

**Appendix 4: Table of comparative assessment between the EIA subject areas and the SDNP Special Qualities**

<b>A27 Worthing Improvement Scheme</b>							
<b>Environmental Statement subject comparison with South Downs National Park Special Qualities</b>							
	<b>South Downs National Park Special Qualities</b>						
<b>Environmental Impact Assessment Chapters</b>	<b>Diverse and inspirational landscapes 1</b>	<b>Rich variety of wildlife and habitats 2</b>	<b>Tranquil and unspoiled places 3</b>	<b>Environment shaped by farming 4</b>	<b>Great recreational opportunities 5</b>	<b>Well conserved historic features 6</b>	<b>Distinctive towns and villages and communities 7</b>
<b>Air quality</b>							
<b>Cultural Heritage</b>							
<b>Landscape</b>							
<b>Nature Conservation</b>							
<b>Geology and Soils</b>							
<b>Materials</b>							
<b>Noise and Vibration</b>							
<b>People and communities</b>							
<b>Road Drainage &amp; the water environment</b>							
<b>Cumulative impacts</b>							

<b>A27 Worthing - Lancing Improvement Scheme Assessment of Impacts of scheme on SDNP</b>			
<b>EIA subject (SDNP special quality)</b>	<b>Negative impacts</b>	<b>Positive impacts</b>	<b>Potential mitigation measures/options</b>
<b>Air quality 7</b>	Not assessed by SDNPA	Not assessed by SDNPA	Not assessed by SDNPA
<b>Cultural Heritage 6</b>	<b>Medium</b> There is potential for archaeology to be present within the adjacent field. Depending on the level of finds this could increase the assessed degree of impacts	<b>Low</b> The scheme does not offer any significant opportunities for exploring cultural heritage, although any archaeological finds would need to be recorded.	<p>The potential impacts upon the setting of local assets will require more detailed investigation, leading to mitigation measures</p> <p>A programme of archaeological fieldwork would be required to fully assess the potential of as yet unrecorded archaeology at the site north of Worthing</p> <p>Include public engagement as part of any mitigation strategy</p> <p>Site archives to be deposited in a publically accessible archive</p>
<b>Landscape 1, 3</b>	<p><b>Medium</b> The existing views are influenced by the urban edge, the revised road widening layout would not result in significant change to these views provided the hedgeline &amp; hedgerow trees along the northern edge of the road are replaced.</p> <p>Landform proposals are not yet identified</p> <p>Potential for increased highways signage to have further urbanising impacts on the SDNP and it's setting.</p>	<b>Low</b> There is limited scope to improve natural beauty as part of the scheme proposals. Replacement hedge planting along the northern edge of the road widening scheme would provide some visual containment for the A27 together with hedgerow tree planting.	<p>Replacement and supplementary planting of the existing hedgeline along the north side of the A27</p> <p>An appropriate native planting scheme within the vicinity of the new junction would supplement a replacement hedgerow. This would create a defined edge to the A27 and reduce views of moving traffic from the north within the SDNP. Further land would be required to achieve this.</p> <p>Preparation of an appropriate road lighting scheme across the entire scheme to minimise impacts on dark night skies in the SDNP</p>

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	Potential for increased Highway lighting to have further detrimental impacts on the SDNP Dark night Sky status as an International Dark Sky Reserve		SUDs to be sensitively designed in the landscape to reflect the local character of surface water bodies and drainage patterns  A 'minimal signage' approach where the A27 has a rural character and is adjacent to the SDNP
<b>Nature Conservation</b> <b>2</b>	<b>Low</b> The existing biodiversity value of the location is low and would be relatively unaffected by the proposals provided the hedge is replaced along the northern edge of the road.	<b>Low</b> The scheme is adjacent to an agricultural field which would remain following scheme completion. Replacement hedge planting would be required along the northern edge of the road scheme..	An appropriate native planting scheme would enhance the setting of the A27 and provide a buffer area of native planting to create a range of habitats alongside the arable field.  SUDS schemes should be designed to enhance biodiversity and provide a variety of habitat types.
<b>Geology and Soils</b> <b>1, 2</b>	<b>Medium</b> Permanent loss of agricultural land/soils within SDNP	<b>Low</b> no positive impacts identified	None proposed
<b>Materials</b>	Not assessed by SDNPA	Not assessed by SDNPA	Not assessed by SDNPA
<b>Noise and Vibration</b> <b>3</b>	<b>Low</b> The proposed widening would not significantly affect existing tranquillity levels due to the existing urban edge location. Tranquillity along Dankton Lane PROW would be similarly unlikely to be significantly affected by the proposals. Might be	<b>Low</b> Limited scope to improve tranquillity within the SDNP owing to the urban context and busy trunk road. Replacement hedge planting along the northern edge of the scheme will help to reduce impacts from moving traffic	Additional buffer planting alongside northern roadside would reduce the impacts of visible moving traffic on the sense of tranquillity although would be unlikely to reduce noise levels.
<b>People and communities</b> <b>4, 5, 7</b>	<b>Low</b> The adjacent PROW, Dankton Lane would not be significantly affected by the scheme proposals, The road widening proposals would have limited impact on settlements within the SDNP. The road widening proposals would require a narrow length of land take for 310m length from the existing agricultural field to the north of the A27. The field to the north would be unaffected. A reduction in usage of the A29/A283 would see traffic speeds increase through communities which currently experience near	<b>Medium</b> there are potential opportunities for the whole scheme to enhance connectivity for NMUs across the A27 and reduce severance for these user groups. A series of access improvement points have been suggested to HE  The road widening proposals would have limited impact on settlements within the SDNP.  A reduction in the use of the A29/A283 Storrington route would reduce traffic	A publicly accessible 'off road' bridleway (on the north side of the A27) to the bridleway to the west of the Busticle Lane junction (Dankton Lane), would provide a recreational connection to Dankton Lane (although land take for this would require loss of agricultural land).  A series of access point improvements have been suggested to HE by SDNP (see map in Appendix 3)

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	queueing traffic with inherent safety risks and dropping off in passing trade (Slindon ?)	impacts on Slindon to a degree.  There are limited opportunities to enhance enterprise or farming within the SDNP.	
<b>Road Drainage &amp; the water environment 2</b>	<b>Medium</b> There are known impacts from highway drainage schemes in the chalk having soakaways which allow pollutants to enter the aquifers and ground water. Drainage proposals for the scheme are not yet known.	<b>Low</b> , new SUDS schemes which are included could be designed to enhance landscape biodiversity and protect ground water from contamination by water borne pollutants.	SUDS schemes which drain to a soakaway system would be discouraged due to impacts on water quality from pollutants entering the water supply.  SUDS to incorporate a system of filtration to ensure that pollutants are prevented from entering ground water.
<b>Cumulative impacts</b>	<b>High</b> Other schemes with cumulative impacts: All other RIS schemes on the A27; Arundel, Chichester and East of Lewes  There are several major developments in the vicinity of the Worthing lancing scheme as follows: New Monks Farm (Ikea) development) at Shoreham Airport; West Durrington housing development south of Castle Goring; Shoreham Cement works redevelopment,  Cumulative impacts from these proposals result from increased traffic and traffic speeds limiting connectivity across the A27, severing disadvantaged communities from easy access to the SDNP; Increased demand from higher numbers of local residents, to access/visit the SDNP, leading to higher number of car journeys to the SDNP  There is a longer term risk of the Worthing scheme being only a short term solution, but the scheme results in permanent loss of SDNP land and further improvements will be required	<b>High</b> Opportunities to enhance NMU access provision across the A27 as part of the scheme.	Limit permanent loss of SDNP land due to likely short term lifespan of the scheme  Achieve landscape buffer, biodiversity improvements and link PROW networks to from/within the SDNP along the length of the scheme.  A number of crossing points over the A27 have been identified on the map included as Appendix 3 these seek to address cumulative impacts on the existing severance caused by the A27. New PROW link opportunities should be explored during the progression of this project.

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	at a later stage which could have additional impacts on the SDNP.		
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