tranquillity = (Very) High value	+	<ul style="list-style-type: none">Option 3 would have no direct, physical implications for LCA.Unlikely to have implications for SDNPA’s ability to fulfil its statutory purposes (aside from visual effects, considered within receptor Group 1, below). = Low susceptibility to change	=	MODERATE landscape sensitivity	<i>Landscape change:-</i> <p>No direct, physical implications for A3. However, the creation of a causeway stretching across the width of the lower Arun Valley floor may be apparent from parts of A3. (The nature of the change within the lower Arun Valley floor is described as part of the assessment of effects on SC10, above).</p> <p>It is not thought likely that any increase in road noise would be noticeable from any part of A3 (due the distance between the road improvement scheme and the receptor). Similarly, an increased awareness of the movement of vehicles is thought to be unlikely from more distant parts of A3 (such as the South Downs Way), though at locations within A3 that are nearer to the road improvement scheme (such as Perry Hill) this could be regarded as an erosion of tranquillity to some extent.</p> <p>Downgrading the existing A27 is not likely to have any notable implications for A3, since it’s route is wholly outside the LCA and any changes would therefore only be experienced indirectly and at some distance.</p> <p>On balance = NEGLIGIBLE magnitude of change</p>	<i>Landscape effects:-</i> NEUTRAL
SDILCA B1: Goodwood to Arundel Wooded Estate Downland	<i>Key components (landscape):-</i> <ul style="list-style-type: none">Irregular fields of arable and pasture (consistent with A3)<ul style="list-style-type: none">Fields are straight-sided and linked by thick hedgerowsOpen (consistent with A3)Deeply secluded / remote (consistent with A3)Good pubic access (consistent with A3)Large number of prehistoric and later earthworks (consistent with A3)Large woodland blocksArundel Park:- Designed parkland landscape / remnant deerpark with important visual influences – estate walls, avenues, follies.	<ul style="list-style-type: none">National Park designationArundel Park (Grade II* Registered historic park)Various scheduled monuments (archaeological earthworks)Ancient woodland = (very) High value	+	<ul style="list-style-type: none">Option 3 would have direct, physical implications for SDILCA B1 (with its route cutting through Binsted Wood / Tortington Common).It would fundamentally compromise the Large woodland block key landscape component / ancient woodland designation.May have a critical effect on SDNPA’s ability to fulfil both of its statutory purposes. = High susceptibility to change	=	HIGH landscape sensitivity	<i>Landscape change:-</i> <p>A long section of the proposed road improvement option 3 passes through part of B1, stretching approximately 1900m from the woodland edge where it abuts an agricultural field just east of Tortington Road, to the driveway leading to Havenwood Park caravan site, just off the existing A27 at the northern edge of the wood.</p> <p>Highways England technical drawings provided to-date do not detail this stretch of the proposed road improvement option 3, and it has therefore been necessary to make some assumptions to enable an assessment of effects to be made. It is assumed that the proposed road would be approximately at grade. The road would cut through continuous and successive woodland compartments along almost all of this section, of which all compartments are registered on the Natural England inventory as ancient replanted woodland (referred to as Tortington Common and Paine’s Wood).</p> <p>The woodland extends over gently undulating topography, with numerous meandering drainage ditches, and broadly consists of coniferous plantation, with a rich woodland understorey, all contributing to an interesting and varied landscape experience. Habitat biodiversity is outside of the scope of landscape assessment, though it is noted that this woodland has a particular wealth of flora and fauna. The woodland is well served by public footpaths, bridleways and rural lanes, all of which provide opportunities for recreation. In particular Old Scotland Lane (a bridleway) is particularly noteworthy, as an ancient trackway. The landscape experience throughout the woodland on the PRoW / rural lane network is one of deep seclusion.</p> <p>Near to its northern extent a relatively short section of the proposed road re-alignment would emerge from the woods into a pastoral field.</p> <p>The movement of vehicles and road noise through B1 have clear implications for enjoyment of the scenic value of the woodlands and adjacent pastoral landscape, (eroding the sense of deep seclusion /. tranquillity).</p>	<i>Landscape effects:-</i> MAJOR ADVERSE

						Aside from experiential changes, the proposed road improvement option 3 would have inevitable physical implications for B1, including the loss of ancient woodland (extending to approximately 24ha). Whilst it is not known what the nature of the interface between the various PRow’s and rural lanes with the proposed A27 would be, it should be noted that the proposed road alignment crosses 3 public footpaths, a bridleway and a rural lane. This is likely to impede the use of these recreational routes, or sever them altogether, with adverse consequences for the wider network of these routes throughout the woodland, and erosion of the otherwise good public access that is considered to be a key baseline component of B1. Although the downgrading of the road along the existing alignment of the A27 could be regarded as a positive intervention locally, with regards to B1 as a whole the intrusion of vehicle movement and road noise would merely be displaced further south rather than reduced, and any physical changes along the alignment of the existing A27 are unlikely to have notable implications for B4. = HIGH ADVERSE magnitude of change		
SCILCA B4: Angmering and Clapham Wooded Estate Downland (Highdown Hill)	<i>Key components (landscape):-</i> <ul style="list-style-type: none">• Outlying chalk ridge• Woodland, interlocked with straight-sided, open arable fields linked by hedgerows.• Irregular patchwork of early enclosures around Ecclesden Farm (probably late Saxon period assarts)• Bronze Age and Iron Age earthworks at Highdown Hill provide a strong sense of historical continuity• Views across to Arundel Castle in the west, open downland to the north, and coastal plain to the south.	<ul style="list-style-type: none">• National Park designation.• Bronze Age and Iron Age Hillfort (Scheduled monument)• Panoramic views, including long views to Arundel Castle and the Arun valley = (Very) High value	+	<ul style="list-style-type: none">• Option 3 would have no direct, physical implications for LCA.• Unlikely to have implications for SDNPA’s ability to fulfil its statutory purposes (aside from visual effects, considered within receptor Group 2, below). = Low susceptibility to change	=	MODERATE landscape sensitivity	<i>Landscape change:-</i> No direct, physical implications for B4. However, the creation of a causeway stretching across the width of the lower Arun Valley floor may be apparent from parts of B4. (The nature of the change within the lower Arun Valley floor is described as part of the assessment of effects on SC10, above). It is not thought likely that any increase in road noise would be noticeable from any part of B4 (except perhaps at the adjacent part of B4 in the hamlet of Crossbush, albeit road noise from the A27 is already experienced in that location). Similarly, an increased awareness of the movement of vehicles is thought to be unlikely from more distant parts of B4 (such as Highdown Hill), though at locations within B4 that are nearer to the road improvement scheme (such as Warningcamp Hill) this could be regarded as an erosion of tranquillity to some extent. Although the downgrading of the road along the existing alignment of the A27 could be regarded as a positive intervention locally, with regards to B4 as a whole the intrusion of vehicle movement and road noise would merely be displaced further south rather than reduced, and any physical changes along the alignment of the existing A27 are unlikely to have notable implications for B4. On balance = NEGLIGIBLE magnitude of change	<i>Landscape effects:-</i> NEUTRAL
Fieldwork Representative Receptor group 1 Arun to Adur Open Downs (Springhead and Rackham Hills, and Wepham Down)	<i>Key components (landscape (Scenic quality / tranquillity)):-</i> <ul style="list-style-type: none">• Generally, impressive wide views.• Open and exposed.• Movement of (high-sided) vehicles on the current A27 route is apparent, but doesn’t cause significant distraction due to distance and scale of the panoramic context.• The current A27 does not cause road noise intrusion on Receptor group 1 due to distance.• High levels of relative tranquillity	<ul style="list-style-type: none">• National Park designation.• Some representative viewpoints on the South Downs Way National Trail = (Very) High value	+	<ul style="list-style-type: none">• Option 3 is unlikely to have undue consequences for maintaining the baseline situation of the landscape receptor’s scenic quality / tranquillity.• Option 3 is unlikely to have implications for SDNPA’s ability to fulfil its statutory purposes in respect of this landscape receptor = Low susceptibility to change	=	MODERATE landscape sensitivity	<i>Landscape change (Scenic quality / tranquillity):-</i> It is not thought likely that any increase in road noise would be noticeable from Springhead and Rackham Hills, or Wepham Down, due to the distance between the road improvement scheme and the receptors. Similarly, distance is likely to limit any increase in awareness of the movement of vehicles experienced from the South Downs Way at Springhead and Rackham Hills. However, receptors in closer proximity to the road improvements, such as those at Wepham Down / Peppering Lane, may experience a slightly increased awareness of the movement of vehicles across the lower Arun valley floor, as a consequence of them being elevated on an embankment stretching across the width of the otherwise flat topography, and being a dual carriageway rather than single as at present. This movement could be slightly distracting, and regarded as detrimental to scenic quality. The downgrading of the road along the existing alignment of the A27 would displace road noise and the visual intrusion of vehicular	<i>Landscape effects:-</i> MINOR / MODERATE ADVERSE

						movements further south, increasing the distance between the receptor and the source. Nevertheless, some adverse change would still be experienced from Wepham Down / Pepperling Lane. On balance = LOW ADVERSE magnitude of change		
	<p><i>Key components (visual (view composition)):-</i></p> <ul style="list-style-type: none">• Foreground of large, open fieldscape, with some tree-belts.• Eye is drawn to the valley bottom• Middle-distance views of the valley bottom, with intricate pattern of small to medium-sized fields and network of hedgerows / trees.• Arundel Castle is the key focal point, comfortably situated at the southern end of a woodland block on the western valley side• Atmospheric haze tends to reduce the clarity of the distant and far distant view components• Distant views of the wide, flat, lower valley include a network of fields with vegetated edges, appearing intricate at this distance.• Far distant views to the coast.	<ul style="list-style-type: none">• Views within the National Park• Some representative viewpoints on the South Downs Way National Trail = (Very) High value	+	<p>People engaged in outdoor recreation (walking / horse-riding / cycling), whose attention is likely to be focussed on the visual amenity. Expectations of visual amenity likely to be particularly high due to location within SDNP / in places on the South Downs Way National Trail.</p> = (Very) High susceptibility to change	=	(VERY) HIGH visual sensitivity	<p><i>Visual change (view composition):-</i></p> <ul style="list-style-type: none">• Foreground views would remain unchanged• Focus of view would remain unchanged• Middle distant view would remain unchanged• In the distance, the new section of road elevated across the valley floor would be visible. The visual component of a linear embankment would be contrary to the baseline visual component of the flat topography. The proposed road would also interrupt the intricate pattern of small to medium-sized fields, and would require some clearance of hedgerows / trees. The macadam surface of the road would be contrary to the existing fieldscape. The presence of highway infrastructure (such as lighting and signage) and vehicles would also be contrary to the existing simple visual composition. However, at distance, the visual change would occupy a small proportion of the view composition.• Far distant views would remain unchanged.• Atmospheric haze would reduce the clarity of the visual change in the distant view composition. On balance = LOW magnitude of change	<p><i>Visual effects:-</i></p> MODERATE ADVERSE
<p>Fieldwork Representative Receptor group 2 Angmering and Clapham Wooded Estate Downland (Including Highdown Hill)</p>	<p><i>Key components (landscape (Scenic quality / tranquillity)):-</i></p> <ul style="list-style-type: none">• Impressive panoramic views (from Highdown Hill (representative viewpoint 6))• Highdown Hill is open and exposed, and has a sense of elevation• Warningcamp Hill (representative viewpoint 5) has a more vegetated context (with field boundary hedgerows and nearby tree-belts / woodland clumps), so has more perceived shelter.• Highdown Hill is relatively tranquil, though is a popular recreation destination and as such lacks a sense of isolation• Warningcamp Hill is relatively tranquil.• The current A27 between Arundel and Crossbush does not cause road noise intrusion on Receptor group 2 due to distance.• Movement of (high-sided) vehicles on the current A27 route between Arundel and Crossbush is apparent from Highdown Hill, but negligible	<ul style="list-style-type: none">• National Park designation.• Highdown Hill is a popular recreational destination• Highdown Hill is a Scheduled Monument = (Very) High value	+	<ul style="list-style-type: none">• Option 3 is unlikely to have undue consequences for maintaining the baseline situation of the landscape receptor’s scenic quality / tranquillity, although the movement of vehicles across the otherwise still floodplan could have implications for the experience of receptors at Warningcamp Hill, who may regard the vehicular movement as slightly distracting, thereby slightly compromising tranquillity.• However, Option 3 is unlikely to have noteworthy implications for SDNPA’s ability to fulfil its statutory purposes in respect of this landscape receptor = Low susceptibility to change	=	MODERATE landscape sensitivity	<p><i>Landscape change (Scenic quality / tranquillity):-</i></p> It is not thought likely that any increase in road noise would be noticeable from Warningcamp Hill, or Highdown Hill, due to the distance between the road improvement scheme and the receptors. Similarly, distance is likely to limit any increase in awareness of the movement of vehicles experienced from from Highdown Hill. However, receptors in closer proximity to the road improvements, such as those at Warningcamp Hill, may experience a slightly increased awareness of the movement of vehicles across the lower Arun valley floor, as a consequence of them being elevated on an embankment stretching across the width of the otherwise flat topogrpahy, and being a dual carriageway rather than single as at present. This movement could be distracting, and regarded as detrimental to scenic quality. The downgrading of the road along the existing alignment of the A27 would displace road noise and the visual intrusion of vehicular movements further south, increasing the distance between the receptor and the source. Nevertheless, some adverse change would still be experienced from Warningcamp Hill. On balance = LOW ADVERSE magnitude of change	<p><i>Landscape effects:-</i></p> MINOR / MODERATE ADVERSE
	<p><i>Key components (visual (view composition)):-</i></p> <ul style="list-style-type: none">• Foreground of large, open fieldscape, with some tree clumps at the edges• At Highdown Hill, middle-distance views are obscured by landform• At Warningcamp Hill, middle-distance views are of the woodland and field covered hillside at Batworthpark	<ul style="list-style-type: none">• Views within the National Park• Highdown Hill is a Scheduled Monument• Highdown Hill is a well-used recreational	+	<p>People engaged in outdoor recreation (walking), whose attention is likely to be focussed on the visual amenity. Expectations of visual amenity likely to be particularly high due to location within SDNP.</p>	=	HIGH visual sensitivity	<p><i>Visual change (view composition):-</i></p> <ul style="list-style-type: none">• Foreground views would remain unchanged• Focus of view would remain unchanged• Middle distant view would remain unchanged• From Warningcamp Hill, in the distance the new section of road elevated across the valley floor would be visible. The visual component of a linear embankment would be contrary to the baseline visual component of the flat topography. The proposed	<p><i>Visual effects:-</i></p> MODERATE ADVERSE

	<ul style="list-style-type: none"> Eye is drawn to Arundel Castle (a distant feature, seen from Highdown Hill, or in the middle-distance seen from Warningcamp Hill). Distant views of the wide, flat, lower valley include a network of fields with vegetated edges, appearing intricate at this distance (particularly from Highdown Hill, from which distance the features are barely discernible). 	destination and informally recognised panoramic viewpoint = (Very) High value	Highdown Hill is a well-used recreational destination / informally recognised panoramic viewpoint. = High susceptibility to change		<p>road would also interrupt the intricate pattern of small to medium-sized fields, and would require some clearance of hedgerows / trees. The macadam surface of the road would be contrary to the existing fieldscape. The presence of highway infrastructure (such as lighting and signage) and vehicles would also be contrary to the existing simple visual composition. However, at distance, the visual change would occupy a small proportion of the view composition.</p> <ul style="list-style-type: none"> From Highdown Hill it is not thought that the proposed Option 3 route would align with the principle direction of view. Changes to the distant view composition as a consequence of clearing roadside vegetation in order to facilitate the road improvement is not likely to be discernible. <p>On balance = LOW magnitude of change</p>	
Fieldwork Representative Receptor group 3 Arun valley floor	<i>Key components (landscape (Scenic quality / tranquillity)):-</i> <ul style="list-style-type: none"> Sense of openness Movement of (high-sided) vehicles on the current A27 route between Arundel and Crossbush is apparent (and intrusive at viewpoints within a close vicinity, such as at representative viewpoint 7 and representative viewpoint 18). The current A27 between Arundel and Crossbush causes some road noise intrusion at locations in relatively close vicinity The broad perception of the valley floor is of an empty, still and tranquil place, although the tranquillity is interrupted by traffic on the current A27 route, and periodically by trains moving along the railway line. 	<ul style="list-style-type: none"> Setting of the National Park Some scenic quality is consistent with upper valley floor within the SDNP <p>= High value</p>	<ul style="list-style-type: none"> Option 3 is very likely to cause undue consequences for maintaining the baseline situation of the landscape receptor's scenic quality / tranquillity Option 3 may have some effect on SDNPA's ability to fulfil its statutory purpose of 'promoting opportunities for the understanding and enjoyment of the special qualities', since the potentially compromised scenic quality (and tranquillity) is consistent with / provides context to / is relevant to the understanding of the SDNP landscape. <p>= High susceptibility to change</p>	HIGH landscape sensitivity	<i>Landscape change (Scenic quality / tranquillity):-</i> The creation of a causeway stretching across the width of the lower Arun Valley floor would elevate moving vehicles on an embankment generally 2m higher than the floodplain, with elevations of up to 6m (to meet a bridge over Ford Road in the West), and up to 5m (to meet a bridge over the railway line in the East). This elevation of the carriageway in an otherwise flat landscape would inevitably expose the receptors to increases in road noise, and vehicular movement. This would be exacerbated by the proposed road improvement being a dual carriageway rather than single as at present. This movement and road noise could be distracting, and regarded as detrimental to scenic quality and an erosion of tranquillity in an otherwise quiet and peaceful landscape. Although the downgrading of the road along the existing alignment of the A27 could be regarded as a positive intervention locally (as experienced for instance from the Monarchs Way on the southern bank of the River Arun, north of the existing A27 route), with regards to receptor group 3 as a whole the intrusion of vehicle movement and road noise would merely be displaced further south rather than reduced. = (Very) HIGH ADVERSE magnitude of change (relating to the SDNP)	<i>Landscape effects:-</i> MAJOR ADVERSE (relating to the SDNP)
	<i>Key components (visual (view composition)):-</i> <ul style="list-style-type: none"> Impressive wide, open views Foreground of large, flat fieldscape, crossed by drainage ditches / rifles. Sparse tree-cover and hedgerows. The wide River Arun, with concrete reinforced banks, is a major feature visible from some viewpoints in the centre of the valley floor From viewpoints at the outer edges of the floodplain, the River Arun is generally obscured by the flood defence berms either side of it The railway line, (elevated on an embankment throughout its course along the valley floor) is clearly visible from viewpoints to the eastern edge of the floodplain. The embankment obscures views beyond (i.e. the full width of the valley floor is not apparent) The town of Arundel, with the Castle and the Cathedral sits in the middle-distance view. The eye is drawn to Arundel Castle, a clear focal point 	<ul style="list-style-type: none"> Landform / features within the National Park forms a coherent backdrop to the visual composition. Some existing routes through the valley floor (including the railway line) are regarded as the likely access to the SDNP for recreational users. Arun District Council aspiration to upgrade footpath 	People engaged in outdoor recreation (walking on footpaths 206 and 2207), and railway passengers whose attention is likely to be focussed on the visual amenity. Road users on Ford Road are less likely to have their attention focussed on visual amenity. However, it is considered that on balance visual receptors in this group would have relatively high expectations of visual amenity. = Moderate to High susceptibility to change	HIGH visual sensitivity	<i>Visual change (view composition):-</i> The new section of road elevated across the valley floor would be clearly visible throughout the Arun Valley floor. The visual component of a linear embankment crossing the valley would be contrary to the baseline visual component of the flat topography. The proposed elevated road would be perpendicular to the flood defence banks either side of the river, and the railway embankment. The macadam surface and presence of highway infrastructure (such as lighting and signage) and vehicles would also be contrary to the baseline visual composition. The proposed road would require some clearance of hedgerows / trees. It would also interrupt the pattern of fieldscape, potentially leaving remnant small parcels of fields which would no longer be agriculturally viable. These could become neglected and occupied by scrubby vegetation growth, which would be contrary to the baseline visual components. The introduction of a road into the view composition would compromise the impressive wide, open views. It could also in-part obscure the high-ground in the distant view composition, and may divert attention away from the baseline focus on Arundel with its Castle.	<i>Visual effects:-</i> MAJOR ADVERSE

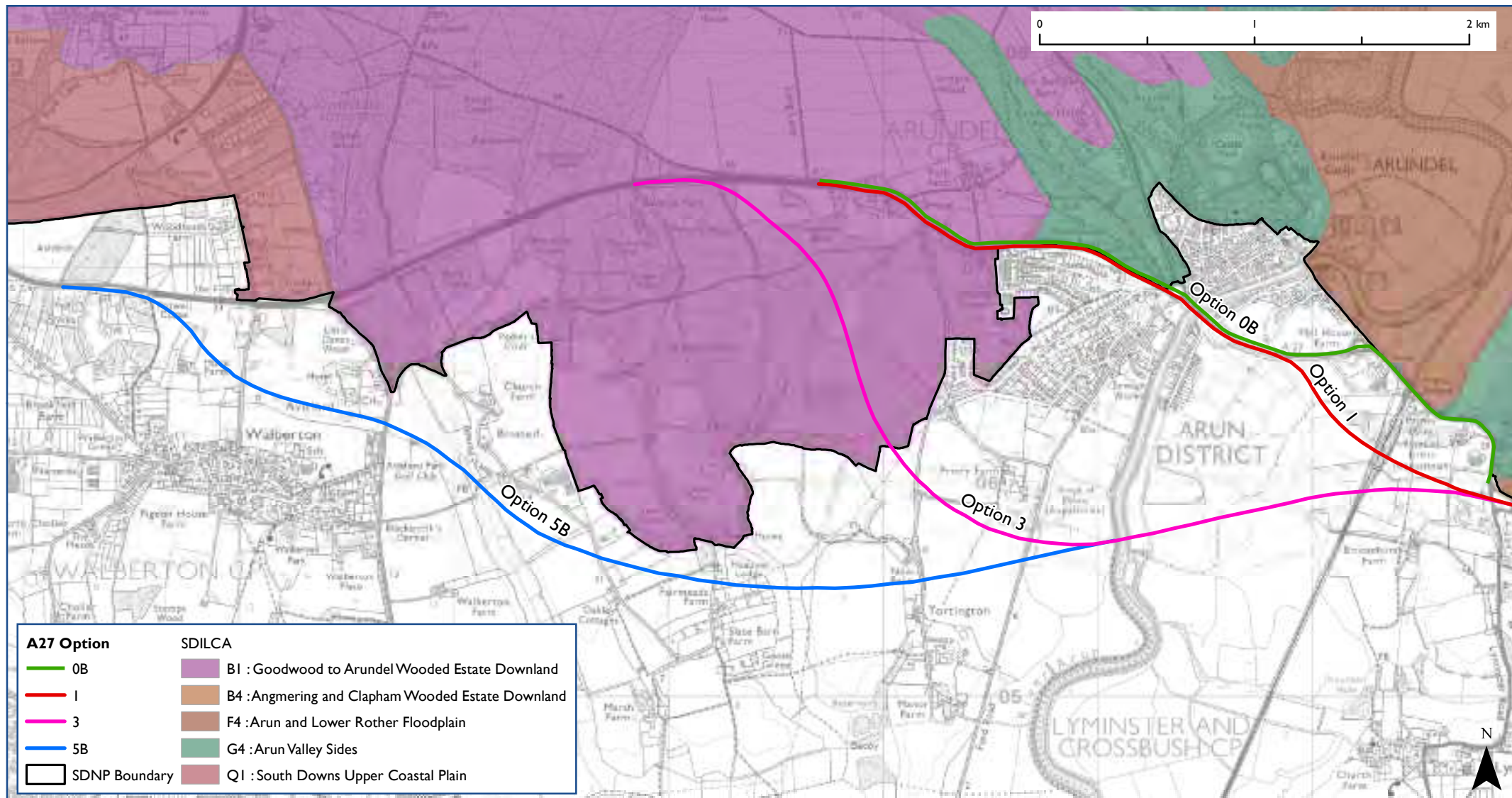
	<ul style="list-style-type: none">Backdrop tends to be of distant high ground, and is broadly wooded, (except the exposed downland, rolling topography, generally seen behind Arundel Castle (in the north)).	206 (on the top of the western flood defence berm alongside the River Arun), to a cycle route linking Littlehampton to Arundel <ul style="list-style-type: none">Representative viewpoint 7 is on the Monarchs Way, regional trail = (Very) High value				= HIGH ADVERSE magnitude of change (relating to the SDNP)		
Fieldwork Representative Receptor group 4 Arun valley floor / coastal plain	<i>Key components (landscape (Scenic quality / tranquillity)):-</i> <ul style="list-style-type: none">Urban fringe influences (including expanding settlement, busy roads and industrial scale agriculture) are broadly perceived.Movement or road noise from the current A27 is not apparent.The flat floodplain landform dominates the landscape character.A sense of connection with the landscape character of the SDNP is reduced, though some visual interconnectivity is important (see below)	<ul style="list-style-type: none">Setting of the National ParkScenic quality is eroded by urban influencesBroad disconnect with the landscape character of the SDNP = Low value	+	<ul style="list-style-type: none">Option 3 is unlikely to have undue consequences for maintaining the baseline situation of the landscape receptor’s scenic quality / tranquillity.Option 3 is unlikely to have implications for SDNPA’s ability to fulfil its statutory purposes in respect of this landscape receptor = Low susceptibility to change	=	LOW sensitivity	<i>Landscape change (Scenic quality / tranquillity):-</i> It is not thought likely that any increase in road noise, or awareness of vehicle movements would be noticeable from receptors in the lower part of the Arun valley floor within the coastal plain, due to the distance between the road improvement scheme and the receptors, and also because of the intervening railway embankment which curtails visual interconnectivity. Accordingly, the scenic quality / tranquillity of these receptors would remain unchanged. = NIL magnitude of change (relating to the SDNP)	<i>Landscape effects:-</i> NEUTRAL (relating to the SDNP)
	<i>Key components (visual (view composition)):-</i> <ul style="list-style-type: none">Intermittent foreground of large, flat fieldscape. Sparse tree-cover and hedgerows. Wide, open views.Elsewhere, views are curtailed by roadside vegetation or nearby built-form.Where not curtailed at close-range, middle-distant views include the railway line, (elevated on an embankment throughout its course along the valley floor). The embankment obscures views beyond (i.e. the full length of the valley floor is not apparent)Where views are not curtailed at close-range, the town of Arundel, with the Castle and the Cathedral sits in the distance view, beyond (above) the intervening railway embankment.The eye is drawn to Arundel Castle, a clear focal pointThe far distant backdrop to views of Arundel tend to be of broadly wooded high ground, and the exposed downland, rolling topography.	<ul style="list-style-type: none">In places, landform / features within the National Park forms a coherent (but distant) backdrop to the visual composition.No formal or informal recognition of any viewpoint = Low value	+	Road users, unlikely to have their attention focussed on visual amenity. Visual receptors in this group are outside of the SDNP, and are likely to have limited expectations of visual amenity. = Low susceptibility to change	=	LOW visual sensitivity	<i>Visual change (view composition):-</i> None of the key visual components would be likely to change as a consequence of road option 3. = NIL magnitude of change (relating to the SDNP)	<i>Visual effects:-</i> NEUTRAL (relating to the SDNP)
Fieldwork Representative Receptor group 5 Lyminster / Crossbush valley side	<i>Key components (landscape (Scenic quality / tranquillity)):-</i> <ul style="list-style-type: none">Relatively intimate scaled landscape, of small to medium-sized pasture fields, with a relatively high degree of tree cover, and loosely bound by hedgerows	<ul style="list-style-type: none">Setting of the National ParkSome landscape components are consistent with Arun valley sides, within the SDNP.	+	<ul style="list-style-type: none">Option 3 is very likely to cause undue consequences for maintaining the baseline situation of the landscape receptor’s scenic quality / tranquillity	=	HIGH landscape sensitivity	<i>Landscape change (Scenic quality / tranquillity):-</i> Receptors at the Lyminster / Crossbush valley side would experience increases in road noise, and vehicular movement across the lower Arun valley floor, and through the undulating farmland of the valley sides. This would be as a consequence of traffic being experienced at close range (cutting through the undulating farmland), and stretching further away on an elevated on an embankment	<i>Landscape effects:-</i> MODERATE ADVERSE (relating to the SDNP)

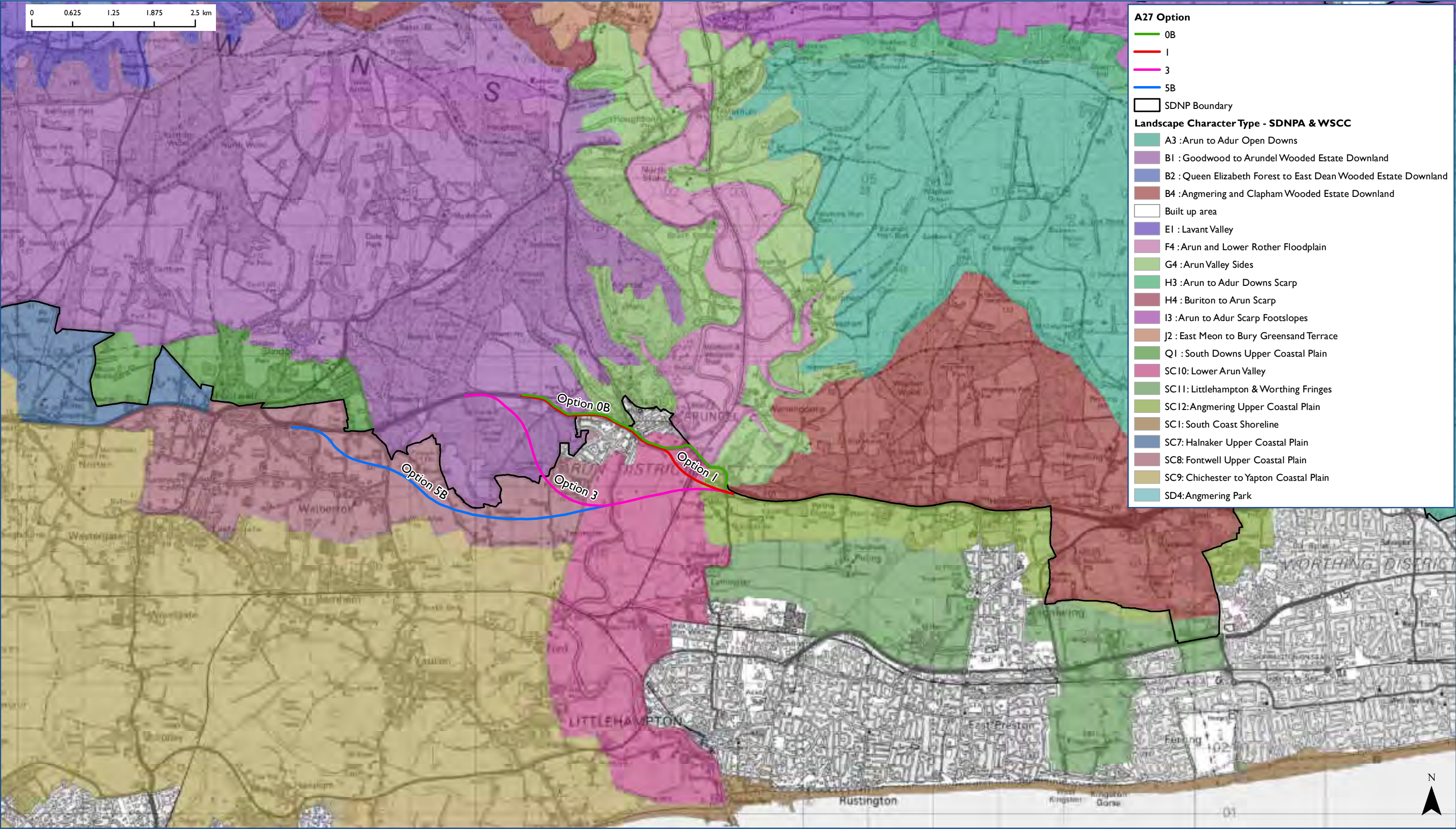
	<ul style="list-style-type: none">• A sense of the relationship with the valley is perceived through the gently undulating landform.• Movement of vehicles on the current A27 route rising up to Crossbush from Arundel railway station is particularly apparent and intrusive.• The current A27 causes some road noise intrusion.• Tranquillity is eroded by the movement and noise of traffic on the A27	though the experience / tranquilly is eroded to some extent by intrusive movement and noise of the A27 = Moderate value	<ul style="list-style-type: none">• Option 3 may have some effect on SDNPA’s ability to fulfil its statutory purpose of ‘promoting opportunities for the understanding and enjoyment of the special qualities’, since the potentially compromised scenic quality (and tranquillity) is consistent with / provides context to / is relevant to the understanding of the SDNP landscape. = High susceptibility to change		stretching across the width of the otherwise flat topography (across the valley floor). This would be exacerbated by the proposed road improvement being a dual carriageway rather than single as at present. This movement and road noise can be regarded as an erosion of the scenic quality / tranquillity, though it is noted that some road noise and vehicle movements on the existing A27 is a baseline conditions. The downgrading of the road along the existing alignment of the A27 could be regarded as a positive intervention to the scene north of receptor location 8, and could potentially improve the relationship of this landscape’s scenic quality with that of the adjacent SDNP (truncated by the A27 at present). However, as a complete 360° experience at that location it is notable that the intrusion of vehicle movement and road noise would merely be displaced further south (further away from the SDNP) rather than reduced. On balance = LOW ADVERSE magnitude of change (relating to the SDNP)		
	<p><i>Key components (visual (view composition)):-</i></p> <ul style="list-style-type: none">• Foreground of small to medium-sized fieldscape pasture, with some loose-woodland pasture, bound by hedgerows with hedgerow trees.• The existing route of the A27 is visible just beyond the foreground scene, on an incline to the north-east, and also to the south-east at its highest point (the Crossbush junction) where lighting and road signs break the skyline and are a clear feature which is incongruous with the rest of the scene.• Middle distant views to the north-west are of the town of Arundel, filtered through the foreground woodland pasture. The eye is particularly drawn to Arundel Castle, a clear focal point• Middle-distant views to the north-east of the woodland block at Batfordpark, filtered through the foreground woodland pasture, and as a continuation of it.• Middle-distant views to the south-west are of the distinctively flat valley floor fieldscape, notably devoid of tree-cover / hedgerows. From the slightly elevated position of representative viewpoint 9, the drainage ditches / rife crossing the valley is particularly apparent, as is the railway line elevated on an embankment.• Distant views to the north are filtered through the foreground woodland pasture. However, the upper Arun Valley is visible with the distinctively flat valley bottom and network of reclaimed pastures, with the smooth ascent of the valley sides to the upland landscape (generally wooded to the west of the valley, and exposed downland with distinctive rolling topography to the east of the valley).	<ul style="list-style-type: none">• Landform / features within the National Park forms a coherent backdrop to the visual composition.• Visual components within the foreground are broadly consistent with nearby features within the SDNP (Arun valley sides)• No formal or informal recognition of viewpoint) = Moderate value	+	People engaged in outdoor recreation (walking on footpath 2207), whose attention is likely to be focussed on the visual amenity. Visual receptors in this group are outside of the SDNP, though are either moving towards or existing the SDNP. On balance it is considered that these visual receptors are likely to have modest expectations of visual amenity. = Moderate susceptibility to change	=	<p>MODERATE visual sensitivity</p> <p><i>Visual change (view composition):-</i> The following visual components would not be likely to notably change as a consequence of the Option 3 road improvements:-</p> <ul style="list-style-type: none">• The majority of the foreground• The middle-distance to the north-east and north-west (albeit the downgrading of the road on the alignment of the existing A27 could be regarded as a positive change, with a reduction of vehicles in the view composition)• The distance to the north <p>However, to the south and south-west visual components would be effected by the Option 3 road improvements in several parts of the view composition.</p> <ul style="list-style-type: none">• Between the foreground and the middle-distance a new section of road would be constructed from Crossbush junction (which is visible, in an elevated position) across undulating farmland. The proposed road would be elevated on an embankment approximately 2m tall in the centre, but rising up to meet the Crossbush junction in the east and a bridge over the railway line in the west. Furthermore, a footbridge is proposed to carry a public footpath over the road. This structure (of un-known height or material) would be an additional vertical element in the view composition. The elevated nature of the carriageway would curtail views southwards. The macadam surface and presence of highway infrastructure (such as lighting and signage) and vehicles would also be contrary to the baseline visual composition. The proposed road would require some clearance of hedgerows / trees. It would also interrupt the pattern of fieldscape, potentially leaving remnant small parcels of fields which would no longer be agriculturally viable. These could become neglected and occupied by scrubby vegetation growth, which would be contrary to the baseline visual components.• In the middle-distance the new section of road would be visible elevated across the valley floor. The visual component of a linear embankment crossing the valley would be contrary to the baseline visual component of the distinctively flat topography. The proposed elevated road would be perpendicular to the railway embankment which is visible in	<p><i>Visual effects:-</i> MODERATE ADVERSE</p>

						<p>the baseline visual composition. The macadam surface and presence of highway infrastructure (such as lighting and signage) and vehicles would also be contrary to the baseline visual composition. The proposed road would require some clearance of hedgerows / trees. It would also interrupt the pattern of fieldscape, potentially leaving remnant small parcels of fields which would no longer be agriculturally viable. These could become neglected and occupied by scrubby vegetation growth, which would be contrary to the baseline visual components.</p> <p>On balance = MODERATE ADVERSE magnitude of change</p>	
<p>Fieldwork Representative Receptor group 6 Binsted Wood / Tortington Common</p>	<p><i>Key components (landscape (Scenic quality / tranquillity)):-</i></p> <ul style="list-style-type: none"> • Small-scale, enclosed space. • A dynamic scene, with notable seasonal variations. • Generally peaceful / high degree of tranquilly (except where adjacent to the existing A27) 	<ul style="list-style-type: none"> • National Park designation. • Binstead Wood is an ancient woodland, typical of the Wooded Downland landscape character. <p>= (Very) High value</p>	+	<ul style="list-style-type: none"> • Option 3 is very likely to cause undue consequences for maintaining the baseline situation of the landscape receptor's scenic quality / tranquillity • Option 3 may have a critical effect on SDNPA's ability to fulfil both of its statutory purposes in respect of this landscape receptor <p>= High susceptibility to change</p>	=	<p>= HIGH landscape sensitivity</p> <p><i>Landscape change (Scenic quality / tranquillity):-</i> Receptors at the Binsted Wood / Tortington Common would experience increases in road noise, and vehicular movement as a consequence of the proposed Option 3 road improvement cutting a route through the woods, and across various public footpaths, a bridleway and rural lanes from where the A27 traffic would be experienced at close range. The vehicular movement and road noise generated would inevitably erode of the high degree of tranquillity and scenic quality currently enjoyed within the woods. It is noted that road noise and vehicle movements are locally experienced as baseline conditions in locations adjacent to the existing A27 at the northern edge of the woods. Although the increased exposure to these intrusive landscape components is relative, it is thought that the changes caused by re-aligning the road through the woods rather than along their northern edge would be considerable. Although the downgrading of the road along the existing alignment of the A27 could be regarded as a positive intervention locally (at the northern edge of the woods), with regards to receptor group 6 as a whole the intrusion of vehicle movement and road noise would be displaced (and probably increased) further south rather than reduced.</p> <p>= HIGH ADVERSE magnitude of change</p>	<p><i>Landscape effects:-</i> MAJOR ADVERSE</p>
	<p><i>Key components (visual (view composition)):-</i></p> <ul style="list-style-type: none"> • Views of close-range tree-cover • Woodland floor includes some ditches, and occasional lanes / footpaths cutting through the tree cover. Shrub understorey is not a major component of the scene. • Sky is largely absent from the view composition • Distant views are curtailed 	<ul style="list-style-type: none"> • Views within the National Park • No formal or informal recognition of any specific viewpoint <p>= High value</p>	+	<p>People engaged in outdoor recreation (walking, with horse-riding / cycling also possible on Binsted Lane and Old Scotland Lane (bridleway)), whose attention is likely to be focussed on the visual amenity. Expectations of visual amenity likely to be particularly high due to location within SDNP.</p> <p>= High susceptibility to change</p>	=	<p>HIGH visual sensitivity</p> <p><i>Visual change (view composition):-</i> The visual components of the view composition at the representative receptors through Binsted Wood / Tortington Common would be fundamentally compromised by the proposed Option 3 road improvement scheme. The proposed highway would clear a substantial corridor of woodland vegetation from view, cutting across (perpendicular to) the various recreational routes which provide the context of the representative view compositions. The macadam surface and presence of highway infrastructure (such as lighting and signage) and vehicles would also be contrary to the baseline visual composition of close-range tree-cover. However, it is likely that distant views would remain curtailed by the remaining tree-cover either side of the new road. The downgrading of the road on the alignment of the existing A27 could be regarded as a positive change, with a reduction of vehicles in the view composition observed at representative viewpoint 28.</p> <p>= HIGH magnitude of change</p>	<p><i>Visual effects:-</i> MAJOR ADVERSE</p>
<p>Fieldwork Representative Receptor group 7 Tortington / Binsted / Walberton farmland</p>	<p><i>Key components (landscape (Scenic quality / tranquillity)):-</i></p> <ul style="list-style-type: none"> • A rural scene, with a relatively high proportion of tree-cover, and hedgerows at field edges 	<ul style="list-style-type: none"> • Setting of the National Park • Some landscape components are consistent with the Wooded 	+	<ul style="list-style-type: none"> • Option 3 is unlikely to have undue consequences for maintaining the baseline situation of the landscape receptor's scenic quality / tranquillity. 	=	<p>= MODERATE landscape sensitivity</p> <p><i>Landscape change (Scenic quality / tranquillity):-</i> Receptors within the agricultural landscape at Tortington (but not in the wider collection of receptors extending to the agricultural landscape at Binsted and Walberton) would experience increases in road noise, and vehicular movement cutting through the gently undulating farmland, and across the lower Arun valley floor beyond.</p>	<p><i>Landscape effects:-</i> MODERATE ADVERSE</p>

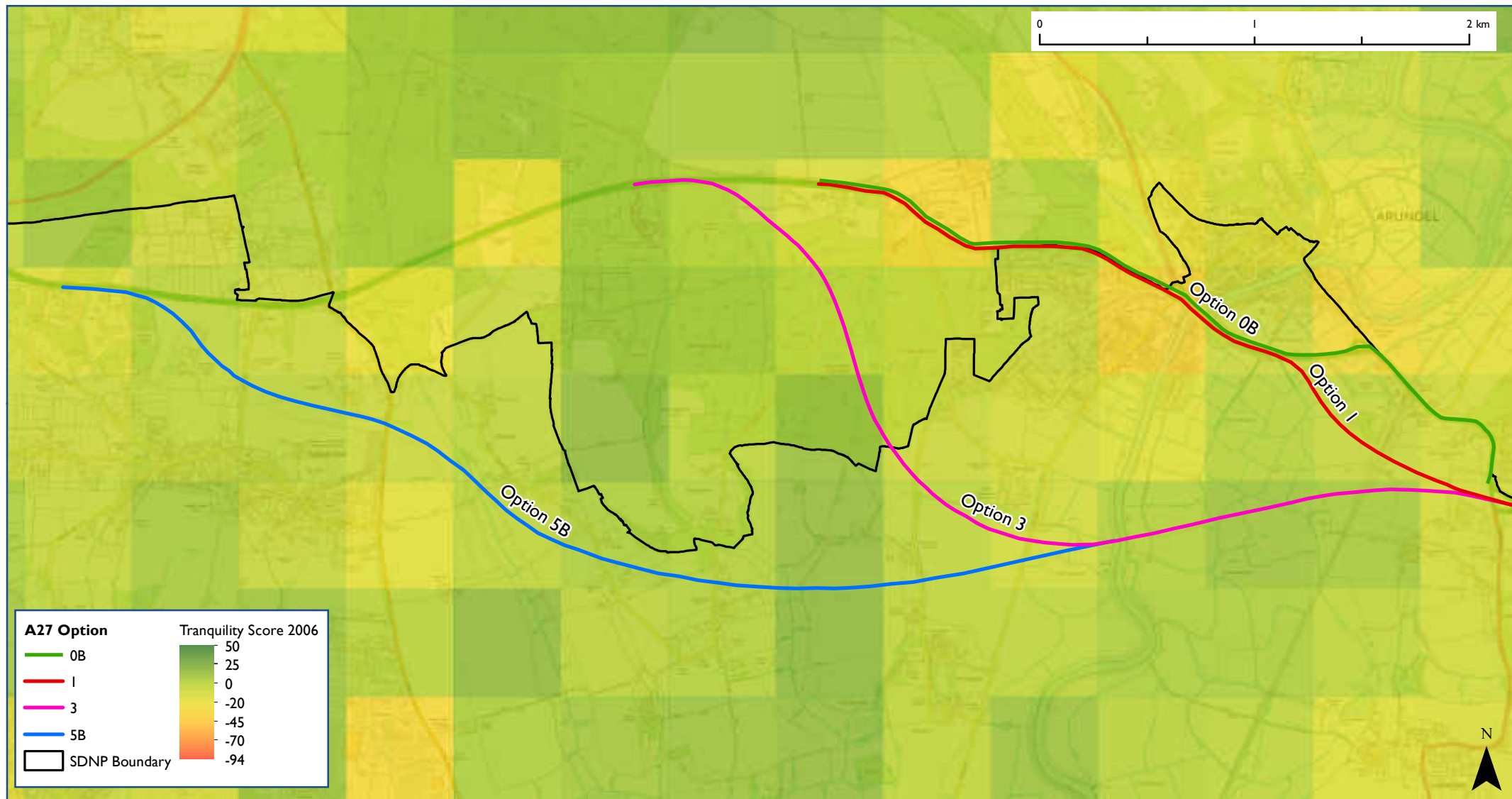
	<ul style="list-style-type: none"> Landform is variable, with some particularly flat fieldscape, to some intimate hidden valleys, and generally undulating fieldscape elsewhere Vegetation and landform tends to promote a sense of enclosure. A perceived relationship with the wooded estate downland, with some continuity of landscape features, and a backdrop of woodland Generally peaceful and still, with high degree of tranquillity 	Estate Downland, within the SDNP. = High value	<ul style="list-style-type: none"> Option 3 is unlikely to have implications for SDNPA's ability to fulfil its statutory purposes in respect of this landscape receptor = Low susceptibility to change 		<p>The magnitude of this change would be exacerbated by the source of the intrusion (i.e. traffic) being at close range. This movement and road noise can be regarded as an erosion of the high degree of tranquillity and stillness that are regarded as a key baseline component. The road would also curtail the perceived relationship with the wooded estate downland.</p> <p>Downgrading the existing A27 is not likely to have any notable implications receptors within group 7, since the changes would therefore be experienced at some distance.</p> <p>On balance = MEDIUM ADVERSE magnitude of change (relating to the SDNP)</p>	(relating to the SDNP)
	<p><i>Key components (visual (view composition)):-</i></p> <ul style="list-style-type: none"> Foreground views from publicly accessible viewpoints are often curtailed to some extent at close-range by hedgerows lining rural lanes. Filtered foreground views, or those which occur uncurtailed, are generally of small to medium-sized fieldscape, with a mixture of arable and pastoral agriculture, bound by hedgerows with hedgerow trees, and some tree-belts. The Avisford Park Golf course / grounds of the Avisford Park Hotel is also a notable influence on foreground views for receptors in the west of the group. Here the spaces are more enclosed than the fieldscapes, with an increase in tree-cover / blocks of trees. The intimate hidden valley the west of St. Mary's church at Binstead also features a higher proportion of vegetation including scrubby shrubs. Middle-distant views tend to be of a tree'd horizon, including the woodland of the adjacent Wooded Estate Downland. Distant views are limited by intervening vegetation and landform, and not generally considered to be a key visual component, except at receptors in the east of the group, close to the Arun Valley. Here long-views over the distinctively flat valley bottom with its network of reclaimed pastures is afforded. 	<ul style="list-style-type: none"> Features within the National Park (particularly Binstead Wood) forms a coherent backdrop to the visual composition. Visual components within the foreground are broadly consistent with nearby features within the SDNP (Wooded Estate Downland / Arun valley sides) No formal or informal recognition of viewpoint) <p>= Moderate value</p>	<p>Mostly road users, although the locations of visual receptors within this group are generally on rural lanes, and 2 public footpaths. Generally, these receptors are likely to be people engaged in outdoor recreation (walking / horse-riding / cycling), whose attention is likely to be focussed on visual amenity. Visual receptors in this group are outside of the SDNP, though are either moving towards or existing the SDNP. On balance it is considered that these visual receptors are likely to have modest expectations of visual amenity. = Moderate susceptibility to change</p>	MODERATE visual sensitivity	<p><i>Visual change (view composition):-</i></p> <p>The majority of the key visual components throughout the receptor group would not be likely to change as a consequence of road option 3. However, at representative receptor 23 the foreground and middle-distant view components would be compromised by a section of the new road cross the undulating farmland. The vertical alignment of the road is not known, although it is assumed that the road would be constructed approximately at grade. The macadam surface and presence of highway infrastructure (such as lighting and signage) and vehicles would also be contrary to the baseline visual composition. The proposed road would require some clearance of field boundary hedgerows. It would also interrupt the pattern of fieldscape, potentially leaving remnant small parcels of fields which would no longer be agriculturally viable. These could become neglected and occupied by scrubby vegetation growth, which would be contrary to the baseline visual components.</p> <p>On balance = LOW magnitude of change</p>	<i>Visual effects:-</i> MODERATE / MINOR ADVERSE
Fieldwork Representative Receptor group 8 Arundel Wooded Estate Downland	<p><i>Key components (landscape (Scenic quality / tranquillity)):-</i></p> <ul style="list-style-type: none"> A rural scene, varying in scale:- <ul style="list-style-type: none"> large open / exposed fieldscape with large blocks of woodland as a backdrop More comfortably scaled estate parkland surrounded by woodland blocks, with individual parkland trees and clumps of trees standing within the spaces. Gently sloping topography Generally peaceful and still, with high degree of tranquillity However, in places tranquillity is eroded to some extent by the movement and noise of traffic on the existing A27, at the edge of the open space to the south of Long lane (public footpath). 	<ul style="list-style-type: none"> National Park designation. Arundel Park (Grade II* Registered historic park) Hiorne Tower is at Grade II* Listed building, and also recognised as a Landmark by SDNPA's 'Viewshed Analysis' study. Representative viewpoint 37 is on the Monarchs 	<ul style="list-style-type: none"> Option 3 is unlikely to have undue consequences for maintaining the baseline situation of the landscape receptor's scenic quality / tranquillity, although there would be a change to experience of vehicle movements for receptors at Long Lane. This movement may be regarded as slightly distracting, thereby slightly compromising tranquillity. However, Option 3 is unlikely to have noteworthy implications for SDNPA's ability to fulfil its statutory 	MODERATE landscape sensitivity	<p><i>Landscape change (Scenic quality / tranquillity):-</i></p> <p>Intervening tree-cover would curtail any visual or audial interconnectivity between receptors at Hiorne Tower and the proposed Option 3 road improvements. Receptors at bridleway 415 would experience increases in road noise and vehicular movement across a relatively small pastoral fieldscape which has woodland around 3 sides to the furthest side relative to the receptor, and the existing A27 route on the side nearest the receptor. This is just adjacent to where the proposed option 3 and existing A27 routes diverge, and receptors at bridleway 415 would experience visual interconnectivity with the proposed tie-in. It is assumed that the proposed road would be at grade, and screened to some extent by vegetation along the route of the existing A27. However, an increase in the experience of road noise and vehicular movements may be anticipated by the proposed road improvement being a dual carriageway rather than single as at present. This vehicular movement and road noise could be distracting, and regarded as detrimental to scenic quality and an</p>	<i>Landscape effects:-</i> MINOR / MODERATE ADVERSE

		Way, regional trail = (Very) High value	purposes in respect of this landscape receptor = Low susceptibility to change		erosion of the high degree of tranquillity and stillness that are regarded as a key baseline component. Although the downgrading of the road along the existing alignment of the A27 could be regarded to some extent as a positive intervention within the landscape experienced by receptors at bridleway 415, it should be noted that broadly speaking the intrusion of vehicle movement and road noise would merely be displaced further south rather than reduced. = LOW ADVERSE magnitude of change	
	<p><i>Key components (visual (view composition)):-</i></p> <ul style="list-style-type: none"> At Long Lane (representative viewpoint 36), foreground of large, open arable fieldscape. At Hiorns Tower (representative viewpoint 37) foreground of medium-sized, open estate parkland (grazed grassland), with occasional individual parkland trees and tree clumps standing within the space. At Long Lane, vehicles (particularly high-sided vehicles) travelling along the existing A27 are apparent between the foreground and middle distance. At Long Lane, the middle-distant view is of wide, sprawling woodland (Binstead wood), forming a dark mass in the visual composition. At Hiorns Tower the near middle-distant view is of woodland blocks edges to the estate parkland spaces. At Long Lane, far distant views to the coastal plain, built-form at Littlehampton and the English Channel are afforded. This part of the view composition is very wide and horizontal. At Hiorns Tower, distant views are curtailed by the wooded edges of the estate parkland. 	<ul style="list-style-type: none"> Views within the National Park Arundel Park (Grade II* Registered historic park) Hiorne Tower is at Grade II* Listed building Representative viewpoint 37 is on the Monarchs Way, regional trail <p>= (Very) High value</p>	<p>People engaged in outdoor recreation (walking / horse-riding / cycling), whose attention is likely to be focussed on the visual amenity. Expectations of visual amenity likely to be particularly high due to location within SDNP / in places on the Monarchs Way Regional Trail.</p> <p>= (Very) High susceptibility to change</p>	<p>(VERY) HIGH visual sensitivity</p>	<p><i>Visual change (view composition):-</i></p> <p>At Hiorns Tower, the Foreground, Middle-distant and Distant view components of the view composition would not be likely to be change as a consequence of the Option 3 road improvement. At Long Lane, the Foreground and Distant view components of the view composition would be un-changed by the Option 3 road improvement. However, some changes to view components between the foreground and the middle-distance may be discernible, where the existing A27 carriageway would be downgraded in status to a local road. The reduction in the quantity of vehicles in this part of the view composition could be regarded as a positive visual change.</p> <p>Elsewhere in the middle-distance, the new carriageway would be visible cutting its route across a relatively small pastoral fieldcape which is set-back into the prevailing woodland. The additional hardstanding of the road surface would be visible to some extent, as well as the vehicles using it and highway infrastructure such as signage and lighting. However, the existing vegetation on the northern side of the present A27 carriageway (i.e. facing the representative visual receptor) would remain in-tact, and as-such any changes in the view composition would be loosely screened by the existing, retained roadside vegetation.</p> <p>On balance = LOW ADVERSE magnitude of change</p>	<p><i>Visual effects:-</i></p> <p>MODERATE ADVERSE</p>

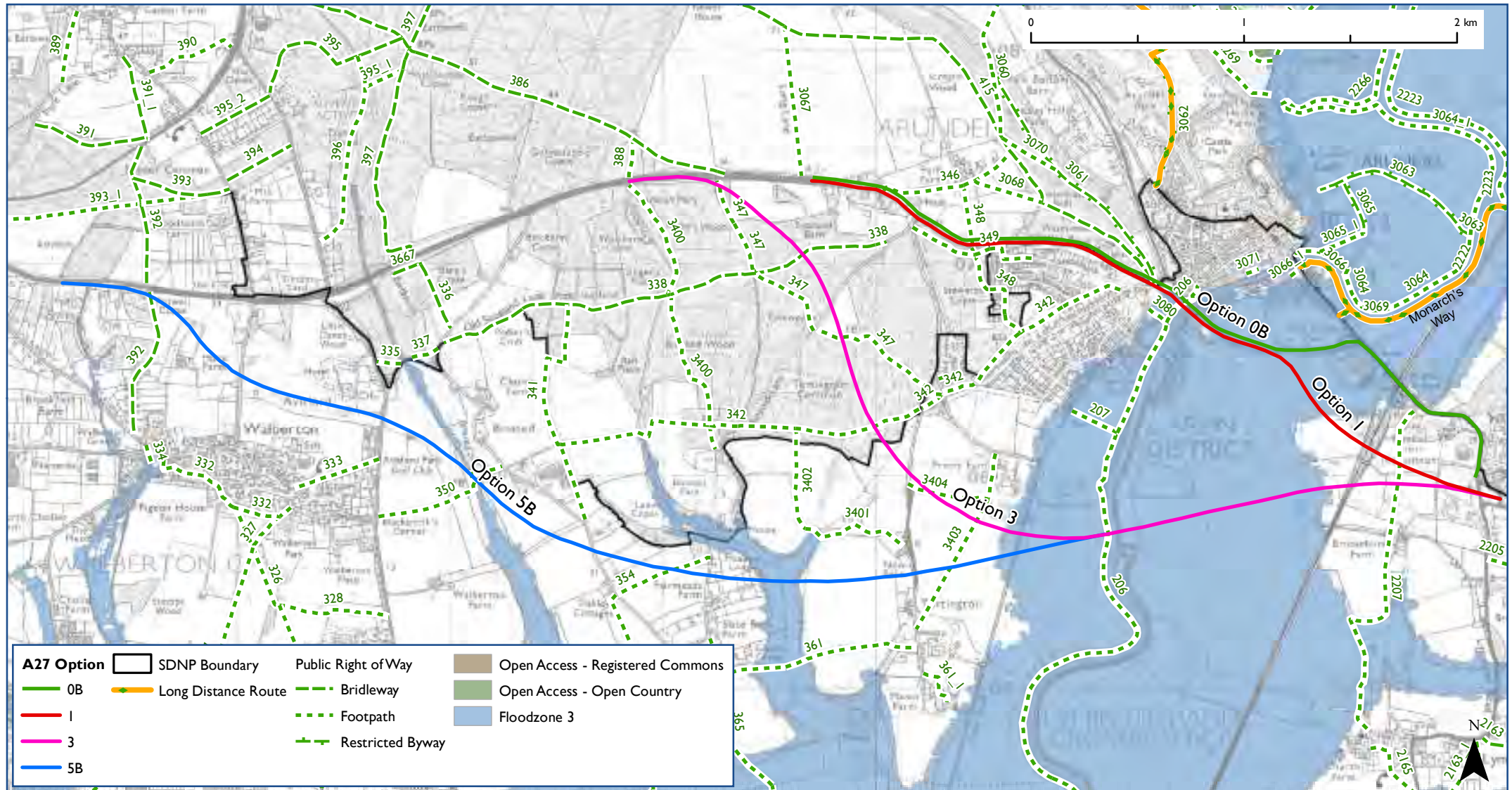




Arundel A27 Route Options - Landscape Context Relative Tranquility



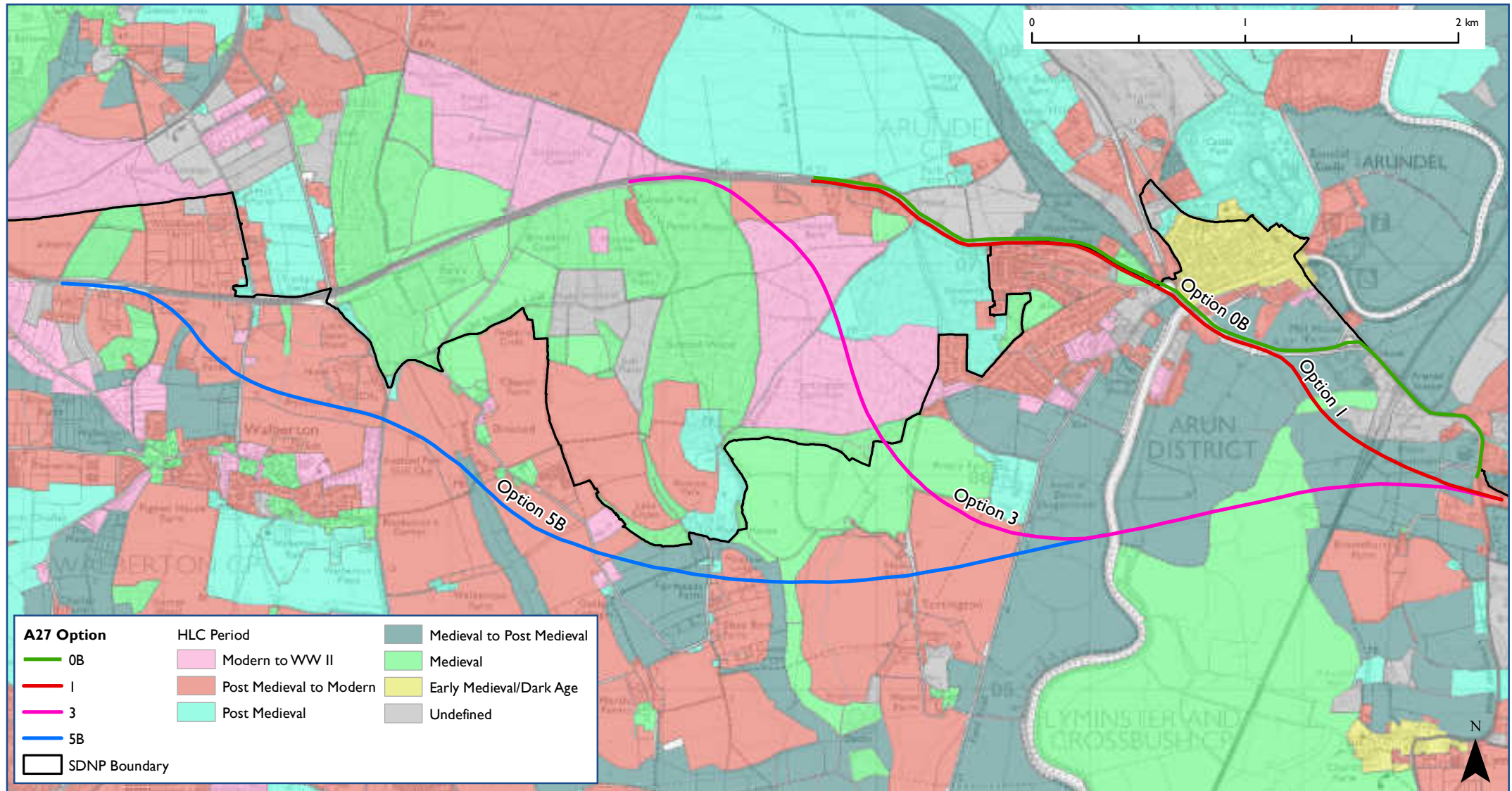
Arundel A27 Route Options - Landscape Context Public Rights of Way and Access Land



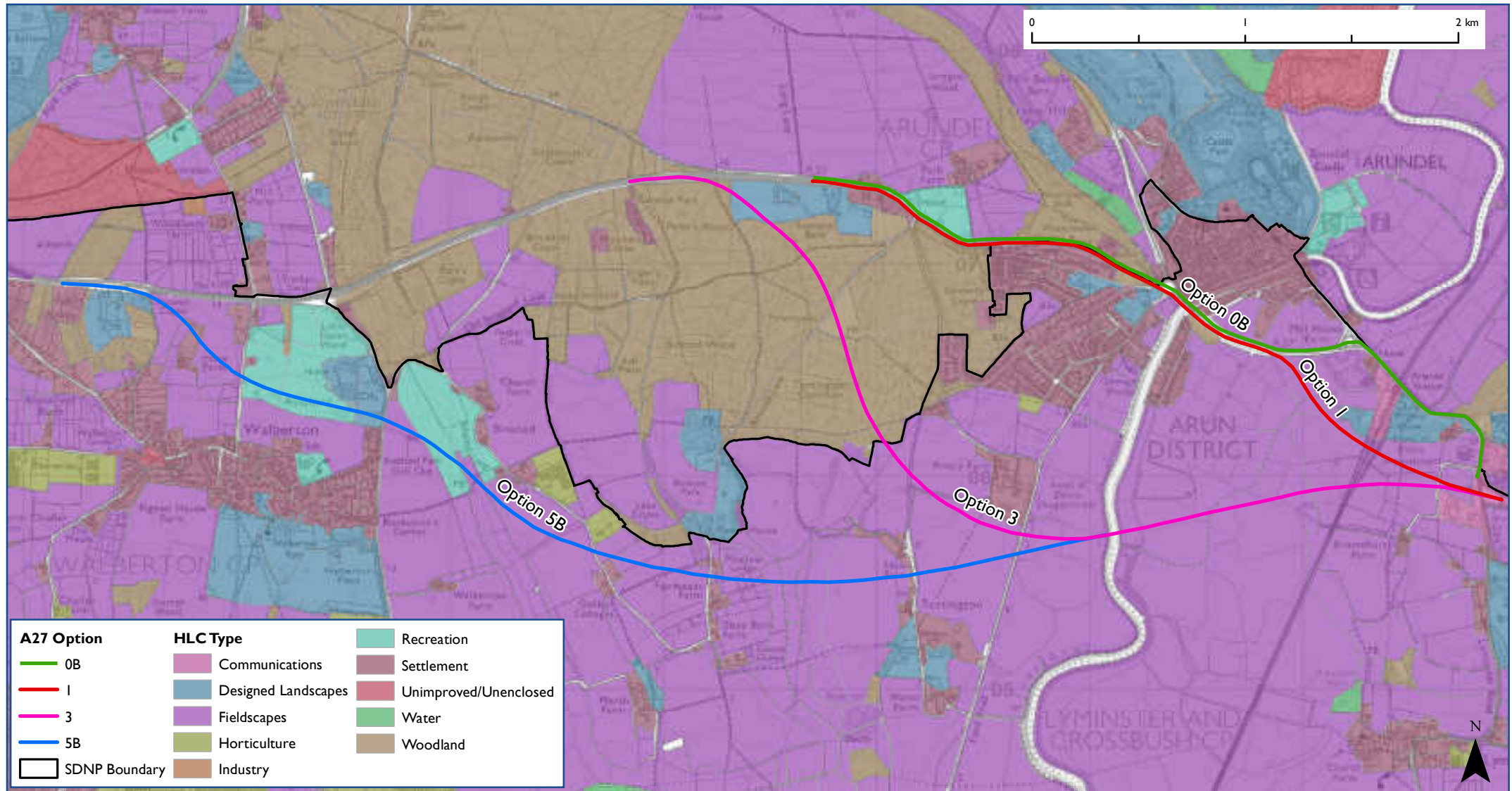
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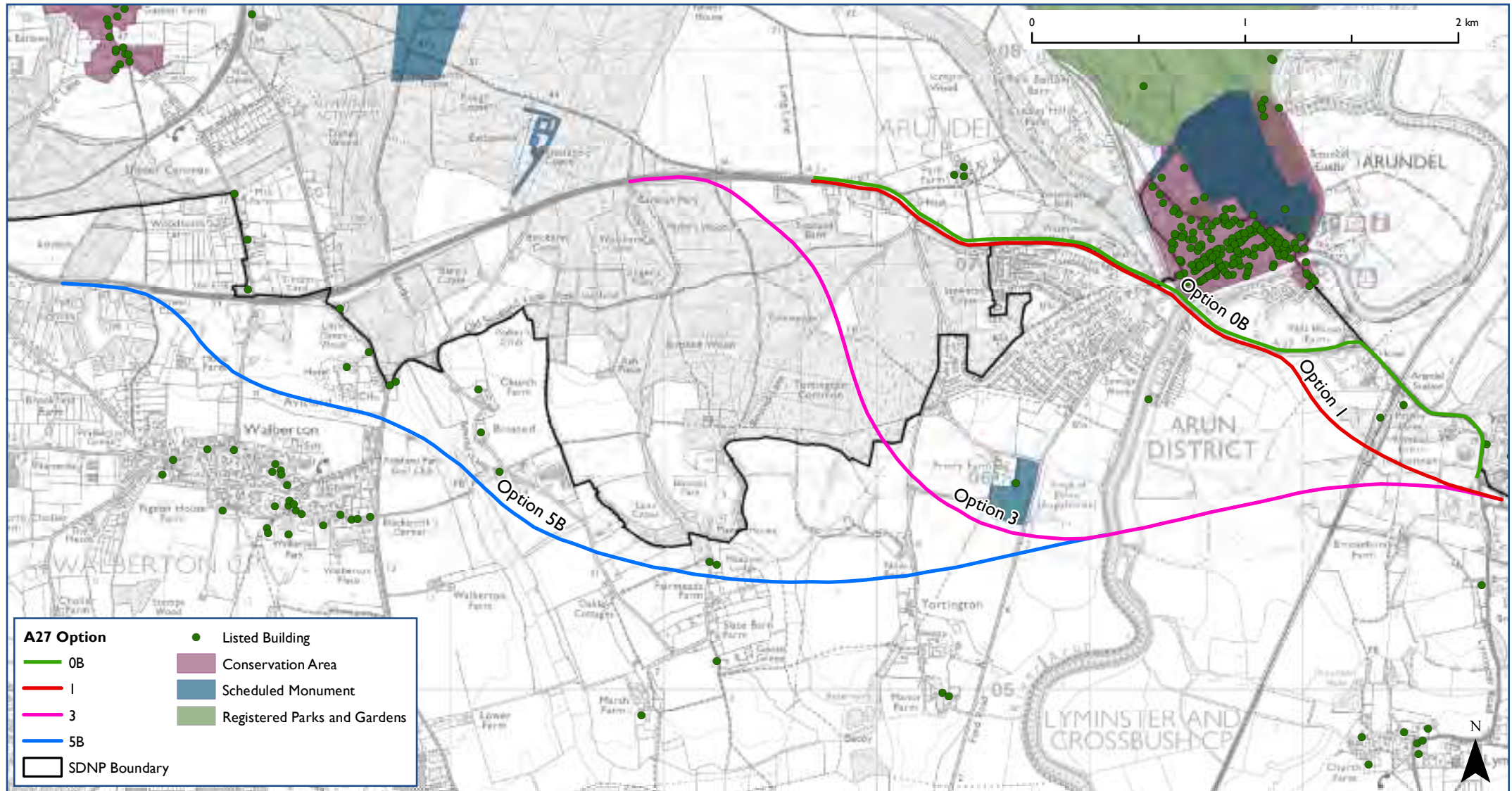
Arundel A27 Route Options - Landscape Context WSCC Historic Landscape Character (Period)



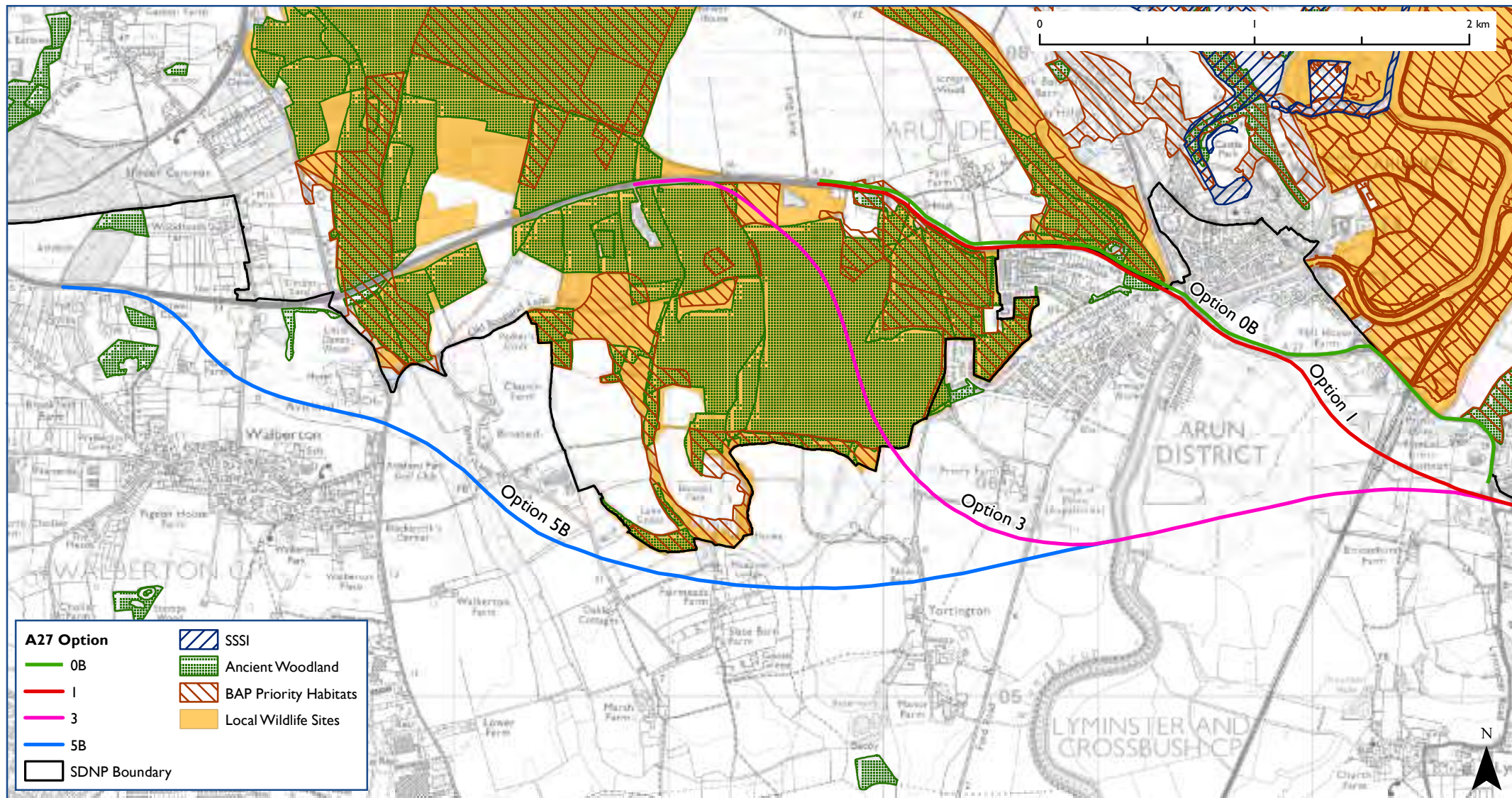
Arundel A27 Route Options - Landscape Context WSCC Historic Landscape Character (Type)



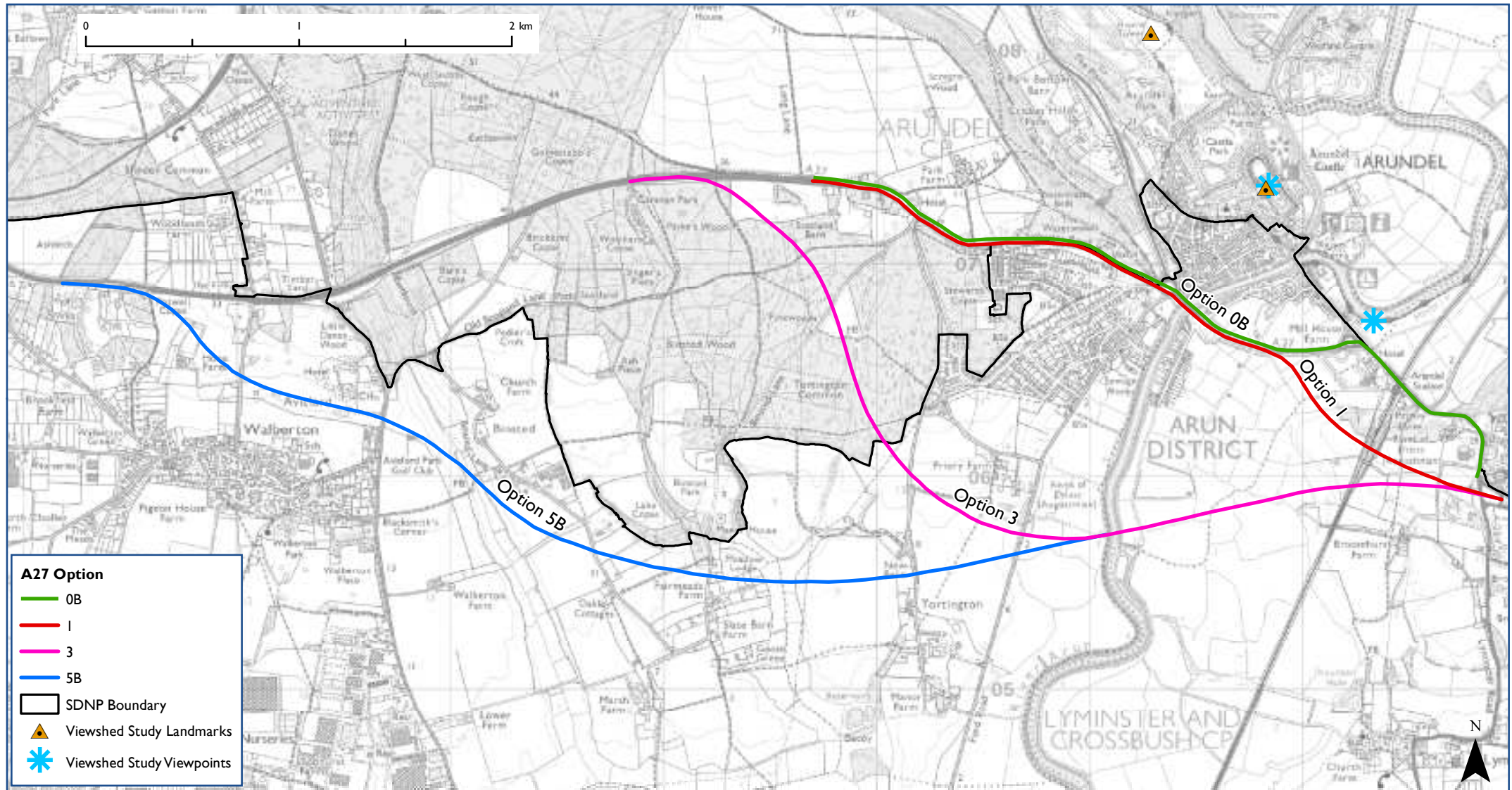
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Arundel A27 Route Options - Landscape Context Biodiversity



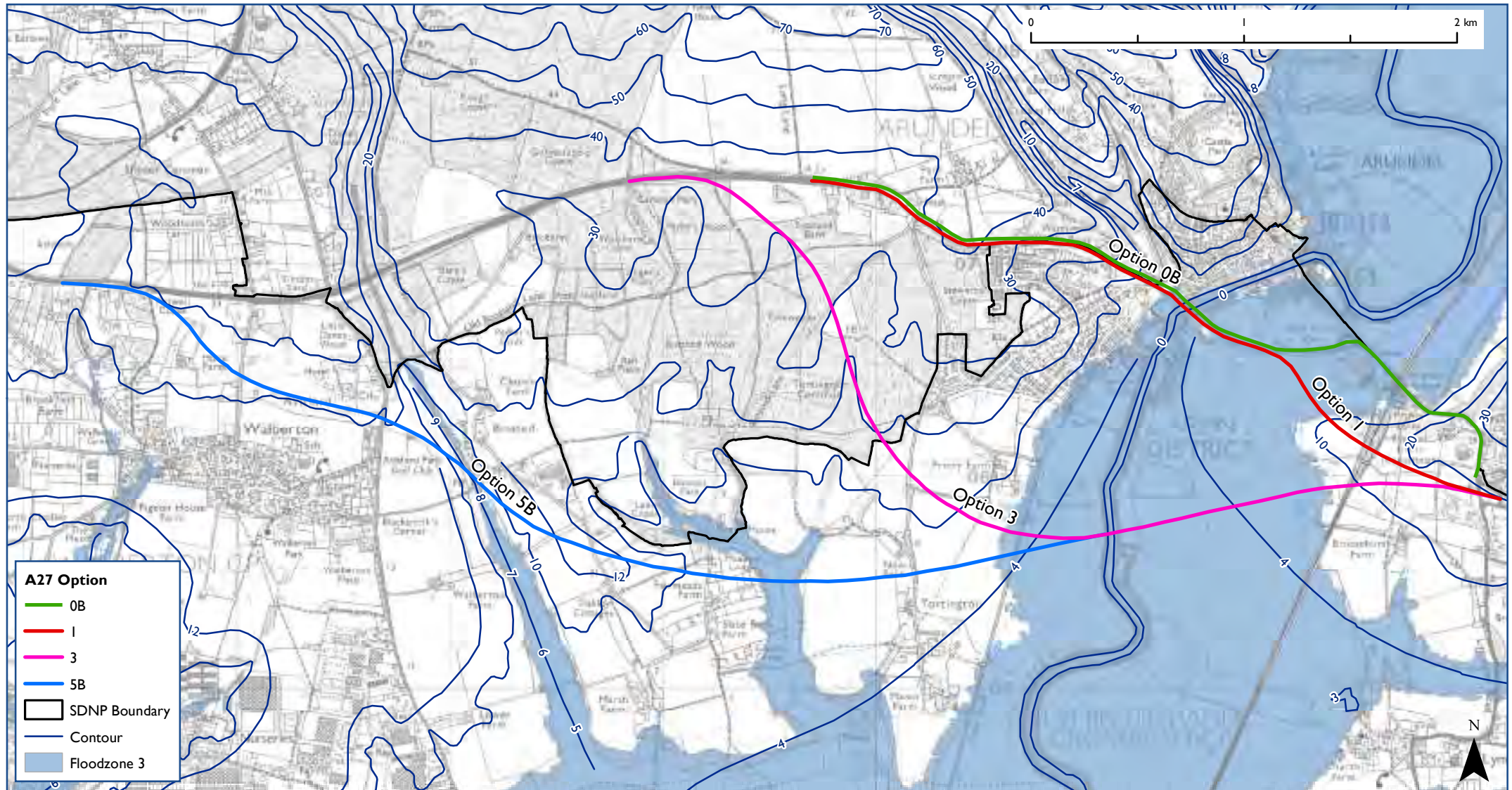
Arundel A27 Route Options - Landscape Context Viewpoints and Viewshed Study



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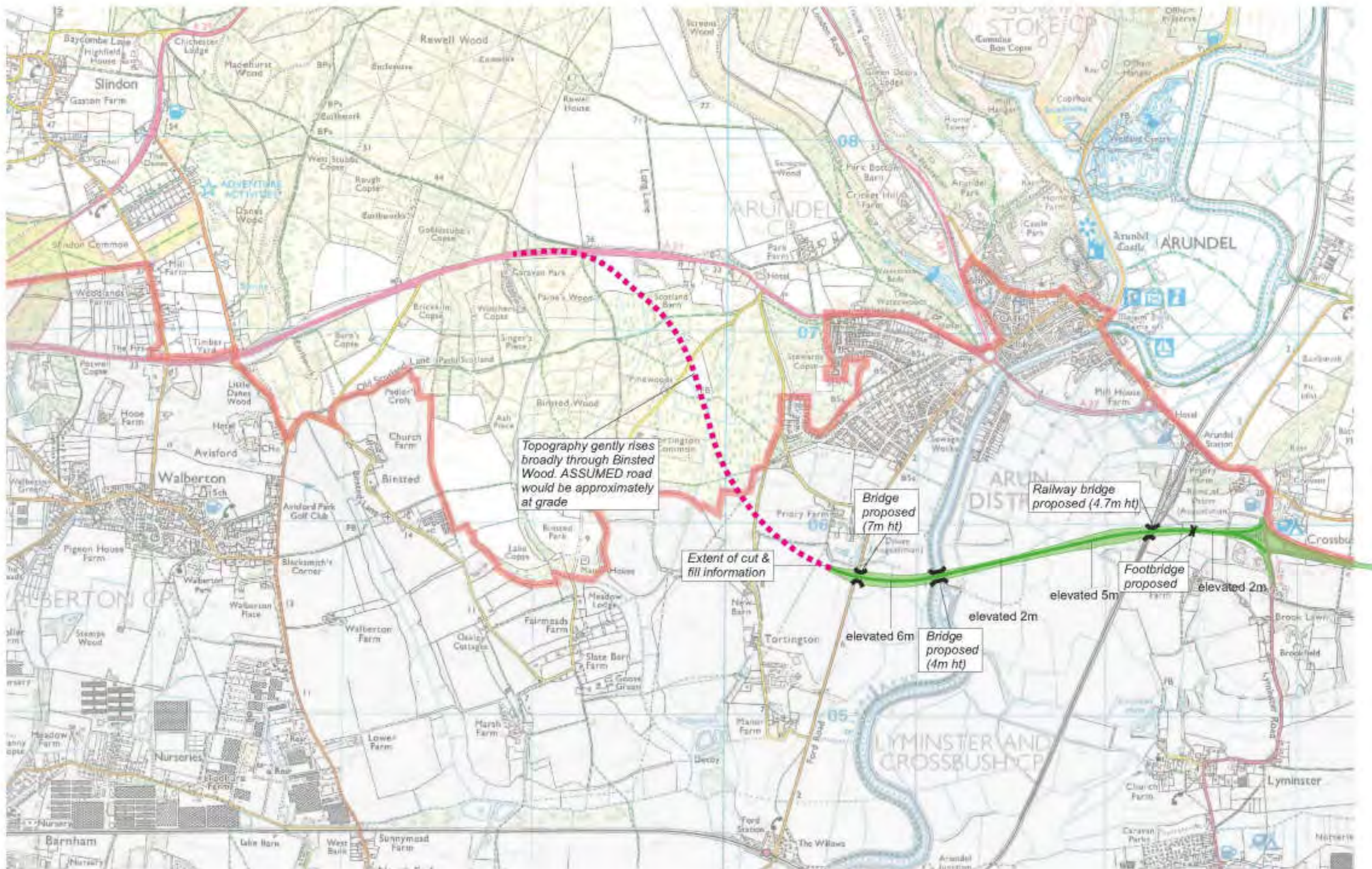
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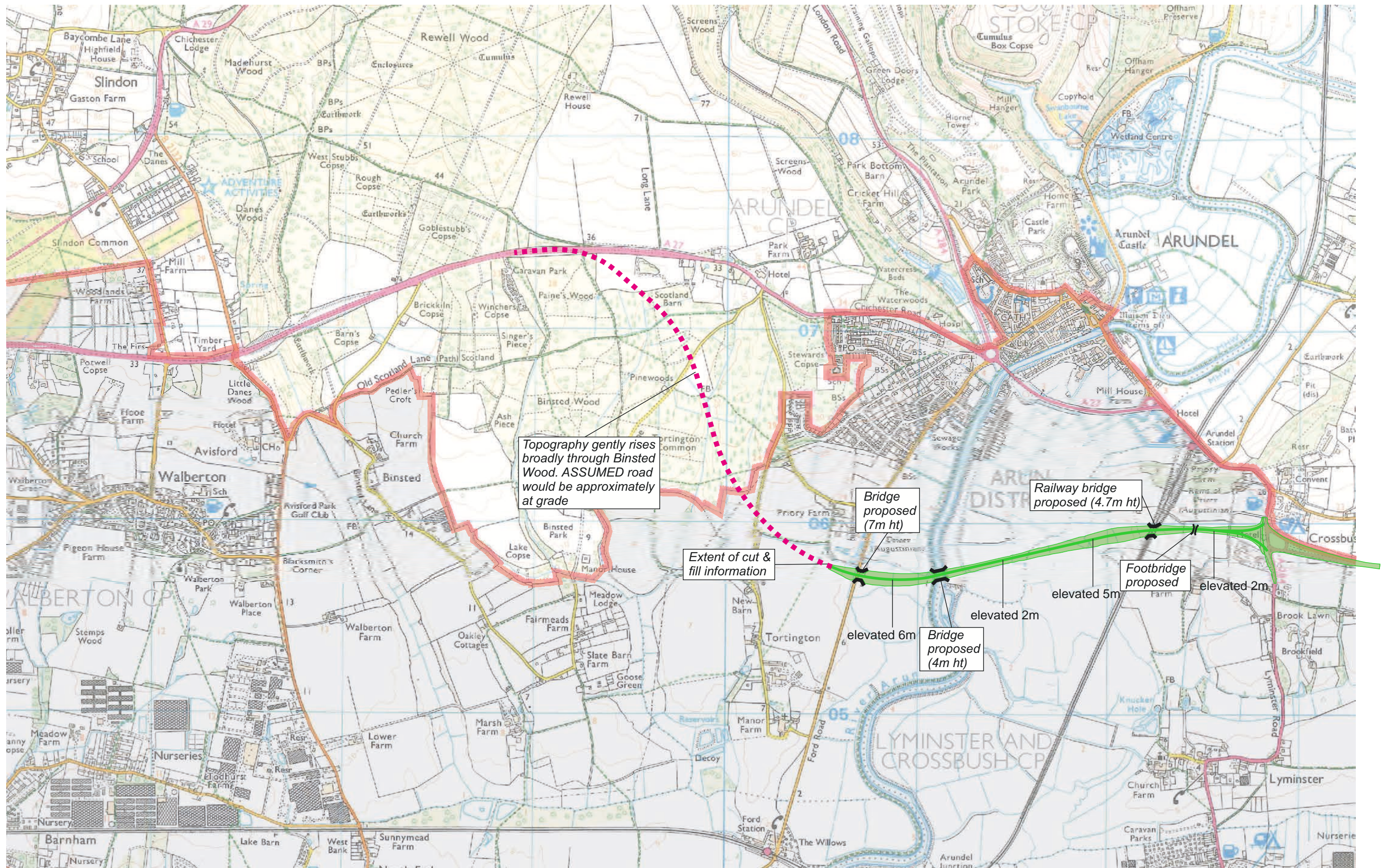
Arundel A27 Route Options - Landscape Context Topography & Flood Zone



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Scale at A4 1:25,000



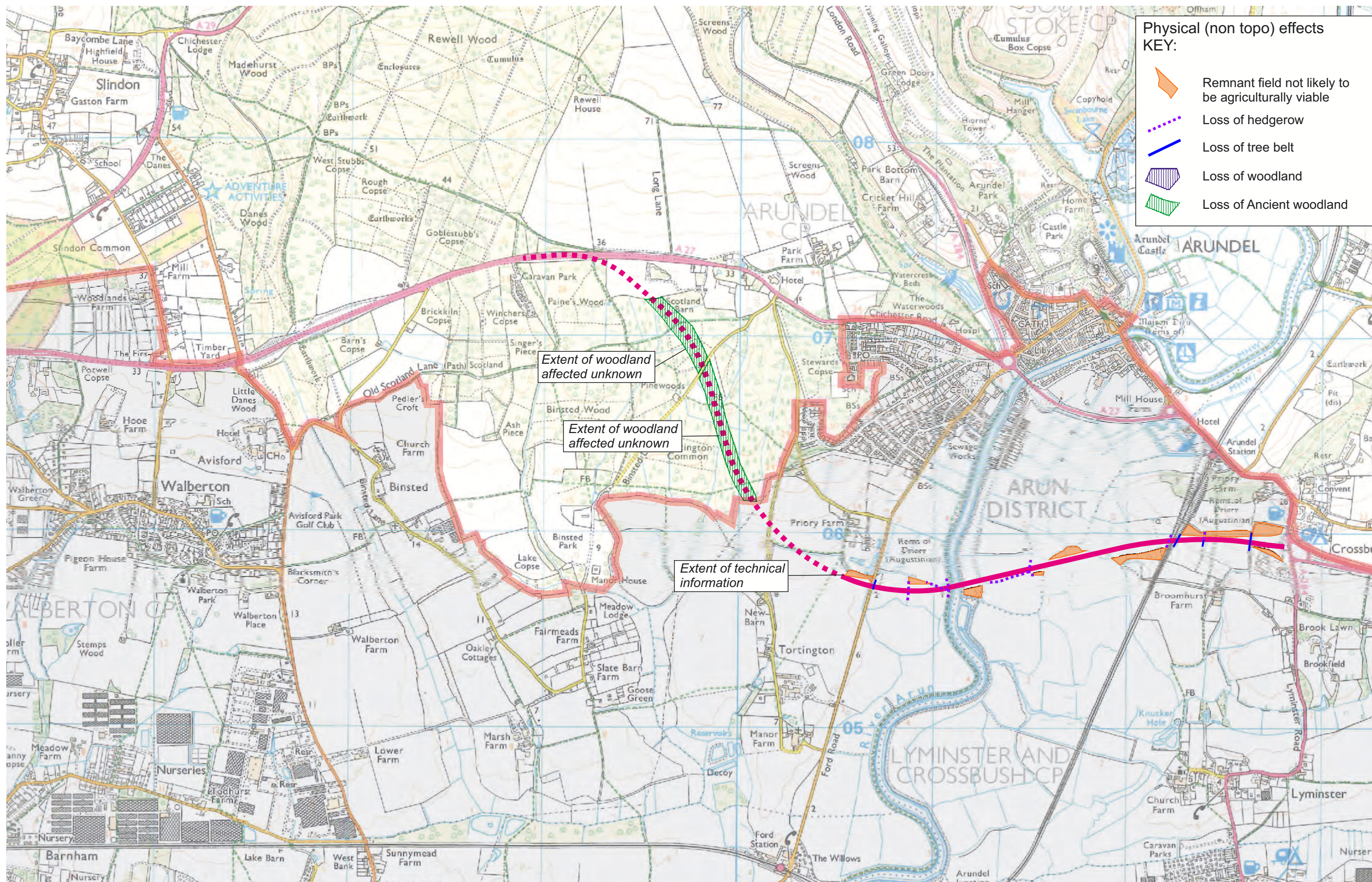


project: Consultation response to proposed A27 improvements

drawing title: Vertical alignment (Arundel section: Option 3)

date: March 2017

Figure 4

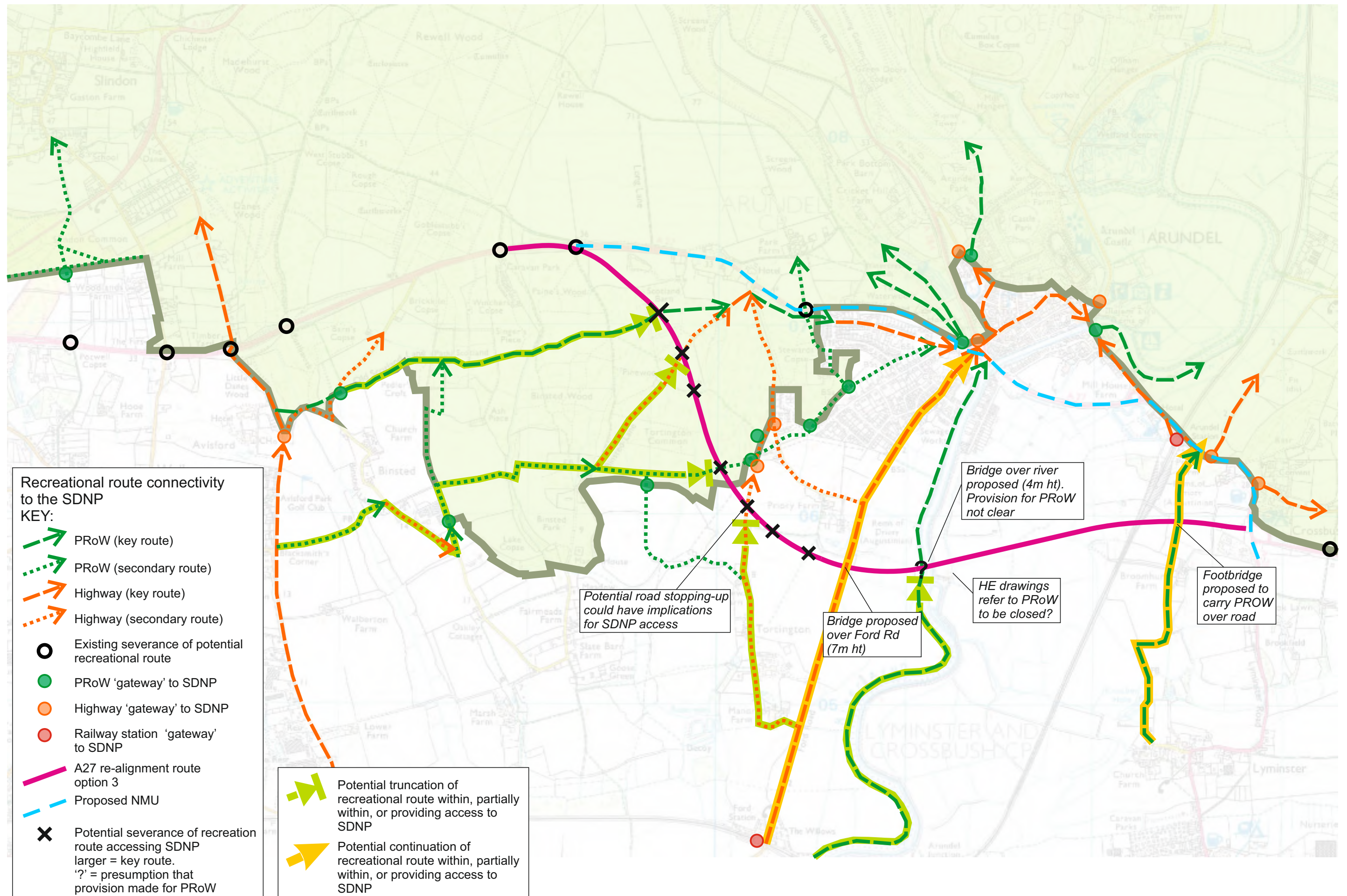


project: Consultation response to proposed A27 improvements

drawing title: Physical effects (Arundel section: Option 3)

date: March 2017

Figure 8



project: **Consultation response to proposed A27 improvements**

drawing title: **Effects on the PRoW network / connectivity to the SDNP (Arundel section: Option 3)**

date: **April 2017**

Figure 6

1837
Figure 20

RECEPTOR VIEWPOINTS (COMPOSITE)

Key

Re-alignment Option 0B

Re-alignment Option 3

Re-alignment Option 5B

Potential viewpoint not visited

Group 1: Rackham / Springhead
(Arun to Adur Open Downs)

Group 2: Angmering and
Clapham Wooded Estate

Group 3: Arun Valley Floor

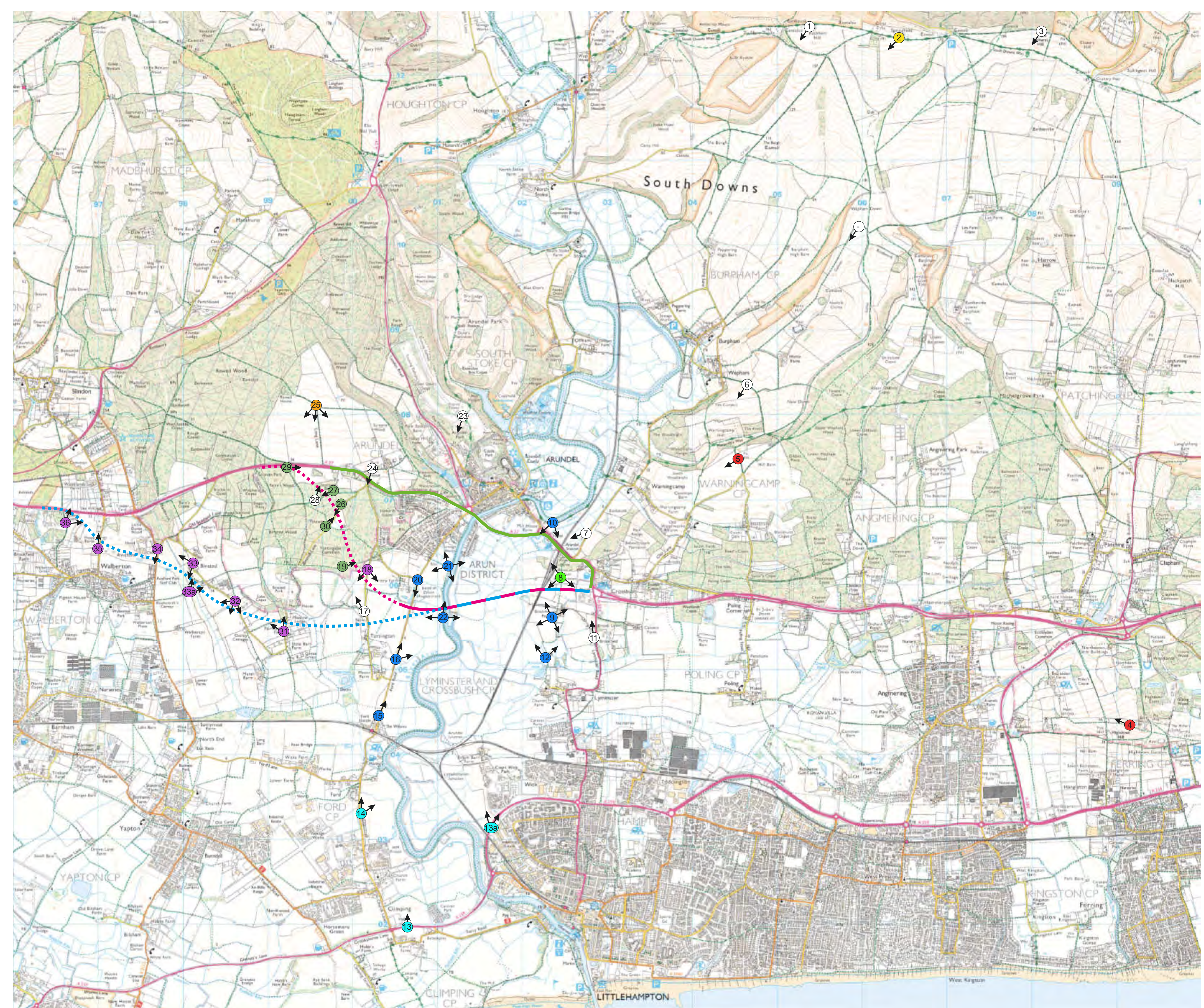
Group 4: Lower Arun Valley
Floor and Floodplain

Group 5: Lyminster/Crossbush
Valley Sides

Group 6: Binsted Wood

Group 7: Tortington / Binsted /
Walberton Farmland

Group 8: Arundel Wooded Estate
Downland



1837
Figure 11.1

RECEPTOR VIEWPOINTS

Key

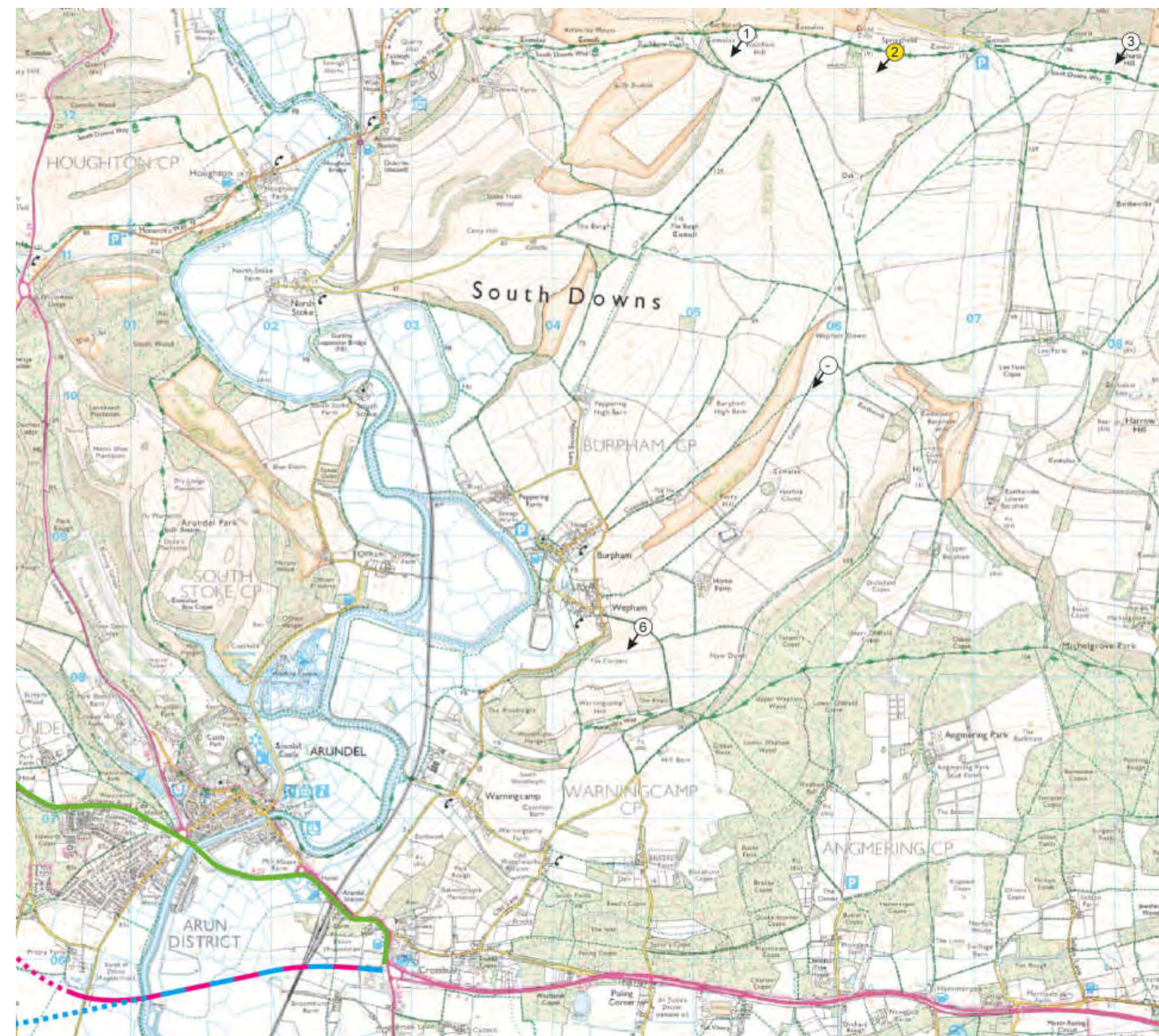
 Re-alignment Option 0B

 Re-alignment Option 3

 Re-alignment Option 5B

 Potential viewpoint not visited

 Group 1: Rackham / Springhead
(Arun to Adur Open Downs)



Viewpoint 1



Viewpoint 2






Viewpoint 3

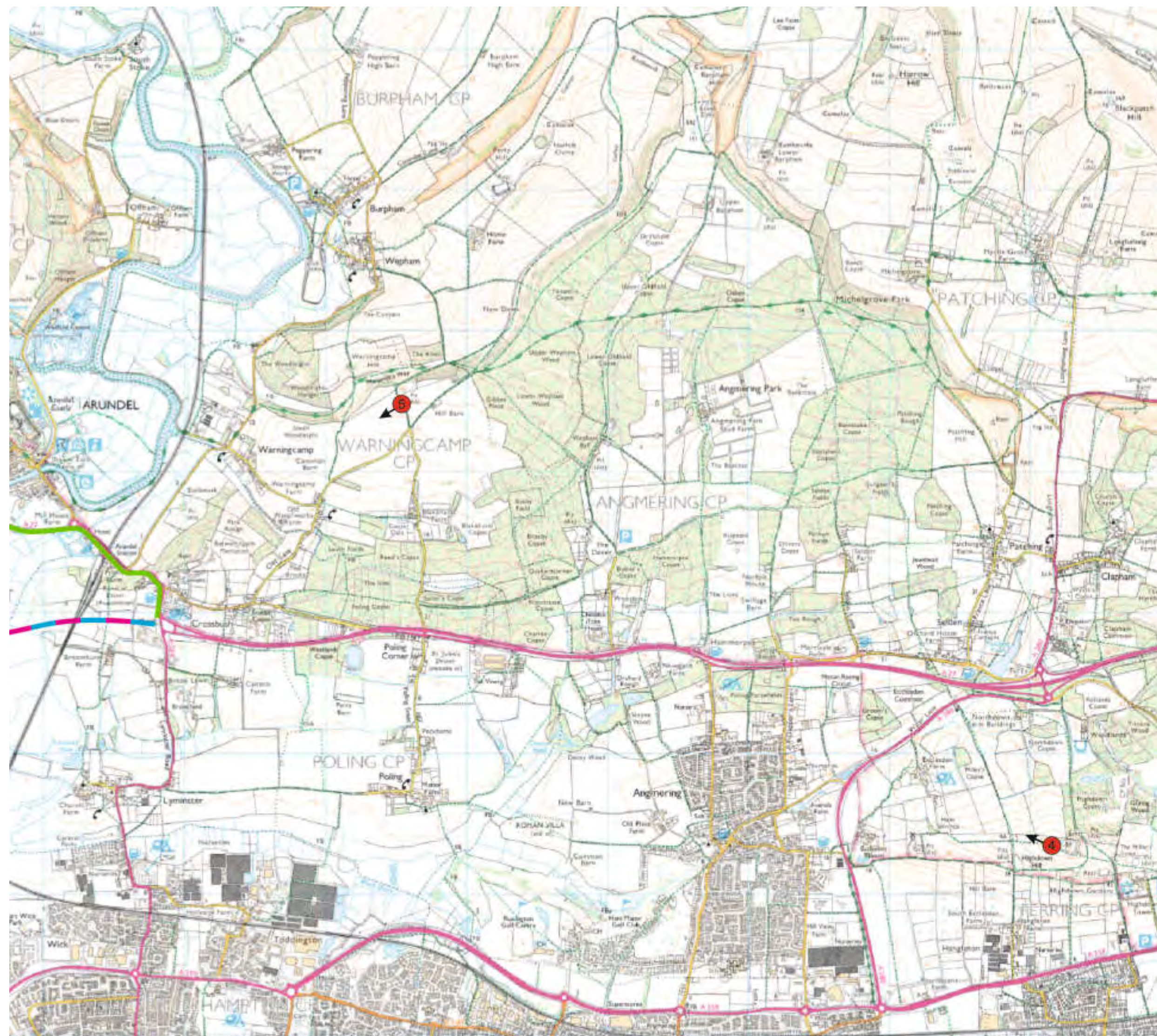
1837 Figure: Arun to Adur Open Downs

1837
Figure 12.1

RECEPTOR VIEWPOINTS

Key

-  Re-alignment Option 0B
-  Re-alignment Option 3
-  Re-alignment Option 5B
-  Potential viewpoint not visited
-  Group 2: Angmering and Clapham Wooded Estate





Viewpoint 4








Viewpoint 5

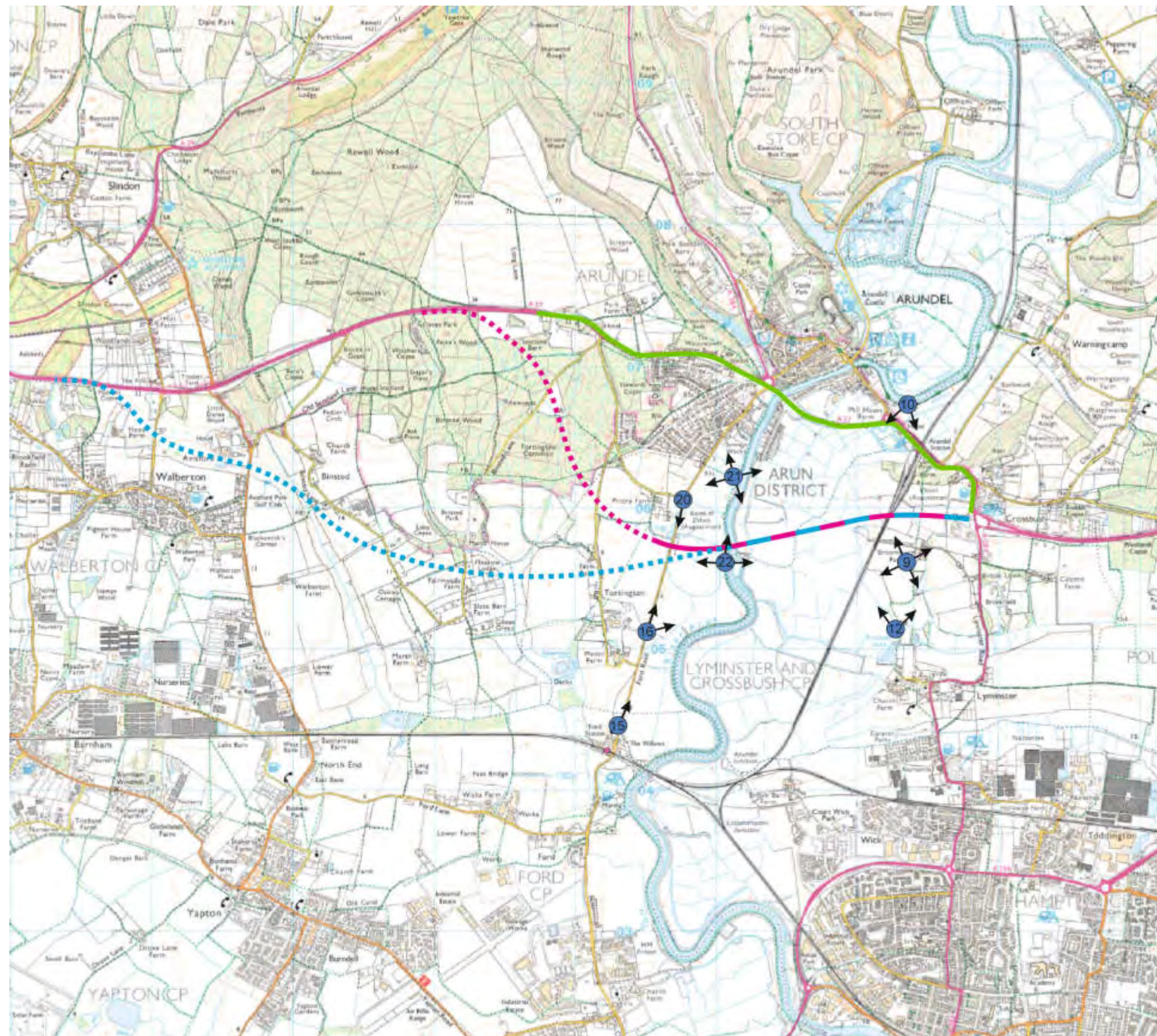
1837 Figure: Angmering and Clapham Wooded Estate Downland

1837
Figure 13.1

RECEPTOR VIEWPOINTS

Key

-  Re-alignment Option 0B
-  Re-alignment Option 3
-  Re-alignment Option 5B
-  Potential viewpoint not visited
-  Group 3: Arun Valley Floor





Viewpoint 9



Viewpoint 9

1837 Figure: Arun Valley Floor



Viewpoint 10



Viewpoint 12

1837 Figure: Arun Valley Floor



Viewpoint 15



Viewpoint 16

1837 Figure: Arun Valley Floor



Viewpoint 20



Viewpoint 21 (Option 0B)

1837 Figure: Arun Valley Floor



Viewpoint 21 (Option 3 & 5B)





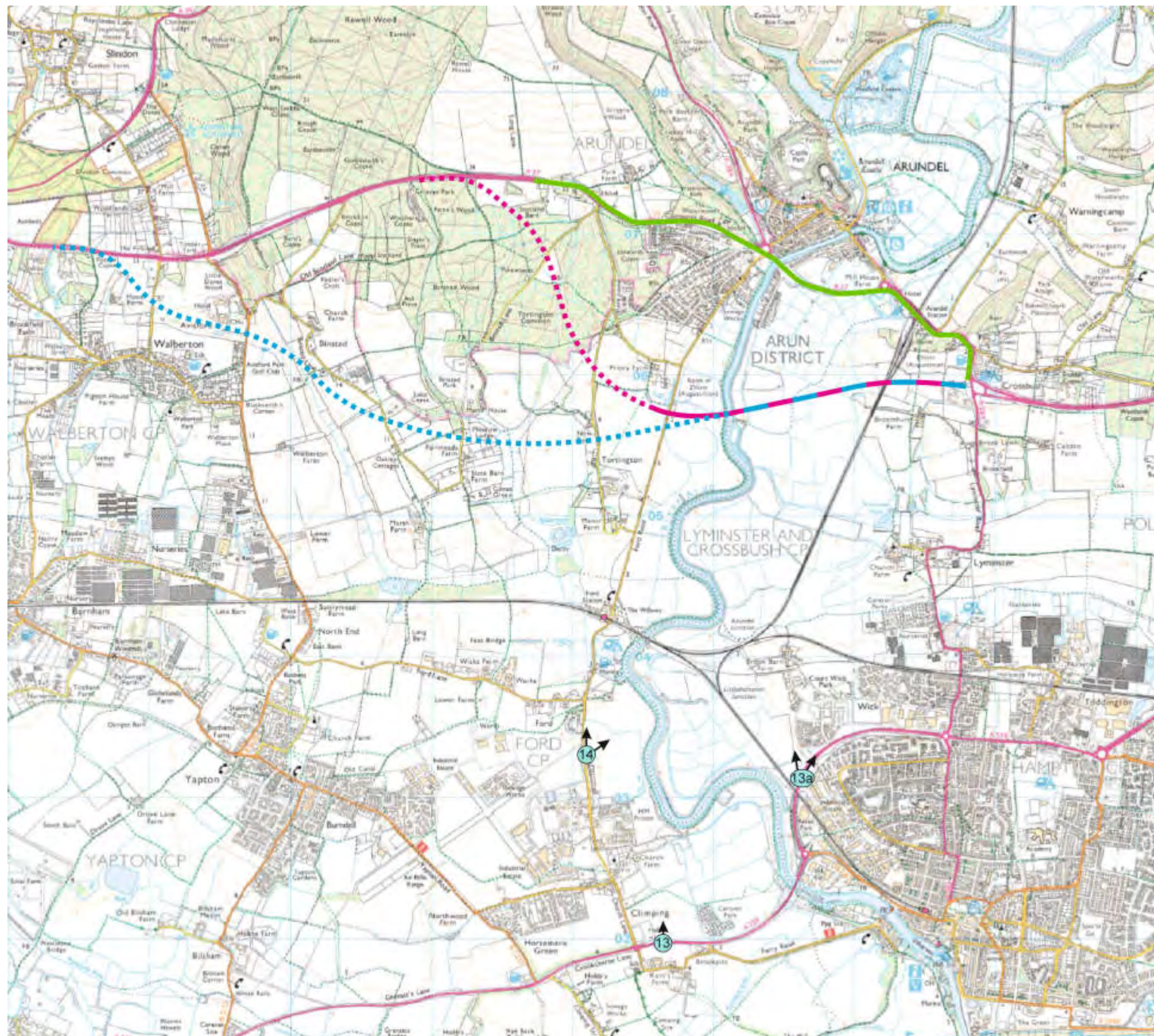
Viewpoint 22

1837
Figure 14.1

RECEPTOR VIEWPOINTS

Key

- Re-alignment Option 0B
- - - Re-alignment Option 3
- - - Re-alignment Option 5B
-  Potential viewpoint not visited
-  Group 4: Lower Arun Valley Floor and Floodplain





Viewpoint 13



Viewpoint 13a








Viewpoint 14

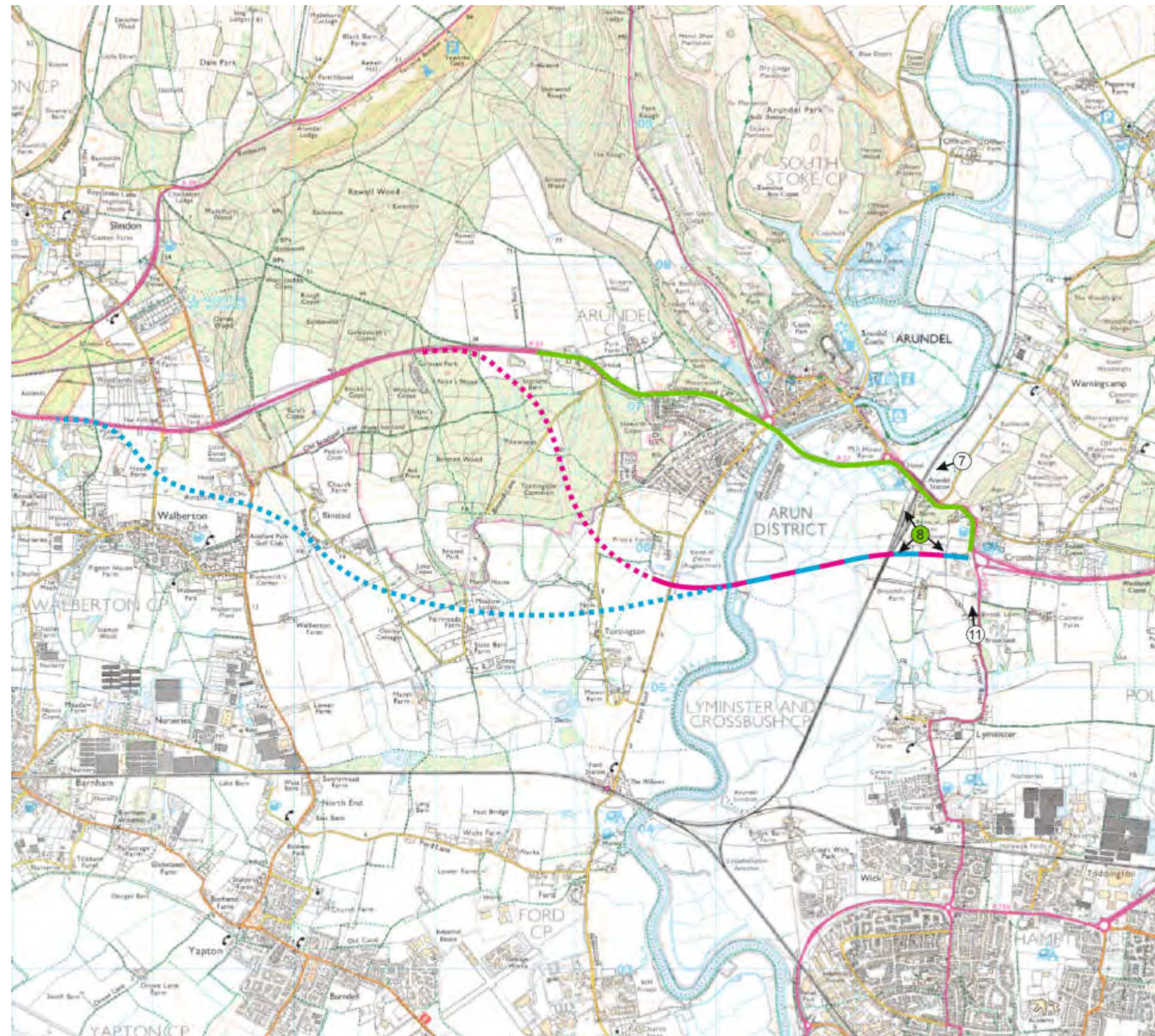
1837 Figure: Lower Arun Valley Floor and Floodplain

1837
Figure 15.1

RECEPTOR VIEWPOINTS

Key

-  Re-alignment Option 0B
-  Re-alignment Option 3
-  Re-alignment Option 5B
-  Potential viewpoint not visited
-  Group 5: Lyminster/Crossbush Valley Sides





Viewpoint 8 (Option 0B)



Viewpoint 8 (Option 0B)

1837 Figure: Lyminster/Crossbush Valley Sides



Viewpoint 8 (Option 3 and 5B)



Viewpoint 8 (Option 3 and 5B)

1837
Figure 16.1

RECEPTOR VIEWPOINTS

Key

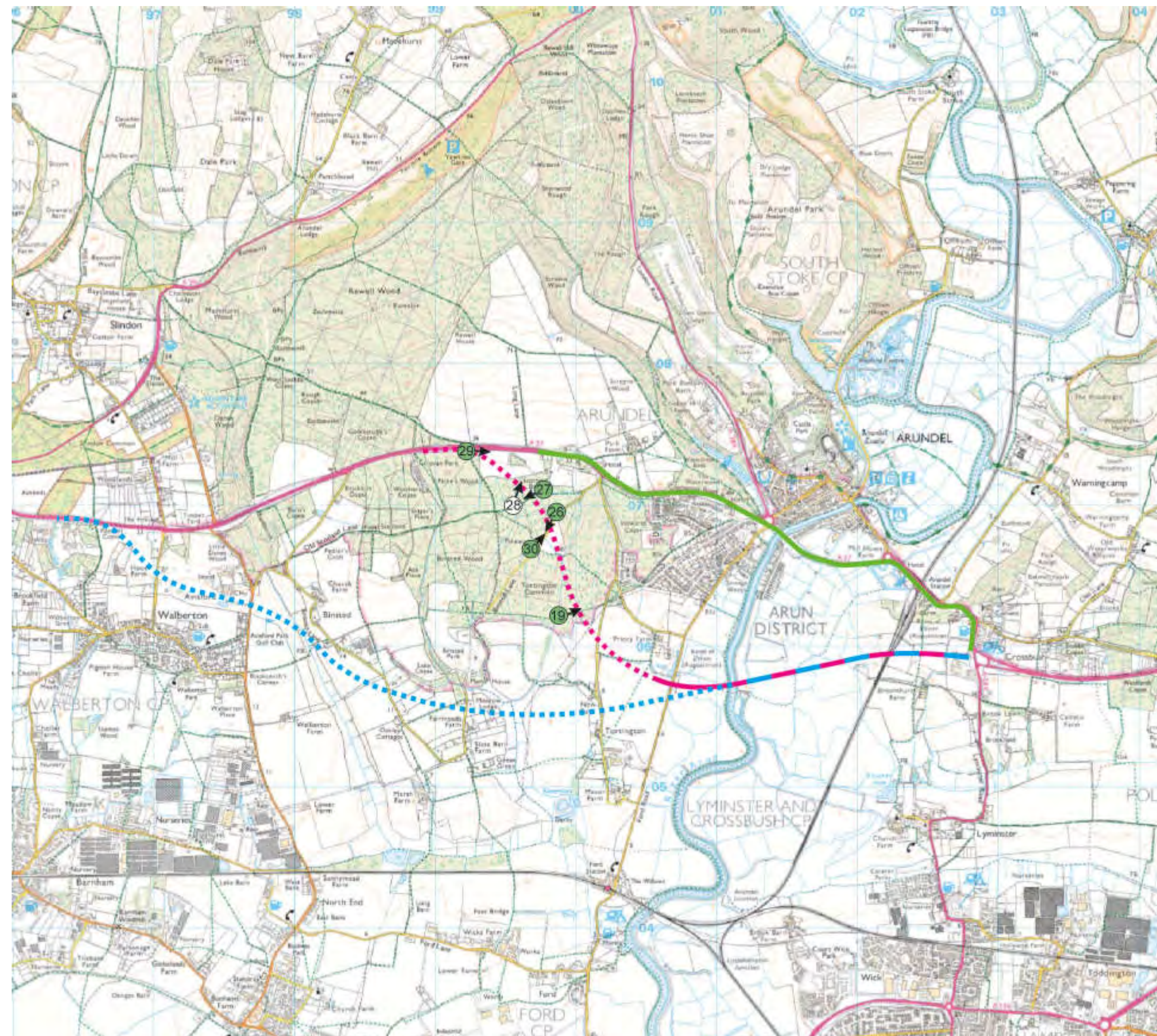
 Re-alignment Option 0B

 Re-alignment Option 3

 Re-alignment Option 5B

 Potential viewpoint not visited

 Group 6: Binsted Wood





Viewpoint 19



Viewpoint 26



Viewpoint 27



Viewpoint 30

1837 Figure: Binsted Wood








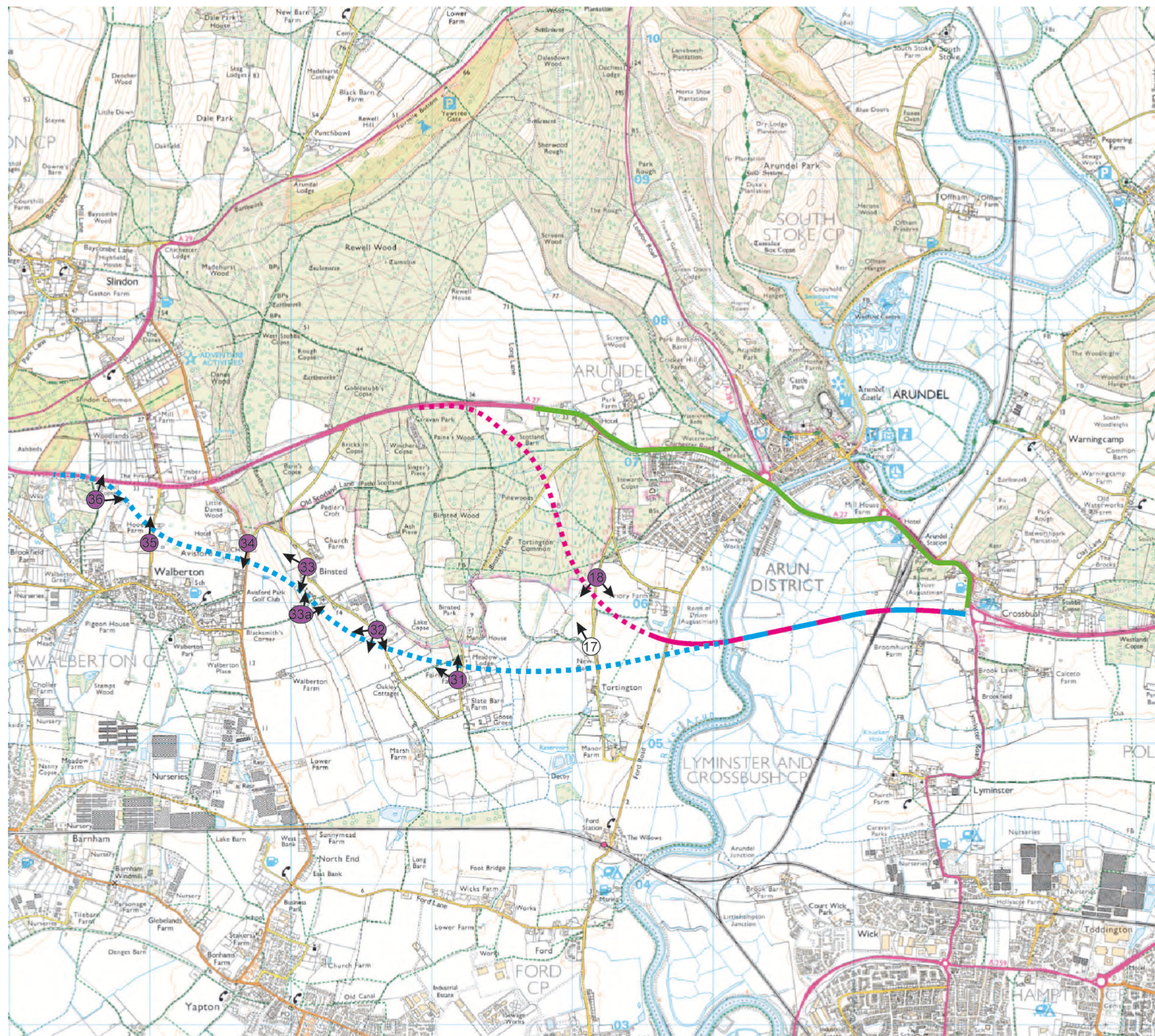
Viewpoint 29

1837
Figure 17.1

RECEPTOR VIEWPOINTS

Key

-  Re-alignment Option 0B
-  Re-alignment Option 3
-  Re-alignment Option 5B
-  Potential viewpoint not visited
-  Group 7: Tortington / Binsted / Walberton Farmland



Viewpoint 17



Viewpoint 18



Viewpoint 31



Viewpoint 32



Viewpoint 32



Viewpoint 33

1837 Figure: Tortington/Binsted/Walberton Farmland



Viewpoint 33a



Viewpoint 34



Viewpoint 35



Viewpoint 36

1837
Figure 18.1

RECEPTOR VIEWPOINTS

Key

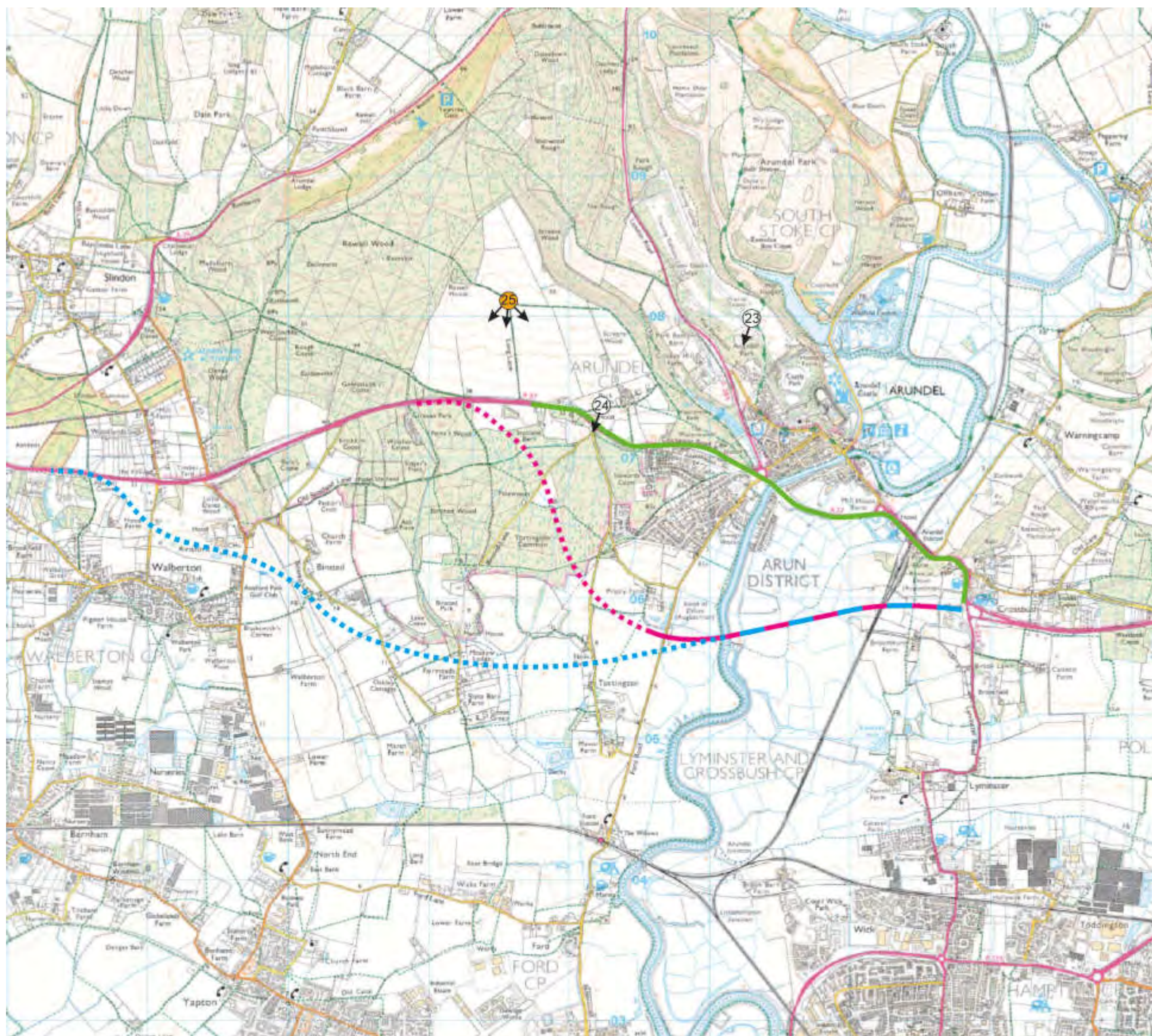
— Re-alignment Option 0B

— Re-alignment Option 3

— Re-alignment Option 5B

○ Potential viewpoint not visited

● Group 8: rundel Wooded Estate
Downland





Viewpoint 25 (Option 3)

Viewpoint 23



Viewpoint 25 (Option 0B)

