Rampion 2 Offshore Wind Farm

Written Representation

South Downs
National Park Authority

PINS REFERENCE: EN010117

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Contents

Appendices

1. Summary

1.1 The South Downs National Park Authority (SDNPA) objects to the development proposed due to the significant adverse harm the proposal would cause, contrary to the statutory purpose to conserve and enhance the National Park. There is also a lack of mitigation and compensation for the harm caused.

1.2 The proposal conflicts with South Downs Local Plan policies as well as the Purposes of the National Park and the Special Qualities for which it was designated. Of key concern is:

- Inadequate demonstration that the onshore cable corridor could not be delivered outside of the National Park, or that the route selected has been successful in moderating the effect on the environment and recreation,
- Major adverse harm caused to seascape and landscape as a result of the offshore development, including significant effects on the Heritage Coast,
- Significant adverse effects as a result of the onshore cable corridor route on landscape character and visual receptors,
- Inadequate assessment of the effects on terrestrial ecology and nature conservation, including key habitats such as Ancient Woodland and Chalk Grassland,
- Inadequate assessment and potential significant harm to areas of national archaeological significance, and
- Insufficient consideration of public rights of way, including the South Downs Way National Trail, during construction.

1.3 There is an overarching lack of commitment to appropriate mitigation and compensation measures, as well as an apparent failure to learn from the experience during the Rampion 1 construction and operation periods.

1.4 Concern is also raised regarding compliance with policies of the South Downs National Park and West Sussex County Council Joint Minerals Local Plan 2018 (and Partial Review 2021).

1.5 The SDNPA has highlighted elements within the proposed scheme which could be improved. These would lessen the significant adverse harm caused. However, they do not overcome the issue that despite the positive public benefit a renewable energy scheme of this magnitude would bring in principle, the scheme as proposed would result in residual and significant permanent adverse effects due to the erosion of the Special Qualities of the South Downs National Park, a protected landscape of national importance. The magnitude of harm identified needs to be considered alongside any benefits of the proposal.

2. Introduction

2.1 This written representation is submitted by the South Downs National Park Authority (SDNPA) in response to the application by Rampion Extension Development Limited (the applicant) for the proposed expansion of the existing Rampion offshore wind farm.

2.2 The South Downs National Park (SDNP) lies to the north of the proposed offshore array, comprising the higher ground and open downland above the Coastal Plain and includes the Heritage Coast east of Seaford to Eastbourne.

2.3 One-third of the proposed onshore cable corridor would run through the SDNP. The offshore array and other construction activity including the temporary construction compound at Washington would take place in the setting of the SDNP (see Appendix A of SDNPA Local Impact Report).

2.4 The South Downs National Park contains over 1,600 sq. km of England's most iconic lowland landscapes, stretching from Winchester in the west to Eastbourne in the east. The SDNPA is the organisation responsible for promoting the statutory purposes of the National Park and the interests of the people who live and work in it.

2.5 The SDNPA is the Local Planning Authority for the National Park, including the parts of the SDNP within the districts of Arun, Horsham and Mid-Sussex. The DCO Application does not always recognise this is the case, most notably in the Planning Statement, Chapter 23 of the Environmental Statement (Transport), the Outline Worker Travel Plan and, importantly, within the DCO Schedules themselves.

2.6 As well as the South Downs Local Plan, the SDNPA is responsible for producing (as required by statute) the South Downs National Park Partnership Management Plan 2020-2025. There has been a failure by the applicant to take this document into consideration throughout their application.

2.7 This written representation should be read in conjunction with:

- SDNPA's Local Impact Report (LIR)
- SDNPA's Principal Areas of Disagreement Summary Statement (PADSS)
- The forthcoming draft Statement of Common Ground between the applicant and the SDNPA.

2.8 As recommended in paragraph 23.2 of the Planning Inspectorate's Advice Note 2, where possible we have cross referenced to the above documents in order to assist in keeping submissions as concise as possible and to avoid repetition.

2.9 This written representation concentrates on those parts of the DCO application to which the SDNPA objects and those issues which, in the SDNPA's view, remain outstanding or unresolved. This representation refers to amendments to the DCO Requirements and possible obligations secured through a Section 106 Legal Agreement (see Table 1 in section 3.2 of this representation), however, it should also be read in conjunction with the LIR for a full set of amendments and obligations.

2.10 Matters of agreement are being recorded in the draft Statement of Common Ground.

3. The SDNPA's View of the Proposal

3.1. Principle of Major Development in the National Park

3.1.1. As set out in the SDNPA's Local Impact Report (LIR), the overarching National Policy Statement for Energy (EN-1, 2011), the National Planning Policy Framework (updated December 2023) and the South Downs Local Plan (SDLP adopted July 2019, specifically Policy SD3), confirm that National Parks have the highest status of protection in relation to landscape and scenic beauty and that major development should be refused save in exceptional circumstances, and where the development is in the public interest.

3.1.2. This 'major development test' (as set out in 5.9.10 of EN-1, para 183 and policy SD3 of the SDLP) states that the consideration of such applications should include an assessment of:

a) the need for the development, including in terms of any national considerations, and the impact of consenting, or not consenting it, upon the local economy;

b) the cost of, and scope for, developing elsewhere, outside the designated area, or meeting the need for it in some other way; and

c) any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated.

3.1.3. Then at paragraph 5.9.11 EN-1 states that if consent were to be given, the Secretary of State should ensure that any projects consented in these designated areas should be carried out to high environmental standards, including through the application of appropriate requirements where necessary.

3.1.4. In response to these requirements and point a), the SDNPA acknowledges that there is a critical need for renewable energy developments, which will help the country achieve its net zero targets.

3.1.5. Where the SDNPA differs from the applicant, is i) that the scope for and cost of developing outside of the National Park has not been adequately explored and, ii) over the extent to which the detrimental effects to the environment, landscape and recreational opportunities have been moderated (following the mitigation hierarchy).

3.1.6. As explained in the SDNPA's accompanying LIR (paragraph 6.5) the applicant's assessment in respect of the cost/scope for developing outside the SDNP within the Planning Statement (Document Reference APP-036) has been superficial and focussed on the cost and scope of developing after key decisions have been made (such as landfall and the decision to site an offshore wind farm in such close proximity to a protected landscape). The assessment also appears to have been made prior to many of the requirements for mitigation and compensation in respect of ecology, archaeology or other land-based requirements had been realised. For these reasons, the SDNPA consider the assessment flawed and further consideration of options that do not require extensive onshore cables within the SDNP should be undertaken (for example, Fawley). However, the SDNPA will continue to seek to address these matters with the applicant.

3.1.7. The choice of final route has not demonstrated that it is the most appropriate option through the protected landscape – and that this route choice is the most effective at moderating the detrimental effects on environment, landscape and recreational opportunities. This point is borne out through the objections raised in respect of landscape, ecology, cultural heritage and public rights of way in later sections of this representation.

3.1.8. Further to this, the SDNPA remains unconvinced that the scheme will be carried out to high environmental standards, in respect of the construction of the onshore cable

corridor. For example, there is inadequate commitment to the use of Horizontal Directional Drilling (HDD) or trenchless techniques in sensitive areas and work areas will only be 'reinstated to pre-existing conditions as far as reasonably practical'. Nor through reinstatement or offsite opportunities have measures to mitigate and enhance the environment been fully realised.

3.1.9. The SDNPA raised the notion during the examination of Rampion 1 Offshore Windfarm of the benefit in 'futureproofing' the onshore cable corridor for any further expansion of the windfarm. Whilst this was not agreed by the Secretary of State, further consideration should have been given in the current proposal to utilising the existing route, so as to minimise the areas and features impacted by a cable corridor. We are disappointed with the response the applicant has provided for not using the Rampion 1 cable corridor and would expect further consideration to have been given to this option.

3.1.10. The applicant has, through the Planning Statement (Document Reference 5.7), stated that the draft National Policy Statements for Energy (most specifically EN-1, EN-3 and EN-5) that were put forward for public consultation in April/May 2023 are "considered to be important and relevant to the determination of the present DCO application". The updated NPS have now been published (22 November 2023) and it is noted that under the transitional arrangements within these, that this application would still be considered under the 2011 suite of NPS. It is however noted that the Major Development Tests as outlined above remain in place within the new NPS EN-1.

3.1.11. The proposal through both the offshore and onshore aspects of the scheme is considered to result in significant and permanent impacts on the Special Qualities for which the National Park was designated. The Special Qualities include:

- 'Diverse, inspirational landscapes and breathtaking views' – for example at Cuckmere Haven and Birling Gap,
- 'A rich variety of wildlife and habitats including rare and internationally important species' – habitats such as the Ancient Woodland at Michelgrove and the Chalk Scarp at Sullington,
- 'Well-conserved historical features and a rich cultural heritage' – including that at and in between Harrow and Blackpatch Hills.

3.1.12. As well as topic-specific concerns, there has been a lack of meaningful assessment of the overall effects of the proposed development on the Special Qualities. To address this matter, there should be a specific and discrete assessment, which goes further than signposting to the individual chapters where the Special Qualities have been assessed. As set out in more detail below (and within the SDNPA's LIR), examples which demonstrate our objection include the significant adverse impact on landscape character, areas of significant cultural heritage and the impact on habitats. The choice of cable corridor has not been demonstrated to have been made on the basis it would moderate the effects on the environment and recreational opportunities.

3.2. <u>Approach to Mitigation, Enhancement and Compensation, including S106 Agreement</u>

3.2.1. The package of mitigation measures, as detailed in the Commitments Register (Document Reference APP-254) are frequently vague with non-committal language such as 'where possible'. The considerable areas of uncertainty imply that new or materially different environmental effects may be missing from the Environmental Statement and therefore the impacts of the proposed development may be considerably understated or even incorrect.

3.2.2. Where specifically addressing the SDNP, such as C-66 of the Commitments Register, the applicant does not set out in any detail how the commitments will be achieved.

3.2.3. In addition, in some of the chapters of the Environmental Statement (for example Transport), there is no acknowledgement of the National Park Purposes, Local Plan or Partnership Management Plan and therefore the mitigation is failing to conserve and enhance the National Park.

3.2.4. In many instances, the Commitments have not been secured appropriately through the Requirements in the DCO itself. A critical example of this is in respect of Commitment C-61, which relates to the Design Principles for the offshore array. Whilst the SDNPA object to the proposal on the grounds of seascape and landscape impact (as detailed below and in Appendix A), a strong commitment to a set of robust Design Principles is required in order to attempt to mitigate the harm; the current proposal fails to achieve this.

3.2.5. There is also a requirement within National Parks to not just mitigate harm but enhance their Purposes (as set out in the 1949 Act). This has not been demonstrated through the proposed development. The Levelling Up and Regeneration Act 2023 (LURA) at s245 goes further, and advises relevant authorities must 'seek to further' the purposes. Heads of Terms for a S106 Agreement have been presented to the SDNPA, which seeks to provide public rights of way improvements and hedge management schemes within 5km of the onshore cable route. The SDNPA feel that this, as well as the proposed mitigation within the application, do not meet the high environmental standards expected and, most importantly, is not sufficient to mitigate for the magnitude of harm caused in and to the SDNP.

3.2.6. Through the LIR and the sections below, further areas that require substantially improved mitigation or increased certainty for delivery, have been set out. In addition to this, the SDNPA would expect a S106 Agreement to be entered into by the applicant, providing compensatory measures in respect of several matters as detailed in Table 1.

3.2.7. The SDNPA consider that such measures would meet the tests of s122 of the Community Infrastructure Regulations 2010 (as amended) in as much as the suggested obligations are necessary to make the development acceptable in planning terms; will be directly related to the development (which has landscape scale impacts) and; will be fairly and reasonably related in scale and kind to the proposed development. The detail and quantum of the contributions are being discussed with other relevant Local Authorities and the applicant.

Subject Area	**Compensatory Measure**
Seascape and Landscape Impacts (offshore)	Identified landscape-based project or financial contribution
Landscape Impacts (onshore)	Identified landscape-based project or financial contribution
Terrestrial Habitats and Protected Species (including Ancient Woodland)	Habitat creation / Nature recovery-based project or financial contribution
Archaeology	Project related to preservation, depositing, storage and interpretation/education opportunities (or financial contribution)

Public Access and recreational opportunities	Rights of way improvements or access to the National Park (or financial contribution)
Construction and ongoing monitoring	Financial contribution to cover monitoring of onshore construction works through the National Park and for 10 years following final completion of the project

Table 1: Proposed S106 Agreement Heads of Terms

3.3. Lessons Learned from Rampion 1

3.3.1. The applicant has heavily relied on the successful reinstatement, in a short period, of the Rampion 1 onshore corridor. The SDNPA carried out an aerial survey of the existing corridor route during the summer of 2021 – over 4 years after some of the areas were reinstated. A visual overview of this survey can be found at Appendix B. In summary, the survey identified several areas where the cable route was still fully visible and where reinstatement clearly had not been successful.

Fig. 1 – Aerial view of Rampion 1 Cable Corridor 2021 (Lambleys Farm)

Fig. 2 – Aerial view of Rampion 1 Cable Corridor 2021 (Edburton Road)

3.3.2. Further to this, there have been ongoing issues regarding the management and maintenance of mitigation measures, including wildflower, hedgerow and grass planting and reluctance to remove 'temporary' features such as fencing, which have a detrimental impact on the Open Downland landscape.

3.3.3. A period of maintenance and monitoring for 10 years following completion is proposed in the Landscape and Ecology Management Plan (Document Reference: APP-232) for reinstated habitats, which is welcomed. However, this will need to be expanded and a clearer definition of the responsibilities of all parties involved (and agreement of these from all relevant parties, including landowners) will be needed in order to demonstrate that the issues experienced in the monitoring period for Rampion 1 can be resolved and avoided.

3.4. Seascape, Landscape and Visual Impact (Offshore)

3.4.1. A full consideration of the landscape, seascape and visual effects in respect of the offshore, onshore elements as well as the whole development effects on the SDNP, are included at Appendix A. A summary of the key areas of objection relating to landscape harm is provided below.

3.4.2. There is a substantial underestimation of the effects of an offshore array of this scale, height and spread, in a location as sensitive as this, in close proximity to the SDNP and Heritage Coast. This combination of designated areas is considered to be particularly sensitive, as identified in the Review and Update of Seascape and Visual Buffer Study for Offshore Wind Farms (March 2020)[1], produced as part of the UK Department for Business, Energy and Industrial Strategy's offshore energy SEA programme (SLVIA references Document Ref APP-056).

3.4.3. It is somewhat surprising to see that within the SLVIA (Table 15-29 of APP-056) that residual effects on landscape character and visual receptors have been concluded as 'not significant', despite this combination of highly sensitive designations. Whilst the SDNPA disagree some of these effects are 'moderate' (e.g. at Birling Gap and along LCA S1 and S2 – Shoreline) and consider them to be 'major/moderate' at least and as stated in the LIR, a 'moderate' effect in a designated area should be considered to be significant.

3.4.4. The SDNPA commissioned a further study into seascape sensitivity as it relates to the proposed development in 2021, which is included at Appendix C. This identifies six seascape character zones of sensitivity associated with the SDNP, as shown in Figure 3 below. The darkest shade (i.e. SCZ1) indicates the area with the highest level of sensitivity, with the lightest shade (i.e. SCZ3) indicating the lower end – in this case medium-low sensitivity. The study identifies different levels of sensitivity, though "a gently curving coast, the iconic chalk cliffs to the east, the special qualities of the breath-taking panoramic views, tranquillity and unspoilt character, combined with the wildness that the seascape imparts, all contribute with other factors to enhance the value and sensitivity of the area".

[1] P23 of OESEA seascape and visual buffer study 2020 (publishing.service.gov.uk)

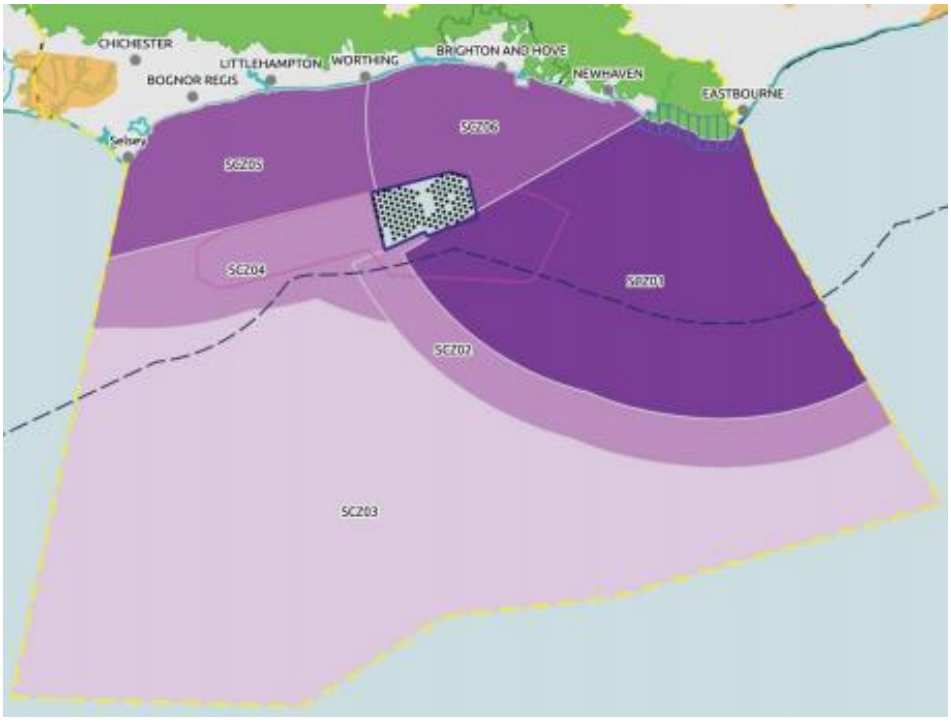

Fig. 3 South Downs Seascape Sensitivity Summary Map

3.4.5. The study goes on to propose a set of recommendations in respect of the design, layout and height of a proposed array that would go some way to resolving the concern. These include:

a) Development should only occur within the Extension Area west of Rampion 1.

b) Turbines should not exceed 225m to blade tip in height.

c) Clear separation between Rampion 1 and 2 to minimise the horizontal extent.

d) Turbine layout is designed in coherent blocks.

e) Full north to south extent of the extension area should be utilised to maximise the size of east/west gaps between the arrays.

3.4.6. Through the pre-application process, the applicant reduced the extent of the array, particularly to the east and introduced a set of design principles, however whilst these are welcomed, they do not remove the significant adverse effects identified by the SDNPA. The principles proposed by the applicant would continue to mean that through the combination of the proposed height and the proximity to the coastline, the 'visual layering' that would occur with Rampion 1, inadequate separation zones between the existing and proposed arrays and the extent of the array east-west, there would be visual discord and a substantial loss of open and unspoilt views of the seascape. This is a significant adverse effect on Purpose 1 of the SDNP and directly impacts on the Special Qualities, most notably in respect of the 'breathtaking views'.

3.4.7. The SDNPA also raises a significant concern in the method of assessment of effects and would have expected both a combined cumulative impact assessment of Rampion 1 and Rampion 2 together, along with a cumulative impact assessment of the **additional** effect of Rampion 2. This is a discrete area for cumulative assessment, whereas Advice Note 17 considers a broader and higher-level assessment, applicable to EIA as a whole. This is further explored in both Appendices A and C.

3.5. Landscape and Visual Impact Assessment (Onshore)

3.5.1. Chapter 18: Landscape and Visual Impact of the Environmental Statement (Document Reference: APP-059) frequently downplays the effects on the SDNP affected Landscape Character Areas (LCA), due to the geographical extent of the study area (2km buffer area), lack of consideration of landscape elements and the use of a combined approach to landscape elements that, if considered in isolation, would be significant.

3.5.2. One of the implications of the limited 2km buffer area is demonstrated through the Zone of Theoretical Visibility (ZTV) produced for the SLVIA where visibility extends across a significant area – much greater than the 2km study area. The Open Downland, where openness and expansive views are highly characteristic is one specific area where this is problematic and was highlighted during the pre-application stage.

3.5.3. Landscape elements such as tranquillity, historic landscape character, condition and dark skies, have not been appropriately considered. The summary of effects instead focusses on types of vegetation, which largely ignores perceptual qualities or draws on any historic character associated with these features. By either grouping, or omitting proper assessment of these features, there remains a high probability that effects have been underestimated or missed entirely. A further example of this is demonstrated in the section below regarding Dark Night Skies.

3.5.4. As the SDNP is given the highest status of protection in respect of landscape, the SDNPA consider this is unacceptable and a more thorough assessment should be undertaken so that the effects are fully understood and appropriate mitigation, enhancement and if necessary, compensation, can be secured.

3.5.5. Further to this, the impact on the Arun to Adur Scarp LCA should be completely reconsidered, as it is incorrect to suggest that works running up to the boundary of and under this LCA, which is an area of Open Access Land, would be a 'negligible to zero' magnitude for change.

3.5.6. The SDNPA are also concerned about the viability of some of the construction and mitigation measures proposed in the development. We welcome the principle of the proposed use of Horizontal Directional Drilling (HDD) in order to avoid the use of open-cut trenching in areas of Ancient Woodland and Chalk Scarp (Sullington Hill Local Wildlife Site). There is however, uncertainty about whether this technique will be successful in such landscapes and it is not clear what the alternative proposals would be if the use of HDD is found not to be viable. Under the current proposals and dDCO, work on the cable corridor could have substantially commenced both outside and within the SDNP before determining whether HDD would work in these specific locations. This would amount to pressure to deliver the cable corridor through these areas as it would now be extremely difficult to find an alternative route. In addition, the use of HDD only in these areas is not explicitly secured in the dDCO at present. Further evidence and investigation is required prior to determination to demonstrate this is a viable method in the above locations and the use of this technique should be explicitly secured by a requirement in the dDCO.

3.5.7. The effects on tranquillity and dark night skies, as landscape elements, are also considered in Appendix A.

3.6. Dark Night Skies

3.6.1. The SDNP is designated an International Dark Skies Reserve, throughout which the integrity and quality of these dark skies is particularly sensitive to change. The applicant's landscape assessment (Document Reference APP-059) states there would

be no effect on the South Downs International Dark Skies Reserve, largely as a result of a measure embedded within the Commitments Register.

3.6.2. The SDNPA remains unconvinced this would be the case, based on a number of factors. Firstly, the core working hours set out in the Commitments Register includes times extending into periods of darkness during winter months, requiring lighting to assist construction work. The areas where trenchless crossing techniques are proposed to be employed (including areas of intrinsic rural darkness) require lighting 24 hours a day when being undertaken. The experience the SDNPA have had in respect of Rampion 1 construction also leads us to believe that work will be taking place during periods of darkness, requiring further lighting.

3.6.3. Lighting is therefore considered to be inevitably required and cannot be considered to be without adverse effects. This therefore needs to be properly taken into consideration as a separate landscape effect.

3.7. Whole Development Landscape Impacts

3.7.1. Neither the SLVIA (Ref APP-056) or the LVIA (Ref APP-059) have provided a comprehensive assessment of the whole development landscape impacts.

3.7.2. The effects of the whole proposed development can be both landscape and visual. The assessment method employed to consider the whole development landscape effects is flawed as it has not taken on board this critical point, particularly where it relates to consideration of the SDNP Special Qualities. These Special Qualities should be an integral part of any landscape assessment, however these do not appear to have been taken into account. This omission - and through use of limited study area – implies that environmental effects may be missing from the assessment, as detailed above.

3.7.3. There is also misinterpretation within the assessment of the whole development landscape effects undertaken in Chapter 18, which states that the proposal would not give rise to any landscape effects. This is despite the Seascape, Landscape and Visual Impact Assessment undertaken in Chapter 15 (Document Reference APP-056), setting out the effects on landscape character and on the SDNP's Special Qualities and contradicts the conclusion in Chapter 18 that there would be no landscape effects.

3.7.4. The general lack of consideration of perceptual qualities in the assessment, including historic landscape and tranquillity, is considered to be a substantial omission in the assessment. These qualities underpin the Special Qualities and the incomplete assessment does not allow for appropriate mitigation strategies to have been developed.

3.8. Terrestrial Ecology and Nature Conservation

3.8.1. The SDNPA objects to the proposal as it would be contrary to SDLP policies SD2, SD9 and SD45, as set out in the SDNPA's LIR and landscape section above, with one of the main concerns being that the landscape-scale ecological effects have not been properly assessed in Chapter 22 of the Environmental Statement, which could lead to much greater adverse impacts on habitat than have been predicted (APP-063). The data which is available has not been considered in any meaningful way in assessing the direct and indirect, short to medium term effects of removing potential important / key linear features from the landscape. As well as this overarching objection, the SDNPA would like to make the following additional comments.

3.8.2. *Vegetation Survey and Impact Assessment* – the Phase 1 habitat survey is not sufficiently detailed to assess type and condition of certain habitats including grassland, river/wetland and woodland and does not therefore allow robust habitat classification, ecological impact assessment (or accurate Biodiversity Net Gain Metric

mapping/calculations). Vegetation mapping using UKHab Level 4/5 is required as a minimum along the cable corridor route. This would identify any areas which should be subject to National Vegetation Classification (NVC) survey as potential irreplaceable habitats such as ancient woodland habitats, plus highly distinctive habitats such as chalk grassland. The areas that have been subject to NVC survey are now outside of the DCO Order limits , with the exception of Sullington Hill. The Landscape and Ecology Management Plan (LEMP; APP-232) 4.6.1 states that further NVC survey will only be undertaken prior to construction. Therefore, the impacts of the proposal have not be adequately considered.

3.8.3. *Ancient Woodland* - Ancient woodland habitat includes trees (above ground and their root systems) and ground flora but most importantly their soils - soil chemistry, soil biota and mycorrhizal fungi. The effects of air and water pollution and hydrological changes can occur to ancient woodland at significant distances away from the proposal. There is insufficient evidence provided to demonstrate that a 25 metre stand-off and use of trenchless drilling 6 metres underneath ancient woodland ground level will not cause the loss or deterioration of this irreplaceable habitat by damaging roots, damaging or compacting soils, increasing levels of air and light pollution, noise and vibration, changing the water table or drainage, damaging functional habitat connections or affecting the function of the woodland edge. Insufficient evidence is provided to support the conclusion of low frac-out risk, as stated in Chapter 22 of the Environmental Statement (APP-063), or whether there has been previous experience of using and monitoring the success of this technique successfully, underneath ancient woodland soils. This also applies in relation to veteran tree buffer zones.

3.8.4. *Hedgerows and Treelines* - There are 89 hedgerow and 30 tree-line crossings along the route of the onshore corridor, amounting to 'temporary' loss of 1,062 metres of hedgerow & 370 m of treeline (until such time that these features had been successfully reinstated to their former maturity and condition), plus permanent loss of 622 m hedgerow along the onshore cable easement (as stated in APP-063 and updated by PEPD-001). There are a large number of these hedges and treelines which have not yet been assessed due to lack of access. Therefore, the harm associated with the loss of these important habitat features (as well as the impact the loss would have in respect of landscape character) is likely to have been significantly underplayed. Furthermore, there are some tree lines which have been misidentified as hedgerow or missed entirely, such as between Michelgrove Park and heading between Blackpatch and Harrow Hills.

3.8.5. Hedges in this Chapter have largely been considered in terms of the Hedgerow Regulations, rather than their intrinsic ecological value, importance within the landscape and their connectivity with associated habitats (woodland, scrub, water). This underestimates their contribution as important habitats.

3.8.6. Whilst there has been acknowledgement of the need to mitigate against hedgerow loss and minimise the period of time for reinstatement, the proposed methods for doing so, in particular the 'notching' technique have not been tested on dry, free-draining chalk soils, or in the climate associated with the South Downs. The examples provided are from the Lake District and Norfolk Broads, both of which are much wetter landscapes than the application site. It is also noted that tree lines have been earmarked for notching in some instances (as a result of the mis-identification noted above), which is unlikely to be achievable.

3.8.7. Further to this, paragraph 5.6.38 of the Outline Code of Construction Practice (APP-224) states that "Notched hedges would be pruned to 1m prior to translocation and gaps closed using temp fencing. Removed sections would be managed as necessary (including watering during translocation/storage and in the

first spring/summer following planting)." This implies that all notched hedgerows would be reduced to 1m height. In assessing no significant effects on hedgerows as a result of the scheme, it appears the applicant is suggesting that notched hedge sections would grow back to their original height and function (denseness) within their assessed 2-year reinstatement period. The SDNPA consider the applicant is over-optimistic in this conclusion, particularly for the hedge sections that are very tall and dense.

3.8.8. The LEMP states that "the reinstatement of habitat will be of the same habitat type and to the same condition", whilst also accepting that "although in landscape terms the reinstatement of landscape elements will take time to mature and new sections of field boundary fencing and/or hedgerow will be apparent post construction". The SDNPA queries how both these statements can be true and considers that the latter is more likely to be the reality – as has been demonstrated through the experience with Rampion 1.

3.8.9. *Bats* – Sparse bat survey data has been provided to support the application, with patchy and inconsistent coverage between and within seasons (Document References APP-063, APP-186 and APP-195). It is not clear how many survey hours have been carried out per month for transect and static surveys and there is no information on surveyor competence or equipment used. The survey data is not compliant with accepted guidelines produced by the Bat Conservation Trust for professional bat survey (Referenced in APP-063). Large numbers of hedgerows, treelines and individual potential bat roost trees have not been surveyed at all due to access restrictions. Therefore the impact on bats, a protected species, is unclear.

3.8.10. The associated spatial and temporal survey data is considered insufficient to inform a robust assessment of the terrestrial effects of the Scheme on bats, both in the short and long term. It is not possible to assess the landscape scale effects of notching in short/medium & long term along important bat corridors that have not yet been identified due to poor survey coverage, therefore the conclusions reached may have been underestimated and the mitigation proposed unacceptable. The data which is available has not been considered in any meaningful way in assessing the direct and indirect, short to medium term effects of removing potential important/key linear features from the landscape. Nor how the failure of proposed reinstatement methods (as discussed in paragraphs 3.8.7-3.8.8 above) could affect the bat assemblage within the Zone of Influence in the longer term. Data from the bat surveys conducted in 2023 for the new areas of cable corridor within the SDNP have not been included in the supporting information. This is particularly critical given the proposed route option is in part selected as it would have a less significant impact on ecology (Document Reference APP-044). If this is not in fact the case, then it again calls into question whether the applicant has demonstrated they have fulfilled their requirements under the Major Development Tests (as discussed in 3.1 of this representation and the LIR).

3.8.11. The proposed trenchless crossing locations within the SDNP are in the most vulnerable ecological locations by definition (excepting roads), as otherwise an open-trench method would be proposed. The sensitivity of these locations includes being within a dark skies landscape. As these areas and temporary construction compounds will be lit, up to date BCT/ILP Guidance (2023) must be followed, including provision of a detailed lighting constraints plan or similar, to avoid artificial light spill and glare around sensitive features (woodland/scrub/boundary vegetation). There is currently insufficient commitment to providing these measures.

3.8.12. *Dormice* – Given the location of known records, the survey coverage to date is considered insufficient to conclude the likely absence of Dormice within or close to the proposed DCO Order limits at locations away from Site 7 (Ashurst).

3.8.13. *Biodiversity Net Gain (BNG)* – BNG consists of three elements: a) area/length, b) habitat distinctiveness, c) habitat condition. It is not clear which version of the Metric has been used to calculate the BNG figures provided in Table 4.1 of APP-193 (BNG Information). No Metric spreadsheet has been provided, nor a net gain plan showing existing a pre and post development habitat areas/condition, nor completed Condition Assessment tables. It is not possible to demonstrate a 10% net gain in biodiversity, nor for the SDNPA to assess the submitted BNG information without this information.

3.8.14. There appears to have been conflation of compensation measures and biodiversity gains. These are different and separate steps in the mitigation hierarchy and mitigation of harm caused by the proposal must be fully addressed to the point of net zero before there can be any biodiversity gains resulting from the project. For example, habitat reinstatement within 2 years of impact does not represent a biodiversity gain (as there is no enhancement proposed). Also, woodland will not be reinstated but instead will be replaced with managed scrub. Replanting of woodland away from the point of impact (whether within the DCO limits or outside) is compensation for loss, not BNG.

3.9. Highways, including Public Rights of Way (PRoW)

3.9.1. The proposed cable corridor will intersect with a large number of public rights of way within the SDNP. Whilst closure or diversion of these should only be for a short period of time (according to the application documents), it is difficult to fully understand and appreciate the full impact of these closures and diversions on users as the information has not been clearly presented (Document Reference APP-012). This includes the experience of equestrian users on construction haul roads, where they are also bridleways, and the potential interaction with traffic / waiting areas. Further plans, which show highly impacted areas, such as around Sullington LWS, should be provided that clearly show the PRoW, the proposed diversion, the length of time it would be diverted and when (in terms of the works that necessitate the diversion).

3.9.2. The effect of operational accesses on some PRoW is also unclear, as it would appear these need to be suitable for HGV use, albeit only in exceptional circumstances. There are examples, such as the Bridleway heading north from Long Furlong Farm (sheets 13 and 14 of PEPD-005) and shown below in Fig. 4, where existing landform and vegetation combined with the width of the existing track, mean this would not be possible without significant intervention. This would indicate that the proposed operational access is not fit for purpose. Further clarity of what an operational access is expected to deliver and a strategy for changes that may be needed, should be provided by the applicant.

Fig. 4: Bridleway looking south towards Long Furlong Farm

3.9.3. The proposed development would also impact on the South Downs Way National Trail, where the cable corridor would be constructed using open-cut methods, necessitating a temporary closure and diversion. The details of how this would be undertaken are not clearly set out and the SDNPA requires further clarification of this in order to determine the extent of the effect on the ability to use and enjoy this National Trail.

3.9.4. There will be long-term effects on visual receptors using the numerous public rights of way within the SDNP and along the Heritage Coast, as a result of the offshore array. The scale of the WTG being so much greater than the existing array (which is already highly visible) and the extended field of view has direct adverse effects on these users in respect of the breathtaking and unspoilt views. This is covered in more detail in Section 3.4 above and Appendix A.

3.9.5. We welcome the inclusion of a specific requirement (16) within the dDCO regarding the construction of highway accesses within the SDNP and have provided comment on the wording of this in the LIR. The SDNPA remain concerned however regarding the number of proposed accesses and haul roads from the A280 (Long Furlong), from which there are three construction access points (A-27, A-28 and A-29). The Design Manual for Roads and Bridges is being proposed to inform the design and layout of these access points, which is an excessive measure given the character and level of use of the highway; Manual for Streets would be a more appropriate reference as it is designed for the roads affected by this scheme and the level of use proposed. The applicant is yet to have carried out the actual Speed Surveys (as opposed to surveys based on posted speeds) and Road Safety Audits, which the SDNPA consider could result in the reduction in the number of access points and therefore a reduced impact on the SDNP. These should be undertaken prior to the determination of the DCO, in order to moderate the effects on the environment within the SDNP.

3.9.6. The lack of consideration of the National Park Purposes in respect of the Transport chapter of the Environmental Statement (Document Reference 6.2.23) and associated supporting documents including the Construction Traffic Management Plan, Construction Workers Travel Plan is of significant concern. These documents and assessments have not recognised the South Downs Local Plan, which includes

relevant policies, nor the South Downs Walking and Cycling Strategy. There also appears to have been a lack of acknowledgement, or consideration of the cumulative effects on the SDNP, of onshore traffic generated by offshore works, that will need to access ports through routes in the SDNP (specifically the A26 to Newhaven) and onshore works. Therefore it is considered the totality of transport effects has been underestimated.

3.10. Historic Environment

3.10.1. Matters regarding the historic environment, particularly as it relates to archaeology, have not advanced since our formal consultation response to the Further Supplementary Information Report dated 27 March 2023. The following comments reflect that response.

3.10.2. The proposed route of the cable corridor would come in close proximity to a Scheduled Monument (Itford Down) and through an area of known prehistoric industrial activity (see Fig 5).

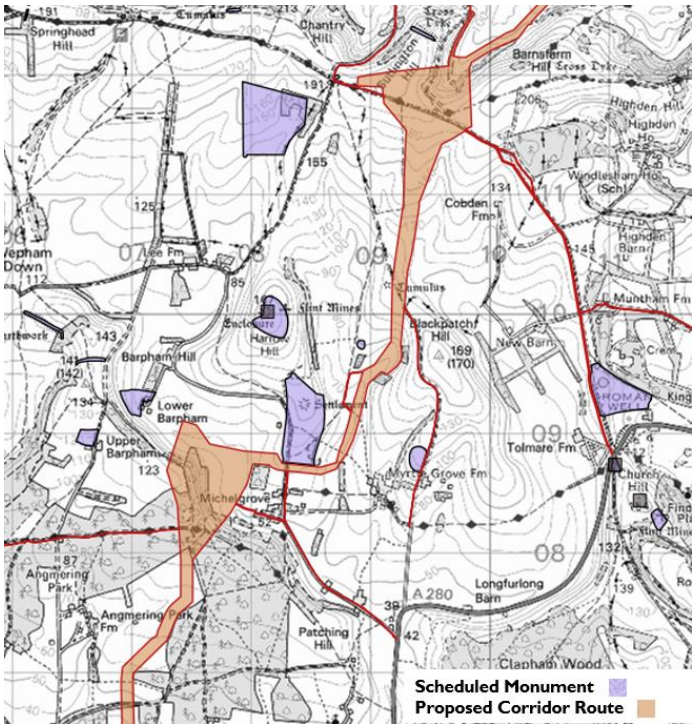

Fig. 5 Scheduled Monuments in relation to Cable Corridor

3.10.3. Blackpatch and Harrow Hills sit on high points either side of the valley containing the proposed route corridor. Given both sites are of a prehistoric industrial nature, it is probable that the valley contains significant potential for settlement evidence from the early prehistoric (and therefore may represent some of the earliest evidence for Neolithic settlement in Britain). The landforms themselves suggest significant sediment build ups within the dry valley between both sites, with potential evidence for Neolithic and other periods lying deep in the valley profiles. This means that geophysical data, which is all that has informed this section of the route (to date) is unlikely to provide a sufficiently detailed evidence base on which to base decisions relating to route options (Document Reference APP-066).

3.10.4. Of the excavations that have occurred linked to the flint mining complexes of Blackpatch and Harrow Hill, it is clear that the mines became the focus for Bronze Age burial monuments constructed after mining had ceased. As many Bronze Age barrows and similar funerary monuments were plough damaged during intensive world war and post war agricultural practices, there is also the potential for below

ground Bronze Age archaeological evidence not necessarily recorded or known. A summary of significant archaeological sites and finds in the area is included at Appendix D. It would appear highly unlikely that the route could be achieved without substantial permanent destruction of the historic environment.

3.10.5. The need for further investigation is acknowledged by the applicant, including field investigation. These need to be provided as a matter of priority – ideally prior to determination - any intrusive investigation must be carried out prior to commencement of any phase, to ensure the route remains viable and the construction period through this sensitive area is not prolonged. In addition, a Written Scheme of Investigation needs to address the approach to preservation and public engagement.

3.10.6. Overall, whilst it is noted that Neolithic Settlement would be of 'high heritage significance' at 25.9.142 of the Historic Environment Chapter (Document ref: APP-066), the overall approach for mitigation is for 'preservation by record'. This would retrieve artefacts, but is in itself a destructive process that would destroy archaeological resource and context. Further, there are additional burdens and requirements related to the depositing and storage of such material. This has been overlooked in the Requirements and commitments and it is considered further mitigation or compensatory measures are required.

3.10.7. There are other areas of the route within the SDNP that we consider have underestimated the significance of potential heritage assets. For example, in Table 25-20 the possible mounds at Sullington Hill are considered to be of 'low to medium' significance, despite the proximity to known barrow sites.

3.10.8. Overall, there has also been an apparent compartmentalisation of archaeological impacts away from matters such as groundwater management and pollutants. Artefacts surviving in the ground reach a form of chemical equilibrium with the surrounding soil environment; once any changes happen in the chemical make-up of the soil (or in water levels and moisture), depending on the artefact there can be risks of artefactual decay. If preservation in situ is being proposed as viable mitigation in areas where HDD is taking place, an additional commitment /mitigation/compensation measure is expected in respect of the associated impact on below ground artefacts.

3.11. Ground Conditions (including impact on Minerals Resources)

3.11.1. As noted in the SDNPA's LIR, we support the comments made by West Sussex County Council in relation to the effects on minerals and in particular the safeguarding of the Soft Sand resource. Further to this, the SDNPA would add that any potential site sterilisation, such as that at Lower Chancton, that adds to further pressure to identify sites for extraction within the SDNP would be of additional concern.

3.12. Residential Amenity

3.12.1. The construction compound at Washington, whilst outside of the SDNP is likely to have a prolonged impact on residents of Washington Village, which is located within the SDNP. The main access to the village is opposite the proposed location to the compound and therefore it is anticipated that matters of noise, vibration and increased traffic are all likely to cause harm to the amenity of residents in the village and users of the facilities.

3.13. Geology and Soils, including Contaminated Land

3.13.1. This matter is covered in the above sections on onshore landscape and terrestrial ecology.

4. Other Matters

4.1 As set out in the SDNPA's LIR the following topics are considered to have neutral or limited impact. Therefore, the SDNPA has no further comments to make at this stage but reserves the right to make additional comments should it become necessary during the examination process.

- Water Environment;
- Air Quality;
- Open Access Land and Public Open Space (whilst the offshore array will be visible from multiple such areas there will be no direct use of Open Access Land or Public Open Space for the onshore cable corridor, providing trenchless crossing is used at Sullington Hill Local Wildlife Site and under Washington Recreation Ground); and
- Socio-economic (other than where they relate to landscape character and access).

5. Common Ground

5.1 The agreed matters, as they currently stand between SDNPA and the applicant, are captured in the draft Statement of Common Ground to be submitted by the applicant by the required deadline and, in the interests of brevity, these are not repeated here.

6. Conclusion

6.1 The SDNPA objects to the DCO application for the reasons given above.

6.2 The SDNPA will continue discussions with the applicant in an attempt to address the issues raised in this written representation and will continue to engage positively and in a timely fashion during the examination process.

SDNPA WRITTEN REPRESENTATION APPENDIX A

RAMPION 2

SLVIA AND LVIA SUBMISSION REVIEW

November 2023
Revision P02

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CONTENTS

1. PURPOSE OF REPORT

1.1. This report sets out a review of the Rampion 2 proposals and the ES, specifically looking at aspects that cover landscape character and visual amenity and the effects of the development on these, as assessed in Chapter 15 Seascape, Landscape and Visual Impact Assessment and Chapter 18 Landscape and Visual Impact Assessment.

1.2. The report covers a review the methodology for both assessment and specifically concentrates on the proposals and effects that relate to the South Downs National Park and its setting.

1.3. The report does not purport to provide an alternative impact assessment.

2. SDNPA PURPOSES AND SPECIAL QUALITIES

2.1. Statutory purposes

2.1.1. The statutory purposes of the National Park as set out in the set out in the National Parks and Access to the Countryside Act 1949 Sections 5 and 11A(2)) are:

- ***'Purpose 1:*** *To conserve and enhance the natural beauty, wildlife and cultural heritage of the area.*
- ***Purpose 2:*** *To promote opportunities for the understanding and enjoyment of the special qualities of the National Park by the public.'*

2.1.2. The Statutory Purposes are underpinned in the Overarching National Planning Policy Statement for Energy (EN-1) (para 5.9.9 page 96) which states '*National Parks, the Broads and AONBs have been confirmed by the Government as having the highest status of protection in relation to landscape and scenic beauty. Each of these designated areas has specific statutory purposes which help ensure their continued protection and which the IPC should have regard to in its decisions. The conservation of the natural beauty of the landscape and countryside should be given substantial weight by the IPC in deciding on applications for development consent in these areas.*'

2.2. Special Qualities

2.2.1. The SDNP seven special qualities (APP-056) define sense of place, distinctiveness and the characteristics that make this place special and valued. The SDNPA consider that all Special Qualities should be conserved and enhanced. The following are the stated summary descriptions about the qualities that support the statutory purposes

1. '*Diverse, inspirational landscapes and breathtaking views*
2. *A rich variety of wildlife and habitats including rare and internationally important species*
3. *Tranquil and unspoilt places*
4. *An environment shaped by centuries of farming and embracing new enterprise*
5. *Great opportunities for recreational activities and learning experiences*
6. *Well-conserved historical features and a rich cultural heritage*
7. *Distinctive towns and villages, and communities with real pride in their area'*

2.2.2. The SDNPA consider that whilst Special Qualities nos. 1,3, and 5 are of key relevance to this review of the seascape, landscape and visual impacts of the Rampion 2 proposal, the other four are still of equal importance in wider considerations.

3. SUMMARY OF MATTERS OF SIGNIFICANT CONCERN

3.1. Overarching significant concerns

3.1.1. The SDNPA maintain their previously stated position: that the Rampion 2 development proposals give rise to significant seascape, landscape and visual impacts that cause harm to the Statutory Purposes of the SDNP and its Special Qualities, as defined in the original SDNP Partnership Management Plan (PMP), from both off-shore and on-shore development proposals.

3.1.2. It should be noted that the Special Qualities are not defined geographically. Any harm to these cannot be downplayed through the defining of a geographically limited Study Area as set out in Section 1.2.13 of the LVIA methodology (APP-167) which states out that '*The Study Area for the LVIA is illustrated in Figure 18.1* [APP-098] *and extends to a 2km buffer beyond the proposed DCO Order Limits*.' The SDNP maintains that any harm to the Special Qualities, as identified will occur in the ES, will harm the Statutory Purposes of the Designation and is of utmost concern. The SDNPA suggest it is of key importance to note that the Rampion 1 windfarm was not constructed when the SDNP Special Qualities were set out and suggest that Rampion 1 has already provided a significant level of harm to the Special Qualities, which is not taken into consideration in the assessment.

3.1.3. The SDNPA also considers that these limitations on the geographical study area as well as other reasons set out in this report, leads to a substantial understatement in the seascape, landscape and visual impacts set out in the Chapter 15 Seascape, landscape and visual impact assessment (APP-056) and Chapter 18 Landscape and visual impact (APP-059) of the ES.

3.1.4. The SDNPA are also concerned that the ES downplays the effects on the SDNP Landscape Character Areas due to the geographical extents of the Study Area, lack of consideration of some landscape elements and the use of a combined approach to landscape elements that, if considered in isolation, would be significant.

3.2. Incomplete and unevidenced proposals

3.2.1. The Commitments Register (APP-254) has multiple instances of uncertainty and qualification and use of phrases such as *'where practical', 'as far as reasonably practical', 'as far as reasonably possible'* and other similar phrases, that do not allow for a maximum design scenario to be established. The considerable areas of uncertainty imply that new or materially different environmental effects may be missing from the ES and therefore the impacts of the Proposed Development may be considerably understated or even incorrect.

3.3. Viability of HDD:

3.3.1. The SDNPA has a significant concern over the viability of that HDD proposed at Michelgrove Park and Sullington Hill.

3.3.2. It is understood that DCO approval would be given prior to any investigation is undertaken to firmly establish viability of the HDD proposed at Michelgrove Park and Sullington Hill. The SDNPA finds the uncertainty involved in this approach unacceptable; these two areas of HDD are both key embedded mitigation measures relied on heavily in the LVIA to mitigate adverse impacts on these highly sensitive areas.

3.3.3. It should be noted that these two key areas of trenchless crossing are not listed in the Commitment at C-5 and this contributes to SDNPA concerns over the uncertainty of the proposals.

3.3.4. There is also concern that if the HDD is deemed to be unviable after construction the cable corridor has already taken place, then significant harm will already have taken place along the cable corridor route and to the SDNP. The SDNPA strongly suggest that no construction along the cable corridor take place until the viability of all propose works is fully confirmed.

3.3.5. The DCO does not consent open trenching in areas where HDD is proposed and it is not clear what the alternative proposals would be, if the use of HDD is found not to be viable or fails.

3.4. Impact on the LCA I3

3.4.1. During construction, the magnitude of change for LCA I3 Arun to Adur Scarp Down is stated to be '*negligible to zero*', despite the proposed HDD construction compounds immediately abutting the LCA both above and below scarp. This gives rise to a level of effect on landscape character of *'Minor and Not Significant'* and for landscape elements: '*N/A*'. The LVIA has not considered the nature of the LCA as open access land, the extent of perceptual and indirect effects and the stated assessed impacts. The resultant harm to the SDNP is considered by the SDNPA to be substantially understated.

3.5. Loss of vegetation

3.5.1. The proposed development will lead to loss of considerable area of hedges, tree and woodland and changes to the nature of grassland. Whilst replanting is proposed, trees cannot be replanted over the cable corridor and will bring long term and irreversible harm to the landscape character of the SDNP. This assertion can be reinforced through lessons learnt from the Rampion 1 development (see SDNPA Written Representation Appendix B) where this change of landscape character can be seen.

3.5.2. Considerable reliance is placed on the successful establishment of planting. Whilst the dDCO (page 56, section 13) references that works should be carried out in accordance with the LEMP and secures a mechanism for the replanting of removed, dead, damaged or diseased plants, there is no mechanism in the dDCO for addressing poor establishment of planting, which brings considerable and unacceptable uncertainty to the long-term effects of the proposed development.

3.5.3. Considerable reliance is placed on reinstatement of vegetation being carried out as soon as possible, which cannot be guaranteed as the detailed works programme is yet to be determined through the development of state specific LEMPs (see Commitments Register C-199). During the construction of Rampion 1 considerable lengths of the cable route, construction haul road and access routes remained in place throughout the construction period to provide access and for cable pulling/jointing activities, preventing prompt reinstatement.

3.6. Viability of hedgerow translocation

3.6.1. The SDNPA has concerns that there is no evidence available to support the assertion that the '*notching*' of hedges is viable and will be successful in the climatic conditions and soil of the SDNP. Whilst there has been acknowledgement of the need to mitigate against hedgerow loss and minimise the period of time for reinstatement, the proposed methods for doing so, in particular the 'notching' technique have not been tested on dry, free-draining chalk soils, or in the climate associated with the South Downs. The examples provided are from the Lake District and Norfolk Broads, both of which are much wetter landscapes than the application proposals.

3.6.2. Despite this lack of testing this key embedded mitigation measure (Commitments Register C-115) is heavily and over-relied on by the LVIA to mitigate impact. The uncertainty of the likely successful establishment, implies that new or materially different environmental effects may be missing from the ES. This in turn does not allow for appropriate mitigation strategies to be developed or allow comprehensive consideration of the proposals by stakeholders.

3.7. Joint bays

3.7.1. It is understood the joint bays are located at regular intervals (typically 600m – 1,000m) (see Commitment Register C-19) along the cable corridor. No detail of the construction of these is provided and it is assumed that there will need to be some form of marking and fencing to enable identification and prevent damage. These will be a frequent feature along the route and will serve to draw attention to this development. This long-term change of landscape character will be particularly evident in the open downland of the SDNP and give rise to significant landscape and visual impacts that do not appear to have been fully considered in the ES.

3.8. Study areas:

3.8.1. The LVIA methodology states (APP-16, section 1.2.14 page 7) that '*IEMA Guidance (IEMA, 2015; 2017) recommends a proportionate assessment focused on the likely significant effects of a development, and a proportionate technical aspect chapter. The LVIA Study Area must therefore be large enough to capture all likely significant effects. However, an overly large LVIA Study Area may be considered disproportionate if it makes understanding the key impacts of the development more difficult by including extraneous baseline information, and hence receptors which are unlikely to be significantly affected by the Proposed Development.*'

3.8.2. The SDNPA understands the need for a proportionate approach, however suggest that the LVIA study area is limited to such a narrow area around the DCO limit that it is likely to fail to assess the full range of landscape and visual receptors likely to be significantly impacted, which will be wide-ranging as indicated by Zones of Theoretical Visibility (ZTVs) in both the SLVIA (APP-090 Figures 15.18- 15.24) and the LVIA (APP-098 Figures 18.4a-18.4d) and have the potential for increased significant and unacceptable effects on the SDNP with its open downland, varied topography and long views.

4. PROJECT INFORMATION

4.1. Design and Access Statement (AS-003)

4.1.1. A DAS is often a primary source of information for interested parties to assist in gaining an overview and summary understanding of the proposals.

4.1.2. Despite mention of both offshore and onshore elements, including the maximum 38.8km onshore cable route in the ''Overview of the Proposed Development' at section 1.1.4, the submitted DAS only covers the Oakendene substation and National Grid Bolney substation extension works.

4.1.3. Design is not all about built form, and the omission of detail on the other aspects of the proposed development is misleading as it does not provide a complete overview or understanding of the whole proposed development, either offshore or onshore.

4.2. Maximum Design Scenario for WTGs

4.2.1. The DCO Explanatory Memorandum (APP-020) sets out that at section 6.4 that '*The final design of a windfarm depends on a number of factors which include the size, height, and capacity of the chosen turbine type; electrical design; length of cables; areas where development is constrained; and the outcomes of site investigations. All these are considered post-consent at the stage of detailed design and optimisation when the final number and type of turbines and their location will be decided as a function of site constraints and viable layout*'.

4.2.2. Schedule 1, part 3 of the DCO (APP-019) sets out maximum parameters for the WTGs:

Detailed offshore design parameters

2.—(1) The total number of wind turbine generators comprised in the authorised project must not exceed 90 and a total rotor swept area of 4.45 square kilometres.

(2) Subject to sub-paragraph (3), each wind turbine generator forming part of the authorised project must not—

(a) exceed a height of 325 metres when measured from LAT to the tip of the vertical blade;

(b) exceed a rotor diameter of 295 metres;

(c) have a distance of less than 22 metres from MHWS to the lowest point of the rotating blade; or

(d) be less than 830m from the nearest wind turbine generator in all directions.

4.2.3. As set out in the Explanatory Memorandum, '*The PINS Advice Note 9 recognises the need for flexibility to address inherent uncertainties for a proposed development, against which the need to ensure that the significant effects of a proposed development have been properly assessed must be balanced. It acknowledges at paragraph 5.5 of that advice note that an Applicant may choose to include parameters within the DCO as a practical way to address uncertainty and provide the required flexibility before setting out example parameters which include 'maximum/ minimum number of turbines, or maximum turbine blade tip height, associated with an offshore wind farm.*''

4.2.4. .

4.2.5. Also as set out in the Explanatory Memorandum, '*As the size of turbine has not yet been established for the Proposed Development the environmental impact assessment undertaken has considered the impacts of 65 'larger' sized turbines and 90 'smaller' sized turbines in order to establish parameters. Each chapter of the Environmental Statement has assessed the worst-case scenario in respect of the potential final design of the project for the aspect under consideration in that chapter, and has also considered whether these worst-case scenarios also apply to a size and number of turbines falling between these two scenarios. Inclusion of a parameter to constrain the maximum rotor swept area for the turbines ensures that a higher number of larger sized turbines cannot be constructed.*'

4.2.6. Whilst the SDNPA accepts that there is a need for flexibility concerning 'post-consent' decisions regarding the number and size of the turbines, there is still significant concern about the Maximum Design Scenario used as a basis for the ES. (APP-056 Table 15-25 pages 273-279) sets out the '*Maximum parameters and assessment assumptions for impacts on seascape, landscape and visual'* as including '*Maximum number of WTGs: 65*' and '*Minimum spacing: 1130m'*.

4.2.7. The DCO sets maximum parameters and therefore it is permissible and indeed possible that the proposed development might consist of 90 larger sized WTGs, at a minimum spacing of 830m. This is likely to give rise to new or materially different environmental effects arising compared to those assessed in the ES. This in turn does not allow for appropriate mitigation strategies to be developed or allow comprehensive consideration of the proposals by stakeholders.

4.3. Temporary compound information

4.3.1. There appears to be uncertainty in the need for the temporary construction compounds. The Landscape Assessment (APP-169, page 63), states '*The onshore cable corridor and temporary construction compounds (if either are elected)*'. It is unclear whether this uncertainly relates to the number of compounds that will be required or their locations.

4.3.2. The DCO (section 23, page 60) sets out maximum sizes for the landfall construction compound and the HDD compounds, but does not secure the maximum size of the temporary construction compounds, although Chapter 4 Proposed Development (APP-045,Table 4-22, page 71) sets out that the approximate size is 3.91ha and the Outline Construction Code of Practice (APP- 224, section 4.3.5, page 24) sets out that the compound will include facilities for welfare, offices, parking, and plant, materials and waste storage.

4.3.3. There is a lack of information provided about the temporary compound sites, in terms of use, activities, heights of structures etc. which may give rise to the effects currently identified in the ES being understated or missing and cannot be appropriately considered to inform appropriate mitigation strategy or allow comprehensive consideration of the proposals by stakeholders.

4.4. Commitments Register (APP-254)

4.4.1. The First Statutory Consultation exercise (APP-027 - 030) included comment from multiple stakeholders setting out that '*The Applicant should endeavour to refine the Rochdale Envelope and provide as much certainty as possible by the DCO application stage to minimise the risk of unforeseen or location specific effects. The parameters associated with the optionality of smaller and larger WTGs vary significantly. These should be accounted for within the ES.*'

4.4.2. The Applicant's response set out in the First Statutory Consultation exercise (RED, 2021) included the statement that '*Where optionality is present, a maximum design scenario is implemented to inform the technical assessments*'.

4.4.3. Despite this the Commitments Register has multiple instances of qualification and use of phrases such as *'where practical', 'as far as reasonably practical', 'as far as reasonably possible'* and other similar phrases, that do not allow for a maximum design scenario to be established.

4.4.4. The considerable areas of uncertainty imply that new or materially different environmental effects may be missing from the ES. This in turn does not allow for appropriate mitigation strategies to be developed or allow comprehensive consideration of the proposals by stakeholders.

4.4.5. Key concerns regarding uncertainties relate to:

- C-1: Burying of the onshore cable
- C-5: HDD trenchless crossings
- C-9: Joint bay locations
- C-37: WTG size
- C-115: Hedgerow notching

4.4.6. It should also be noted that, whilst WTG rotor size is included, there is no reference in the Commitments relating to the number of WTGs.

4.4.7. A full list of concerns in relation to the Commitments Register is set out in Section 13.

5. SEASCAPE, LANDSCAPE AND VISUAL: METHODLOGY

Seascape, Landscape and Visual Impact Assessment Methodology (APP-158)

5.1. Baseline and Cumulative effects

5.1.1. The Executive Summary of the SLVIA (APP-056, page 6) sets out that '*The existing Rampion 1 offshore wind farm forms a notable visible element in the existing seascape and is part of the baseline for seascape, landscape and visual effects assessments.*'

5.1.2. The South Downs National Park Partnership Management Plan (PMP), which sets out the Statutory Purposes of the SDNP and the Special Qualities that underpin these, was adopted by the National Park Authority in 2013.

5.1.3. The SDNPA suggest it is of key importance to note that the Rampion 1 windfarm was not constructed when the SDNP Special Qualities were set out, and suggest that Rampion 1 has already provided a significant level of harm to the Special Qualities, which is not taken into consideration in the assessment. Table 15-2 of the SLVIA (APP-056, page 15) sets out at that '*In its Scoping Opinion (The Planning Inspectorate, 2020) summarised in Table 15-6, the Planning Inspectorate agreed that cumulative seascape, landscape and visual effects of Rampion 2 with other offshore wind farm projects* ***(with the exception of Rampion 1)*** *can be scoped out of the SLVIA.*' **[SDNPA emphasis in bold].**

5.1.4. Despite this requirement also being also referenced in the SLVIA at Table 15-6 (see below) (APP-056), Rampion 1 is assessed as part of SLVIA baseline and is not considered in terms of cumulative effects.

4.12.4	**Cumulative seascape, landscape and visual effects of the offshore elements of the Proposed Development with other operational, consented and application stage offshore wind farm projects (with the exception of Rampion Wind Farm).** *The Inspectorate is content that there is unlikely to be a significant cumulative seascape, landscape and visual effects of the Proposed Development with other wind farm projects; with the exception of Rampion 1 and therefore agrees that this matter can be scoped out of the seascape, landscape and visual assessment.*	Cumulative seascape, landscape and visual effects of Rampion 2 with other wind farm projects have been scoped out. Rampion 1 is considered as part of the baseline conditions in **Section 15.6** and impact assessments in **Section 15.10**.

5.2. Type, location and range of viewpoints

5.2.1. At the Third Statutory Consultation Exercise the SDNPA advised micro-siting of viewpoints be undertaken in consultation with Stakeholders. The SDNPA accept that micro-siting of viewpoints was agreed for the some of the off-shore views. However, it should be noted that this was not undertaken in relation to the remaining off-shore views or the on-shore views and viewpoint locations have not been adjusted.

5.3. Quality of visualisations

5.3.1. The quality of some of the visualisations, where photos were taken in hazy weather conditions, make consideration of the effects difficult i.e. Viewpoint 17 Devils Dyke (APP-092, Figure 15.42e).

5.4. Offshore substations

5.4.1. The SLVIA (APP-056, page 275) states the maximum design scenario included 3 offshore substations of a substantial size. It is set out in the Commitments Register that *'The exact locations, design and visual appearance will be subject to a structural study and electrical design, which is expected to be completed post consent'.*

5.4.2. Review of the visualisations and associated wire frame images shows that the offshore substations are not included in all the visualisations and not in any of the wire frame images. Despite the terms of C-40, the SDNPA asserts that a likely indication of the substations could have been included to assist with the assessment of a worst-case scenario.

5.4.3. These is likely to lead to missing effects cannot be considered to inform appropriate mitigation strategy or allow comprehensive consideration of the proposals by stakeholders.

5.5. 15.3 Simple Seascape, Landscape and Visual Impact Assessment (APP-159)

5.5.1. SLVIA Section 15.6.15 (APP-056, page 177) states that '*The LCAs within these landscape character assessments that are scoped in to the SLVIA are identified in Table 15-8 and in the simple assessment in Appendix 15.3…as those that define the main coastal associated landscapes of the SLVIA study area that have potential to be significantly affected by the offshore elements of Rampion 2*'

5.5.2. Table 2-1 (APP-159, pages 7-17) sets out a simple assessment of likely visibility from the SDNP Landscape Character Areas, stating various details such as % of areas with ZTV visibility, amount of Rampion 2 visible (no. of WTGs visible) and the 'simple assessment'.

5.5.3. Section 1.1.2 (APP-159, page 3) sets out that '*low visibility would tend to be 1 to 13 WTGs and high visibility 53 to 65 WTGs*'. This gives a range of 13 WTGs in the low category, 40 in the medium category and 10 in the high category. This has the potential to distort the assessed proportions with a far greater chance of visibility falling into the medium range.

5.5.4. The assessment identified the LCTs to either have a '*Potential for significant effects that require detailed assessment'* or *'No potential for significant effects – scoped out of detailed assessment.'*

5.5.5. It is of concern that some LCAs have been scoped out of the full assessment despite having a high percentage of area with ZTV visibility and a range of '*amount of Rampion 2 visible'* that includes high.

5.5.6. The implication is that the SLVIA does not assess the full range of landscape and visual receptors likely to be impacted. The lack of consideration of these imply that new or materially different environmental effects may be missing from the ES. This in turn does not allow for appropriate mitigation strategies to be developed or allow comprehensive consideration of the proposals by stakeholders.

5.6. Rampion 1 decommissioning

5.6.1. Despite being requested at an earlier stage, there is still no separate assessment of effects of Rampion 2 proposals after the decommissioning of Rampion 1.

6. SEASCAPE, LANDSCAPE AND VISUAL: IMPACTS

6.1. Rampion 2 Design Principles

6.1.1. The SLVIA (APP-056, Table 15-26, page 281-285) includes embedded environmental measures adopted to reduce the potential for impacts on seascape, landscape and visual.

6.1.2. These include C-61 that states that *'Due regard will be given to design principles held in Rampion 1 Design Plan and design principles to be developed for Rampion 2, with consideration of the seascape, landscape and visual impacts on the South Downs National Park and Sussex Heritage Coast.'*

6.1.3. The SLVIA also sets out the Rampion 2 design principles (AP-056, Section 15.7.24, page 288-289) and states that the aim of these is to reduce *'the magnitude and geographic extent of seascape, landscape and visual effects of the Proposed Development and minimising harm to the special qualities of nationally designated landscapes, particularly the SDNP and the associated Sussex Heritage Coast.'*

6.1.4. The SDNPA are of the opinion that these principles are key to addressing the potential effects of Rampion 2 on the SDNP and have reviewed them accordingly.

6.2. SDNPA PEIR REVIEW 2021

6.2.1. The SDNPA set out recommendations for five design principles in their August 2021 PEIR Review response to advise on scheme improvements.

- Development should only occur within the Extension Area west of Rampion 1.
- Turbines should not exceed 225m to blade tip in height.
- Clear separation between Rampion 1 and 2 to minimise the horizontal extent.
- Turbine layout is designed in coherent blocks.
- Full north to south extent of the extension area should be utilised to maximise the size of east/west gaps between the arrays.

6.2.2. These were based recommendation in a report commissioned by the SDNPA from White Consultants in January 2021 (Appendix C of SDNPA Written Representation).

6.2.3. This report in turn drew on the findings in the Offshore Energy Strategic Environmental Assessment (OESEA): Review and update of Seascape and Visual Buffer study for Offshore Wind farms commissioned by the Department for Business, Energy and Industrial Strategy (BEIS as it was then), undertaken in 2020 (APP-056). In particular, this report advised that the combination of National Park and Heritage Coast is particularly sensitive and needs to be given great weight in the planning balance.

6.3. SLVIA: Design Principles

6.3.1. The SLVIA (APP-056, Section 15.7.8 Page 286) sets out the four design principles:

- '**Field of view'** – reducing the field of view or 'horizontal extent/lateral spread' of Rampion 2 and the visually combined lateral spread of Rampion 1 and Rampion 2.
- '**Proximity**' - increasing the distance of Rampion 2 from most sensitive areas of coastline to reduce the apparent height of WTGs and increase sense of remoteness (with consequential benefits to other design principles).
- '**Wind farm separation zones'** - achieving a separation between Rampion 1 and Rampion 2 arrays, with a clear distinction and clear lines of sight between arrays.
- '**Separation foreground'** - avoiding juxtaposition of larger Rampion 2 WTGs in front of smaller Rampion 1

WTGs, to balance arrays and apparent turbine size, insofar as possible.

6.3.2. The SLVIA (APP-056, Section 15.7.25 Page 286) sets out that '*RED have explored the potential impacts of the array area boundary in respect of these principles and arrived at a project design that responds to these combined principles. The design principles were translated into the array area boundary by exploring the relationship of the spatial extent of WTGs within the array area and the resulting visual impacts with these principles, with the aim of minimising impacts and harm to special qualities of the SDNP, particularly its 'breathtaking views' and showing regard to the statutory purpose of the SDNP*'.

6.4. Commentary on Design Principles

6.4.1. None of the SDNPA recommended Design Principles are reflected in the Proposed Development submitted.

6.4.2. Whilst the stated Design Principles appear to be well reasoned and capable of having a positive effect, they only go so far and need more discussion and review to work towards improving the development proposals.

6.4.3. On this basis the SDNPA are still of the opinion that the significant adverse effects on the SDNP, its Statutory Purposes and its Special Qualities remain.

6.5. Detailed commentary on 'Field of view' principle:

6.5.1. Whilst the area of the turbines and therefore the field of view has been reduced from that indicated at Scoping and PEIR stages, the FOV is still extensive and gives rise to significant adverse seascape, landscape and visual impacts on the SDNP, its Purposes and Special Qualities.

6.5.2. The seascape setting of the SDNP is already adversely affected by the industrialised nature of the seascape provided by the Rampion 1 array. The addition of the Rampion 2 array will cumulatively extend this adverse impact with a considerable number of WTGs extending both westwards and southwards. This does not address the SDNPA recommendations that '*Development should only occur within the Extension Area west of Rampion 1'*.

6.5.3. The adverse effects on views are compounded by the layering effects of the proposed Rampion 2 array behind Rampion 1, clearly visible in views from the SDNP.

6.5.4. The SLVIA (APP-056, section 15.15.8 page 509) sets out that 'Significant seascape, landscape and visual effects of the offshore elements of Rampion 2 are contained within the areas of the SDNP, West Sussex, East Sussex and the City of Brighton & Hove.'

6.5.5. The proposals give rise to a substantial increase in the loss of open and unspoilt views of the seascape, significantly adversely affecting the Statutory Purpose 1 of the SDNP to '*conserve and enhance the natural beauty'* and SDNP Special Qualities '*breathtaking views*' and '*tranquil and unspoilt places*' and are therefore not in line with the requirement of NPS EN-1.

6.6. Detailed commentary on 'Proximity' principle:

6.6.1. Whilst is agreed that the proximity to the most sensitive areas of coastline to the east has been reduced in the development proposals from that set out the PEIR by increasing their distance from the coastline, proximity to other areas remains unchanged, and the substantial height of the proposed WTGs remains a significant effect, particularly in combination with the Rampion 1 array.

6.6.2. The maximum design scenario sets out that the WTGs will be substantially taller in height at 325m than the Rampion 1 turbines at 140m. This is 100m taller that the SDNPA recommendations, and more than double the height of the existing array.

6.6.3. In comparison to the Rampion 1 WTG heights, the proposed WTG height of 325m is too substantial for the reduced proximity to the most sensitive coastline to mitigate the significant effects of the WTGs. This is most clearly illustrated in the following figures (not an exhaustive list):

- Figure 15.26e Viewpoint 1 Beachy Head (APP-091)
- Figure 15.27e Viewpoint 2 Birling Gap (APP-091)
- Figure 15.28e Viewpoint 3 Seven Sisters Country Park (APP-091)
- Figure 15.29e Viewpoint 4 Seaford Head (APP-091)
- Figure 15.51e Viewpoint 28 Cuckmere Haven Beach (APP-093)

6.6.4. In comparison to the Rampion 1 WTG heights, the proposed WTG height of 325m is too substantial for the reduced proximity to the SDNP to mitigate the significant effects of the WTGs. This is most clearly illustrated in the following figures (not an exhaustive list):

- Figure 15.41e Viewpoint 16 Firle Beacon (APP-092)
- Figures 15.43 e and 15.43f Viewpoint 18 Cissbury Ring (APP-093)
- Figure 15.46e Viewpoint 21 Bignor Hill (APP-093)
- Figure 15.50e Viewpoint 27 Hollingbury Golf Course / Hill Fort (APP-093)
- Figure 15.63e Viewpoint 50 The Trundle (APP-094)
- Figure 15.65e Viewpoint 52 Chanctonbury Ring (APP-094)

6.6.5. Other viewpoints within the SDNP are included but without visualisations to assist consideration by stakeholders. Review of these relies on wire frames and in indicative line showing the extent of the Rampion 2 proposed development in comparison to Rampion 1. This is most clearly illustrated in the following figures (not an exhaustive list):

- Figure 15.45b Viewpoint 20 Springhead Hill (APP-093)
- Figure 15.53b Viewpoint 30 Halnaker Windmill North of Chichester [incorrectly described as east of Chichester] (APP-093)

6.6.6. Section 15.7.37 (APP-056, page 291) states that 'The increase in distance offshore and reduction in apparent scale that has been achieved by the revised spatial extent of the array area is evident in the comparative wirelines presented in Figures 15.93 to 15.109 (APP-095). The scale of the Rampion 2 WTGs will appear smaller relative to the scale of the receiving seascape compared with the apparent scale of the PEIR MDS'.

6.6.7. Whilst the SDNPA accept that reductions have been achieved, there are still significant seascape, landscape and visual effects.

6.6.8. The contrast in size with the Rampion 1 WTGs, combined with the close proximity and visual layering of the two arrays leads to visual discord and incoherence, gives rise to significant adverse effects on the Statutory Purpose 1 of the SDNP to '*conserve and enhance the natural beauty'* and SDNP Special Qualities '*breathtaking views*' and '*tranquil and unspoilt places*' and are therefore not in line with the requirement of NPS EN-1.

6.6.9. The close proximity to the coast gives rise to significant adverse effects on the Statutory Purpose 1 of the SDNP to '*conserve and enhance the natural beauty'* and SDNP Special Qualities '*breathtaking views*' and '*tranquil and unspoilt places*' and are therefore not in line with the requirement of NPS EN-1.

6.7. <u>Detailed commentary on 'Wind farm separation zones' principle:</u>

6.7.1. Whilst separation zones are shown between Rampion 1 and the proposed Rampion 2 WTG locations, the separations are only apparent in a small proportion of views; of 69 viewpoints, the separations are visible in 15.

6.7.2. Looking westwards from the heritage coast the north-south separation is clear in Viewpoints 1, 2 (APP-091) and 28 (APP-093) from the heritage coast, with visible separation in Viewpoint 3 (APP-091) present but less pronounced than with the other views.

6.7.3. Looking south from the elevated area of the SDNP the east-west separation is visible in Viewpoints 17 (APP-092), 18, 19 (APP-093), 52, 53, 54, 55 (APP-094) from elevated areas of the SDNP.

6.7.4. It should be noted that:

- Viewpoint 18 (APP-093): both the visualisations and the wireframe images are split across two pages without a clear overlap, so the full extent of the separation is unclear.
- Viewpoint 52 (APP-094): only the wider wireframe image shows the extent of the separation, with the visualisations and corresponding wireframe images again split across two pages.
- Viewpoints 53, 54 and 55 (APP-094): Review of these viewpoints relies on wire frames and in indicative line showing the extent of the proposed Rampion 2 development in comparison to Rampion 1; no

visualisations are provided to assist consideration by stakeholders.

6.7.5. The east-west separation is also clear in Viewpoints 9, 10 (APP-092), E, F (APP-095) from the coastline of West Sussex.

6.7.6. However, it should be also noted that there are no views that show a clear separation of the two wind farms:

- In views where the separation lies south of Rampion 1, the western WTGs of Rampion 2 are visible behind Rampion 1.
- In views where the separation lies west of Rampion 1, the eastern WTGs of Rampion 2 are visible behind Rampion 1.

6.7.7. The lack of separation and overlap of the Rampion 1 and proposed Rampion 2 arrays gives rise to visual incoherence that has significant adverse effects on the Statutory Purpose 1 of the SDNP to '*conserve and enhance the natural beauty'* and SDNP Special Qualities '*breathtaking views*' and '*tranquil and unspoilt places*' and are therefore not in line with the requirement of NPS EN-1.

6.8. Detailed commentary on 'Separation foreground' principle

6.8.1. This principle is welcomed, but there are still adverse effects due to the substantial contrast between the size of the Rampion 2 and Rampion 1 WTGs and the close proximity of the two arrays.

6.8.2. The SLVIA (APP-056, Section 15.7.51, page 300) states that '*In views from central areas of SDNP, such as Viewpoints 17, 18, 19, 52, 53, 54 and 55 the southern Rampion 2 array will be viewed behind Rampion 1, taking advantage of the greater distance offshore and the effects of perspective to reduce the apparent scale differences between Rampion 1 and Rampion 2 WTGs. Rampion 2 WTGs sited behind Rampion 1 have less scale difference than if they were located to the fore of Rampion 1*.'

6.8.3. The effects of perspective may be found to reduce adverse effects where there is less contrast between sizes of the WTGs, however the substantial size difference between the Rampion 1 and 2 WTGs and close proximity of the two arrays give little benefit from perspective effects.

6.8.4. This leads to visual discord and incoherence, gives rise to significant adverse effects on the Statutory Purpose 1 of the SDNP to '*conserve and enhance the natural beauty'* and SDNP Special Qualities '*breathtaking views*' and '*tranquil and unspoilt places*' and are therefore not in line with the requirement of NPS EN-1.

6.9. Size of turbines

6.9.1. The Commitments Register C-37 sets out that the '*maximum blade tip height will be 325m from lowest astronomical tide (LAT) and the maximum rotor diameter will be 295m*.' In comparison the Rampion 1 turbines are substantially smaller, with the tip of the turbine blade reaching 140m above the lowest astronomical tide and the rotor diameter at 112m. The maximum sizes are substantially greater that the Rampion 1 turbines.

6.9.2. Where the proposed turbines are seen in conjunction with the Rampion 1 turbines, the difference in size will be clearly visible, as demonstrated by the visualisations in both Chapter 18 the SLVIA and the layering of Rampion 2 behind Rampion 1 in views gives rise to considerable visual incoherence about distances and heights in views. The juxtaposition of Rampion 1 and proposals will make the bigger Rampion 2 turbines appear to be closer to the viewer.

6.9.3. Should a smaller WTG be used, the SDNP would welcome this, but still consider that this will also result in significant adverse seascape, landscape and visual effects.

7. LANDSCAPE AND VISUAL: METHODOLOGY

Landscape and Visual Assessment Methodology (APP-167)

7.1. Consideration of all adverse effects

7.1.1. NPPF Para 176 sets out that '*Great weight should be given to conserving and enhancing landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty which have the highest status of protection in relation to these issues. The conservation and enhancement of wildlife and cultural heritage are also important considerations in these areas, and should be given great weight in National Parks 58 Where significant development of agricultural land is demonstrated to be necessary, areas of poorer quality land should be preferred to those of a higher quality. The scale and extent of development within all these designated areas should be limited, while development within their setting should be sensitively located and designed to* ***avoid or minimise adverse impacts*** *on the designated areas.*' [**SDNPA emphasis in bold**]

7.1.2. SDNP Local Plan 2019 Strategic Policy SD4: Landscape Character sets out that '*1. Development proposals will only be permitted where they conserve and enhance landscape character by demonstrating that: a) They are informed by landscape character, reflecting the context and type of landscape in which the development is located; b) The design, layout and scale of proposals conserve and enhance existing landscape and seascape character features which contribute to the distinctive character, pattern and evolution of the landscape; c) They will safeguard the experiential and amenity qualities of the landscape*'.

7.1.3. The implications of these national and regional policy are that any adverse effects should be avoided, not simply significant effects. The SDNPA understand that a project such as Rampion 2 will inevitably have adverse effects and that the planning balance has to be considered.

7.2. Baseline

7.2.1. The SDNPA suggest it is of key importance to note that the Rampion 1 windfarm was not constructed when the SDNP Special Qualities were set out, and suggest that Rampion 1 has already provided a significant level of harm to the Special Qualities, which is not taken into consideration in the assessment.

7.3. Consideration of Whole Development effects:

7.3.1. The methodology (APP-167, Section 1.2.5, page 5) sets out that '*The assessment has also considered the whole Proposed Development or combined effects of the offshore and onshore elements of the Proposed Development, as well as the cumulative effects likely to result from the Proposed Development and other similar committed developments*'.

7.3.2. The methodology (APP-167, Section 1.2.8, page 6) sets out that '*The LVIA also refers to potential interrelated effects likely to result from any areas where the construction, operation and maintenance, and decommissioning of the offshore and onshore elements combine, or inter-relate to affect receptors within the LVIA Study Area. An example includes effects on views where both offshore and onshore elements are visible, potentially resulting in whole Proposed Development landscape and visual effects as a result of the construction, operation and decommissioning of the onshore and offshore elements. In those instances, the LVIA provides whole Proposed Development assessment focusing on the onshore elements that will be referenced for consistency in the SLVIA. The SLVIA also provides Whole Proposed Development assessment focusing on the offshore elements*.'

7.3.3. This is also mentioned in the SLVIA at section 15.8.8 (APP-056).

7.3.4. The SLVIA (APP-056, Section 15.6.27, page 179) states that '*The ZTV in Figure 15.22, Volume 3, of the ES (Document Reference: 6.3.15) shows areas where Rampion 2 and the existing Rampion 1 wind farm will be visible in combination (green areas on ZTV); and where they will be visible alone (i.e. without the other). Rampion 2 will often be viewed in combination with the operational Rampion Offshore Wind Farm (green areas), in particular from the main areas of higher theoretical visibility (i.e., from the immediate coastal edges and hinterland of Sussex Bay between Selsey Bill and Beachy Head; the coastal plateau; the white cliffs of the Sussex Heritage Coast and slopes of the South Downs). In views from these areas, Rampion 2 will result in visual effects arising from the appearance of Rampion 2 when viewed in-combination with Rampion 1. The apparent height of the larger Rampion 2 turbines (up to 325m) relative to the smaller operational turbines (140m) is likely to be central to the potential for cumulative visual effects arising from these areas.*'

7.3.5. Given the substantial geographic extent illustrated on Figure 15.22 (APP-090) where Rampion 2 has theoretical visibility from in combination with Rampion 1, the SDNPA considers that the use of the Study Area alone in considering the Whole Proposed Development landscape and visual effects is inadequate. The SDNPA understand the need for a proportionate approach, however suggest that the LVIA study area is limited to such a narrow area around the DCO limit that it is likely to fail to assess the full range of landscape and visual receptors likely to be significantly impacted, which will be wide-ranging as indicated by Zones of Theoretical Visibility (ZTVs) in both the SLVIA (APP-090 Figures 15.18- 15.24) and the LVIA (APP-098 Figures 18.4a-18.4d) and have the potential for increased significant and unacceptable effects on the SDNP with its open downland, varied topography and long views. This lack of consideration implies that new or materially different environmental effects may be missing from the ES. This in turn does not allow for appropriate mitigation strategies to be developed or allow comprehensive consideration of the proposals by stakeholders.

7.4. Landscape effects of the Whole Proposed Development

7.4.1. It should be noted that the effects of the Whole Proposed Development can be both landscape and visual.

7.4.2. The Landscape Assessment (APP-169) does not consider that Whole Proposed Development will give rise to any landscape effects and states in the SDNP LCA tables (Tables 2-9 to 2-13, pages 49-76) that '*The offshore elements of the Proposed Development including the wind turbines and offshore substations will be limited to visual effects as reported in Chapter 15: Seascape, landscape and visual impact assessment, Volume 2 of the ES (Document Reference: 6.2.15).*'

7.4.3. This is a misinterpretation of the SLVIA which does indeed set out effects on landscape character and the SDNP Special Qualities. The landscape effects are summarised (APP-056, Table 15-29 (pages 343-361) showing there are significant effects on LCA A1 Ouse to Eastbourne Open Downs, LCA A2 Adur to Ouse Open Downs, LCA A3 Arun to Adur Open Downs, LCA S1 Seaford to Beachy Head Shoreline and LCA S2 Brighton to Rottingdean. It should be noted that there are other effects states as not significant, however these are still adverse effects on the SDNP.

7.4.4. The Landscape Institute's Technical Guidance Note 02-21 forms part of industry guidance for professionals (Appendix A1 of this Review). Whilst it states it does not apply to national landscape designations, it provides a far more in-depth range of factors for consideration in respect of landscape value, which the SDNPA fee is helpful for explaining the range of perceptual effects that should be also considered when providing assessments that relate to national landscape designations, such as the SDNP.

7.4.5. There is no consideration of scenic perceptual landscape effects, set out in the Landscape Institute's Technical Guidance Note 02-21 as '***Landscape that appeals to the senses, primarily the visual sense****: Distinctive features such as dramatic or striking landform or harmonious combinations of land cover; strong aesthetic qualities such as scale, form, colour, and texture; presence of natural lines in the landscape; visual diversity or contrasts which contribute to appreciation; memorable/ distinctive views and landmarks, or landscape which contributes to such.'*

7.4.6. There is no consideration of perceptual landscape effects (wildness and tranquillity) set out in the Landscape Institute's Technical Guidance Note 02-21 as *'**Landscape with a strong perceptual value notably wildness, tranquillity and/or dark skies:** High levels of tranquillity or perceptions of tranquillity, including perceived links to nature, presence of wildlife / birdsong and relative peace and quiet; presence of wild land and perceptions of relative wildness (resulting from a high degree of perceived naturalness, rugged or otherwise challenging terrain, remoteness from public mechanised access and lack of modern artefacts); sense of particular remoteness, seclusion or openness; dark skies'*.

7.4.7. There is no consideration of the effects of the proposed development on historic landscape character. set out in the Landscape Institute's Technical Guidance Note 02-21 as *'Landscape with clear evidence of archaeological, historical or cultural interest which contribute positively to the landscape. Presence of historic landmark structures or designed landscape elements (e.g., follies, monuments, avenues, tree roundels) Presence of historic parks and gardens, and designed landscapes Landscape which contributes to the significance of heritage assets, for example forming the setting of heritage assets (especially if identified in specialist studies) Landscape which offers a dimension of time depth. This includes natural time depth, e.g. presence of features such as glaciers and peat bogs and cultural time depth e.g. presence of relic farmsteads, ruins, historic field patterns, historic rights of way (e.g. drove roads, salt ways, tracks associated with past industrial activity)'*

7.4.8. The SDNPA considers this to be a substantial omission in the assessment. These are perceptual qualities that underpin the SDNP's Special Qualities that support the SDNP Statutory Purposes. The lack of consideration of these Whole Proposed Development landscape effects implies that new or materially different environmental effects may be missing from the ES. This in turn does not allow for appropriate mitigation strategies to be developed or allow comprehensive consideration of the proposals by stakeholders.

7.5. Visual effects of the Whole Proposed Development

7.5.1. In respect of the SDNP, visual effects would be experienced in areas where both onshore cable route and offshore WTGs can be seen from the same position.

7.5.2. Many of the viewpoint figures in the LVIA include views of the sea, however whilst they show indicative wireframe locations of onshore elements, the location of offshore elements is not shown. This does not give the opportunity to consider the visual effects of the Whole Proposed development.

7.5.3. In addition, a side-by-side comparison of the onshore and off-shore elements from viewpoints is not possible as different viewpoint locations have been used for the SLVIA and the LVIA.

Defining the Study Area:

7.5.4. The SLVIA (APP-056, Sections 15.8.15 and 15.8.16, page 307) states '*The geographic extent over which the seascape/landscape and visual effects will be experienced is also assessed, which is distinct from the size or scale of effect. This evaluation is not combined in the assessment of the level of magnitude, but instead expresses the extent of the receptor that will experience a particular magnitude of change and therefore the geographical extents of the significant and not significant effects'* and *'The extent of the effects varies depending on the specific nature of Rampion 2 and is principally assessed through analysis of the extent of perceived changes through visibility of the Rampion 2 Offshore Wind Farm.*'

7.5.5. The SDNPA would expect the SLVIA and the LVIA to have a jointly considered approach to their Study Areas, however this does not appear to be the case.

7.5.6. The SDNPA accepts that there needs to be a proportional approach to the LVIA, however the LVIA methodology (APP-167, Section 1.2.13, page 7) states out that '*The Study Area for the LVIA is illustrated in Figure 18.1, Volume 3 (Doc. Ref. 6.3.18) and extends to a 2km buffer beyond the proposed DCO Order Limits.*' The LVIA methodology (APP-167, Section 1.2.14, page 7) sets out that a proportional approach has been taken and that the *'study area must be large enough to capture all likely significant effects*'.

7.5.7. GLVIA para 5.2 (page 70) sets out that '*the study area should include the site itself and the **full extent** of the wider landscape around it which the proposed development may influence in a significant manner*' [**SDNPA emphasis in bold]**

7.5.8. The SDNP are concerned that by limiting the LVIA study zone to such an extent prior to assessment is unlikely to '*capture all likely significant effects*'.

7.5.9. The implication of using a 2km buffer for the LVIA is clearly seen when considering the ZTV produced for the SLVIA (SLVIA (APP-090 Figures 15.18- 15.24) where the visibility of Rampion 2 extends across a substantial area of the south coast and the ZTV produced for the LVIA (APP-098 Figures 18.4a-18.4d)) which show that the visibility of the onshore cable corridor extends across a substantial area of the SDNP.

7.5.10. Despite the wide geographical extents shown on the ZTVs, Figure 18.1 (APP-098) which shows a very limited the buffer zone, at 2km, set from the centre of the proposed DCO Order Limits, which appears to form the basis for other figures going forwards.

7.5.11. The limitations of such a restricted Study Area imply that new or materially different environmental effects may be missing from the ES. This in turn does not allow for appropriate mitigation strategies to be developed or allow comprehensive consideration of the proposals by stakeholders.

7.5.12. The DCO Order Limits include areas around all access routes, as well as the cable route, however the indicated buffer zone does not included the full extent required, , for example there are access roads close to Findon that lie outside the 2km buffer zone.

7.5.13. The LVIA methodology (APP-167, Section 1.2.16, page 8) states that '*The LVIA Study Area therefore defines a limit, based on…knowledge of similar projects including East Anglia TWO and THREE, Rampion 1, Norfolk Vanguard and Thanet Extension offshore wind farms.*'

7.5.14. With the exception of Rampion 1, the SDNPA do not consider these other projects to be similar, given the low-lying nature of the topography of these areas compared to the distinctly varied topography and coastline of the SDNP.

7.5.15. The SDNPA understand the need for a proportionate approach, however suggest that the LVIA study area is limited to such a narrow area around the DCO limit that it is likely to fail to assess the full range of landscape and visual receptors likely to be significantly impacted, which will be wide-ranging as indicated by Zones of Theoretical Visibility (ZTVs) in both the SLVIA (APP-090 Figures 15.18- 15.24) and the LVIA (APP-098 Figures 18.4a-18.4d) and have the potential for increased significant and unacceptable effects on the SDNP with its open downland, varied topography and long views

7.6. Definition of timescales

7.6.1. Section 5.51 of GLVIA sets commentary on '*Duration and reversibility of landscape effects*', and states '*duration can usually be judged on a scale such as short term, medium term or long term, where, for example., short term might be zero to five years, medium term five to ten years and long term ten to twenty five years. There is no fixed rule on these definitions and so in each case it must be made clear how the categories are defined and the reasons for this.*'

7.6.2. Chapter 5 Approach to the EIA (APP-078, Section 5.8.13, page 52) sets out that '*The temporal scope refers to the time periods over which impacts and effects may be experienced by sensitive receptors which may be permanent, temporary, long term or short term. This has been established for each aspect in discussion with relevant consultees.*'

7.6.3. The LVIA Methodology (APP-167, Section 1.5.17, page 22) states '*The duration or time period over which a landscape effect is effect is likely to occur is judged on a scale of 'short', 'medium' or 'long' term and is assessed for the onshore elements of the Proposed Development as follows: long-term – more than 10 years; medium-term – 6 to 10 years; and short-term – 1 to 5 years.*'

7.6.4. The SDNPA have not agreed on the temporal scope to date and there does not appear to be any explanation of the reasoning behind the length of the timescales used.

7.6.5. It is unclear if the short-term period of time allows for the considerable survey and investigation work still required to establish the feasibility of the proposals, particularly the HDD.

7.6.6. The SDNPA consider that the considerable timescale of 5 years is inappropriate to be a short term for a project with such a finite timescale for the construction phase. The SDNPA suggest that the terminology 'short-term' should apply to construction works only on a rolling basis as the construction works are completed, with all establishment phases falling under the terminology 'long-term'. With the inclusion of establishment phases in the short-term assessment,this leads to an understatement of the assessed landscape and visual effects.

7.6.7. Chapter 4 Proposed Development (APP-045, Graphic 4-24, page 83), sets out an indicative construction programme.

7.6.8. The programme shows the construction period for the HDD onshore cable route and commissioning is a period of at least 4 years. The construction compounds are deemed to be 'temporary' but the phasing of the works appears to set out that these would be in place for the duration of the HDD and onshore cable construction work which is a period of 3.5-4 years. If they remain in place during the commissioning works, this extends the duration further.

7.6.9. The SDNPA would suggest that considerable lengths of the cable route, construction haul road and access routes are likely to remain in place throughout the construction period to provide access and for cable pulling/jointing activities, which further extend the duration of the landscape and visual effects.

7.6.10. The SDNPA would suggest that, given previous experience of the construction of Rampion 1, with its shorter length of cable and construction period of 4 years, the indicative programme would appear to be underestimated.

7.7. Range of landscape effects

7.7.1. The LVIA Methodology (APP-167, Section 1.3.3, page 9) sets out that the potential effects include '*effects on landscape character and key characteristics, including perceptual characteristics and qualities'*.

7.7.2. There appears to be no consideration of effects on individual landscape elements in the LVIA. As a result of this combined approach, it is inevitable that some aspects are downplayed, in particular perceptual and indirect effects that, if considered in isolation, would be significant. This is particularly important to be considered in respect of landscape elements, such as tranquillity and openness, which contribute to the SDNP Special Qualities.

7.7.3. The LVIA gives a 'Summary landscape assessment: Part 2: SDNP' (APP-059, Sections 18.11.32 to 18.11.41, page 224-226) which sets out a summary of the effects, however these are focussed purely on effects different types of vegetation, with no consideration of direct or indirect effects on other landscape elements, such perceptual factors, condition, distinctiveness, historic landscape character, lighting and tranquillity or dark skies which all are particularly important in relation to the SDNP and contribute to its Special Qualities.

7.7.4. Industry guidance document 'GLVIA 3' Box 5.1 (page 84) sets out a '*Range of factors that can help in the identification of valued landscapes which include 'Perceptual aspects: a landscape may be valued for its perceptual qualities, notably wildness and / or tranquillity'*.

7.7.5. The Landscape Institute's Technical Guidance Note 02-21 'Assessing landscape value outside national designations' sets out a range of factors that can be considered when identifying landscape value. It states at 2.4.4 '*As with Box 5.1 in GLVIA3, Table 1 is not intended to be an exhaustive list of factors to be considered when determining the value of landscapes, but to provide a range of factors and indicators that could be considered. This TGN is intended to be complementary to GLIVA3*'.

7.7.6. Whilst it is acknowledged that the guidance is for assessment 'outside national designations', the table (page 10-11) provides a useful guide to the different perceptual qualities (reproduced below):

Factor	***Definition*** *(and examples where more clarity is useful)*
Perceptual (scenic)	**Landscape that appeals to the senses, primarily the visual sense**: Distinctive features such as dramatic or striking landform or harmonious combinations of land cover; strong aesthetic qualities such as scale, form, colour, and texture; presence of natural lines in the landscape; visual diversity or contrasts which contribute to appreciation; memorable/ distinctive views and landmarks, or landscape which contributes to such.
Perceptual (wildness and tranquillity)	**Landscape with a strong perceptual value notably wildness, tranquillity and/or dark skies:** High levels of tranquillity or perceptions of tranquillity, including perceived links to nature, presence of wildlife / birdsong and relative peace and quiet; presence of wild land and perceptions of relative wildness (resulting from a high degree of perceived naturalness, rugged or otherwise challenging terrain, remoteness from public mechanised access and lack of modern artefacts); sense of particular remoteness, seclusion or openness; dark skies

7.8. Lack of assessment of effects of ash dieback.

7.8.1. The SDNPA is concerned that the potential for increased landscape and visual effects as a result of ash dieback, a serious and increasing issue in the SDNP, is not considered in the LVIA.

7.9. Type, location and range of viewpoints

7.9.1. At the Third Statutory Consultation Exercise the SDNPA advised micro-siting of viewpoints be undertaken in consultation with Stakeholders. It should be noted that this has not taken place and viewpoint locations have not been adjusted.

7.9.2. The LVIA Methodology (APP-167, Section 1.2.13, page 7) states that states the Study Area is '*supported by a number of elevated, long-distance panoramic viewpoint locations within the wider landscape, beyond 2km, as agreed with consultees, in particular the South Downs National Park to demonstrate any visibility at these distances*'. The SDNPA is not aware of any agreement on these and is of the opinion that there are insufficient views from the Downs, in particular the South Downs Way, and those chosen downplay the wide visibility of the proposed development.

7.9.3. The SDNPA is concerned that sequential testing of viewpoints along the route of the South Downs Way has not been adequately undertaken. The limited number of views illustrated (see APP-103, Figures 18.76 a-c) do not adequately reflect the nature of the continuous views afforded to a visual receptor as they travel along the South Downs Way.

7.9.4. The SDNPA is concerned that there is a lack of range of different views of the Washington Construction Compound from the surrounding area particularly from high ground to the south; only one viewpoint includes a view towards the compound (APP-102, Figure 18.49a).

7.9.5. The SDNPA is concerned that there is a lack of consideration of visual effects of visibility splays.

7.10. Mapping and presentation

7.10.1. Mapping used in LVIA follows the route of cable, however there is insufficient overlap of the sheets leading to the omission of potential areas of cable corridor visibility. For example, Amberley Mount / Rackham Hill omitted in inadequate overlap between Figures 18.4a and 18.4b (APP-098), with potential lack of consideration of effects on the South Downs Way the nationally important trail.

7.11. Residential Visual Amenity Assessment

7.11.1. The RVAA (APP-171, Section 1.4.1 page 5) sets out that a '*Study Area of 1km distance from the Proposed Development has been selected for the RVAA (Figure 18.1, Volume 3 (Document Reference: 6.3.18.1). Only those residential properties within the 1km Study Area, which can be identified on the Ordnance Survey (OS) 1:25,000 scale map, and are overlapped by the Zone of Theoretical Visibility (ZTV) are included in the assessment.*'

7.11.2. The SDNPA suggest that the reasoning behind this is not explained and that this approach leads to consideration of only these residential properties that are closest and most impacted.

7.11.3. The ZTVs for the LVIA (APP-098, Figures 18.4a- 18.4d) show a far wider range of influence for the onshore cable corridor route than RVAA's 1km distance and includes a large number of residential properties. The baseline for the RVAA cannot, therefore, be considered as the worst-case scenario. The limitation of the Study Area of the RVAA gives considerable cause for concern that without considering the greater number of properties impacted this significantly understates the adverse effects.

7.11.4. It is also unclear why the study area is limited to 1km when the Study Area for the LVIA extends to 2km (which the SDNPA suggest is inadequate. The SDNPA consider this very brief Residential Visual Amenity Assessment to be inadequate.

Commented [VC1]: Photos to be added

8. LANDSCAPE AND VISUAL: IMPACTS

8.1. General Comments

8.1.1. The SDNP feel that as a result of a flawed methodology there are likely to substantially more significant adverse effects as a result of the onshore cable corridor route on landscape character and visual receptors that stated in the LVIA.

8.1.2. The LVIA (APP-059) consistently understates the effects on the SDNP Landscape Character Areas (LCA), due to the limited geographical extents of the study area, lack of consideration of a wide range of landscape elements including perceptual effects and the use of a combined approach to landscape elements that, had they been considered as individual elements, effects would be significant.

8.1.3. One of the implications of the limited 2km buffer area is demonstrated through the LVIA Zone of Theoretical Visibility (ZTV) (APP-098, Figures 18.4a- 18.4d) where visibility extends across a significant area – much greater than the 2km study area. In particular the nature of the open downland, where openness and expansive views are highly characteristic is one specific area where this limited study area is not appropriate.

8.1.4. Landscape elements such as tranquillity, historic landscape character, condition and dark skies, have not been appropriately considered. The summary of effects instead focusses on types of vegetation, which largely ignores perceptual qualities or draws on any historic character associated with these features or the wider landscape character. By either grouping, or omitting proper assessment of these features, there remains a high probability that effects have been underestimated or missed entirely.

8.2. Whole Proposed Development visual effects

8.2.1. With regards to Whole Proposed Development effects, the Visual Assessment (APP-170) sets out that there will be significant visual effects as a result of both the onshore and offshore elements of the Proposed Development at viewpoints A (outside the SDNP) (APP-168, page 38), H7d (APP-168, page 80), H7h (APP-168, page 84) and LD2 (APP-168, page 114).

8.2.2. However, the Visual Assessment (APP-170, section 1.4.33, page 114), it states that the '*Section 7 of the South Downs Way: Arun to Adur Downs, overlaps with the LVIA Study Area for the onshore cable corridor and the SLVIA reports a Significant (Moderate) effect on the southern views from the tops of the downs between the Adur and Arun Valleys passing Chanctonbury Ring, Chantry Hill and Amberley Mount*.'

8.2.3. The Visual Assessment goes on to state (APP-170, section 1.4.34, page 115), that '*the likelihood of significant visual effects occurring concurrently due to the visibility of the offshore elements of the Proposed Development (installation and commissioning of the offshore substation and wind turbines) and the construction of the onshore cable corridor will be limited to approximately 12 months due to the overlap of the indicative construction programme*'.

8.2.4. The lack of adequate sequential testing viewpoints along the top of the South Downs and the route of the South Downs Way gives rise to a substantial underestimate of the extent of adverse visual effects arising from the Whole Proposed Development in the LVIA, despite this being alluded to in the SLVIA. The SDNPA suggest that had an adequate assessment been undertaken then this was likely to identify a for a far wider range of significant effects.

8.3. Landscape and Visual Effects on the SDNP LCA I3

8.3.1. The SDNPA has substantial concerns over assessment of effects on the LCA I3 Arun to Adur Scarp Down (APP-169, Table 2-9, pages 67-69).

8.3.2. During construction, the magnitude of change for LCA I3 Arun to Adur Scarp Down is state to be '*negligible to zero'*, despite the proposed HDD construction compounds immediately abutting the LCA both above and below scarp. This give rise to a level of effect on landscape character of *'Minor and Not Significant'* and for landscape elements: '*N/A*'. The LVIA has not considered the nature of the LCA as open access land, the extent of perceptual and indirect effects and the stated assessed impacts. The resultant harm to the SDNP are considered by the SDNPA to be substantially understated.

8.3.3. The LVIA has also not considered the nature of the LCA as open access land and any resultant visual effects, which the SDNPA consider is a considerable omission and that the effects are likely to be significant.

8.4. Landscape and Visual Effects of the Construction Compounds

8.4.1. There is a lack of information provided regarding the use and appearance of the compounds.

8.4.2. There are insufficient views and wireframe images provided of the Washington Compound which has the potential to be visible in considerable sequential views as a visual receptor moves along the recreational routes on the Downs.

8.4.3. The construction compounds are stated as being 'temporary' (APP-045, Section 4.5.1, page 60) but it is clear that these would be in place for the duration of the construction work and not removed until the end of the construction activities; this is a period of over 3 years. The period is considered short-term.

8.4.4. The Washington Compound is stated as having a maximum area of 3.91ha (APP-045, Table 4-22, page 71).

8.4.5. Activity stated for the compounds (APP-045, Section 4.5.35, page 71) includes *'logistics; storage of materials and equipment, location of cement bound sand (CBS) batching plant, also includes welfare facilities and office space as appropriate'*

8.4.6. The compound lighting is described (APP-045, Section 4.5.48, page 74) as '*At temporary construction compounds and specific locations where night working is required or in poor light conditions during normal working hours, portable lighting units will be used where necessary to ensure safe working and / or site security.*'

8.4.7. The SDNPA has concerns that, given the lack of information and the long-term duration of their use, the landscape and visual impacts of these compounds are understated in the LVIA, given the close proximity to the SDNP, the considerable size of the compounds, the associated lighting, vehicle movement, structures within the compound and visibility from the downs, that the effects are substantially understated and are likely to be significant.

8.5. Effects of Lighting

8.5.1. The Landscape Assessment (APP-169, Section 3.3.20, page 122) states that '*There would be no effect on the South Downs International Dark Sky Reserve or 'dark skies' within the SDNP due to the implementation of embedded environmental measures within the Commitments Register (Document Reference: 7.22) (C-22, C-66, and C-200)*'.

8.5.2. Commitment C-22 sets out core working hours, which in winter months would extend into periods of darkness, requiring lighting to assist construction work.

8.5.3. Commitment C-66 is an overarching statement and provides no indication of detail regarding lighting.

8.5.4. Whilst Commitment C-200 sets out that '*construction lighting will be limited to directional task lighting'* the SDNPA would suggest that this would not be the case, based on a number of factors. Firstly, the core working hours set out in the Commitments Register include times extending into periods of darkness during winter months, requiring lighting to assist construction work. The areas where trenchless crossing techniques are proposed to be employed (including areas of intrinsic rural darkness) require lighting 24 hours a day when being undertaken. The experience the SDNPA have had in respect of Rampion 1 construction also suggests that work will be taking place during periods of darkness, requiring further lighting.

8.5.5. Lighting is therefore considered to be inevitably required and cannot be considered to be without adverse effects. These therefore need to be properly taken into consideration as a separate landscape effect.

8.5.6. The SDNPA suggest that any additional lighting can affect dark skies and have concerns that the adverse effects of lighting are not considered in the LVIA as a separate effect, which is a substantial omission in the ES in light of the SDNP's status as an International Dark Sky Reserve.

9. LANDSCAPE AND VISUAL: MITIGATION

9.1. Outline Landscape and Ecology Management Plan (APP-232):

9.1.1. The following points relate to the consideration of landscape and visual effects only and should be read in conjunction with other comments, particularly in relation to Ecology considerations.

9.1.2. The LEMP (APP-232, Section 1.2.5, page 6) sets out that '*The draft DCO requires stage specific LEMPs for areas of habitat creation and reinstatement along the onshore cable corridor, including associated areas such as temporary compounds.*'

9.1.3. The LEMP (APP-232, Sections 2.6.4 and 2.6.5, page 13) sets out that '*A programme of landscape works will be provided setting out the programme according to relevant planting seasons and maximising opportunities for advance planting prior to construction to allow trees to mature during the construction works and in advance of completion of the onshore substation.' and 'Some of the landscaping will be established prior to the beginning of construction (advance planting), with the remainder being delivered following the completion of the substation and the decommissioning of temporary construction compounds.*'

9.1.4. The DCO does not make allowance for advance planting, and there is no reference to this in the Commitments Register. The SDNPA would therefore like to understand how this is to be secured and implemented.

9.1.5. The LEMP (APP-232, Section 4.5.2, Page 23) sets out that hedgerow '*may be removed and reinstated with new plants or temporarily translocated to a pre-prepared planting trench and returned to its original position in the first available planting period.*' This is also referenced in the Commitments Register at C-115.

9.1.6. The SDNPA has significant concerns over likely success of proposed hedge 'notching'. The example of successful notching (APP-063, section 22.9.102, page 166) is not relevant to South Downs; the examples provided are from the Lake District and Norfolk Broads, both of which are much wetter landscapes than the application proposals. There has not been any proven testing in the vicinity of the proposed development in respect of the particular climatic conditions and dry, free-draining soils found in the SDNP undertaken to evidence that the proposals will allow for successful vegetation establishment.

9.1.7. The LEMP places significant reliance on the ability to water reinstated habitat (dense scrub and hedgerows) (APP-232, sections 4.3.3, page 22 and section 4.5.6 page 24) to assist establishment, however it is unclear how this work in practice over such a vast, and in places remote, area along the onshore cable corridor. The SDNPA would therefore like to understand how this is to be secured and implemented.

9.1.8. The LEMP (APP-232, Section 4.4.1, page 23) sets out that '*Where woodland is lost (approximately 0.4ha) the reinstatement will be in the form of scrub to prevent damage to the transmission cables. This scrub will provide visual diversity of landscape character and elements*'.

9.1.9. The SDNPA would suggest that in woodland areas where clearance could be a width of at least 20m to accommodate the 4 trenches (see APP-232, Graphic A-4, Page A6) this cannot be regarded as 'visual diversity of landscape character' and cannot be mitigated and therefore should be regarded as a significant adverse effect.

9.1.10. The LEMP (APP-232, Section 4.5.4, page 24) sets out that '*Landscape plans for hedgerow and treeline reinstatement **may** need to be produced in sensitive areas such as the SDNP and included within the stage specific LEMP.*' **[SDNP emphasis in bold]**

9.1.11. The SDNPA finds this statement to be unacceptable due to the use of the word 'may'. The planting plans are essential, not just for purposes of consultation and approval but also to enable accurate implementation and effective monitoring.

9.2. <u>Outline Soils management plan (APP-226):</u>

9.2.1. THE OSMP (APP-226, Section 1.2.5, page 7) states '*Most of the affected land is within the South Downs National Park where provisional Agricultural Land Classification (ALC) mapping shows mainly Grades 2 and 3, and the likelihood of best and most versatile land is assessed by Natural England (Natural England, 2017) to be moderate or high.*'

9.2.2. The Natural England website states that '*Agricultural Land Classification map London and the South East (ALC007)' forms 'part of a series at 1:250 000 scale derived from the Provisional 1" to one mile ALC maps and is intended for strategic uses. These maps are not sufficiently accurate for use in assessment of individual fields or sites and any enlargement could be misleading. The maps show Grades 1-5, but Grade 3 is not subdivided.*'

9.2.3. The 'Predictive BMV Landscape Assessment' explanatory note sets out that the mapping carries a proviso that '*the map is intended for strategic planning purposes only and is not suitable for use below scale 1:250 000 or for the definitive classification of any local area or site'*.

9.2.4. It will be important to provide a full assessment of the agricultural land classification for the area of the proposed DCO Order Limits to allow review prior to any construction work.

9.2.5. THE OSMP (APP-226, Section 1.2.6, page 7) states that the '*Soils Resource Plan (SRP) – which will be produced during pre-construction to detail the type and volume of soils to be stripped, haul routes and stockpile arrangements and be produced in conjunction with the MMP* [Materials Management Plan] *and will interact with the stage specific SMP* [Soils Management Plan].'

9.2.6. If there are still elements of the proposals to be developed, especially haul routes (which it was assumed were already covered by the DCO Order Limits area) this is likely to lead to missing effects cannot be considered to inform appropriate mitigation strategy or allow comprehensive consideration of the proposals by stakeholders.

9.2.7. THE OSMP (APP-226, Section 2.1.1, page 9)sets out that a '*soil resource survey was carried out in February 2022. It was based on observations at 100m intervals along the cable route corridor and including areas of permanent development (e.g., the onshore substation at Oakendene) within the proposed DCO Order Limits.*'

9.2.8. The Agricultural Quality report summary (APP-226, Appendix A, Page 5) states '*The survey work covers approximately 40% of the proposed DCO Order Limits. The remaining land could not be surveyed due to health and safety risks associated with an elevated (moderate or higher) risk of encountering UXO and land access restrictions*.'

9.2.9. The accompanying plans (APP-226, Appendix A, Map 1A to Map 1G) suggest that the percentage of the proposed DCO Order Limits covered by the survey work may be lower still as many of the auger observations do not lie within the DCO Order Limits.

9.2.10. There is a considerable area of the proposed DCO Order Limits that is missing between (APP-226, Appendix A) Maps 1B and 1C (survey observations), and Maps 2B and 2C (Agricultural land classification) most of which is the section of the DCO Order limits within the SDNP. This is due to the possible presence of UXO

9.2.11. The SDNP would expect that this missing information be fully provided in due course to allow review prior to any construction work.

10. LANDSCAPE AND VISUAL: ENHANCEMENTS

10.1. The SDNPA welcomes the approach to BNG, however will be keen to see further information about the delivery of habitat compensation and enhancement, including how it will be secured.

10.2. Where habitats are lost in the SDNP, the SDNPA expects that any biodiversity net gain provision, landscape enhancements and biodiversity enhancements to be provided within the SDNP.

11. RAMPION 1: LESSONS LEARNT

11.1. 'Lessons Learnt' were discussed at a workshop that included representatives from WSCC, SDNPA and Rampion Offshore Wind Ltd in 2019. Some of the points discussed (in italics) and commentary on these from the SDNPA in relation to the Rampion 2 proposals are as follows:

11.2. Project Scope:

11.2.1. '*Whilst it is recognised that there is a requirement for some flexibility in design, it is helpful to provide authorities with realistic project information e.g. clearer parameters for cable route, number of river crossings, constraints, construction methodologies*'

11.2.2. The Rampion 2 proposals still include a substantial amount of uncertainty and qualification that implies that new or materially different seascape, landscape and visual effects may be missing from the ES.

11.3. More focus on enhancements, not impacts

11.3.1. '*Place greater emphasis on enhancements without appearing to appease the community. Care should be taken to strike the right balance and work within the parameters of the Planning system to ensure that positives are emphasised.*'

11.3.2. The SDNPA feel that there is little indication of enhancement in the submission; opportunities for enhancement are missed, and C-7 sets out that the work area is to be 'reinstated to pre-existing conditions'.

11.4. Targeted enhancements, public visibility

11.4.1. '*Consider enhancements that target the community, rather than broad actions which may not have same impact e.g. target popular or visible areas for enhancement*'

11.4.2. The SDNPA feel that there is little indication of enhancement in the submission.

11.5. After care period

11.5.1. '*The "After Care" period of the project was changed from 5 years to 10 years.*'

11.5.2. The SDNP welcome the proposals for a 10 year aftercare period for the landscape maintenance and monitoring.

11.6. Other points outside Lessons Learnt Workshop

11.6.1. The SDNPA has concern over claims that Rampion 1 was successfully reinstated; this was not the case. In particular areas of the cable corridor across agricultural land remain visible to date and fencing is still in place (see Appendix B of Written Representation).

11.6.2. During the construction of Rampion 1 working hours were extended, giving rise to increased adverse effects from lighting. Commitment C-22 only sets out 'core hours' which implies the possibility for extension, which the SDNPA would suggest has the potential to again increase adverse effects of lighting, given the experience with Rampion 1.

11.6.3. Drainage issues and wet conditions meant working practices for Rampion 1 had to be altered to make areas workable, altering both habitats and landscape character. The potential issues that might arise with Rampion 2 are as yet undetermined and have the potential to again increase adverse effects.

11.6.4. During the construction of Rampion 1 there was alteration to topography that had adverse effects on landscape character, with some sunken lanes infilled and ridges levelled. There are not detailed plans to evidence that Rampion 2 will avoid these types of issues.

11.6.5. During the construction of Rampion 1 considerable lengths of the cable route, construction haul road and access routes remained in place throughout the construction period to provide access and for cable pulling/jointing activities, which further extended the duration of the landscape and visual effects. There is no evidence to suggest that Rampion 2 can be dealt with any differently.

11.6.6. The SDNPA would suggest that, given previous experience of the construction of Rampion 1, with its shorter length of cable and construction period of 4 years, the indicative programme would appear to be underestimated.

12. DOCUMENTS REVIEWED

- 3.1 Draft Development Consent Order
- 3.2 Explanatory Memorandum
- 5.8 Design and Access Statement
- 6.2.1 Non-technical summary
- 6.2.4 Chapter 4 The Proposed Development (incl. figures)
- 6.2.5 Chapter 5 Approach to the EIA
- 6.4.5.4 Appendix 5.4 Cumulative effects assessment shortlisted developments
- 6.2.15 Chapter 15 Seascape, landscape and visual impact assessment.
- 6.3.15 Chapter 15 Seascape, landscape and visual impact assessment – Figures (8 parts)
- 6.4.15.1 Appendix 15.1 Seascape, Landscape and Visual Impact Assessment consultation responses
- 6.4.15.2 Appendix 15.2 Seascape, Landscape and Visual Impact Assessment methodology
- 6.4.15.3 Appendix 15.3 Simple Seascape, Landscape and Visual Impact Assessment
- 6.4.15.4 Appendix 15.4 Viewpoint assessment
- 6.4.15.5 Appendix 15.5 Assessment of aviation and navigation night-time lighting
- 6.2.18 Chapter 18 Landscape and visual impact
- 6.3.18 Chapter 18 Landscape and visual impact assessment - Figures (6 parts)
- 6.4.18.1 Appendix 18.1 Landscape and visual impact assessment methodology
- 6.4.18.2 Appendix 18.2 Viewpoint Analysis
- 6.4.18.3 Appendix 18.3 Landscape Assessment
- 6.4.18.4 Appendix 18.4 Visual Assessment
- 6.4.18.5 Appendix 18.5 Residential Visual Amenity Assessment
- 6.4.18.6 Appendix 18.6 Viewpoint directory
- 6.4.22.15 Appendix 22.15 Biodiversity Net Gain information
- 7.2 Outline Code of Construction Practice
- 7.2 Vegetation Retention Plan
- 7.4 Outline Soils Management Plan
- 7.10 Outline Landscape and Ecology Management Plan
- 7.22 Commitments Register
- 7.23 Outline Construction Method Statement
- Rampion Offshore Wind Farm Joint Consenting Workshop held with South Downs National Park Authority & West Sussex County Council: Lessons Learn
- Landscape Institute's Technical Guidance Note 02-21 'Assessing landscape value outside national designations'

13. COMMENTARY ON COMMITMENTS REGISTER (APP-254)

13.1. C-1

13.1.1. '*The onshore cable route will be completely buried underground for its entire length where practicable.*'

13.1.2. The description of the Proposed Development (APP-045) makes no reference to any of the cable route not being buried. Should there be sections of unburied cable, then locations need to be identified and acknowledged as part of the 'worst case scenario'.

13.1.3. The wording for C-1 should be amended to remove the phrase 'where practicable to be acceptable to the SDNPA.

13.2. C-5

13.2.1. '*Main rivers, watercourses, railways and roads that form part of the Strategic Highways Network will be crossed by Horizontal Directional Drill (HDD) or other trenchless technology where this represents the best environment solution and is financially and technically feasible'*.

13.2.2. This commitment omits areas of trenchless crossing in other areas (under woodlands, vegetation and chalk scarp)

13.2.3. The SDNPA also does not consider the financial feasibility of trenchless crossings to be a consideration in this process.

13.2.4. Alternative options for HDD routes and compounds are included in the proposals. It is not clear how these will be decided upon.

13.2.5. The DCO does not consent open trenching methods in areas where HDD is being proposed (should HDD fail additional consent would be required to deliver an alternative solution). This is referenced in the DCO at Item 6 (4) (page 54) *'Trenchless installation techniques must be used to install the transmission cables where identified in the crossings schedule (comprising part of the code of construction practice approved pursuant to requirement 22) for the purpose of passing under a relevant obstruction unless otherwise agreed by the relevant planning authority, following consultation with the lead local flood authority, Natural England, the highway authority or Network Rail as relevant.'*

13.2.6. The description of the Proposed Development (APP-045 Section 4.5.26, page 68) that '*For trenchless crossings, HDD has been assessed in the DCO Application as this is the likely preferred option based on their reduced complexity and relatively low cost compared to other techniques. The detailed methodology and design of the trenchless crossing will be determined following site investigation and confirmed within stage specific Onshore Construction Method Statements including confirmation that there are no new or materially different environmental effects arising compared to those assessed in the ES.*'

13.2.7. It is unclear what the approach will be if '*new or materially different environmental effects'* do arise.

13.2.8. It is not acceptable to the SDNPA that the construction of the onshore cable route should commence prior to the viability of the sections of trenchless crossing HDD being confirmed as possible to implement, due to the extensive landscape and visual effects along the route. If the HDD is not confirmed as possible at any point, and an alternative is sought to be agreed, then the SDNP is of the opinion that effects of the proposed development have the potential to be prolonged and, depending on the alternatives, different and possibly more extensive than those set out in the ES.

13.2.9. For Commitment C-5 to be acceptable to the SDNPA, reference needs to be made to the use of HDD in other areas, particularly under the scarp and prior to construction, a fixed proposal needs to be identified and acknowledged as part of the 'worst case scenario' with an amended ES if appropriate.

13.3. C-7

13.3.1. *'Post construction, the work area will be reinstated to pre-existing conditions as far as reasonably practical'*.

13.3.2. Pre-existing conditions need to be established prior to construction. It may be that an area is in poor condition, badly drained or have some other issue, whereby reinstatement to an equally poor condition would not be desirable and that the opportunity for some form of enhancement would be welcomed.

13.3.3. The wording for C-7 should be amended to remove the phrase '*as far as reasonably practical'* to be acceptable to the SDNPA and further consideration given to opportunities for enhancement in areas where existing conditions are found to be poor and could be improved.

13.4. C-9

13.4.1. '*Joint bays will be completely buried, with the land above reinstated to pre-construction ground level, with the exception of link box chambers where access will be required from ground level (via manholes).*'

13.4.2. The description of the Proposed Development (APP-045, Section 4.5.45, page 73) states that '*Typically, they are located every 750 to 950m'*, however Commitment C-19 states that '*At regular intervals (typically 600m – 1,000m) along the route joint bays/pits will be installed to enable the cable installation and connection process*.' No plans showing locations of joint bays has been provided.

13.4.3. In agricultural land it is assumed that there will need to be some form of marking or fencing to enable identification land to ensure farming practices, such as ploughing, do not damage manholes, however there is no mention of this in APP-045.

13.4.4. The Soils Management Plan (APP-226, Section 3.1.6, page 12) sets out that '*ALC grades should be used to inform 'micro-siting' in the final design so that where practicable, temporary or permanent development on the best quality agricultural land is avoided. Where there is flexibility for a final joint bay location to be positioned in areas of agricultural land with different ALC grades, consideration will be given in the final design to locating the joint bay in the land with the lowest ALC grade (with the highest being Grade 1).*'

13.4.5. This is welcomed, but it is suggested that for C-9 to be acceptable to SDNPA this should be taken to a greater level of detail and the micro-siting of joint bays to edges of fields would reduce impact on agricultural land further.

13.5. C-26

13.5.1. *'Where noisy activities are planned and may cause disturbance, the use of mufflers, acoustic barriers (or shrouds) and other suitable solutions will be applied*.'

13.5.2. No identification of location of acoustic barriers has been provided. Should these be required, then the SDNPA suggest that locations need to be identified and acknowledged as part of the 'worst case scenario' to be assessed.

13.6. C-27

13.6.1. '*Following construction, construction compounds will be returned to previous conditions as far as reasonably possible.*'

13.6.2. Pre-existing conditions need to be established prior to construction. It may be that an area is in poor condition, badly drained or have some other issue, whereby reinstatement to an equally poor condition would not be desirable; the SDNP would welcome the opportunity for some form of enhancement.

13.6.3. The wording for C-27 should also be amended to remove the phrase '*as far as reasonably possible*' to be acceptable to the SDNPA.

13.7. C-40

13.7.1. '*There will be up to three offshore substations installed to serve the Proposed Development. The exact locations, design and visual appearance will be subject to a structural study and electrical design, which is expected to be completed post consent. The offshore substations will be installed on multi-leg or monopile foundations, similar to those described for the wind turbine generators (WTGs) themselves'*.

13.7.2. See commentary above in Section 5.4.

13.8. C-61

13.8.1. '*Due regard will be given to design principles held in Rampion 1 Design Plan and design principles to be developed for Rampion 2, with consideration of the seascape, landscape and visual impacts on the South Downs National Park and Sussex Heritage Coast*.'

13.8.2. Rampion Offshore Wind Farm and connection works Examining Authority's Report of Findings and Conclusions and Recommendation to the Secretary of State for Energy and Climate Change Section 4.357 states '*The Panel considers the offshore design parameters provide an important contribution to reducing the visual effect of the offshore wind farm on the National Park and Heritage Coast.*'

13.8.3. SLVIA Design Principles supplementary document in the above document sets out that the design principles are:

(a) To limit as far as possible the horizontal degree of view of wind turbine generators from the key sensitive visual receptor within the SDNP and the HC through a more compact layout;

(b) To increase as far as possible the distance of the wind turbine generators from the key sensitive visual receptor within the SDNP and the HC;

(c) To locate the largest turbines, in any hybrid scheme, to the south-western portion of the Order limits maximising distance from the key sensitive visual receptor within the SDNP and the HC;

(d) Provide clear sight lines through the wind turbine layout to the open sea horizon from the key sensitive visual receptor within the SDNP and the HC;

(e) Consider use of colour tones to minimise visibility, specifically in relation to the key sensitive visual receptor within the SDNP and the HC;

(f) The key sensitive visual receptor from the SDNP and HC is Beachy Head. Other sensitive visual receptors, which the undertaker should have regard to in applying the design principles, are Birling Gap, Cuckmere Haven and inland sea views from the downs.

13.8.4. It is accepted that the Rampion 2 design principles do not include principle (c) which relates to a hybrid scheme.

13.8.5. Principle (e) is not adopted in the Rampion 2 principles.

13.8.6. Principle (f) is not relevant to Rampion 2.

13.9. C- 67

13.9.1. '*The onshore cable route will avoid the brows of hills as far as is reasonably practical and is likely to follow the established pattern of the landscape i.e. routed to closely follow the line of existing field boundaries as far as is practicable.*'

13.9.2. Study of the aerial mapping of the route of the onshore cable shows that this commitment cannot be met adequately with the current proposed route.

13.10. C-103

13.10.1. '*Areas of temporary habitat loss will begin reinstatement within 2 years of the loss, other than at the temporary construction compounds, cable joint bays, some haul roads, some construction access roads, landfall and substation location where activities may take longer to complete. Habitat restoration (i.e. planting and seeding) will take place at an appropriate time of year dependent on habitat type. In general habitat restoration will seek to deliver the same habitat type as the baseline, unless there is an opportunity to deliver enhancements. Woodland cannot be replaced above the cable ducts and in these situations woodland ride habitats will be delivered*'.

13.10.2. For C-103 to be acceptable to the SDNPA prior to construction, a fixed programme needs to be identified and acknowledged as part of the 'worst case scenario' with an amended ES if appropriate.

13.11. C-115

13.11.1. '*Hedgerows/tree lines crossed by the cable route will be 'notched' to reduce habitat loss and landscape and heritage impacts wherever possible. This is defined as temporarily displacing one or more short sections (i.e. notches) within the same hedgerow/tree line. Hedgerow/tree line losses will thereby be kept to approximately 14m total width at each hedgerow crossing point where notching can take place. Hedgerows deemed "important" under the Hedgerows Regulations 1997 (or where there are other considerations), losses will be reduced to a 6m notch for the temporary construction haul roads only, by trenchless installation of the cable ducts under them. Where appropriate, hedgerows will be temporarily translocated using a tree spade to maintain diversity and structure and result in more rapid reinstatement. Where chances of success are questionable, notches will be made by removal and reinstatement through planting. The ECoW will justify the approach being taken in line with the responsibilities of implementing the vegetation retention plan (see C - 220)*'

13.11.2. See sections 3.6 and 9.15 above.

13.12. C-193

13.12.1. 'Replacement planting will be characteristic of the area and resilient to climate change. Plant species will be selected carefully at detailed design stage with appropriate management and maintenance techniques established to support the development of these species in line with the environmental requirements'

13.12.2. The SDNPA suggest that plant species that are both characteristic of the area and resilient to climate change will need to be carefully selected and may lead to a smaller range of plants to select from.

13.13. C-286

13.13.1. '*Mitigation planting for the removal of trees and hedgerow will be designed in accordance with the principles set out in the Arboricultural Impact Assessment (Document reference: 6.4.22.16) and Outline Landscape and Ecology Management Plan (LEMP) (Document Reference: 7.10)*'

13.13.2. The SDNPA suggest that the Commitments Register should also make some reference to the presence of ash dieback and any compensatory measures required.

Rampion 1 Onshore Windfarm Cable Corridor
Officer Explanatory Note to Accompany Aerial Photography

In July 2021, aerial photography was taken of the existing Rampion windfarm onshore cable route (Rampion 1), as it runs through the South Downs National Park. The photography was taken at both close and wide range. This note provides some narrative to be read alongside the full range of photography, however some images have been selected to support the comments. Unless stated, the photography follows the cable route from north to south, and is taken looking in a westerly direction. This note does not make any assumptions regarding the reasons for successful/unsuccessful recovery.

The cable route enters the National Park south of Horn Lane, Henfield and continues south past Truleigh Manor Farm and onwards to Edburton Road. In this section, the cable route is visible above ground and significant runs of fencing remain on either side of the cable corridor. Further divisions along this part of the route appear to be intensively grazed (Fig.1) Hedgerows and other field boundary planting still demonstrate visible gaps, where new planting has either not been implemented or has not been successful.

Fig.1

As the corridor travels up the scarp slope and over to towards the South Downs Way (past Tottington Mount and the Site of Special Scientific Interest), there remains clear evidence of the works. However this is where further works following the failure of previous attempts at reinstatement have recently taken place and so there has been less time to recover. Parts of this section also remain fenced (Fig.2).

Fig.2 – looking east

Fencing appears to have been partially removed and the cable corridor managed as part of the wider land use between the South Downs Way and Mill Hill (Fig.3). Despite this, the cable route remains evident above ground.

Fig.3

As it crossed Mill Hill (south of Shoreham Cement Works) and into the Adur Valley, the route is not readily discernible (Fig.4 and 5). This is also where it moves through the Old Erringham Farm and Road Cutting Local Wildlife Site. It remains relatively discreet it moves up the western valley side.

Fig.4

Fig.5 – looking north

The cable route becomes more visible as it crosses Coombes Road – due to the gaps in the hedgerow and differentiation in the grassland quality (Fig.6). This improves as the corridor becomes less obvious before it heads south at Beggars Bush/Titch Hill (Fig.7), skirting round Applesham Farm Bank and Steep Down Local Wildlife Sites, at which point the route is easier to follow.

Fig.6

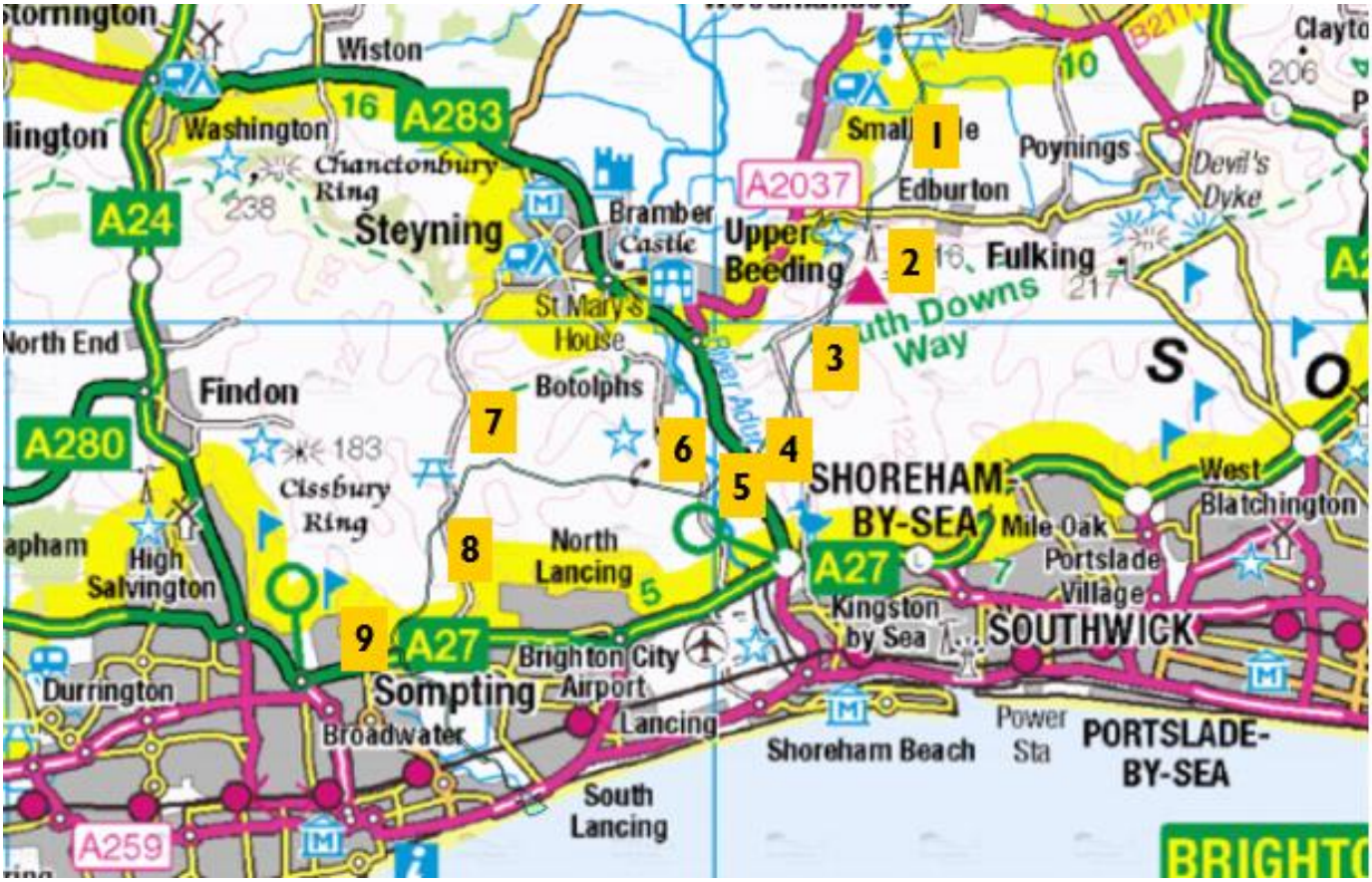
Fig.7 – looking east

As the corridor passes Lambleys Farm, despite a mix of crops and uses, the cable route is clear and gaps in the hedgerow are highly visible (Fig.8).

Fig.8

Prior to leaving the National Park at the A27 east of Lyons Farm, the route crosses Lambleys Lane, through the fields where the corridor is only notable as a result of the gaps in hedgerow (Fig.9).

Fig.9



Plan with broad location of figures shown

August 2021

Technical Guidance Note | 02/21

Assessing landscape value outside national designations

Landscape Institute
Inspiring great places

Contents

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Photo acknowledgements:

- Font cover: Pensford Viaduct viewed across the rural landscape of Bath and North East Somerset, credit LUC.
- Appendices cover: River Findhorn, Strathdearn, credit LUC.

1 Introduction

1.1 Purpose, aims and objectives

1.1.1 This technical guidance note (TGN) provides information and guidance[1] to landscape professionals and others who need to make judgments about the value of a landscape (outside national landscape designations[2]) in the context of the UK Town and Country Planning system. It is also intended to be of assistance to those who review these judgements, so that there is a common understanding of the approach.

1.1.2 Although the discussion that led to the drafting of this document was prompted by a need to interpret the (England) National Planning Policy Framework February 2019 (NPPF) term 'valued landscape', the main body of this TGN is intended to be independent of national policy, which differs across the four nations of the UK.

1.2 Structure

1.2.1 In Part 2, this TGN:

- *identifies the stages in the planning process at which landscape value might be assessed;*
- *reviews the tools available to enable practitioners to assess landscape value; and*
- *presents a list of factors that could be considered when identifying landscape value.*

1.2.2 Appendices provide:

- *a summary of historical background and context;*
- *a summary of the evolution of factors used to describe landscape value;*
- *a summary of policies and guidance relating to designated landscapes in the four nations of the UK;*
- *the Landscape Institute's understanding of the term 'valued landscape' as it is used in the context of the (England) NPPF; and*
- *an analysis of planning decisions and judgements concerned with the [England] NPPF term 'valued landscape'.*

1.3 Context and relationship to existing UK guidance

1.3.1 The TGN does not seek to provide an evaluative methodology that would replace those provided by other established advisory documents. It is intended to supplement existing advice to practitioners, such as guidance on Landscape Character Assessment and Landscape Sensitivity Assessment (Natural England, NatureScot, Natural Resources Wales, Marine Management Organisation), Local Landscape Designation (NatureScot, Natural Resources Wales) and Landscape and Visual Impact Assessment (the Landscape Institute and Institute of Environmental Management and Assessment). The TGN acknowledges and reflects all these important sources of guidance.

1.3.2 Although the history of how we value landscape is closely related to the concept of 'natural beauty' (summarised in **Appendix A2**), it is not the purpose of this document to define the expression 'natural beauty' and this TGN does not apply to national landscape designations.

[1] Some parts of the note are for information, some parts supplement existing guidance and other parts (e.g. **Appendix A4**) provide new guidance.
[2] Designation of nationally important landscapes is a matter for government and its agencies, some of whom have prepared technical guidance.

1.3.3 There is a difference between landscape value and the wider topic of environment value. For example, the assessment of Ecosystem Services (which combines quantitative and qualitative information) and Natural Capital Accounting (a quantitative approach) are two approaches to valuing the environment, of which landscape forms an important part. More information about these approaches can be found in the following LI Technical Information Notes (TIN):

- *TIN 02/2016 - Ecosystem Services;*
- *TIN 02/2018 - Natural Capital Accounting.*

1.4 Potential future revisions

1.4.1 Landscape offers multiple values, benefits and services and the way in which landscapes are valued by people is a dynamic process that can change over time. The landscape profession's understanding of landscape value is still evolving, particularly in light of the nature and climate emergency. This TGN is the Landscape Institute's current reflection on the subject of landscape value.

1.4.2 The wide range of comments on the consultation draft document suggested that further guidance would be welcome, including:

- *how the landscape design process can respond to value assessments;*
- *how value can be expressed in local plan policy;*
- *how the increased emphasis on 'beauty' in Government papers (in England) relates to landscape value; and*
- *how to interpret value in relation to other aspects of England's NPPF such as Local Green Spaces.*

1.4.3 It has not been possible to address all these as part of this TGN, although they could form topics for future TGNs.

1.4.4 This TGN is written in the context of current policy guidance and evaluation factors that have evolved since 1945 (see **Appendices A1** and **A2)**. The LI is committed to equity, diversity and inclusion within the landscape profession and emerging sources of 'evidence' of value, for example from social data, will feed into future revisions to this TGN.

.

2 Tools to enable practitioners to assess landscape value

This TGN uses the following definitions:

Landscape qualities = characteristics/ features of a landscape that are valued

This term is being used to distinguish landscape qualities from landscape characteristics which are elements, or combinations of elements, which make a particular contribution to landscape character. Landscape qualities (in the sense meant in this TGN) are usually referred to as 'special qualities' or 'special landscape qualities' in relation to nationally designated landscapes. For example, 'special qualities' is a statutory expression used in relation to National Parks, in policy for Scotland's local landscape designations, and is a term used informally to describe components of natural beauty set out in AONB Management Plans[3].

Landscape value = the relative value or importance attached to different landscapes by society on account of their landscape qualities (see Table 1).

The definition of landscape value used in this TGN draws on, and is compatible with, the GLVIA3 definition of landscape value as well as Natural England's definition (Landscape Institute and Institute of Environmental Management & Assessment, 2013; Tudor, 2014). The definition makes it clear that it is 'society' that assigns value to landscapes. However, landscape value means more than popularity and the Landscape Institute suggests that value assessments should be undertaken by a landscape professional, drawing on evidence from stakeholders where available.

2.1 Introduction

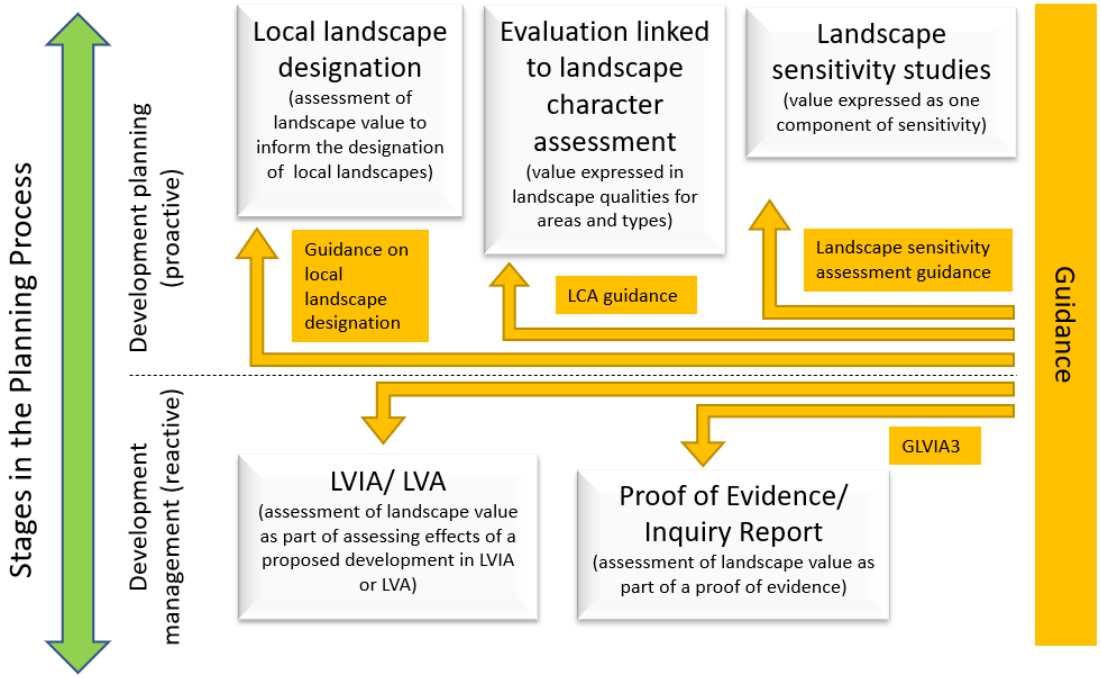
2.1.1 Assessments of landscape value (for landscapes which are outside, and not candidates for, national designation) may be required at different stages of the planning process, for example:

- *Local planning authorities (LPAs), neighbourhood planning groups and other parties at the evidence-gathering and plan-making stages;*
- *LPAs, applicants/appellants and others considering a site on which future development or other form of change is proposed, usually at the planning application or appeal stage.*

2.1.2 These scenarios are shown by **Figure 1**, along with the type of guidance that might feed in.

[3] National Parks are UK-wide. AONBs are found in England, Wales and Northern Ireland, and NSAs are unique to Scotland.

Figure 1: Assessing landscape value at different stages of the planning process



2.2 Assessing landscape value as part of plan making (development planning)

2.2.1 Landscape value at the local authority or neighbourhood level can be assessed and mapped spatially, i.e. through identifying areas for local landscape designation. Studies to support spatial designations should identify the landscape qualities of each area of landscape proposed for designation.

2.2.2 Landscape value can be assessed as an evaluation stage of a landscape character assessment or as a follow-on study. In this case landscape qualities will be identified in relation to individual character areas or types. Currently these are commonly described as 'valued landscape characteristics' or 'landscape qualities'.

2.2.3 Landscape value can also be assessed as part of a landscape sensitivity study, as landscape value is one of the two components of landscape sensitivity (the other being susceptibility). The areas to be assessed will depend on the purpose of the study.

2.2.4 The LI supports all approaches as they are all capable of highlighting the particular aspects of a landscape that are valued. Where value has been placed on a landscape by the local planning authority, this should ideally be defined in the development plan documents. Where value is not defined in the development plan, evaluations undertaken by local planning authorities and neighbourhood planning groups still form part of the evidence base.

Local landscape designations: the spatial approach

2.2.5 Although the guidance in this note is independent of policy, it is worth noting that different parts of the UK currently have different policy approaches to local landscape designations, as described in **Appendix A3**. Local landscape designation is supported by national policy in Scotland, Wales and Northern Ireland, but across England local landscape designations have been inconsistently applied due to past changes of emphasis in national planning guidance. Therefore, the absence of local landscape designations in England does not necessarily indicate there are no landscapes worthy of local designation. Additionally, in all nations, the lack of designation does not mean that a landscape has no value.

2.2.6 Guidance on how to identify local landscape designations has been produced in Scotland and Wales. This TGN is intended to support the approach set out in these guidance documents:

- *NatureScot and Historic Environment Scotland (2020) have jointly produced guidance on designating Local Landscape Areas (LLAs) in Scotland which is intended primarily for local authorities to use in taking forward their own designation process. The guidance acknowledges that local landscape designations are a valuable tool in the development plan toolbox and outlines the process for designating new LLAs and refreshing existing designations, noting that 'designations do not mean other places are unimportant or not valued' (paragraph **1.16**).*

- *NRW has published LANDMAP Guidance Note 1: LANDMAP and Special Landscape Areas (2017)[4] which sets out an approach for defining Special Landscape Areas in Wales using LANDMAP[5] information. These areas may be designated for 'their intrinsic physical, environmental, visual, cultural and historical importance, which may be considered unique, exceptional or distinctive to the local area' and they should be 'important for their distinctive character, qualities and sense of place'.*

2.2.7 The guidance produced by NatureScot and NRW may be helpful for other nations that do not have their own guidance.

2.2.8 Where local designations are used, the identification of their spatial boundaries and their landscape qualities should be supported by evidence.

2.2.9 **Table 1** of this TGN sets out a range of factors that could be considered to define the value of a landscape[6] and to inform the designation process. These factors are intended to be consistent with the factors set out in existing guidance in relation to local landscape designations in Scotland and Wales, as well as guidance in relation to national landscape designations (e.g. guidance for assessing landscapes for designation as National Park or Area of Outstanding Natural Beauty in England). However, they are not intended to be an exhaustive list.

2.2.10 Stakeholder engagement and early collaboration with local communities will add depth to the assessment by helping the landscape professional to understand what people value about the local landscape. Community engagement should be encouraged whenever practicable in line with existing planning guidance.

Evaluative studies linked to landscape character assessment

2.2.11 The guidance on Landscape Character Assessment (The Countryside Agency and Scottish National Heritage, 2002), which is still in use in Scotland, acknowledges that 'most assessments will usually move beyond the characterisation stage to the stage of making judgements to inform particular decisions'[7]. Natural England's 2014 document, which replaced the 2002 guidance in England, also notes that landscape character assessment can be used to identify special qualities and inform judgements (Tudor, 2014). These evaluative studies can be undertaken as an extension to a landscape character assessment, or as a separate follow-on study. Such studies can include the identification of landscape qualities that contribute to the value of landscape areas or types[8]. **Table 1** of this TGN sets out a range of factors that could be considered as part of the process.

2.2.12 In these types of assessments, information from stakeholders (where available) about what is valued should inform the landscape professional's consideration of landscape value.

Landscape sensitivity studies

2.2.13 Landscape value is assessed as one of the two components of landscape sensitivity in strategic landscape sensitivity assessments. As explained in Natural England's *An Approach to Landscape Sensitivity Assessment – to Inform Spatial Planning and Land Management* (Tudor, 2019), landscape

[redacted]
https://gov.wales/sites/default/files/publications/2018-12/planning-policy-wales-edition-10.pdf

[5] LANDMAP is an all-Wales landscape resource where landscape characteristics, qualities and influences on the landscape are recorded and evaluated.

[6] It should be noted that designation is a process that may include factors other than landscape value.

[7] This is a two-stage process with the landscape character assessment being separate from subsequent assessments of value or sensitivity.

[8] It should be noted that, in Wales, LANDMAP already includes a range of criteria-based evaluations relating to the landscape.

sensitivity combines judgements about the susceptibility to the specific development type/development scenario or other change being considered together with the value(s) related to that landscape and visual resource.

2.2.14 Existing guidance on landscape sensitivity assessment should be followed where available. In addition to the guidance from Natural England above, Natural Resources Wales and NatureScot are also preparing guidance documents for Wales and Scotland which should be available soon. The Marine Management Organisation (MMO) has also published guidance on seascape sensitivity assessment (see further reading). The factors in **Table 1** of this TGN may be helpful to consider as part of the process of landscape sensitivity assessment.

2.3 Assessing landscape value of a site in its context (as part of development management)

2.3.1 The landscape value of a site in its context needs to be assessed as part of carrying out a Landscape and Visual Impact Assessment (LVIA) or Landscape and Visual Appraisal (LVA)[9]. Most commonly this will be as part of the assessment of a development proposal (for a planning application or appeal). The current guidance for LVIA/LVA is the third edition of *Guidelines for Landscape and Visual Impact Assessment* (GLVIA3; LI and IEMA, 2013) which states that the value of a landscape should be assessed as one of two components of landscape sensitivity[10]. Landscape value is the 'inherent' component, which is independent of the development proposal, while the other component, susceptibility, is development specific.

2.3.2 GLVIA3 recognises that landscape value is not always signified by designation: 'the fact that an area of landscape is not designated either nationally or locally does not mean that it does not have any value' (paragraph **5.26**). GLVIA3 recommends that when undertaking a LVIA/LVA in an undesignated area, landscape value should be determined through a review of existing assessments, policies, strategies and guidelines and, where appropriate, by new survey and analysis (paragraphs **5.27** and **5.28**). It is recommended that the process for identifying landscape value outside nationally designated areas is based upon a structured and transparent assessment process including community-based evidence where practical to do so.

2.3.3 The list of factors set out in Box 5.1 on page **84** of GLVIA3, which is a slightly modified form of the list of criteria from the 2002 landscape character assessment guidance, is described as an example of 'the range of factors that can help in the identification of valued landscapes'. It should be noted that they are not comprehensive nor intended to be prescriptive. Nevertheless, 'Box 5.1' has been widely used to inform judgements about landscape value as part of LVIA/LVA in the planning process.

2.3.4 Since GLVIA3 was published in 2013, appeal decisions, high court judgements and practitioners' experience have provided further information about the factors which can be considered in assessing landscape value outside nationally designated landscapes. These have been incorporated into **Table 1** of this TGN.

2.4 Range of factors that can be considered when identifying landscape value

2.4.1 **Table 1** sets out a range of factors that can be considered when identifying landscape value in any of the contexts described above. It also includes examples of potential indicators of value.

2.4.2 This broadly presents the same factors as Box 5.1 from GLVIA3 (and the 2002 Landscape Character Assessment Guidance), with the following changes:

- *'Conservation interests' is separated into natural heritage and cultural heritage factors (reflecting the approach in NatureScot's guidance on local landscape designations and Natural England's*

[9] Landscape and Visual Impact Assessments (LVIA) form part of an Environmental Impact Assessment (EIA). Landscape and Visual Appraisals (LVA) are standalone assessments.
[10] This is consistent with the approach set out in Tudor (2019).

Guidance for assessing landscapes for designation as National Park or Area of Outstanding Natural Beauty in England);

- *The term 'landscape condition' is used in place of 'landscape quality (condition)';*
- *'Rarity' and 'representativeness' are combined into a newly-named factor 'distinctiveness'; and*
- *A new factor, 'function' is included which addresses the value attached to landscapes which perform a clearly identifiable and valuable function.*

2.4.3 It should be noted that the factors are not presented in order of importance.

2.4.4 As with Box 5.1 in GLVIA3, **Table 1** is not intended to be an exhaustive list of factors to be considered when determining the value of landscapes, but to provide a range of factors and indicators that could be considered. This TGN is intended to be complementary to GLIVA3.

Table 1: Range of factors that can be considered when identifying landscape value

Factor	Definition	Examples[11] of indicators of landscape value	Examples of evidence[12]
Natural heritage	Landscape with clear evidence of ecological, geological, geomorphological or physiographic interest which contribute positively to the landscape	Presence of wildlife and habitats of ecological interest that contribute to sense of place Extent and survival of semi-natural habitat that is characteristic of the landscape type Presence of distinctive geological, geomorphological or pedological features Landscape which contains valued natural capital assets that contribute to ecosystem services, for example distinctive ecological communities and habitats that form the basis of ecological networks Landscape which makes an identified contribution to a nature recovery/ green infrastructure network	Landscape character assessment LANDMAP Geological Landscape and Landscape Habitats Aspects (in Wales) Ecological and geological designations SSSI citations and condition assessments Geological Conservation Review Habitat surveys Priority habitats Nature recovery networks/ nature pathways Habitat network opportunity mapping/ green infrastructure mapping Catchment management plans Ecosystem services assessment/ schemes Specialist ecological studies
Cultural heritage	Landscape with clear evidence of archaeological, historical or	Presence of historic landmark structures or designed landscape elements (e.g. follies,	Landscape character assessment

[11] These examples are not exhaustive.
[12] Evidence may be set out in development plans (or evidence that sits alongside development plans). Online mapping may also provide useful information (see 'useful data links' at the end of this TGN).

Factor	Definition	Examples[11] of indicators of landscape value	Examples of evidence[12]
	cultural interest which contribute positively to the landscape	monuments, avenues, tree roundels) Presence of historic parks and gardens, and designed landscapes Landscape which contributes to the significance of heritage assets, for example forming the setting of heritage assets (especially if identified in specialist studies) Landscape which offers a dimension of time depth. This includes natural time depth, e.g. presence of features such as glaciers and peat bogs and cultural time depth e.g. presence of relic farmsteads, ruins, historic field patterns, historic rights of way (e.g. drove roads, salt ways, tracks associated with past industrial activity)	LANDMAP Historic Landscape and Cultural Landscape Services Aspect (in Wales) Historic environment and archaeological designations Conservation Area appraisals, Village Design Statements Historic maps Historic landscape character assessments[13] Historic Land Use Assessment[14] and Historic Area Assessments[15] Place names Specialist heritage studies
Landscape condition	Landscape which is in a good physical state both with regard to individual elements and overall landscape structure	Good physical condition/ intactness of individual landscape elements (e.g. walls, parkland, trees) Good health of elements such as good water quality, good soil health Strong landscape structure (e.g. intact historic field patterns) Absence of detracting/ incongruous features (or features are present but have little influence)	Landscape character assessment LANDMAP condition and trend questions (in Wales) Hedgerow/ tree surveys Observations about intactness/ condition made in the field by the assessor SSSI condition assessments Historic landscape character assessments/ map regression analysis
Associations	Landscape which is connected with notable people, events and the arts	Associations with well-known literature, poetry, art, TV/film and music that contribute to perceptions of the landscape	Information about arts and science relating to a place Historical accounts, cultural traditions and folklore

[13] Historic Landscape Characterisation has developed as a GIS mapping tool to capture how land use has changed and the 'time-depth' of the present-day landscape.

[redacted]

[14] Mapping of Scotland's Historic Landscape: [redacted]

[15] [redacted]

Factor	Definition	Examples[11] of indicators of landscape value	Examples of evidence[12]
		Associations with science or other technical achievements Links to a notable historical event Associations with a famous person or people	Guidebooks/ published cultural trails LANDMAP Cultural Landscape Services aspect (in Wales)
Distinctiveness	Landscape that has a strong sense of identity	Landscape character that has a strong sense of place (showing strength of expression of landscape characteristics) Presence of distinctive features which are identified as being characteristic of a particular place Presence of rare or unusual features, especially those that help to confer a strong sense of place or identity Landscape which makes an important contribution to the character or identity of a settlement Settlement gateways/approaches which provides a clear sense of arrival and contribute to the character of the settlement (may be ancient/historic)	Landscape character assessment LANDMAP Visual & Sensory question 3 and 25, – Historic Landscape question 4 (in Wales) Guidebooks Observations about identity/ distinctiveness made in the field by the assessor
Recreational	Landscape offering recreational opportunities where experience of landscape is important	Presence of open access land, common land and public rights of way (particularly National Trails, long distance trails, Coastal Paths and Core Paths) where appreciation of landscape is a feature Areas with good accessibility that provide opportunities for outdoor recreation and spiritual experience/ inspiration Presence of town and village greens Other physical evidence of recreational use where experience of landscape is important Landscape that forms part of a view that is important to the	Definitive public rights of way mapping/ OS map data National Trails, long distance trails, Coastal Paths, Core Paths Open access land (including registered common land) Database of registered town or village greens Visitor surveys/ studies Observations about recreational use/ enjoyment made in the field by the assessor

Factor	Definition	Examples[11] of indicators of landscape value	Examples of evidence[12]
		enjoyment of a recreational activity	
Perceptual (Scenic)	Landscape that appeals to the senses, primarily the visual sense	Distinctive features, or distinctive combinations of features, such as dramatic or striking landform or harmonious combinations of land cover Strong aesthetic qualities such as scale, form, colour and texture Presence of natural lines in the landscape (e.g. natural ridgelines, woodland edges, river corridors, coastal edges) Visual diversity or contrasts which contributes to the appreciation of the landscape Memorable/ distinctive views and landmarks, or landscape which contributes to distinctive views and landmarks	Landscape character assessment LANDMAP Visual and Sensory scenic quality question 46 (in Wales) Protected views, views studies Areas frequently photographed or used in images used for tourism/ visitor/ promotional purposes, or views described or praised in literature Observations about scenic qualities made in the field by the assessor Conservation Area Appraisals Village Design Statements, or similar
Perceptual (Wildness and tranquillity)	Landscape with a strong perceptual value notably wildness, tranquillity and/or dark skies	High levels of tranquillity or perceptions of tranquillity, including perceived links to nature, dark skies, presence of wildlife/ birdsong and relative peace and quiet[16] Presence of wild land and perceptions of relative wildness (resulting from a high degree of perceived naturalness[17], rugged or otherwise challenging terrain, remoteness from public mechanised access and lack of modern artefacts) Sense of particular remoteness, seclusion or openness Dark night skies	Tranquillity mapping and factors which contribute to and detract from tranquillity Dark Skies mapping Wildness mapping, and Wild Land Areas in Scotland Land cover mapping Field survey LANDMAP Visual and Sensory Aspect

[16] More about tranquillity can be found in Landscape Institute Technical Information Note 01/2017 (Revised; Landscape Institute, 2017).

[17] Relating to extensive semi-natural vegetation, presence of wildlife and presence of natural processes/ lack of human intervention.

Factor	Definition	Examples[11] of indicators of landscape value	Examples of evidence[12]
		A general absence of intrusive or inharmonious development, land uses, transport and lighting	
Functional	Landscape which performs a clearly identifiable and valuable function, particularly in the healthy functioning of the landscape	Landscapes and landscape elements that contribute to the healthy functioning of the landscape, e.g. natural hydrological systems/ floodplains, areas of undisturbed and healthy soils, areas that form carbon sinks such as peat bogs, woodlands and oceans, areas of diverse landcover (benefits pest regulation), pollinator-rich habitats such as wildflower meadows Areas that form an important part of a multifunctional Green Infrastructure network Landscapes and landscape elements that have strong physical or functional links with an adjacent national landscape designation, or are important to the appreciation of the designated landscape and its special qualities	Land cover and habitat maps Ecosystem services assessments and mapping (particularly supporting and regulating services) Green infrastructure studies/strategies Development and management plans for nationally-designated landscapes, Local Plans and SPDs Landscape character assessments

The practical application of factors in coming to a judgement on landscape value

2.4.5 The following bullet points provide some advice on the practical application of the factors in **Table 1**:

- *The factors to be considered are not fixed as they need to be appropriate to the particular project and location. It is recommended that the factors used to assess landscape value in a particular assessment are, where appropriate, discussed with the relevant planning authority or statutory consultees.*
- *The indicators of value should be reviewed on a case-by-case basis, taking into account what they contribute (positively or negatively) to a specific landscape. The relative importance to be attached to each indicator is likely to vary across different landscapes. Once evidence for each factor has been collated and assessed, it is important to step back and judge the overall 'weight of evidence' in coming to an overall judgement on landscape value.*
- *There are likely to be overlaps between the factors, as well as overlaps with other specialist studies for example in relation to natural and cultural factors. These overlaps should be acknowledged and considered when presenting conclusions on the overall value of the landscape.*
- *While condition/intactness of a landscape is one factor that can influence value, poor landscape management should not be a reason to deny a landscape a valued status if other factors indicate*

value. Deliberately neglecting an area of landscape and allowing its condition to deteriorate should not be allowed to diminish its value in a planning context.

- *When assessing landscape value of a site as part of a planning application or appeal it is important to consider not only the site itself and its features/elements/characteristics/qualities, but also their relationship with, and the role they play within, the site's context. Value is best appreciated at the scale at which a landscape is perceived – rarely is this on a field-by-field basis.*
- *Landscape function can influence value, but the presence of a spatial designation (e.g. Green Belt or Green Gap) is not in itself an indicator of high landscape value.*
- *The presentation of information about landscape value should be proportionate to the task at hand.*
- *Landscape value, and the way in which landscapes are valued by people, is a dynamic process, and can change over time. Any value assessment will be a snapshot in time.*

3 References and further reading

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Useful data links

England

https://naturalengland-defra.opendata.arcgis.com/

https://www.gov.uk/right-of-way-open-access-land/access-private-land

https://magic.defra.gov.uk/

Wales

www.naturalresources.wales/landmap

www.naturalresources.wales/landscape

http://lle.gov.wales

Scotland

Landscape Character Assessment https://www.nature.scot/professional-advice/landscape/landscape-character-assessment [*the general LCA page; links from these pages include Coastal Characterisation guidance]*

Local Landscape Areas guidance https://www.nature.scot/professional-advice/protected-areas-and-species/protected-areas/local-designations/local-landscape-areas

Wild Land https://www.nature.scot/professional-advice/landscape/landscape-policy-and-guidance/landscape-policy-wild-land

Historic Land Use Assessment https://hlamap.org.uk/

Northern Ireland

https://www.daera-ni.gov.uk/services/natural-environment-map-viewer

https://www.daera-ni.gov.uk/topics/land-and-landscapes/landscape-character-areas

https://www.daera-ni.gov.uk/articles/seascape-character-areas

4 Glossary

Term	Definition
Aesthetics	Philosophical study of beauty and taste
Characteristics (landscape)	Elements, or combinations of elements, which make a particular contribution to distinctive character (An Approach to Landscape Character Assessment Natural England 2014)
Green infrastructure	The network of natural and semi-natural features, green spaces, rivers and lakes that intersperse and connect villages, towns and cities. Individually, these elements are GI assets, and the roles that these assets play are GI functions (Green Infrastructure Landscape Institute Position Statement 2013)
Elements	Individual parts which make up the landscape, such as, for example, trees, hedges and buildings (GLVIA3)
Features	Particularly prominent or eye-catching elements, like tree clumps, church towers, or wooded skylines (from GLVIA3 and An Approach to Landscape Character Assessment 2014)
Landscape	An area as perceived by people whose character is the result of the action and interaction of natural and/or human factors (European Landscape Convention)
Landscape condition	A measure of the physical state of the landscape (including the intactness of the landscape structure and the condition of individual elements)
Landscape management	Action, from a perspective of sustainable development, to ensure the regular upkeep of a landscape, so as to guide and harmonise changes which are brought about by social, economic and environmental processes (European Landscape Convention)
Landscape planning	Strong forward-looking action to enhance, restore or create landscapes (European Landscape Convention) The development and application of strategies, policies and plans to create successful environments, in both urban and rural settings, for the benefit of current and future generations (Landscape Institute)
Landscape policy	An expression by the competent public authorities of general principles, strategies and guidelines that permit the taking of specific measures aimed at the protection, management and planning of landscapes (European Landscape Convention)
Landscape protection	Actions to conserve and maintain the significant or characteristic features of a landscape, justified by its heritage value derived from its natural configuration and/or from human activity (European Landscape Convention)
Landscape qualities	Characteristics/features of a landscape that have been identified as being valued

Term	Definition
	Landscape qualities are usually referred to as 'special qualities' or 'special landscape qualities' in relation to nationally designated landscapes or 'wildness qualities' in relation to Wild Land Areas.
Landscape value	The relative value or importance attached to different landscapes by society on account of their landscape qualities (see **Table 1**).
LVA	Landscape and visual appraisal
LVIA	Landscape and visual impact assessment
Natural beauty	The term 'natural beauty' is enshrined in the 1949 National Parks and Access to the Countryside Act (it was also subsequently included in the Nature Conservation and Amenity Lands Order (NI) 1985), the Town and Country Planning (Scotland) Act 1997, and the Planning etc. (Scotland) Act 2006). Natural beauty is not exhaustively defined in the legislation, but its meaning has been clarified and interpreted through a series of studies, guidance documents and public inquiries (see 'Further reading'). *N.B. Since the term 'natural beauty' applies to national designation, it is not the purpose of this note to define it.*
Natural capital	The elements of nature that directly and indirectly produce value or benefits to people, including ecosystems, species, fresh water, land, minerals, the air and oceans, as well as natural processes and functions. (Natural Capital Committee, 2014)
Scenic quality	The extent to which the landscape appeals to the senses (primarily, but not only, the visual senses) (Landscape Character Assessment Guidance 2002)
Special qualities	A statutory expression used in (amongst other places) sections 5 and 11A of the National Parks and Access to the Countryside Act 1949 (as amended), section 87 of the Countryside and Rights of Way Act 2000 and National Parks (Scotland) Act 2000 (although the term is not defined in legislation). Special qualities are defined by Nature Scot as 'the characteristics that, individually or combined, give rise to an area's outstanding scenery'

Appendices

A1 (Appendix 1) Assessment of landscape value: a summary of historical background and context

A1.1.1 Land has always had a productive value for food and other natural resources, but our appreciation of the landscape has evolved over time. A summary is provided below.

A1.1.2 During the 17th century in Europe, an appreciation of landscape became closely linked to ideas about beauty and aesthetics. In the 18th–19th centuries influential artists writers and thinkers such as Turner, Ruskin, Wordsworth and others publicly described their appreciation of scenic qualities, landform, nature, vernacular architecture, traditional agriculture, tranquillity and wildness, raising awareness of these landscape qualities.

A1.1.3 From the 19th century, the value of access to natural landscapes for recreation and wellbeing was also recognised, partly as a response to industrialisation. The National Trust was the first organisation to use the term natural beauty. Originally called the National Trust for Places of Historic Interest or Natural Beauty, it was established in 1895.[18] Its purpose, confirmed in the first National Trust Act passed in 1907, was 'promoting the permanent preservation for the benefit of the nation of lands and tenements (including buildings) of beauty or historic interest and as regards lands for the preservation (so far as practicable) of their natural aspect features and animal and plant life'.[19]

A1.1.4 Pressure in the early decades of the 20th century resulted in the establishment of the Addison Committee in 1929 and in 1931 the Addison Report (see Ministry of Town and Country Planning, 1947) recommended the identification of national parks in England and Wales. However, it was the establishment of the National Parks Committee and the publication of the Dower report (Ministry of Town and Country Planning, 1945), the Ramsay Report (Department for Health for Scotland, 1945) and the Hobhouse Report (Ministry of Town and Country Planning, 1947) that finally led to the 1949 National Parks and Access to the Countryside Act. This Act established a National Parks Commission with the purpose of preserving and enhancing 'natural beauty in England and Wales', and particularly in the areas designated under this Act as National Parks or as 'areas of outstanding natural beauty', for encouraging the provision of 'opportunities for open air recreation and the study of nature'.[20]

A1.1.5 The 1949 Act did not define 'natural beauty', but since then its meaning has been debated and tested through a series of studies, guidance documents (see the section on 'Further reading'), Secretary of State Decision letters, an Appeal Court judgement, and public inquiries. Some clarification has also been provided through legislative amendments to the 1949 Act, e.g. NERC Act 2006 Section 99. Following the 1949 Act national landscape designations were made in England and Wales following advice from experts who relied on criteria originally defined by Hobhouse (Ministry of Town and Country Planning, 1947) to assess the value of an area for its natural beauty and recreational opportunity. The first statutory designations in the UK were the Peak District and Lake District National Parks in England, and Snowdonia in Wales (all confirmed in 1951).[21] This approach to assessing

[18] For England, Wales and Northern Ireland. The National Trust for Scotland was established in Scotland in 1931.
[19] National Trust Act 1907.
[20] National Parks and Access to the Countryside Act 1949.
[21] Scotland passed the National Parks (Scotland) Act in 2000 and designated the Loch Lomond and the Trossacks National Park in 2002. Northern Ireland passed the Nature Conservation and Amenity Lands (Northern Ireland) Order in 1985 but has no designated National Parks at present, despite a proposal to designate the Mourne Mountains.

landscape value continued throughout the 1950s and 60s. **Appendix A3** provides a summary of current landscape designations within the UK.

A1.1.6 In the 1970s there were attempts to introduce a quantitative approach to assessing landscape value. These, along with other methods, were tested at the North Pennines AONB Public Inquiry in 1985. The inspector noted the lack of an agreed methodology to evaluating landscape, acknowledged that there was inevitably a degree of subjectivity, and recommended the use of informed opinion, a trained eye and common sense. The quantitative approach was generally considered inappropriate because it reduced complex concepts to a series of numerical values.

A1.1.7 In the 1980s a new methodology for understanding and recording what is important about a landscape began to emerge. Then known as Landscape Assessment, and now known as Landscape Character Assessment (see Landscape Institute, 2015), it was not limited to identifying landscapes worthy of designation but considered all landscapes with the objective of identifying what makes one area 'different' or 'distinct' from another (Countryside Agency and Scottish National Heritage, 2002b). Although the landscape assessment approach covered all landscape, early guidance included advice on evaluating landscapes (Countryside Commission, 1987) by identifying factors for evaluating 'natural beauty' which built on the Hobhouse criteria. The 1993 landscape assessment guidance (Countryside Commission, 1993) was specific in separating the classification and description of landscape character, which concerns what makes one area 'different' or 'distinct' from another, from landscape evaluation, which concentrates on relative value (Countryside Agency and Scottish National Heritage, 2002b). The 1993 guidance included criteria for evaluating 'landscape quality' (particularly in relation to designating landscapes) and identified factors important for evaluating natural beauty (see **Appendix A2**). Historic Landscape Characterisation, piloted at the end of the 1990s, also developed as a way of understanding and mapping the time-depth of places.

A1.1.8 In 1996, the evolving national approach for Landscape Assessment in Wales (Countryside Council for Wales, 1996), LANDMAP, took the strategic decision to include landscape evaluation information. A range of national criteria, grouped under different landscape themes, was developed to provide a relative indication of landscape value to prompt further investigation and consideration as part of planning projects or landscape assessments (see **Appendix A2**).

A1.1.9 The Countryside Agency and Scottish Natural Heritage (2002a) guidance on Landscape Character Assessment developed the criteria set out in the 1993 Landscape Assessment Guidance further, and these were presented as criteria for making judgements about 'landscape value' more widely (i.e. not just in relation to designated landscapes). These criteria informed subsequent guidance including guidance on Local Landscape Designations in Scotland (2006, updated 2020), Natural England's *Guidance for Assessing Landscapes for Designation as National Park or Area of Outstanding Natural Beauty in England* (2011) and Box 5.1 in the *Guidelines for Landscape and Visual Impact Assessment* (GLVIA3) (LI and IEMA, 2013). **Appendix A2** provides a summary of the evolution of factors used in the assessment of natural beauty and landscape value from 1945 onwards.

A1.1.10 The European Landscape Convention (2000) (ELC) was informed and influenced by the UK's landscape assessment work in the 1980s and 1990s. The first international treaty dedicated to the protection, management and planning of all landscapes in Europe, it was signed by the UK government in 2006[22]. Signatories acknowledge that 'the landscape is an important part of the quality of life for people everywhere: in urban areas and in the countryside, in degraded areas as well as in areas of high quality, in areas recognised as being of outstanding beauty as well as everyday areas'[23] and that 'the landscape is a key element of individual and social well-being'. Article 6 of the Convention places a responsibility on all signatories to increase awareness of 'the value of their landscapes, their role and changes to them'.[24] As a signatory to the ELC, the UK has an obligation to enhance the natural and cultural value of all landscapes though a blend of strategies: managing and planning (restoring, creating/enhancing) landscapes.

A1.1.11 The importance of landscape and its value continues to be recognized, for example in DEFRA's 25 Year Environment Plan (HM Government, 2018). There has also recently been a re-emergence of the

[22] The UK remains a member of the Council of Europe, which is a separate body from the European Union.
[23] European Landscape Convention – Preamble.
[24] European Landscape Convention – Article 6.

word ‘beauty’ in the field of planning and placemaking (for example in the UK Government's commissioned ‘Living with Beauty’ report; see Building Better, Building Beautiful Commission/MHCLG, 2020).

A1.1.12 The landscape profession’s understanding of landscape value is still developing, particularly in light of the nature and climate emergency (as well as the lockdowns caused by the Covid-19 pandemic). People today value different aspects of landscape than they did in the past or may do in the future, but it is clear that landscape value is more than just beauty and aesthetics.

A2 (Appendix 2) An evolution of factors used to describe landscape value

A2.1 Introduction

A2.1.1 This Appendix summarises the factors used in the assessment of natural beauty and landscape value from 1945 onwards.

A2.2 1945

Report on National Parks in England and Wales (Cmd 6628), John Dower, Ministry of Town and Country Planning

A2.2.1 In 1942 John Dower, a research officer in the Planning Department of the Ministry of Works and Planning, was requested to report on the establishment of National Parks in England and Wales. In his 1945 report, he noted that 'the task of selecting and delimiting the areas which are to be established as National Parks … will clearly be no easy matter … It must rest on an adequate and disinterested survey and investigation of all areas which are, or are claimed to be, in any way suitable, and it must take into account a wide range of factors' (Ministry of Town and Country Planning, 1945).

A2.2.2 These factors were included in **paragraph 6**, as:

- *landscape beauty*
- *wildlife*
- *suitability for rambling access*
- *popularity*
- *existing and potential land utilization*
- *existing or threatened disfigurements*
- *transport and accommodation facilities, and*
- *the financial and administrative strength of the local authorities concerned.*

National Parks: A Scottish Survey, 'The Ramsay Report', Department of Health for Scotland

A2.2.3 The Scottish National Parks Survey Committee was set up to advise on areas suitable for National Parks and to supervise a survey of potential areas. The Committee laid down seven selection criteria (see Department for Health for Scotland, 1945):

- *outstanding scenic beauty*
- *accessibility*
- *preservation and preservability*
- *recreational facilities (of an open-air type)*

- *educational, cultural and social interests*
- *flora and fauna, and*
- *accommodation.*

A2.3 1947

Report of the National Parks Committee (England & Wales) (CMD 7121), Sir Arthur Hobhouse, Ministry of Town and Country Planning

A2.3.1 **Para 35 -** Factors in selection (of National Parks; see Ministry of Town and Country Planning, 1947)):

Natural beauty	Great natural beauty
Recreation	A high value for open-air recreation
Substantial continuous extent	Distribution so that at least one of them is quickly accessible from each of the main centres of population in England and Wales
Merit in variety	With the wide diversity of landscape which is available in England and Wales, it would be wrong to confine the selection of National Parks to the more rugged areas of mountain and moorland, and to exclude other districts which, though of less 'outstanding' grandeur and wildness, have their own distinctive beauty and high recreational value

A2.4 1986

Wildlife and Countryside Acts 1981 & 1985: Section 3 Conservation Maps of National Parks – Guidelines (CCD6), Countryside Commission (out of print)

A2.4.1 This guidance included a table of 'factors affecting natural beauty' in response to Section 3 of the Wildlife and Countryside Acts of 1981 and 1985 which placed a responsibility on each of the National Parks of England and Wales to prepare a map showing those areas of mountain, moor, heath, woodland, down, cliff or foreshore, the natural beauty of which the Authority considers it is particularly important to conserve. The same factors were subsequently reproduced in Countryside Commission (1987).

Physiographic	Geology, soils, relief/landform, land use, vegetation, ecological habitats, natural history/wildlife, archaeology, artefacts – buildings, walls
Associations	a. Historical – general history of settlements, special events b. Cultural – well-known personalities, literary, painting, music
Aesthetics	a. Visual – extent/degree of enclosure, form, scale, continuity/harmony/ contract, diversity, colour (hue, time), texture, presence of eyesores, detractors from scene, contribution to wider landscape, views out – length and breadth, views in – length and breadth, boundaries to views b. Other Senses – sounds, smalls, tastes, touch
Relative to other areas	Nationally rare, regionally rare, typical/representative of an area

Feelings evoked in the observer	Comfort, awe, remoteness, solitude, joy
Public accessibility	Indirect/visual, direct/actual – by vehicle, bicycle, horse or foot

A2.5 1991

Landscape Assessment: Principles and Practice, Countryside Commission (out of print)

A2.5.1 This Countryside Commission for Scotland (1991) guidance proposed criteria for evaluating landscape quality in Scotland, in relation to designation of National Scenic Areas, which are summarised in **Table 2** (originally **Table 4.2** of Part 4) of the University of Sheffield's 'A Statement on Natural Beauty: A Report to the Countryside Council for Wales' (2006).

Table 2: Proposed criteria for evaluating landscape quality in Scotland:

Main criterion	Factors considered	Explanation
Landscape as a resource	Rarity	Value conferred by virtue of scarcity value either of landscape as a whole or elements within it
	Representativeness/ typicality	Value because a landscape is typical or representative of its type demonstrating better than other areas the combination of features and attributes which characterise that type
Scenic quality	Combination of landscape elements	Landscape quality arising from the particular mix of landscape elements in an area of their disposition in relation to each other
	Aesthetic quality	Landscape quality resulting from the interaction of elements in terms of visual characteristics such as form, line, colour, texture, diversity, memorability, intactness and so on
	Intangible qualities	Includes sense of place or the 'genius loci' and ideas from preference theory including ideas of prospect/refuge and landscape legibility
Preference	Evidence on public preference	Ideally based on preference attitude surveys
	Informed consensus on value	Evidence from planners and landscape professionals, interest groups involved with landscape and writers, artists and photographers
Special values	Wild land/wilderness quality	Depends on factors such as apparent naturalness, remoteness, extent and feelings of solitude, escape and exposure
	Cultural associations	Landscape can assume significance because of its special cultural associations with people or events
	Special heritage interests	Landscape cannot be divorced from other interests and wildlife, archaeological and historical features and geological or geomorphological features will make major contributions to landscape character as well as having conservation value in their own right

A2.6 1993

Landscape Assessment Guidance (CCP 423), Cobham Resource Consultants, Countryside Commission (1993)

A2.6.1 The section of the 1993 guidance dealing with landscape evaluation dealt explicitly with the need to evaluate the quality of the landscape, especially where the assessment related to an area of designated landscape. A list of criteria for evaluating landscapes for designation was included, developing the factors contained in the Countryside Commission's 1991 guidance. They were:

Landscape as a resource	Important for reasons of rarity or representativeness
Scenic quality	High scenic quality, with pleasing patterns and combinations of features
Unspoilt character	Unspoiled by large scale, visually intrusive industry, mineral extraction etc.
Sense of place	Distinctive and common character, including topographic and visual unity
Conservation interests	Such as features of historical, wildlife or architectural interest
Consensus	Consensus of both professional and public opinion as to its importance

A2.7 1995

Guidelines for Landscape and Visual Impact Assessment (GLVIA1), Landscape Institute and Institute of Environmental Assessment (1995)

A2.7.1 Paragraph **3.41** suggested that a qualitative analysis requires an assessment to be made of landscape condition and importance in the sense of aesthetic or cultural value. It suggested that the analysis may include:

Landscape designations	List of landscape designations that may apply
Reasons for designations	Summary of the reasons for landscape designations, e.g. landscape type is rare in a national or regional context
Scenic quality	Professional judgements as to the scenic quality of the site and its wider landscape context, and to the importance of landscape components
Condition of landscape components	Assessment of the condition of important landscape components, including management of land, and the extent of deviation from the perceived optimum condition
Conservation interests	Details of any notable conservation interests such as features of historical, wildlife or architectural importance
Cultural associations	Reference to any special cultural associations, such as important writing and paintings that feature local landscapes
Local perceptions	Past and present perceptions of local value

A2.7.2 GLVIA1 also referred to Countryside Commission (1993) for further advice on criteria for evaluating landscape quality in England.

A2.8 1999

Interim Landscape Character Assessment Guidance, C. Swanwick & Land Use Consultants, Countryside Agency and Scottish Natural Heritage (out of print)

A2.8.1 Criteria for making judgments about landscape value were:

Landscape as a resource	Rarity, representativeness or typicality
Landscape quality	Extent to which typical character is demonstrated in an area and condition or state of repair of the landscape
Scenic quality	Depends upon perception and reflects the particular combination and pattern of elements in the landscape, its aesthetic qualities and its more intangible sense of place or genius loci
Consensus	Consensus of opinion, expressed by the public, informed professionals, interest groups, and artists, writers and other media
Conservation interests	Presence of features of wildlife, earth science or archaeological or historical interest which add to the value of the landscape as well as having value in their own right
Other values	Landscapes may be valued for their wilderness qualities, or particular cultural associations, or because of their tranquillity

A2.9 2001

LANDMAP 2001, and as amended to date. Countryside Council for Wales (2001)

A2.9.1 The LANDMAP assessment for Wales developed a set of evaluation criteria for separate themed layers.

A2.9.2 A method document for each theme set out and defined each criterion[25], as follows:

[25] LANDMAP methodology, including definitions of each layer, reports, guidance and interactive map browser.

Geological Landscape	*Landscape Habitats*	*Visual and Sensory*	*Historic Landscape*	*Cultural Landscape (NB: not evaluated by degree of importance)*
• *Research value* • *Educational value* • *Historical value* • *Rarity/ uniqueness* • *Classic example*	• *Priority habitats* • *Significance* • *Opportunity* • *Expansion rates* • *Sensitivity* • *Connectivity/ cohesion* • *Habitat evaluation* • *Importance for key species*	• *Scenic quality* • *Integrity* • *Character (strength of)* • *Rarity*	• *Integrity* • *Survival* • *Condition* • *Rarity* • *Potential*	• *Recognition/ transparency* • *Rarity* • *Group value* • *Survival*

Further layers, for seascapes and (ecosystem cultural) services are being added. The latter responds to the Welsh policy context, which views landscape value through ecosystem services, well-being and placemaking.

A2.9.3 Not all evaluations will be relevant to all projects, so intelligent selection is needed. 'Adding up' evaluations for different themes is discouraged as that masks what is important about a landscape (and would just confirm that all landscapes are very important in some way). Their intended use is to open rather than close discussion of landscape value, by alerting users to topics and areas that may need more detailed enquiry.

A2.10 2002

Landscape Character Assessment: Guidance for England and Scotland (CAX 84), Countryside Agency and Scottish Natural Heritage (2002a)

A2.10.1 Paragraph 7.22 states, 'In considering natural beauty and amenity, and in any other situation which requires that a landscape be identified as requiring special attention, judgements must be based at least in part on the concept of landscape value'. The reasons may be set out according to a range of more detailed criteria that may include the following:

Landscape quality/ condition	Intactness of the landscape and the condition of features and elements
Scenic quality	The term that is used to describe landscapes which appeal primarily to the visual senses
Rarity	The presence of rare features and elements in the landscape, or the presence of a rare landscape character type

Representativeness	Whether the landscape contains a particular character, and/or features and elements, which is felt by stakeholders to be worthy of representing
Conservation interests	Presence of features of particular wildlife, earth science or archaeological, historical and cultural interest can add to the value of a landscape as well as having value in their own right
Wildness	Presence of wild (or relatively wild) character in the landscape which makes a particular contribution to sense of place
Associations	Associations with particular people, artists, writers, or other media, or events in history

A2.11 2006

A Statement on Natural Beauty, Sheffield University Landscape Department, Countryside Council for Wales (CCW; Selman and Swanwick, 2010)

A2.11.1 This was an academic study commissioned by CCW. Paragraph **6** refers to criteria that can be taken into account in defining landscape value and hence defining landscapes which have outstanding 'natural beauty' as:

Scenic quality	Aesthetic aspects of landscape (those which give pleasure to the senses), its perceptual dimensions and the spiritual or emotional impact that both have on people
Sense of place	Unity and distinctiveness of landscape character
Landscape quality/condition	Intactness of the landscape and its condition, distinctiveness of landscape character in a particular locality
Integrity	Intact rural character and general lack of large-scale, visually intrusive or otherwise inharmonious development
Perceptual qualities	Perceptual qualities which make a particular contribution to sense of place, including wildness and tranquillity
Associations	Important associations of the landscape with people, places or events relevant to a particular place
Cultural descriptions	Expressions or descriptions of the landscape in art, literature, music and other art forms, through language and folklore, and through modern media
Rarity or representativeness	Either of the landscape as a whole, or of individual elements and features within it
Conservation interest	Presence of features of particular wildlife, earth science or archaeological, historical and cultural interest which add value to the landscape as well as having conservation value in their own right

Guidance on Local Landscape Designations, SNH and Historic Environment Scotland[26]

A2.11.2 SNH and Historic Environment Scotland's (2006) guidance on local landscape designations suggested that local authorities need to identify both the character and qualities of the landscape considered to be of particular value in the local context, and suggested the following aspects/factors could be considered:

	Definition	Description
Aspects of landscape character		
Typicality	Elements of landscape character which are particularly common within the assessment area as a whole	Landscape features or combination of features that recur throughout the area
Rarity or uniqueness	Particular aspects of landscape character which are rare or unique in the area	Landscape features or combination of features which are rare or unique within the assessment area as a whole
Condition or quality	The degree to which individual characteristics of landscape character are in a good state of repair or health	Landscape features or combination of features which are in a good state of repair
Landscape qualities		
Scenic	Aspects of the landscape and our reaction to it which contribute to its natural beauty and aesthetic appreciation	Landscapes with strong visual, sensory and perceptual impacts and experiential appeal. May contain a pleasing combination of features, visual contrasts or dramatic elements
Enjoyment	Aspects of the landscape and our reactions to it which contribute to its potential for recreation and amenity	Landscapes of importance as local greenspace, as tranquil areas and/or for countryside recreation. May contain viewpoints and landmarks
Cultural	Aspects of the landscape and our reactions to it which contribute to the understanding of its historic character and the wider cultural record	Landscapes rich in archaeology, built heritage, literary, artistic and other cultural associations and local history. May include historic gardens and designed landscapes
Naturalness	Aspects of the landscape and our reactions to it which contribute to its naturalness	Landscapes with extensive semi-natural habitat, a lack of human presence and perceived qualities of wildness. May include areas of wild land

A2.12 2011

Guidance for assessing landscapes for designation as National Park or Area of Outstanding Natural Beauty in England, Natural England (2011)

A2.12.1 Table 3 of this guidance sets out factors that are related to Natural Beauty. These are expanded upon in Appendix 1 to include sub-factors and indicators, as follows:

[26] Accessible at [redacted]

Factor	Example sub-factor	Example Indicator
Landscape quality	Intactness of the landscape in visual, functional and ecological perspectives	Characteristic natural and man-made elements are well represented throughout
	The condition of the landscape's features and elements	Landscape elements are in good condition
	The influence of incongruous features or elements (whether man-made or natural) on the perceived natural beauty of the area	Incongruous elements are not present to a significant degree, are not visually intrusive, have only localised influence or are temporary in nature
Scenic quality	A distinctive sense of place	Landscape character lends a clear and recognisable sense of place
	Striking landform	Landform shows a strong sense of scale or contrast
		There are striking landform types or coastal configurations
	Visual interest in patterns of land cover	Land cover and vegetation types form an appealing pattern or composition in relation to each other and/or to landform which may be appreciated from either a vantage point or as one travels through a landscape
	Appeal to the senses	Strong aesthetic qualities, reflecting factors such as scale and form, degree of openness or enclosure, colours and textures, simplicity or diversity, and ephemeral or seasonal interest
		Memorable or unusual views and eye-catching features or landmarks
		Characteristic cognitive and sensory stimuli (e.g. sounds, quality of light, characteristic smells, characteristics of the weather)
Relative wildness	A sense of remoteness	Relatively few roads or other transport routes
		Distant from or perceived as distant from significant habitation
	A relative lack of human influence	Extensive areas of semi-natural vegetation
		Uninterrupted tracts of land with few built features and few overt industrial or urban influences
	A sense of openness and exposure	Open, exposed to the elements and expansive in character
	A sense of enclosure and isolation	Sense of enclosure provided by (e.g.) woodland, landform that offers a feeling of isolation
	A sense of the passing of time and a return to nature	Absence or apparent absence of active human intervention

Relative tranquillity	Contributors to tranquillity	Presence and/or perceptions of natural landscape, birdsong, peace and quiet, natural-looking woodland, stars at night, stream, sea, natural sounds and similar influences
	Detractors from tranquillity	Presence and/or perceptions of traffic noise, large numbers of people, urban development, overhead light pollution, low flying aircraft, power lines and similar influences
Natural heritage features	Geological and geo-morphological features	Visible expression of geology in distinctive sense of place and other aspects of scenic quality
		Presence of striking or memorable geo-morphological features
	Wildlife and habitats	Presence of wildlife and/or habitats that make a particular contribution to distinctive sense of place or other aspects of scenic quality
		Presence of individual species that contribute to sense of place, relative wildness or tranquillity
Cultural heritage	Built environment, archaeology and designed landscapes	Presence of settlements, buildings or other structures that make a particular contribution to distinctive sense of place or other aspects of scenic quality
	Historic influence on the landscape	Visible presence of historic landscape types or specific landscape elements or features that provide evidence of time depth or historic influence on the landscape
	Characteristic land management practices	Existence of characteristic land management practices, industries or crafts which contribute to natural beauty
	Associations with written descriptions	Availability of descriptions of the landscape in notable literature, topographical writings or guidebooks, or significant literature inspired by the landscape
	Associations with artistic representations	Depiction of the landscape in art, other art forms such as photography or film, through language or folklore, or in inspiring related music
	Associations of the landscape with people, places or events	Evidence that the landscape has associations with notable people or events, cultural traditions or beliefs

A2.13 2013

Guidelines for Landscape and Visual Impact Assessment (GLVIA3), Landscape Institute and Institute of Environmental Management & Assessment (2013)

A2.13.1 **Box 5.1** contains a 'Range of factors that can help in the identification of valued landscapes'. These are:

Landscape quality (condition)	A measure of the physical state of the landscape. It may include the extent to which typical character is represented in individual area, the intactness of the landscape and the condition of individual elements
Scenic quality	The term used to describe landscapes that appeal primarily to the senses (primarily but not wholly the visual senses)
Rarity	The presence of rare elements or features in the landscape or the presence of a rare Landscape Character Type.
Representativeness	Whether the landscape contains a particular character and/or features or elements which are considered particularly important examples
Conservation interests	The presence of features of wildlife, earth science or archaeological or historical and cultural interest can add to the value of the landscape as well as having value in their own right
Recreation value	Evidence that the landscape is valued for recreational activity where experience of the landscape is important
Perceptual aspects	A landscape may be valued for its perceptual qualities, notably wildness and/or tranquillity
Associations	Some landscapes are associated with particular people such as artists or writers, or events in history that contribute to perceptions of the natural beauty of the area

A2.14 2017

Guidance Note 1: LANDMAP and Special Landscape Areas, Natural Resources Wales (2017)

A2.14.1 Paragraph **6.1.2** states that 'by definition, an SLA designation usually only applies to areas that are deemed as 'special' in terms of their local landscape character. This reflects both local distinctiveness and sense of place, as well as landscape quality in its own right'. Examples of landscape criteria are:

Rarity	A landscape that is particularly rare/unique or special in the local context
Distinctiveness	An area with a distinct landform or topography, forming a discrete and recognisable area in the local landscape
Natural or cultural character	A landscape with strong character linked to natural or cultural factors, which contribute to an understanding of historic character, wider cultural values or create a strong degree of naturalness
Cultural associations	A landscape with particular cultural associations, represented in art, literature, music, language or folklore
Scenic qualities	An area of recognisable character with a strong sense of place and/or scenic qualities

Guidance on Local Landscape Areas (Draft), Scottish Natural Heritage and Historic Environment Scotland (now superseded)

A2.14.2 **Table 1** of Scottish Natural Heritage and Historic Environment Scotland's (2017) draft guidance set out the common criteria used to define landscape qualities:

Landscape Qualities	Definition	Description
Scenic	Landscape that appeals primarily to the visual senses, appreciated for its natural beauty	Landscapes with strong visual, sensory and perceptual impacts and experiential appeal. May contain a pleasing combination of features, visual contrasts or dramatic elements
Cultural	Landscape with features of archaeological, historical or cultural interest, offering a time-depth to people's experience.	Landscapes rich in archaeology, built heritage, literary or artistic connections, consciously designed (parks and gardens), the scene of historic events (such as battles), other cultural associations and local history. and designed landscapes
Natural	Landscape of strong natural or semi-natural character, with wildlife or earth science features	Landscapes with extensive semi-natural habitat, distinctive topography or geology, a lack of human presence and perceived sense of 'wildness'
Enjoyment	Landscape recognised for recreation and amenity, which evokes pleasure	Landscapes valued as tranquil areas and/or for countryside recreation. May contain viewpoints and landmarks
Rarity or uniqueness	The presence of rare elements or features in the landscape or a rare landscape character type	Landscape features or combination of features which are rare or unique within the assessment area as a whole. Landscapes that are distinctive with a strong 'sense of place'
Typicality	A landscape that is a good example of a particular landscape type, and often relatively common within the assessment area	Landscape features or combination of features that recur throughout the area

A2.15 2020

Guidance on Designating Local Landscapes, NatureScot and Historic Environment Scotland (2020)

A2.15.1 This guidance states, at paragraph **2.4.2**: 'Selection criteria are essential. These must be fit for purpose, developed by agreement with interested stakeholders where possible, and applied consistently. The criteria relate to the special qualities of a landscape'. **Table 1** of the guidance sets out the range of evaluation criteria commonly used, noting 'this is not a fixed list as the criteria need to be appropriate to each designation process' (paragraph **2.4.4**). The criteria in **Table 3** of the guidance are:

Landscape criterion	Definition	Description
Scenic	Landscape that appeals primarily to the visual senses, and is appreciated for its beauty	Landscapes with strong visual, sensory and perceptual impacts and experiential appeal. May contain a pleasing combination of features, visual contrasts or dramatic elements

Cultural	Landscape with clear evidence of archaeological, historical or cultural interests / associations / significance, offering a time-depth to people's experience	Landscapes rich in archaeology or built heritage, or consciously designed (e.g. parks and gardens), or largely the product of human interaction. May include the scene of historic events (such as battles), have literary or artistic connections, or other cultural associations and local history
Natural	Landscape of strong natural or semi-natural character, with clear evidence of ecological, geological or geomorphological interest	Landscapes with extensive semi-natural habitat, distinctive topography or geology, a general lack of permanent human presence and a perception of wildness
Recreation and enjoyment	Landscape recognised as offering opportunities for recreation and amenity, where experience of landscape is important	Landscapes valued for recreation. May contain viewpoints, landmarks and renowned vistas; paths and trails including core paths, rights of way, long distance trails, national cycle routes; and scenic routes
Local distinctiveness and sense of place	Landscape that has a strong sense of identity	Landscape features or combination of features which are identified as being characteristic of a particular place. Landscapes that are distinctive with a strong 'sense of place'
Health and wellbeing	A landscape which makes particular contribution to both the physical and psychological health and wellbeing of a local community and/or visitors	Landscape facilities and features which are well-used and valued by local communities and visitors
Important spatial function	Landscape that performs a clearly identifiable and valued spatial role	Can include, for example, settlement 'gateways', or separation between developments

A2.15.2 The guidance notes that the list is not fixed as the criteria need to be appropriate to each designation process. It also recognises that not all the criteria need to be met in every case: a landscape might be deemed so valued under one criterion that it merits designation on that basis alone. The guidance explains that the aim is to identify and analyse what the qualities are that, individually or when combined, make the area special in terms of its landscape and scenery.

A3 (Appendix 3) Designated landscapes: UK policy and guidance

A3.1 Introduction

A3.1.1 This Appendix considers how landscape is valued in UK legislation and in UN, European and UK policy statements, regulations and guidance. It describes the current UK hierarchy of international, nationally protected, and locally designated landscapes, including the different approaches of devolved nation governments.

A3.2 Internationally valued landscapes

A3.2.1 Globally, under the **UNESCO World Heritage Convention 1992**, landscapes may be designated to ensure the protection of their natural and/or cultural heritage. World Heritage Sites must have values that are outstanding and universal, and it is each site's Outstanding Universal Value (OUV) that is to be protected. Cultural landscapes are said to 'express a long and intimate relationship between peoples and their natural environment'.

A3.2.2 In the UK there are 32 sites on the current list. The UNESCO 2008 operational guidelines describe categories of 'clearly defined landscape designed and created intentionally by man, organically evolved landscape, and associative cultural landscape, identified on the international list as 'cultural, natural or mixed' sites'. Criteria for selection are described on UNESCO's website[27].

A3.2.3 **The International Union for Conservation of Nature (IUCN)** provides a global classification system for Protected Areas. National Parks in England, Wales and Scotland, and Areas of Outstanding Natural Beauty (AONBs) in England, Wales and Northern Ireland are internationally recognised as **Category V Protected Areas**, as living, working landscapes and seascapes. National Parks and AONBs are periodically assessed by the IUCN to ensure continued compliance with the standards and management guidelines[28].

A3.3 The European Landscape Convention

A3.3.1 The UK is a member state on the Council of Europe and a signatory to the **European Landscape Convention (ELC) 2004**, which came into effect in the UK in 2007. The first aim of the ELC is to encourage public authorities to adopt policies and measures at local, regional, national and international level for protecting, managing and planning landscapes throughout Europe.

A3.3.2 The treaty introduces the concept of all landscapes having value in terms of quality of life and wellbeing. Signatories commit to 'acknowledging that the landscape is an important part of the quality of life for people everywhere: in urban areas and in the countryside, in degraded areas as well as in areas of high quality, in areas recognised as being of outstanding beauty as well as everyday areas.' The ELC's 'all-landscapes' approach is compatible with the identification of 'valued landscapes' as it seeks to promote 'measures to preserve the present character and quality of a landscape which is greatly valued'.[29]

[27] [redacted]

A3.4 National landscape designations

A3.4.1 Planning legislation and policy in each of the UK's devolved nations recognise landscape value at both national and local levels. England, Wales, Scotland and Northern Ireland each have their own primary planning legislation.

A3.4.2 It should be noted that Green Belt is not a landscape designation and does not denote landscape value, although it does perform a spatial function in the landscape.

England

A3.4.3 Statutory designations of landscapes in England, which are safeguarded by legislation, originated with the National Parks and Access to the Countryside Act 1949. The Broads National Park is designated under its own Act of Parliament (the Broads Act 1988). National Park purposes are defined as 'conserving and enhancing its natural beauty[30], wildlife and cultural heritage, and promoting understanding and enjoyment of its special qualities by the public'. The 1949 Act also made provision for the designation of AONBs to 'preserve and enhance natural beauty'. This original purpose of 'preserving and enhancing' was subsequently changed to 'conserving and enhancing' (Environment Act 1995).

A3.4.4 The Countryside & Rights of Way (CROW) Act 2000 consolidated the provisions of the 1949 Act, enabling conservation boards to be set up for larger AONBs and requiring management plans to be adopted for AONBs. Two AONBs have Conservation Boards, the Chilterns and Cotswolds AONBs.

A3.4.5 AONBs carry the same status and level of landscape protection as National Parks (Defra Vision and Circular 2010). Paragraph 20 states: 'The Government continues to regard National Park designation (together with that for Areas of Outstanding Natural Beauty ['AONBs']) as conferring the highest status of protection as far as landscape and natural beauty is concerned'.

A3.4.6 In England, Heritage Coasts (from 1973) are protected by policy rather than statute, though many are located within National Parks or AONBs and benefit from their statutory protection. They are defined (rather than designated) by agreement between local authorities and Natural England. The policy framework for Heritage Coasts in England was issued by the Countryside Commission (the predecessor to Natural England) in 1992. Heritage Coasts are defined as coastlines of exceptionally fine scenic quality, which are more than a mile in length, substantially undeveloped and contain features of special significance and interest.

A3.4.7 Historic England maintains a statutory 'Register of parks and gardens of special historic interest in England' and a separate 'Register of historic battlefields'. Although these designations bring no additional statutory controls, they contribute to landscape value as well as being heritage assets which are protected through national policy. National policy also requires local authorities to make provision for the protection of the historic environment in their policies and their allocation of resources.

Wales

A3.4.8 Historically, Wales shared most of the legislation and guidance relevant to landscape with England, notably the National Parks and Access to the Countryside Act 1949. The statutory landscape designations that apply in Wales are therefore the same as in England: National Parks, which are valued for their 'natural beauty and recreational value', and AONBs, valued for their 'outstanding distinctive landscape character and natural beauty'. In Wales, National Parks and AONB authorities are legally required to produce a management plan which sets out the Special Qualities of the area and policies to conserve and enhance the natural beauty of the designation. As set out in Planning Policy Wales, National Parks and AONBs are of equal status in terms of landscape and scenic beauty, and must both be afforded the highest status of protection from inappropriate developments.

A3.4.9 In 2014 Welsh Government commissioned a Review of Designated Landscapes and the 'Marsden Report' was published the following year. The review concluded in 2018 with Welsh

[30] The term 'natural beauty' is enshrined in the 1949 Act. The 1949 Act did not define what 'natural beauty' actually meant. Since then, its meaning has been clarified and interpreted through a series of studies, guidance documents, Secretary of State Decision letters, an Appeal Court judgement and public inquiries. Some clarification has also been provided through legislative amendments to the 1949 Act, e.g .NERC Act 2006 Section 99. Today, it is understood that natural beauty goes well beyond scenic or aesthetic value: it is to do with the relationship between people and place, and encompasses everything - 'natural' and human - that makes an area distinctive.

Governments response: 'Valued and Resilient' (Welsh Government, 2018). This sets out Welsh Governments priorities for the National Parks and AONBs in Wales.

A3.4.10 Non-statutory landscape designations valued at a national level include Heritage Coasts, which represent the most scenically outstanding stretches of undeveloped and unspoilt coast in Wales. Cadw, the historic environment service of the Welsh Government, in partnership with Natural Resources Wales (NRW) and the International Council on Monuments and Sites (ICOMOS UK) compiled (in 2014) a Register of landscapes of outstanding or special historic interest in Wales. This is a non-statutory register, 'intended to provide information and raise awareness of an initial selection of the most important and significant historic landscape areas in Wales in order to aid their protection and conservation'.[31]

Scotland

A3.4.11 Scotland's two National Parks (Loch Lomond and The Trossachs National Park and the Cairngorms National Park) are designated under the National Parks (Scotland) Act 2000. Scotland also has National Scenic Areas (NSAs), designated as *'areas of outstanding scenic value in a national context'*[32], and broadly equivalent to AONBs in England and Wales. NSAs were first described in 'Scotland's Scenic Heritage' (CCS 1978) and have been recognised within the planning system since 1980. As explained on the Scottish Government's website[33], in 2010, Scottish Ministers issued directions to local authorities under provisions in section 263A of the Town and Country Planning (Scotland) Act 1997 (inserted by section 50 of the Planning etc. (Scotland) Act 2006) to designate the current suite of NSAs. The NSAs include areas of landscape described variously on the www.nature.scot website as 'spectacular, dramatic, picturesque and richly diverse'.

A3.4.12 Wild land is not a statutory designation but the third National Planning Framework (NPF3, 2014) 'recognises wild land as a nationally important asset and indicates that Scotland's wildest landscapes merit strong protection'. NatureScot has identified 'wild land areas' – nationally important extensive areas of semi-natural landscapes that show minimal signs of human influence.[34] Historic Environment Scotland maintains the Inventory of Gardens and Designed Landscapes and the Inventory of Historic Battlefields. The cultural significance of sites can be taken into account in the planning process.

Northern Ireland

A3.4.13 In 2015, a new two-tier planning system came into force under the Planning Act (Northern Ireland) 2011. It introduced a sharing of planning responsibilities between eleven Councils and the Department for Infrastructure (DfI). The new planning system involved a move away from a suite of Planning Policy Statements (PPS) to a single Strategic Planning Policy Statement (SPPS 2015). However, a transitional period is in operation until local authorities adopt their Local Development Plans (LDPs). The Department of Agriculture, Environment and Rural Affairs (DAERA) has two Executive Agencies, namely Northern Ireland Environment Agency (NIEA) and Northern Ireland Forest Service.

A3.4.14 The main legislative basis for DAERA NIEA in relation to landscape and amenity protection is the Nature Conservation and Amenity Lands Order (NI) 1985 (NCALO). Through this, the former Department of the Environment for Northern Ireland (DOE NI) designated the seven landscape areas with the highest amenity value as Areas of Outstanding Natural Beauty (AONB), although the Lagan Valley AONB remains designated under an earlier act, The Amenity Lands Act 1965.

A3.4.15 'Shared Horizons' (2003) is the former DOE NI's Statement of Policy on Protected Landscapes, relating to the protection and sustainable use of Northern Ireland's finest landscapes. Such areas are usually recognised by some form of designation, which sets them apart from the wider countryside. Whilst the only designation currently in use in Northern Ireland to identify areas of high landscape

[31] https://lle.gov.wales/catalogue/item/RegisteredLandscapesOfOutstandingHistoricInterestInWales/?lang=en
[32] Planning etc. (Scotland) Act 2006 2006 asp 17.
[33] https://www.gov.scot/policies/landscape-and-outdoor-access/natural-heritage-designations/
[34] [redacted]

quality is that of Area of Outstanding Natural Beauty (AONB) provision has been made for the potential designation of National Parks in future.[35]

A3.5 Local landscape designations

England

A3.5.1 England has seen a rise and fall in the use of local landscape designations over the years. In line with the Town and Country Planning Act 1968, many county councils adopted some form of non-statutory landscape designation when preparing their structure plans. Local designations had various names such as Areas of Great Landscape Value, Special Landscape Areas, Areas of Special Landscape Value, Undeveloped Coast and Coastal Preservation Areas.

A3.5.2 In 2004 national guidance in Planning Policy Statement (PPS 7): Sustainable development in rural areas (ODPM 2004) (now cancelled and superseded by the National Planning Policy Framework (NPPF 2019)) advised local planning authorities only to rely on statutory designations when seeking to conserve 'specific features and sites of landscape, wildlife and historic or architectural value'. Paragraph 25 stated that 'Local landscape designations should only be maintained or, exceptionally, extended where it can be clearly shown that criteria-based planning policies cannot provide the necessary protection'. This resulted in a decline in the use of local landscape designations in England, and in many places they were replaced by criteria-based local plan policies linked to local landscape character assessments.

A3.5.3 NPPF paragraph 171 requires development plans to 'distinguish between the hierarchy of international, national and locally designated sites'; but does not make any specific reference to local landscape designations. However, national Planning Practice Guidance (PPG) Paragraph: 036 [Reference ID: 8-036-20190721] makes it clear that strategic policies should provide for the conservation and enhancement of landscapes and that this can include locally designated landscapes. The NPPF also enables land to be designated as a 'Local Green Space' through local and neighbourhood plans – these are areas that are special to a local community or have particular local significance, for example because of their beauty, historic significance, recreational value, tranquillity or richness of wildlife.

A3.5.4 Future changes in the planning system are proposed in the Government's draft planning white paper: *Planning for the Future* (2020), but it is not yet clear how 'valued landscapes' may be interpreted within the proposed categories of 'growth', 'renewal' and 'protected' areas.

Wales

A3.5.5 Since the establishment of the Welsh Assembly Government in 1999, and following the 2011 referendum and the Wales Act 2017, Wales has been developing its own regulatory framework for landscape. Planning Policy Wales (PPW10 2018) currently sets the context for planning in Wales. Para 6.3.3 explains that 'all the landscapes of Wales are valued for their intrinsic contribution to a sense of place'.

A3.5.6 PPW10 supports local landscape designations and advises (para 6.3.11) that 'Planning authorities should provide for the conservation and, where appropriate, enhancement of local landscapes. This may include policies for landscape features, characteristics and qualities of local significance, and the designation of Special Landscape Areas (SLAs). Planning authorities should state which features, characteristics or qualities require extra protection, and explain how the policy or designation will achieve this protection'. Special Landscape Areas (SLAs) in Wales are non-statutory local landscape designations used by some local authorities to define areas of high landscape importance and to provide for their conservation and enhancement through policies in their local plans and supplementary guidance. SLAs are defined using LANDMAP, and mainly include landscape areas evaluated as Outstanding and High (of national or county importance). In June 2020, 17 local authorities out of 22 had SLAs linked to a local policy plan.

A3.5.7 LANDMAP is the all-Wales GIS based landscape resource that records and evaluates landscape characteristics, qualities and influences on the landscape for the purposes of landscape assessment. LANDMAP Guidance Note 1 (Natural Resources Wales, 2017) sets out an approach for defining Special

[35] https://www.daera-ni.gov.uk/articles/shared-horizons

Landscape Areas (SLAs). These may be designated for 'their intrinsic physical, environmental, visual, cultural and historical importance, which may be considered unique, exceptional or distinctive to the local area'. They should be 'important for their distinctive character, qualities and sense of place'.

Scotland

A3.5.8 National policy in Scotland is set out in NPF3 and Scottish Planning Policy (SPP 2014). SPP states that the planning system should 'facilitate positive change while maintaining and enhancing distinctive landscape character' (paragraph 194), and the ELC is listed as a key document. Paragraph 197 advises that 'Planning authorities are encouraged to limit non-statutory local designations to areas designated for their local landscape or nature conservation value: the purpose of areas of local landscape value should be to safeguard and enhance the character and quality of a landscape which is important or particularly valued locally or regionally; or promote understanding and awareness of the distinctive character and special qualities of local landscapes; or safeguard and promote important local settings for outdoor recreation and tourism'.

A3.5.9 Local Landscape Area (LLA) designations (previously Special Landscape Area; prior to that a variety of names was used), are used in local development plans across Scotland. NatureScot and Historic Environment Scotland (2002) jointly published *Guidance on Designating Local Landscape Areas* (LLAs) is a revised and updated version of guidance originally produced in 2006). This is intended primarily for local authorities to use in taking forward their own designation process. The guidance acknowledges that local landscape designations are a valuable tool in the development plan toolbox and outlines the process for designating new LLAs and refreshing existing designations.

Northern Ireland

A3.5.10 Planning Policy Statement 2 (PPS2 2013) sets out policies for the conservation, protection and enhancement of Northern Ireland's natural heritage. Local authorities are responsible for zoning a variety of landscape related areas as part of their Local Development Plan process. The designations that may be used for local landscapes include Local Landscape Policy Areas (LLPAs) and Areas of High Scenic Value (AoHSVs), although Areas of Townscape Character (ATCs), Areas of Village Character (AVCs) and Countryside Policy Areas (CPAs) may also be designated.

A3.5.11 Planning Policy Statement 6 (PPS6 1999) explains that 'Environmental assets, identified as part of the process of Countryside Assessment, will normally form the basis for the designation of local landscape policy areas. These consist of those features and areas within and adjoining settlements considered to be of greatest amenity value, landscape quality or local significance and therefore worthy of protection from undesirable or damaging development'.

A3.5.12 The Department of the Environment's 'Strategic Planning Policy Statement for Northern Ireland' (SPPS 2015), which will supersede PPS6, highlights Local Landscape Policy Areas (LLPAs) stating that Local Development Plans should, where appropriate, designate LLPAs and bring forward local policies and guidance to maintain the intrinsic landscape, environmental value and character of such areas.

A4 (Appendix 4) The valued landscape 'policy test' in England

A4.1 2012 National Planning Policy Framework (NPPF)

A4.1.1 In 2012, the first version of the NPPF was published. It included a policy (paragraph 109) which stated that 'The planning system should contribute to and enhance the natural and local environment by: [inter alia] protecting and enhancing valued landscapes'.[36] No definition of a 'valued landscape' was given in the NPPF[37]. Planning Practice Guidance paragraph 036 Ref ID:036-20190721 provides advice on the use of policies for landscapes of a particular local value but there is no guidance on how to identify such landscapes.

A4.1.2 The term valued landscape appears in the 2002 landscape character assessment guidance and in the title of GLVIA3 Box 5.1 ('Range of factors that can help in the identification of valued landscapes') which was published in 2013. However, the reference in GLVIA is a quote from the 2002 guidance and not a response to the use of the term 'valued landscapes' in the 2012 NPPF.

A4.1.3 Following the 2012 NPPF the identification of 'valued landscapes' took on a new level of significance in planning appeals. Methods used to identify 'valued landscapes' in the context of the NPPF began to emerge, based on evidence presented by expert landscape witnesses at inquiry, Inspectors'/Secretary of State's decisions, and court judgements. The evolution of approaches to the identification of 'valued landscapes' is summarised in **Appendix A5.** The 'preferred' approach that has emerged is based on the value factors set out in GVLIA3 Box 5.1.

A4.1.4 One particularly influential judgment[38] accepted an approach which identified whether a landscape had sufficient 'demonstrable physical attributes' to take it beyond 'ordinary landscape'. This judgment also found that the 2012 NPPF was clear that 'designation' and 'valued' in relation to landscapes do not mean the same thing. Although this approach is still widely accepted the particular term 'demonstrable physical attributes' is not used in this TGN because it can be misunderstood as focusing exclusively on physical factors and excluding the perceptual and associative factors that may contribute towards the value of a landscape.

A4.2 2018/9 NPPF

A4.2.1 In July 2018, the NPPF was revised, and the 2012 'valued landscape' paragraph 109 was transposed, with modifications, to paragraph 170. The NPPF was revised again in February 2019[39] but paragraph 170 remained unchanged. There is still no definition of 'valued landscapes'.

A4.2.2 Paragraph 170 a) qualifies the term 'valued landscapes' as follows (qualification underlined): 'Planning policies and decisions should contribute to and enhance the natural and local environment by:

[36] Planning Policy Statement 7 Sustainable Development in Rural Areas P24 introduces the idea of valued landscapes which can be protected via of criteria-based policies rather than local designations.

[37] The Landscape Institute is aware of the lack of clarity regarding the expression 'valued landscapes'. The LI drew attention to this wording in a response to the government consultation on the draft NPPF 2012, and again on the draft revised NPPF 2018 (in 2017). The LI continues to respond to all relevant government consultations, in particular those issued by MHCLG and DEFRA. The LI uses these invitations to comment and draw attention to any perceived lack of clarity or inconsistencies in the text of consultation drafts, making suggestions for revised wording where appropriate.

[38] Stroud DC v SoSCLG [2015] EWHC 488 (See Appendix 2 for further discussion of this judgement).

[39] The current consultation draft of a proposed revision to the NPPF (2020) does not include any changes to the wording of paragraph 170.

a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (*in a manner commensurate with their statutory status or identified quality in the development plan*)'.

A4.2.3 The precise meaning of *in a manner commensurate with their statutory status or identified quality in the development plan* has been the subject of much debate, especially at planning inquiries, since 2018. **Appendix A5** refers to a number of decisions relating to its interpretation which provide an indication of the issues inspectors have considered to be relevant in the light of this qualification. However, there is no consensus on the meaning of the qualification and the interpretation of policy intentions and meanings can only be determined by the Courts. At the time of writing there have been no court judgments, post the 2018 revision, that have addressed the issue of 'valued landscapes'.

A4.2.4 This Appendix sets out the Landscape Institute's guidance on how landscape professionals should identify 'valued landscapes' and in particular how landscape professionals might interpret the phrase 'in a manner commensurate with their statutory status or identified quality in the development plan'. It is intended to:

- *guide landscape professionals undertaking landscape assessments in England, so that their judgments about landscape value are based on a transparent and structured approach such as the one set out in Table 1 above; and*
- *assist decision-makers in England who have to interpret and balance the judgments made by different landscape professionals.*

Statutory status

A4.2.5 The interpretation of the phrase 'in a manner commensurate with their statutory status' is relatively straightforward. Where a landscape has a statutory status, such as a National Park or AONB, it is self-evident that it is a valued landscape[40]. The great weight that should be given to conserving and enhancing landscape and scenic beauty in nationally designated landscapes is set out at NPPF paragraph 172 and relates to the statutory requirements with regard to natural beauty and (for National Parks only) the opportunities afforded for open-air recreation. Paragraph 170 a) does not alter those requirements.

Identified quality in the development plan

A4.2.6 The interpretation of 'identified quality in the development plan' is not clear. There are two fundamentally different interpretations that have been adopted by inspectors, which are considered below in more detail:

1. It means non-statutory, locally designated landscapes;
2. It means any landscape where there is evidence to justify the identification of a 'valued landscape'. Local designation alone may not be sufficient evidence.

In both cases it is assumed that the word 'quality' means degree of excellence.

Locally designated landscape

A4.2.7 The phrase 'identified quality in the development plan' was interpreted by one inspector as meaning a locally designated landscape. This interpretation was accepted by the Secretary of State, although the acceptance was implicit not explicit.[41] However, this interpretation has not been adopted by subsequent inspectors who have identified problems with this approach, in particular:

[40] In cases where a particular area within a National Park or AONB may not demonstrate the level of quality expected of its designation status, this does not mean that its value is diminished. Such an area is still a component of the nationally designated area with the characteristics associated with the park or AONB as a whole, and the aim should be to bring it back or much closer to the quality and character of the wider designated area so that it can be a positive contributor to the statutory purpose (to conserve and enhance the area's natural beauty).

[41] App 3197293 Pods Brook Road, Braintree, Essex (June 2019).

- *that many planning authorities, following previous policy guidance,[42] no longer have local landscape designations; and*
- *that some local designations do not have an underlying evidence-base.*

A4.2.8 At least one inspector has disagreed with the interpretation that any locally designated landscape must automatically be a valued landscape because in that case the parties agreed there was no evidence base to support the designation.[43]

Development plan policy support

A4.2.9 Many inspectors have continued to consider evidence presented to support the identification of a 'valued landscape' whether a local landscape designation exists or not. Evidence that has been used in reaching judgements about whether a landscape should be considered to be a valued landscape includes:

- *factors that are generally agreed to influence landscape value as set out in GLVIA3 Box 5.1;*
- *the presence of qualities in the landscape that are identified in the development plan (which includes neighbourhood plans) as requiring protection, such as in policies that require development to respect key aspects of a local landscape identified in the local landscape character assessment; and*
- *when a local designation exists, whether the landscape in question demonstrates the landscape qualities that are identified as important for that designation.*

A4.2.10 The Landscape Institute supports the evidence-based approach. The Landscape Institute does not consider that planning authorities which removed local designations following previous policy guidance, or those which never had local landscape designations, should be considered to have no 'valued landscapes' outside nationally designated areas.

A4.2.11 Where a landscape has a statutory status, it will not be necessary to undertake an assessment based on Box 5.1 of GLVIA3 or the factors identified in Table 1 of this TGN. It may also be unnecessary where a local designation is supported by a strong evidence base. However, where there is little published evidence to support existing local landscape designations, an assessment based upon these factors would be helpful to support planning decision making.

Valued landscape definition

A '**valued landscape'** is an area identified as having sufficient landscape qualities to elevate it above other more everyday[44] landscapes.

A4.2.12 Where possible the development plan should be referenced to support the value placed on the landscape. Where the development plan is silent, evidence should be provided in the form of professional analysis. Key points to note are as follows:

- *It is not possible to set a definitive threshold in this TGN above which a landscape is considered to be a 'valued landscape'. It is a judgment that must be made on a case-by-case basis, based on the evidence. There should be a weight of evidence that supports the recognition of a landscape as valued above more everyday landscapes.*
- *The character and quality of landscapes across England are variable and what may be defined as reaching the 'valued landscape' threshold/criteria in one part of the Country may be considered to be an 'everyday landscape' in another.*
- *It would be expected that a 'valued landscape' would demonstrate the presence of a number of indicators of landscape value, as set out in Table 1, although it is possible for one indicator to be of*

[42] Planning Policy Statement (PPS 7): Sustainable development in rural areas (ODPM 2004) – see Appendix A3.
[43] App 3215534 Tuffs Road and Maple Way, Eye, Suffolk (March 2020) The local plan policy was based on an old structure plan and the parties agreed there was no evidence base for that.
[44] 'Everyday' landscapes may nevertheless have value to people.

such importance (e.g. rarity, association or perceptual aspects) that the landscape is judged to be a 'valued landscape' even if other indicators are not present.

- *The identification of landscape value needs to be applied proportionately ensuring that identification of 'valued landscape' is not over used.*
- *In line with the ELC's approach, landscapes that are not judged to be 'valued landscapes' may still have value, and NPPF paragraph 170 b) requires planning policies and decisions to recognise the intrinsic character and beauty of the countryside. It is well-established that a landscape does not have to be a 'valued landscape' to be afforded protection from inappropriate development (**see Appendix A5**).*

A5 (Appendix 5) Inspectors' decisions and case law in relation to the interpretation of 'valued landscapes' in the National Planning Policy Framework (NPPF) in England

A5.1 Introduction

A5.1.1 This Appendix summarises how inspectors' decisions and case law have dealt with the interpretation of 'valued landscapes', first set out in Paragraph 109 of the NPPF 2012 which referred to 'protecting and enhancing valued landscapes'. This was subsequently updated in Paragraph 170 of the revised NPPF 2018 (with the addition of the qualifying phrase 'in a manner commensurate with their statutory status or identified quality in the development plan') and carried forward to the 2019 NPPF.

A5.1.2 The aim of this Appendix is to demonstrate some of the permutations of the arguments and evidence presented in relation to valued landscapes. Planning appeal decisions, by Inspectors and the Secretary of State, must be read as a whole to understand the full context of decisions, noting that Appeal decisions are made independently and on the basis of the evidence before the Inspector or Secretary of State at that time. Interpretation of policy intentions and meanings can only be determined by the Courts.

The 'Stroud Judgement'

A5.1.3 The 'Stroud' Appeal decision in 2014 is of significance because it became the subject of the first definition of 'valued landscape' (in relation to Paragraph 109 of the NPPF) by the courts. An Appeal was made by Gladman Developments Ltd against Stroud District Council's refusal of planning permission for 150 houses at the foot of the escarpment to the Cotswold Hills (Appeal reference APP/C1625/A/13/2207324). In his decision, the Inspector acknowledged that there was no agreed definition of 'valued' as used in Paragraph 109 of the NPPF and that in the absence of any formal guidance on the point, he considered that to be valued would 'require the site to show some demonstrable physical attribute rather than just popularity'. He went on to say that 'In the absence of any such designation, I find that paragraph 109 is not applicable to the appeal site' (Paragraph 18). In this instance, the Inspector found that the site was not a 'valued landscape' and allowed the Appeal.

A5.1.4 Stroud District Council challenged the Inspector's decision (summarised above) in the High Court on four grounds including the Inspector's approach to valued landscape. During the hearing between Stroud District Council and the Secretary of State for Communities and Local Government & Gladman Developments Limited, the Council suggested that the Inspector equated valued landscape with designated landscape. In his judgement (dated February 2015) Mr Justice Ouseley stated that if the Inspector had concluded that designation was the same as valued landscape he would have been wrong because in the NPPF, 'the word "designation" is used when designation is meant and "valued" is used when valued is meant and the two words are not the same'. Mr Justice Ouseley then considered whether the Inspector really meant that he equated designation with valued landscape and concluded that he did not. He judged that the Inspector knew that designation was not the start and finish of the debate. He concluded that '. . . in the end I am satisfied that the Inspector did not make that error. In particular, the key passage is in the third sentence of paragraph 18, in which he said that the site to be valued had to show some demonstrable physical attribute rather than just popularity' (Paragraph 14).

A5.1.5 In Paragraph 16 of the judgment he explains the Inspector's reasoning: 'It is not difficult to see that the sort of demonstrable physical attributes which would take this site beyond mere countryside, if I can put it that way but into something below that which was designated had not been made out in the Inspector's mind'.

Demonstrable physical attributes

A5.1.6 Following this judgment a number of Inspectors have considered the issue of what constitutes a valued landscape by reference to 'demonstrable physical attributes' that take the landscape beyond ordinary countryside and this phrase was taken as a general principle by many. However, in a later judgement (CEG Land Promotions II Lts v SoS HCLG 2018 EWHC 1799), Mr Justice Ousley made it clear that he was not laying down any general principles when he concluded that it was reasonable for an Inspector to look for such demonstrable physical attributes in reaching a conclusion on valued landscape (Paragraph 58).

The role of the site in the wider landscape

A5.1.7 When assessing landscape value, there has been a growing consensus regarding the importance of looking at the role that a site plays in the wider landscape and not limiting the assessment to the site itself. The Inspector for APP/Z1510/W/16/3160474 (West Street, Coggeshall, July 2017) concluded at Paragraph 30 of her decision as follows:

> 'Whilst the Framework paragraph 109 test based on the Stroud case (which I shall consider later) refers to "this site" I consider that it would be too narrow to just consider the appeal site. A site might have a variety of characteristics but, taken in isolation, for some sites it would be difficult to assess whether those characteristics have any particular value or importance. Moreover, a site might be important because of its position in the landscape as part of it rather than being important in its own right, rather like the pieces of a jigsaw puzzle. Further, as my colleague in the Nanpanton Road appeal sets out, the interactions between people and place are important in the perceptions of landscape and people will perceive the site in a wider context'.[45]

A5.1.8 While this decision pre-dates the amendment of the NPPF, its approach to assessing landscape value remains relevant.

Does a lack of local landscape designation preclude the presence of a valued landscape?

A5.1.9 An Inspector in his report for Appeal 3197293 (Pods Brook Road, Braintree, Essex) concluded that 'A straightforward reading of paragraph 170(a) does not lead to the view that there are other categories of valued landscape (which are not statutorily designated or identified in a development plan)'[46] and he equated this with some form of protection in the development plan. This interpretation was accepted by the Secretary of State, although the acceptance was implicit not explicit. However, this interpretation has not been adopted by other inspectors as set out in the following paragraphs.

A5.1.10 An inspector in a decision letter for APP 3200335 (Watlington Road, Lewknor) made clear that he considered the lack of a local landscape designation should not preclude the presence of a valued landscape: 'It would be wrong in my view to conclude that a landscape cannot be considered as valued simply because it was not identified in a development plan formulated at a time when no such requirement existed'.[47]

A5.1.11 In this instance the inspector was not persuaded that the landscape in question was a 'valued landscape' but this judgement was based on the evidence the parties had put to him about the value of the landscape rather than lack of a local designation.

A5.1.12 In relation to App 3207509 (Land off Colchester Road, Bures Hamlet) the Inspector concluded 'Neither, having regard to Paragraph 127, do I consider that the exhortation to protect and enhance "valued" landscapes is necessarily limited to landscapes that have either a statutory designation or a local designation in the development plan' (Paragraph 21). In this case an evaluation for potential

[45] APP 3160470 West Street Coggeshall Inspector Hill Paragraph 30 2017

[46] Appeal 3197293 Pods Brook Road, Braintree, Essex Inspector Clegg Paragraph 185 June 2019

[47] APP 3200335 Watlington Road, Lewknor Inspector Baugh-Jones Paragraph 40 January 2019

extension of the Dedham Vale AONB to include the land in question had been undertaken and so there was a detailed evidence base to demonstrate landscape value despite the lack of designation.

A5.1.13 In relation to App 3214324 (Poplar Hill, Stowmarket, August 2019) the inspector concluded that the development would harm a valued landscape even though the site was not located within a nationally or locally designated area. Additionally, it was in a district that still had local landscape designations. The inspector was concerned with the harm that would arise to features in the landscape surrounding the appeal site as a consequence of development on the appeal site, stating:

> 'Although the site is not recognised in published documents as an exemplary or outstanding component of the Suffolk landscape and its development would in some ways be consistent with characteristic patterns of development along valley sides, the appeal proposal would compromise the appreciation of sufficiently impressive examples of other characteristic features of the landscape as to cause an unacceptable effect on the landscape character and appearance of the area. These characteristic features are Combs Wood and St Mary's Church both of which have statutory status and so would qualify the landscape to be regarded as valued, to be protected and enhanced in terms of NPPF paragraph 170(a)'.[48]

Implication of the NPPF wording for local landscape designations?

A5.1.14 There has been some speculation as to whether the addition of the qualifying phrase 'in a manner commensurate with their statutory status or identified quality in the development plan' to the 2018 version of the NPPF (and carried forward to the February 2019 version) will result in a resurgence of local landscape designations. In his decision letter, the Inspector for App 3207509 (Land off Colchester Road, Bures Hamlet) concluded:

> '22. The Framework does not provide a definition of a valued landscape. However, *I consider it improbable that the addition of the words in brackets to paragraph 170(a) which occurred in July 2018 was intended to encourage policy makers to revive the practice of creating local "Special Landscape Areas" or similar designations in development plans* as a means of identifying a valued landscape. Previous advice had sought to discourage such designations in favour of landscape character assessment which would identify the distinctive and valued qualities of landscapes'[49] (emphasis added).

A5.1.15 Other inspectors suggest the local plan process is the proper forum for landscape value to be considered and for designations to be made. For example, the inspector for App 3200409 (Old Street, Stubbington, January 2019) concluded:

> '30 a . . . the landscape is not specifically recognised for its quality in the current development plan. This is because local landscape designations fell from favour in national planning policy. Previously, the Lower Meon Valley had been identified as an Area of Special Landscape Character.
>
> 31. *In view of para 170 the matter of landscape value will no doubt be considered through the emerging Local Plan process. That is the proper forum for any designation to be made.* However, until that time it is difficult to understand why there would be a change in terms of intrinsic value'[50] (emphasis added).

If a landscape is not a 'valued landscape' can it still have value?

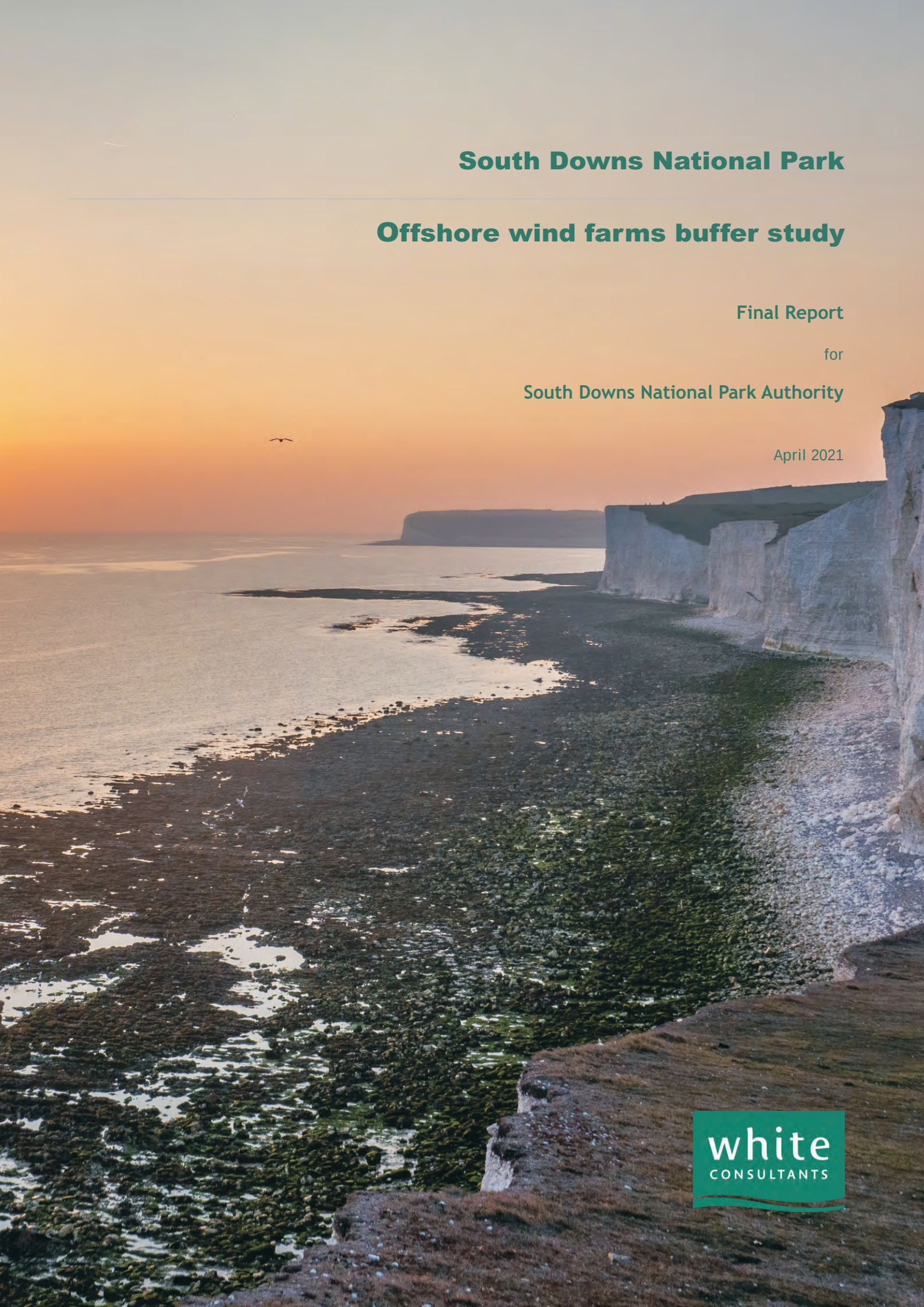
A5.1.16 At the appeal in relation to Bayley Gate Farm, College Road, Cranfield Appeal 3190779 neither the council's nor the appellant's landscape architect considered that the site was a valued landscape. Nevertheless, the inspector concluded that this did not mean it had no value, stating:

> 27. 'The site does not form a valued landscape for the purposes of paragraph 109 of the National Planning Policy Framework (the Framework), a position accepted by both parties. *That however does not mean that it has no value* and although it may not be rare or have significant conservation interest or have any known associations it is very representative of the wider landscape, has a pleasant and attractive scenic quality and is in good condition. Its arable

[48] App 3214324 Poplar Hill, Stowmarket Inspector Clark Paragraph 81, August 2019.
[49] App 3207509 Land off Colchester Road, Bures Hamlet, Inspector Mellor, Paragraph 22, March 2019.
[50] App 3200409 Land west of Old Street, Stubbington, Hampshire, January 2019.

nature, strong boundary hedge and tree treatment ensure that it, along with the surrounding fields, narrow country lanes, bridleway and public rights of way create a strong rural character'[51] (emphasis added).

[51] App 3190779 Bayley Gate Farm, College Road, Cranfield Inspector Stone Paragraph 27, July 2018.



South Downs National Park

Offshore wind farms buffer study

Final Report

for

South Downs National Park Authority

April 2021

white CONSULTANTS

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PART 1: Policy and context, approach and summary of findings

1. Introduction

1.1. White Consultants were appointed in January 2021 to carry out a buffer study for offshore wind farms located in the inshore and offshore waters off the coast related to the South Downs National Park (SDNP) and Sussex Heritage Coast. The study area incorporates the landscapes and seascapes in the influence of Rampion 1 and the proposed Rampion 2 offshore wind farms between Selsey Bill and Beachy Head.

1.2. The brief states that the intention is that the study will incorporate and interpret the findings of the following guidance and study:

- An approach to seascape sensitivity assessment, MMO, 2020.
- Offshore Energy Strategic Environmental Assessment (OESEA): Review and update of Seascape and Visual Buffer study for Offshore Wind farms, BEIS/Hartley Anderson, 2020

1.3. The brief continues that the focus of the study is on seascape character sensitivity with regard to views and the character of the seascape from the lens of the SDNP. The study will take into account the designation process, the South Downs Integrated Character Assessment (2011), the South Downs Viewshed Analysis 2015 and other references, like the Heritage Coast Management Plan.

1.4. This report is the draft report combining the desk study and method report with the findings of the site visit to the National Park. Part 1 of this report sets out policy considerations, the method used to define zones for assessment and the assessment of seascape and visual sensitivity and then summarises the findings with figures. Part 2 sets out the assessment of each defined seascape zone. The factors influencing the sensitivity of seascape zones are included in **Appendix A**. **Appendix B** considers visibility distances derived from local weather stations data. The study is a technical exercise and the report uses a number of technical terms for precision and as a means for reaching conclusions. These terms are defined in the Glossary in **Appendix C** along with abbreviations used.

2. Consideration of Policy

2.1. The review of policy is derived from our previous reports on OESEA seascape visual buffers study (BEIS, 2020) and approach to seascape sensitivity (MMO, 2020) with an additional focus on the study area.

UK National Policy Statements

2.2. The UK Government produces National Policy Statements (NPSs) under the Planning Act (2008) which sets out Government policy for the development of Nationally Significant Infrastructure Projects (NSIPs). National policy statements EN-1 and EN-3 address national infrastructure planning in relation to renewable energy including offshore wind farms with an output above 100MW but are a material consideration for smaller projects.

2.3. **EN-1** states that virtually all nationally significant energy infrastructure projects will have effects on the landscape/seascape. Projects need to be designed carefully taking account of the potential impacts. The aim should be to minimise harm, providing reasonable mitigation where possible and appropriate (5.9.8). It reasserts that National Parks and AONBs have been confirmed as having the highest status of protection in relation to landscape and scenic beauty. Each of these designated areas has specific statutory purposes which help to ensure their continued protection and which the decision-maker should have regard to in its decisions. The conservation of the natural beauty of the landscape and countryside should be given substantial weight by the decision-maker in deciding on applications for development consent in these areas. The same test applies to projects outside the designation boundaries which may have impacts within them (5.9.12). Therefore, both offshore wind farms and associated land-based infrastructure need to take this into consideration. The aim should be to avoid compromising the purposes of designations. This policy is a key driver in defining how the assessment of sensitivity is carried out.

2.4. Outside nationally designated areas, landscapes may be highly valued locally and protected

by local landscape designation. However, these factors in themselves should not be used to refuse consent. The decision maker should judge whether any adverse impact is so damaging that it is not offset by the benefits of the project.

2.5. **EN-3** considers the seascape and visual effects of offshore windfarms in more detail. It sets out three principal considerations on the likely effect of offshore windfarms on the coast:

- Limit of visual perception from the coast
- Individual characteristics of the coast which affect its capacity to absorb a development
- How people perceive and interact with the seascape (2.6.203).

2.6. In terms of mitigation, it states that neither the design or scale of individual wind turbines can be changed without significantly affecting the output of the development so, instead, the layout of the turbines should be designed appropriately to minimise harm (2.6.210).

2.7. For smaller projects (below 100 MW) the Marine and Coastal Access Act (2009) indicates that decisions are made by the Marine Plan Authority (MPA). When considering the impact of an activity it states that the MPA should take into account existing character and quality, how highly it is valued and its capacity to accommodate change (2.6.5.3).

South Downs National Park

2.8. The 1949 National Parks and Access to the Countryside Act, formed the basis for designating National Parks and AONBs. The Environment Act 1995 revised the original legislation. This requires all relevant authorities to have regard to the purposes of Parks. Relevant documents include the South Downs Local Plan: Adopted 2 July 2019 (SDLP) and South Downs Partnership Management Plan 2020-2025. The statutory purposes of the South Downs

2.9. National Park are:

- To conserve and enhance natural beauty, wildlife and cultural heritage of the area.
- To promote opportunities for the understanding and enjoyment of the special qualities of the National Park by the public.

2.10. The National Park Authority also has a duty when carrying out the purposes to seek to foster the economic and social well-being of the local communities within the area.

2.11. In the South Downs seven overall special qualities have been defined which are considered to be mutually reinforcing. These are expanded upon in the Special Qualities document[1]. Those most relevant to this study include:

- Diverse, inspirational landscapes and breathtaking views.
- Tranquil and unspoilt places.

2.12. The descriptive text for the first special quality mentions stunning panoramic views to the sea from the South Downs Way culminating in the impressive chalk cliffs at Seven Sisters.

2.13. The text also states that many people greatly value the sense of tranquillity and unspoilt places which give them a feeling of peace and space in landscapes largely lacking intrusive development.

2.14. The SDLP (4.11) indicates that the NPA will work with others so that development outside the Park avoids detrimental impact on its setting or otherwise prejudices the achievement of the National Park purposes. Section 62 of the Environment Act 1995 is relevant to the roles of public bodies in this respect.

South Downs Integrated Landscape Character Assessment

2.15. The South Downs Integrated Landscape Character Assessment (SDILCA) was originally carried out in 2005 and updated for the National Park in 2011 and 2020 (primarily on a web-based platform). The main relevant landscape character types to this study are A- Open Downland and S- Shoreline.

[1] Available from https://www.southdowns.gov.uk/our-history/why-are-we-a-national-park/sdnp-special-qualities/

2.16. Open Downland key characteristics include:

- *'Large open skies and distant panoramic views- creating a dynamic landscape changing according to prevailing weather conditions.*
- *A tranquil landscape, often seemingly remote and empty, with a windswept character….*
- *The elevated landform and open character enable panoramic views, including long views along the downland **and out to sea**.'*

2.17. Key relevant landscape sensitivities for Open Downland include:

- *'The open uninterrupted skylines and exposed undeveloped character resulting from the rolling topography and absence of enclosing or **vertical features**.*
- *The strong sense of tranquillity and remoteness, with areas of deep remoteness associated with hidden dry valleys and the highest reaches of the downs which no visibility of adjacent settlements and experience the darkest skies. This quality is being affected by traffic pressure on roads and tracks that cross the downs and development on the edge of the National Park'.* (Emphasis in this study)

2.18. Shoreline key characteristics include:

- *'An exposed, wild landscape which is open to the elements and whose character is governed by the weather.*
- *Extensive views out **across the sea** to the horizon.'* (Emphasis in this study)

2.19. Key relevant landscape sensitivities for Shoreline include:

- '*Long, scenic views along the coastline to the dramatic white chalk cliffs and extensive **views out across the sea to the horizon which could be vulnerable to inappropriate development** along the shoreline, or the adjacent open downs or offshore. The open nature of the shoreline makes this landscape particularly sensitive visually.'* (Emphasis in this study)

South Downs view characterisation and analysis study

2.20. A view characterisation and analysis study[2] was carried out for the SDNPA in 2015. This maps views to, from and within the National Park and sits alongside the SDILCA. It is intended to provide evidence about the setting of the Park and the range of potential visibility. Outputs include viewsheds from representative viewpoints, descriptions of the views from different view types and 360^0 panoramic photographs from a selection. The photos are useful as baseline views before the introduction of Rampion 1 wind farm in 2018 which is a long term but temporary development. Key viewpoints from this report will be selected for this study to assess views towards and out to sea from the Park.

2.21. In the analysis of view types, the section on views from the chalk cliffs looking out to sea sets out special qualities including 'breathtaking views' and tranquillity. Management guidance includes:

- 'Maintain long views along cliffs and **out to sea**, particularly views that demonstrate the geology of the Park, the dramatic chalk cliffs **and open sea beyond**.
- **Minimise visibility of new development** by day and night- ensure it does not detract from the tranquillity associated with these viewpoints.' (Emphasis in this study)

2.22. Management guidance for the High Downs views out to sea (3.27, page 25) includes:

- *Maintain the undeveloped character of the downs within the National Park which contrasts with the developed coastal plain, and **ensure that development outside the National Park does not block, or adversely affect the quality of, views towards the sea**.*
- *Ensure that any built development outside the park is integrated into its context in terms of scale, form and materials- consider using native vegetation to enhance existing views that contain development, and **minimise visibility of new***

[2] South Downs National Park: View Characterisation and Analysis, LUC, November 2015.

development from the Park. (Emphasis in this study)

Designating the South Downs National Park- Inspectors Report

2.23. The role of the sea was considered in the SDNP Inspectors report[3] into designating the National Park. The value and importance of the marine area was not considered in dispute. The Heritage Coast designation was a reflection of the spectacular natural and scenic beauty of the coast around Seven Sisters and testimony to the specialness of the marine area beyond MLWM (7.434).

2.24. Although the marine area had not been formally assessed against the natural beauty and recreational opportunities criteria the Inspector stated that the Countryside Agency did not dispute that they were satisfied. That was also his opinion. He also had no doubt that the proposed National Park would be enhanced by including the marine area but this was not legally possible (7.434).

2.25. His overall conclusion on boundaries at the coast were:

'The maritime boundary to the sea be left 'open' where the adjoining cliffs and foreshore satisfy the statutory criteria set out in the 1949 Act'. (Summary of main conclusions/recommendations Part 2, Item 5 and 4.10).

2.26. There are several references to the relationship of the National Park to the sea such as at Combe Farm where a tract of chalk downland sweeps down to the sea offering distinctive panoramic views (7.567). In his consideration of whether to include this land within the Park the Inspector states that, though the PSDNP is not a coastal National Park, the locations where downland meets the coast are all places of especial importance (7.570). The presence of vantage points with *'stunning views out to sea'* mean that the natural beauty criterion is met (7.571).

Sussex Heritage Coast

2.27. In England, Heritage Coasts were established to protect and conserve the best stretches of undeveloped coast. They have four purposes defined at a national level, three of which align with the National Park's purposes and duty. These include:

To conserve, protect and enhance the natural beauty of the coasts…'

2.28. The vision[4] for Sussex Heritage Coast includes:

'The iconic landscapes, seascapes, wildlife and heritage of the Heritage Coast will be conserved and enhanced through landscape scale partnerships.'

2.29. The OESEA (2020)[5] report indicated that the combined designation of National Park and Heritage Coast is a strong indicator of seascape value and sensitivity (13.74).

Marine Planning

2.30. The **Marine and Coastal Access Act 2009** introduced eight key measures to help ensure *'clean, healthy, safe, productive and biologically diverse oceans and seas'*. The measures included the introduction of a marine planning system and the setting up of the Marine Management Organisation (MMO) delivering marine functions in English territorial waters and UK offshore waters for matters that are not devolved. The Act requires that all public authorities should undertake planning decisions should do so in accordance with the Marine Planning Statement.

2.31. The **UK Marine Policy Statement** (MPS) (2011) the national policy framework for preparing marine plans throughout the UK. The high level marine objectives (page 11, Box 1) include:

'*Ensuring a strong, healthy and just society:*

People appreciate the diversity of the marine environment, its ***seascapes****, its natural and cultural heritage and its resources and act responsibly'* (this report emphasis).

[3] The South Downs National Park Inspector's Report Volume 1, Robert Neil Parry, 31 March 2006.
[4] Sussex Heritage Coast: A Strategy and action plan 2016-20
[5] Offshore Energy Strategic Environmental Assessment (OESEA): Review and update of Seascape and Visual Buffer study for Offshore Wind farms, BEIS/Hartley Anderson, 2020

2.32. The MPS sets out how seascape should be considered in marine spatial planning. It states: '*When developing Marine Plans, marine plan authorities should consider at a strategic level visual, cultural, historical and archaeological impacts not just for those coastal areas that are particularly important for seascape, but for all coastal areas, liaising with terrestrial planning authorities as necessary. In addition, any wider social and economic impacts of a development or activity on coastal landscapes and seascapes should be considered.*' (Defra, 2011, 2.6.5.2)

2.33. It goes on to state: '*In considering the impact of an activity or development on seascape, the marine plan authority should take into account existing character and quality, how highly it is valued and its capacity to accommodate change specific to any development. Landscape Character Assessment methodology may be an aid to this process.*' (Defra, 2011, 2.6.5.3).

2.34. The **South Inshore and South Offshore Marine Plan** was completed in July 2018. The inshore area extends out from the mean high water mark to the territorial limit. The offshore area extends from the territorial limit to the boundary of the Exclusive Economic Zone.

2.35. The Vision states that by 2038, the areas' iconic and unique and characteristics will be conserved and, where needed, enhanced through good management of its marine space. The natural beauty of the coastline and busy coastal and offshore waters are qualities that make the area distinctive. This distinctive natural beauty and diversity will be maintained and enhanced through balanced and sustainable use of its resources.

2.36. Policy S-SCP-1 (page 22) states that proposals that may have a significant adverse impact upon the seascape of an area should only be supported if they demonstrate that they will, in order of preference a) avoid, b) minimise, c) mitigate significant adverse impacts upon the seascape of an area, d) if it is not possible to mitigate significant adverse impacts, proposals should state the case for proceeding.

2.37. Marine character areas[6] (MCAs) have been identified for the South inshore and offshore areas to support the Marine Plan (LUC, June 2014). These are at a national scale and contribute to the overall assessment of English waters. The relevant MCAs are 7, 8 and 13 with 5, 6, 9, 12 and 14 acting as context. The boundaries along the coast appear to relate primarily to features or designations, such as Selsey Bill and the South Downs National Park. The boundaries running out to sea appear to relate primarily to the Territorial and Exclusive Economic Zone limits, ie inshore and offshore categorisation, rather than physical or perceptual factors. The southern boundary of MCA 7 South Downs Maritime is the inshore traffic zone.

3. Consideration of Rampion 1 and 2 developments

3.1. As the study is intended to act as a context for, and inform a response to, the Rampion 2 development it is appropriate to briefly describe both this and the existing Rampion 1 windfarm and the associated landscape and seascape issues raised at the Examination.

Rampion 1

3.2. This development was considered in the OESEA, 2020 report (page 18/19) and the following text draws from this. Rampion offshore wind farm was given development consent in July 2014. The development control order (DCO) specified that no turbine would exceed 210m above LAT or exceed a rotor diameter of 172m. The number of turbines was not specified but the extent of the wind farm was. The final approved layout extended around 13km by 6km.

3.3. The layout of the wind farm went through a number of iterations and three options were considered in the SVIA to determine a worst-case scenario (founded upon the 'Rochdale

[6] The Seascape Assessment for the South Marine Plan Area (MMO 1037)

envelope' approach). These were for 3.6MW, 4MW at close spacings and 7MW turbines at wide spacings. The worst case was considered in the SVIA to be the 3.6MW array because of it extended further than the 4MW array but formed a denser array than the 7MW option. Two options showing a reduced array were developed- Option F with 175 3.6MW and Option D with 100 7MW turbines (see extracts of photomontages in **Figure A** below). Natural England's evidence initially considered that Option D would be likely to be worse than Option F but at the hearing, put under some pressure to decide by the Examining Authority panel, agreed that Option F did represent the worst case (Planning Inspectorate, 2014, 4.329). This was mainly due to the spread of turbines being considered to be more intrusive than the height. However, this spread was only apparent from the east, from the more sensitive receptors such as Cuckmere Haven where the National Park meets the Heritage Coast, rather than from the receptors to the north. Otherwise the main difference was the wider spacing between turbines of the larger turbine array, albeit with larger structures.

Figure A Rampion wind farm- Comparative photomontage extracts from Cuckmere Haven

Top image: Option F with 175 3.6MW turbines. Bottom image: Option D with 100 7MW turbines

Source: Rampion Offshore wind farm: Additional visualisations of the array to include structures exclusion zone, E.On, 2013

3.4. The effects on the coastal settlement to Brighton and Hove at around 13km were considered of major and major moderate significance but the views were considered acceptable by the panel considering the urban context.

3.5. The effects on the South Downs National Park and Heritage Coast were considered also to be significant and more problematic. Whilst the National Park Authority considered that the effects could only be mitigated by removing the array altogether Natural England indicated that effects could be mitigated by locating it at a greater distance from the more sensitive parts of the National Park and Heritage Coast to the north east. There was discussion about the term remote and Natural England stated, when pressed by the panel, that anything over 20km could be considered to be 'remote'. By way of mitigation the applicant proposed a reduced array area increasing the distance from Cuckmere Haven beach from 17.5 km to 20.2km, from Birling Gap from 19.6km to 22.8km and from Beachy Head from 23.3km to

25.8 km. The level of significant effects were agreed to remain the same. Natural England also stated that they believed that the revised array would still compromise and be in conflict with the National Park landscape/seascape objectives.

3.6. The size of array actually constructed is 116 wind turbines which are 140m to blade tip (3.45 MW) with one offshore substation. The array is between 13 and 20km off the coast to the north and located further from the Heritage Coast than the approved extents- 23.5km at their closest point, and 27.4km from Seven Sisters.

3.7. The wind farm was put into commission in 2018. The design life for the wind turbines is 20-25 years although the lease for the seabed is 50 years. Therefore, the developer may consider replacement of the turbines or repowering. This would be subject to a further consenting process.

3.8. As part of the development consent order and marine licence a condition was agreed for an exclusion area/zone for wind turbines and offshore substations. This zone covers an area closer to the National Park/Heritage Coast and is shown as the hatched area in the figure extract from SDNPA's Rampion 2 scoping response Appendix 2 (August 2020) below- **Figure B.**

Figure B Rampion 1 and Rampion 2 worst case scenario wind farm

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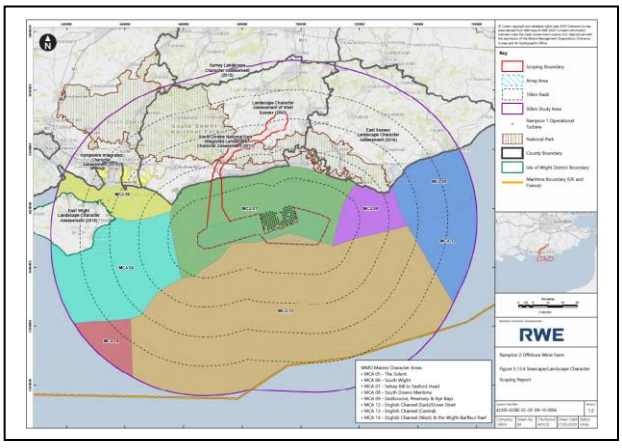
Rampion 2

3.9. The scoping report dated 2 July 2020 (page 61, 62) defines an area of search of 315km^2, 13km from shore at its closest point, with parameters of upto 116 wind turbines, which are upto 325m to blade tip with 275m rotor diameter, and upto 3 offshore substations. The maximum indicative range of wind turbines are 116 10MW turbines (190m to blade tip) or 75 16MW turbines (325m high). The worst case scenario in terms of spread of large turbines is illustrated in **Figure B** above. The wind turbine foundation type is either monopile or jacket. The area of search extends to the south east, south and west of the current Rampion 1 array as shown below in **Figure C** (extract from Rampion 2 scoping report after page 373)**.**

Figure C Rampion 2 SVIA scoping report study area

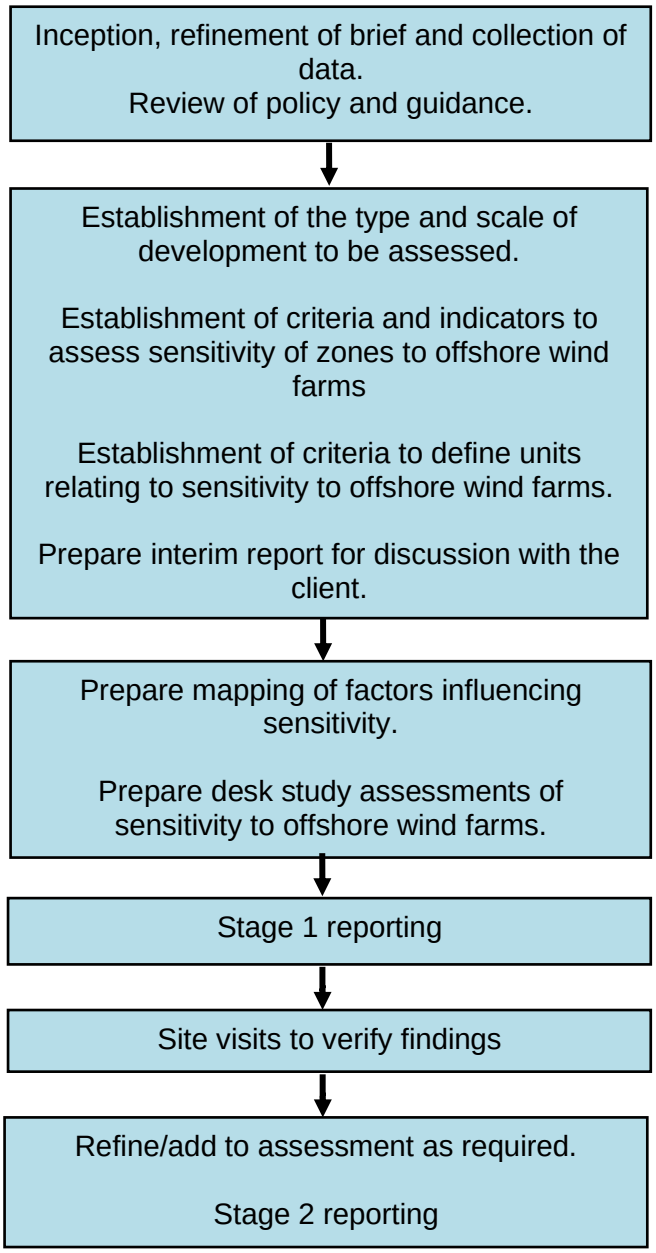


3.10. Subsequent to the scoping report initial work on the Preliminary Environmental Information Report (PEIR) has been shared with SDNPA. These refer to the areas to the west as the Extension Area and the area to the south and east of Rampion 1 as Zone 6. These are referred to in the detailed assessment text. This information also included wirelines and photomontages of different sizes and layouts of turbines within the scoping area which has been used to inform the potential for effects on the National Park.

4. Study approach and process

Process

4.1. The study process followed is summarised below:



Focus and limitations of the report

4.2. The brief requires a sensitivity study to offshore wind farm developments primarily relating to Rampion 1 and the proposed Rampion 2 offshore wind farms including those potentially

coming forward in the Crown Estate Round 4 process within the study area. The study area proposed lies between Selsey Bill and just east of Beachy Head out to the EEZ boundary and including all of MCAs 7 and 8 most of MCA 13.

4.3. The aim is to avoid significant adverse effects on high sensitivity receptors with a relationship with seascape within the SDNP. The premise that the study works on is that the most important effect of offshore windfarms is on the perception of seascape character from the designated coast ie the relationship between any proposed development with coastal seascape character when seen in juxtaposition with each other. An additional consideration is the relationship between the inland High Downs with views to the sea and the proposed offshore development. This means that the main drivers are in the first instance the distance from the coast and the character and value of the designated coastal seascape and its component sensitive receptors. For views from inland receptors the driver is the distance from sensitive viewpoints and relationship of the seascape to the special qualities and sensitivities of the views. The seascape areas or zones identified are focussed on these purposes alone and should not be used for other purposes or development types which may need full seascape characterisation taking intrinsic natural and cultural processes and other characteristics into account.

Relevant Guidance

4.4. The most relevant guidelines and reports taken into consideration in this study are as follows:

- An approach to seascape sensitivity assessment, MMO, 2020.
- Offshore Energy Strategic Environmental Assessment (OESEA): Review and update of Seascape and Visual Buffer study for Offshore Wind farms, BEIS/Hartley Anderson, 2020
- Guidelines for Landscape and Visual Impact Assessment, Edition 3, (GLVIA 3) LI and IEMA, 2013.
- Guidance on the Assessment of the Impact of Offshore Windfarms: seascape and visual impact report, DTI, 2005.
- An approach to seascape character assessment, (Natural England Commissioned Report (NECR) 105), 2012- broad brush guidance on seascape character assessment.
- Seascape and visual sensitivity to offshore wind farms in Wales: Strategic assessment and guidance. Stages 1-3. NRW Evidence Series. Report No: 315, NRW, Bangor, 2019
- The Seascape Assessment for the South Marine Plan Area, (MMO 1037), LUC, June 2014.
- South Downs Partnership Management Plan 2020-2025, South Downs National Park Authority, 2020.
- South Downs Local Plan: Adopted 2 July 2019 (SDLP), South Downs National Park Authority, 2019.
- Sussex Heritage Coast: A Strategy and action plan 2016-20, South Downs National Park Authority, 2016.
- South Downs Integrated Landscape Character Assessment, LUC, 2020.
- South Downs National Park: View Characterisation and Analysis, LUC, November 2015.
- Relevant offshore wind farm SVIAs

4.5. The OESEA (2020) study sets out visual buffers for different types of coastal character and designations at an England and Wales level. It is worth noting (as noted in 4.43 of the report) that the buffers to designated areas are a strategic level tool to identify where effects are likely and do not necessarily suggest no-go areas for development. These areas would need to be subject to careful further assessment should development be proposed within them. This is the purpose of the study.

Definitions

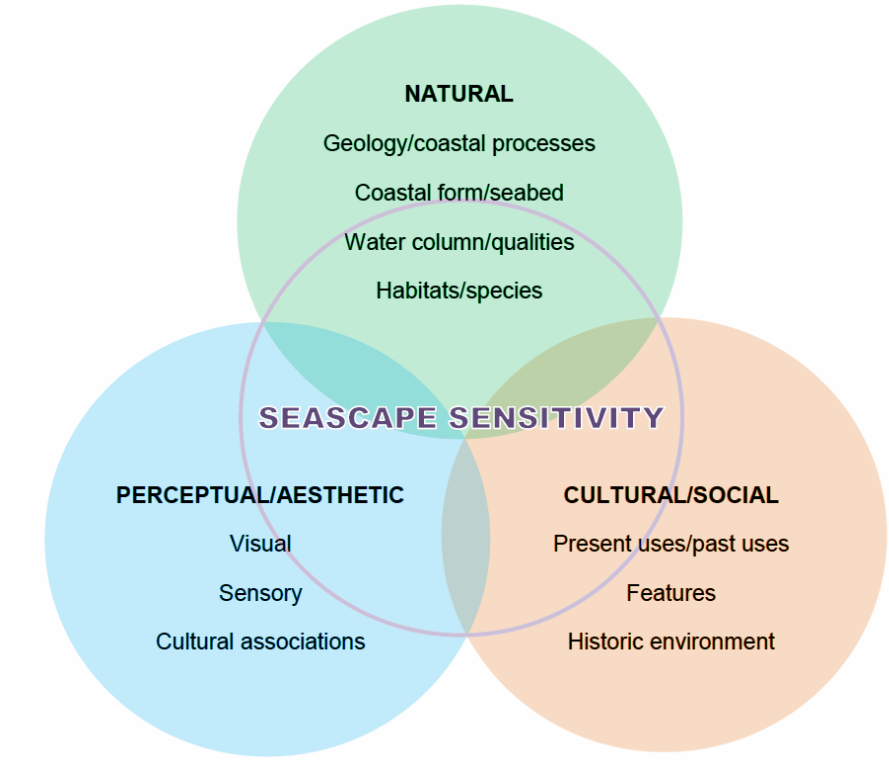
4.6. The following definitions are derived from the MMO Approach (2020) (1.5):

- Seascape character **susceptibility** is defined as the degree to which a defined seascape character area (SCA) and its associated visual qualities and attributes might respond to the specified types of development or change without undue negative effects on character and the visual resource.
- Seascape character **value** is defined as the relative value or importance attached to an SCA, which may express national or local consensus, because of its quality, its special qualities including perceptual aspects such as scenic beauty, tranquillity and wildness, natural or historic attributes or features, cultural associations, or its relationship with designated or valued landscapes and coasts.
- Seascape character **sensitivity** is a term applied to marine character and seascape and the associated visual resource, combining judgements of their susceptibility to a specific type of development / development scenario or other change being considered and the value(s) related to that seascape, marine character and visual resource.

4.7. **Cumulative effects** is explored in the area due to the existing Rampion 1 wind farm. The strategic cumulative assessment is of the *combined* effect of all existing and consented developments, bearing in mind the proposed Rampion 2 development and the Round 4 bidding area. This is discussed in more detail below in 4.22 onwards.

Structure of proforma assessment

4.8. The structure of the proforma assessment relates to the relevant components of seascape character as shown in Figure 2 from the MMO Approach (2020).



4.9. The nature of offshore wind farm development means that there is a particular emphasis on the perceptual and aesthetic criteria and indicators.

Type and scale of development

4.10. The type and scale of offshore wind farm development is defined in the OESEA (2020) study and in the seascape and visual impact assessments (SVIAs) analysed. This study divides

turbines into bands of heights each of which has different likely magnitudes of visual effects. This report assumes that offshore wind farms are likely to be at a larger scale than has been seen previously. This tends to mean, based on the experience of Rounds 1 to 3, that the further offshore, the larger the development is likely to be in terms of turbine numbers, unless it is an extension of an existing development. This study assumes that the scale of development is between 20 and 300 turbines in the following turbine height to blade tip bands:

- 107-145m
- 146-175m
- 176-225m
- 226-300m
- 301-350m
- 351-400m

4.11. It is acknowledged that this covers a wide range of scales but reflects the types of development that have come forward or are likely to be considered in Round 4 or beyond. The proposed Rampion 2 wind farm parameters also lie within this range.

4.12. Other characteristics of turbines include:

- Monopile or jacket foundations on the sea bed in seas of maximum depth 60m;
- Floating foundations anchored to sea bed in deeper waters;
- Generally pale grey painted towers and blades (eg RAL 7035) with Trinity House yellow on lower towers and bases;
- Red aircraft warning lights of medium intensity (upto 2000 candela) on nacelles of selected turbines;
- Navigational warning lights on turbines and surrounding buoys;
- Constantly in operation with moving turbine blades unless in calm conditions or very high wind conditions;
- Offshore substations and operations bases on platforms in larger developments;
- Cable on sea bed;
- Long term installation and operation (but not permanent);
- Associated maintenance and supply craft during operation.

4.13. It is assumed that there will be associated offshore and coastal ancillary development to enable transmission of electricity to shore but the implications of transmission inland has not been taken into account as this is considered in a separate study. The main driver of effects is assumed to be the turbines themselves and their associated lighting although it is acknowledged that other infrastructure such as offshore substations contribute to effects.

Identifying criteria for seascape character and visual resource and indicators to explore sensitivity to development type

The seascape resource

4.14. The information used to inform the assessment includes:

- Bathymetry and elevation;
- Existing seascape character assessments;
- Landscape designations;
- National Park and AONB management plans and related planning policies- with a particular emphasis on natural beauty/ special qualities indicators;

- South Downs Integrated Landscape Character Assessment 2011/updated 2020
- Cultural heritage designations and features eg scheduled monuments;
- Biodiversity designations eg SPAs, SACs, MCZs;
- Countryside and coastal access eg South Downs Way, England Coast Path;
- Existing intervisibility analysis – defining land with sea views and sea visibility from land (part of the national seascape assessment) and SDNP viewshed study;
- Crown Estate existing round zones and Round 4 bidding area;
- Existing marine uses and structures- existing windfarms etc;
- Patterns of maritime use- shipping lanes and mineral extraction;
- OESEA (2020) report – identifying visual buffers for offshore windfarms related to National Parks and AONBs and elsewhere taking into consideration marine visibility modifiers;
- Principles defined in Wales seascape sensitivity to offshore windfarms study Stage 2 report (2019).

Defining seascape units/zones

4.15. NECR 105 sets out in broad brush terms how to carry out a seascape character assessment. This states characterisation concentrates on making clear what makes one area different or distinctive from another. It also states that it is based on the integration of natural and cultural information combined with aesthetic and perceptual experiential aspects. This has already been carried out in South inshore/offshore seascape character assessment, identifying three main and five contextual areas in the study area.

4.16. The type of development proposed and the main national planning policies that drive decision-making, ie NPS EN1 and NPS EN3, mean that these units are not appropriate in themselves as a spatial representation for assessing sensitivity to offshore wind farms. The units need to appropriately reflect the large scale of development and large spread of visual effects of very tall structures in an open seascape combined with the relationship with national landscape-related designations. This means that this is not a character assessment in terms of NECR 105. Instead it is focussed on the factors which are most important in defining the relative seascape and visual sensitivity of an area to offshore wind farms, also taking into account existing and consented development. As such, the areas are defined as seascape zones to avoid any implication that they are characterised as seascape character areas taking in the full range of factors which define such areas eg bathymetry and seabed geology. The grain of the assessment may group together some existing areas and divide up others.

4.17. The definitive factors contributing to defining zones are:

- The extent of visual buffers relating to the designated and other landscapes- these inform the distances of the zones away from the coast. These are primarily defined by SVIA analysis in the OESEA (2020) study and a review of meteorological visibility modifiers relating to the study area (see **Appendix C)**;
- Taking into consideration the relationship of a designation with the seascape ie if it reaches the coast or runs inland. In the former case, the coastline will form the edge of the zone. In the latter case, key viewpoints on the High Downs with views of the sea identified in the View Characterisation study will be used as the edge of buffers although the zone itself will only cover areas of sea.
- The presence or otherwise of existing or consented windfarms, which affects seascape character;
- National seascape character areas/marine character areas;
- The character of the designated at the coastline and inland.

Criteria and Indicators

4.18. The sensitivity of a zone to offshore wind farms is based on a series of criteria with

associated indicators which define what makes an area more or less susceptible to the development type or influences its value. These are set out in **Appendix A.**

4.19. For each zone we have completed a proforma assessing different levels of susceptibility and value based on the indicators. It is important to note that whilst each factor is scored, the overall sensitivity is not a simple adding up of the scores. Some criteria and indicators are more important than others and the justification of sensitivity will explain the key factors underpinning the judgement.

4.20. The potential for cumulative effects are taken into consideration where possible development may result in adverse combined effects with existing and consented development. These are discussed in 4.22 onwards and a series of criteria are set out in the proformas to assess the likelihood of this occurring and possible sensitivities deriving from this.

Thresholds of sensitivity

4.21. The thresholds for landscape and visual sensitivity are defined below in Table 1. The five point scale reflects the subtlety of different seascape's character.

Table 1 Thresholds for landscape and visual sensitivity

Level	Definition
Low	Seascape and/or visual characteristics of the zone are robust or degraded and/or its values are low and it can accommodate the relevant type of development without significant character change or adverse effects. Thresholds for significant change are very high.
Medium/low	Seascape and/or visual characteristics of the zone are resilient to change and/or its values are medium/low or low and it can accommodate the relevant type of development in many situations without significant character change or adverse effects. Thresholds for significant change are high.
Medium	Seascape and/or visual characteristics of the zone are susceptible to change and/or its values are medium/low through to high/medium and/or it *may* have some potential to accommodate the relevant type of development in some *defined* situations without significant character change or adverse effects. Thresholds for significant change are intermediate.
High/ medium	Seascape and/or visual characteristics of the zone are vulnerable to change and/or its values are medium through to high (although this level of value is not essential where landscape or visual susceptibility are key issues). The seascape zone may be able accommodate the relevant type of development but only in limited situations without significant character change or adverse effects if defined in the relevant zone summary. Thresholds for significant change are low.
High	Seascape and/or visual characteristics of the zone are very susceptible to change and/or its values are high or high/medium and it is unable to accommodate the relevant type of development without significant character change or adverse effects. Thresholds for significant change are very low.

4.22. It is important to note that, even within smaller zones, there may be variations in sensitivity. For instance, a zone which is stated as medium sensitivity is likely to have some opportunity for development within it but not necessarily all. Therefore the sensitivity and the resulting capacity do not necessarily apply to the whole area. We define the extent, size and location in the recommendations and associated summary text. It should be noted that other areas of sea within the zone are considered to be areas of constraint in terms of seascape and visual factors. For high/medium sensitivity zones there may be sea which has high sensitivity with other parts which may have some very minor capacity but this does not amount to potential for a strategic allocation. Overall, this level of sensitivity is considered to be a constraint on large wind farms in terms of seascape and visual factors.

Consideration of cumulative assessment

4.23. The OESEA (2020) study indicates that at a strategic level:

'it is the combined cumulative effect of a set of developments that is important in understanding the overall visual effects on people and associated effects on seascape character. This is also a particular consideration in the assessment of extensions.' (13.53)

4.24. It goes on to state that:

'Seascape sensitivity studies should help inform the most suitable locations for development and explore the thresholds of acceptable change taking combined cumulative impact into account.… Studies should be based on further consideration of marine character areas or similar units, proximity to statutory and key designations and related intervisibility.' (13.54)

and

'Within areas considered to be suitable for offshore wind farms, array design should be a key consideration to optimise the pattern of development. This should include the relationship between arrays including the distance between them, open gaps to the horizon (or far offshore arrays) and the compatibility of the arrays' size of turbines and arrangement.' (13.55)

4.25. This study will undertake this approach, informed by the MMO sensitivity guidance (2020). Annex D in this document states:

'For strategic planning, the purpose of an assessment would be to inform if an area can accommodate more development or not, and if so, how? As such, it should be an assessment of the combined effect of a set of developments taken together (SNH (2012), 7, p4). Considerations are likely to include:

…

- *Assessment of the baseline situation in terms of seascape character and visual contribution to setting of any relevant designations (using the sensitivity assessment information).*
- *Review of combined cumulative effects of the developments on the baseline situation.*
- *Assess compatibility of combined effects with existing or proposed seascape policies for the area.*
- *Make recommendations for opportunities or constraint, setting out the most suitable locations for development with appropriate design, scale and spacing in order to provide benefits and/or mitigate and minimise effects.'*

4.26. Both these documents make clear that existing offshore wind farms, Rampion 1 in this case, should not be considered as part of the baseline for a combined cumulative assessment.

Site visit

4.27. A site visit to an agreed number of locations in the National Park was carried out to verify boundaries and aesthetic and sensory qualities at representative key viewpoints. Where available, panoramas taken in 2015 were compared to the existing view with Rampion 1, where visible.

4.28. The criteria for viewpoints selection was as follows:

- Viewpoints representative of the combined National Park/Heritage Coast with views of the sea
- Viewpoints representative of the High Downs inland within the National Park with views of the sea both with and without views of the coastal plain.
- Viewpoints along the South Downs Way.
- Viewpoints identified in the View Characterisation study 2015 including those with existing photo panoramas.

- Selected viewpoints noted in the Rampion 2 scoping report and related SDNPA response.

4.29. The key viewpoints visited were as follows:

Viewpoint number in SDNPA view characterisation report	Name	Viewpoint in Rampion 2 scoping assessment or in SDNPA response?	SDNP panorama/ monitor-ing view-point?	Justification
1	**Beachy Head (Compass Rose)**	Included in both	Yes	Within combined National Park/Heritage Coast with most extensive sea views possible in the study area. Noted in literature about South Downs Way.
2	**Devil's Dyke**	Included in both	Yes	View over Low Weald at top of scarp slope but also over the sea with settled coastal plain with tower blocks in Brighton and Hove and Shoreham. Pub and car park on ridge top. Indicative of less busy open downland ridge views to the east and west. Rampion 1 is virtually directly offshore beyond Shoreham power station.
3	**Birling Gap**	Included in both	Yes	Within combined National Park/Heritage Coast revealing scenic coastline of the Seven Sisters with views west along the coast as well as south out to sea. Indicative of South Downs Way views along the coast.
7	**Firle Beacon**	Included in both	Yes	View over Low Weald at top of scarp slope but also panoramic view to the sea which is a significant component beyond ridge slopes running to the coast, also including some settlement such as Newhaven harbour and Energy from Waste (EFW) plant. Indicative of stretches of open downland ridge views to the east, west and south. Rampion 1 is

				offshore to the right/ west of Newhaven harbour.
Viewpoint number in SDNPA view characterisation report	**Name**	**Viewpoint in Rampion 2 scoping assessment or in SDNPA response?**	**SDNP panorama/ monitor-ing view-point?**	**Justification**
11	**St Roche's Hill/The Trundle**	Not included in Rampion asst but is SDNPA recommendation	No	Prominent hillfort overlooking the coastal plain and sea. Wireless masts lie on the hilltop and Goodwood race course lies on the downs to the east, with associated stands and infrastructure. Popular destination for walkers and cyclists.This is an example of a more developed location on the ridge top.
22	**Ditchling Beacon**	Not included in Rampion asst but is SDNPA recommendation	Yes	View primarily over Low Weald at top of scarp slope but also possible in wide array over sea to south beyond nearby rises/ridges and some of Brighton's outskirts. Indicative of stretches of open downland ridge views to the east and west.
26	**Bignor Hill**	Included in both	No	Noted on South Downs Way. Natural vantage point set back from coast in wooded estate downland with no views of developed coastal plain.
48	**Devils Humps, Kingley Vale**	Not included in Rampion asst but is SDNPA recommendation	Yes	Long view to sea from distinctive heritage site in wooded estate downland over coastal plain with Chichester Cathedral and mixed rural and developed areas.
52	**Hollingbury Hillfort**	Not included in Rampion asst but is SDNPA recommendation	Yes	View to sea over urban area of Brighton with i360 tower and tower blocks etc. Rampion 1 is virtually directly offshore beyond the tower.

Optional viewpoints not visited due to limited time available:

Viewpoint number in SDNPA view characterisation report	Name	Viewpoint in Rampion 2 scoping assessment or in SDNPA response?	Panorama/ monitor-ing view-point?	Justification
31	Highdown Hill	Is included in Rampion asst and SDNPA recommendations	Yes	In Viewshed report located on downs with extensive views of developed coastal plain eg Ferring and sea. Optional as downs edge viewpoint.
45	Stoke Clump	Not included in Rampion asst or SDNPA recommendations	No	Closer to coast than 48 Kingley Vale. Optional as downs edge viewpoint.
66	Halnaker Windmill	Not included in Rampion asst but is SDNPA recommendation	No	Views of dipslope. Close to 11 and also the edge of the dipslope and at a lower level. Optional as downs edge viewpoint.

4.30. The site visit was made in conditions of moderate to very good visibility over three days in February. Rampion 1 turbines were visible in views from:

- 2 Devil's Dyke
- 7 Firle Beacon
- 22 Ditchling Beacon
- 52 Hollingbury hillfort

However, the character of the landscape and coast and all the other viewpoint's relationships with the sea and coastal plain (to the west) were apparent.

5. Summary of findings

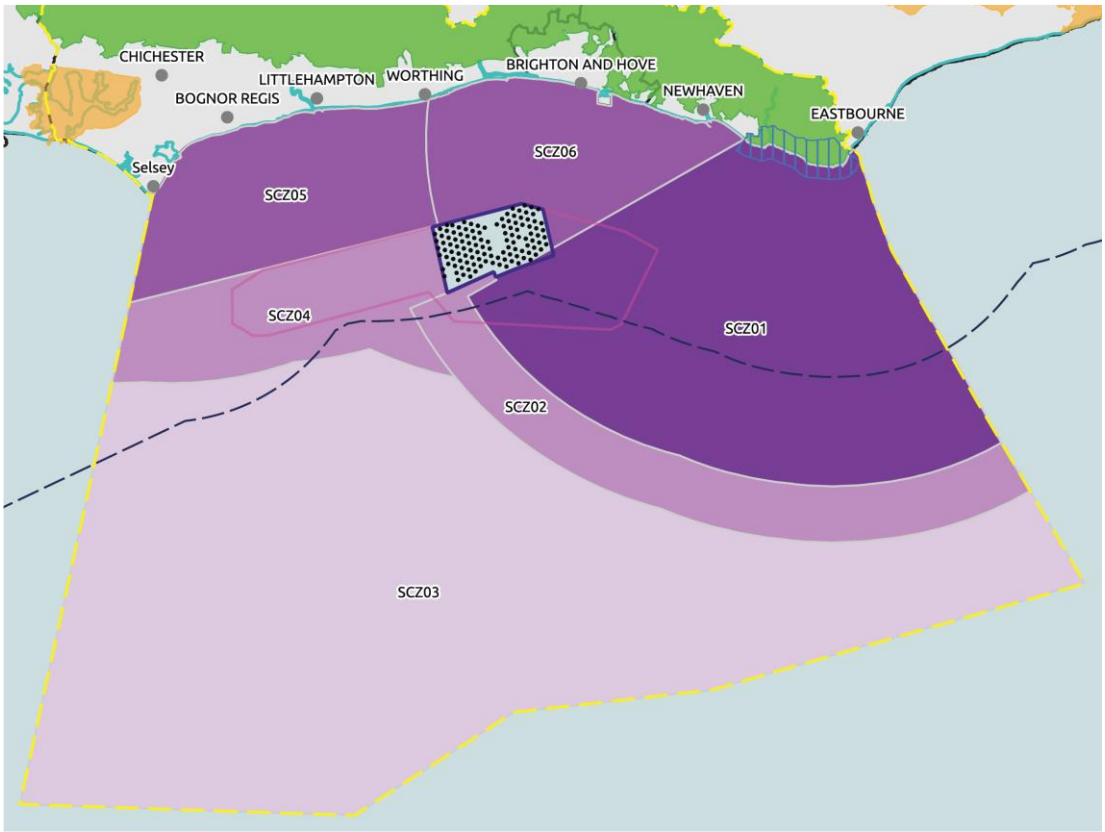
5.1. The seascape and visual sensitivity findings indicate the preferred zones for the location of offshore wind farms with a tabular summary of sensitivities for each seascape zone in Table 2 and Figure D below. A detailed assessment for each zone is set out in Part 2 which sets out the recommendations for different heights of wind turbines. All these conclusions clearly only relate to seascape and visual matters and not other factors which have to be taken into consideration, particularly in relation to the intrinsic nature of the sea and sea bed.

5.2. The conclusions summarised in Table 2 have been reached on the locations that development might proceed in terms of seascape and visual sensitivity factors. They are based entirely on the zone evaluations and if there is any perceived conflict or difference in emphasis between the two, the detailed evaluations should be taken as the definitive position. The zones and their sensitivities and their relationship with Rampion 1 and 2 are set out in Figure 8.

Table 2 South Downs seascape sensitivity summary

Ref no	Name	Sensitivity
SCZ 01	South Downs NP/Sussex Heritage Coast Inshore	High
SCZ 02	South Downs NP/Sussex Heritage Coast Offshore	Medium
SCZ 03	English Channel Offshore	Medium/low
SCZ 04	Selsey Bill to Worthing offshore	Medium
SCZ 05	Selsey Bill to Worthing inshore	High/medium
SCZ 06	Worthing to Seaford Head inshore	High/medium

Figure D South Downs seascape sensitivity summary map



5.3. Overall, the seascape south of the South Downs National Park is sensitive to offshore wind farm development primarily due to its relationship with the combined National Park and Sussex Heritage Coast, contributing significantly to the National Park's setting and special

qualities. However, the relationship between the seascape and the South Downs downland ridges inland also increase the sensitivity of the seascape, extending to the west. The distance offshore of each seascape zone is primarily determined by the OESEA (2020) report which sets out buffers for different levels of sensitivity of coast and heights of turbine to blade tip. Though a gently curving coast, the iconic chalk cliffs to the east, the special qualities of the breathtaking panoramic views, tranquillity and unspoilt character, combined with the wildness that the seascape imparts, all contribute with other factors to enhance the value and sensitivity of the area.

5.4. The site visit revealed the relationship between the undeveloped and developed coast with the seascape and also the relationship of the inland downland with the seascape. To the east there is a direct physical connection between the open downland and the coast/seascape. To the west this becomes separated by the wider coastal plain, but there is nevertheless a visual connection/intervisibility. The built form of the coastal settlements is limited to the east around the Heritage Coast, but increases to the west, albeit hidden by landform in some views from the ridgelines inland. Whilst this does influence perception, the undeveloped open character of the sea to the east and west of Rampion 1 is an unspoilt natural foil to the cluttered coast with a predominantly clear horizon offshore. Rampion 1 itself, whilst a long term and temporary addition to the baseline character adds to the potential for combined cumulative effects with any proposed development around it.

5.5. The most sensitive seascape zone is SCZ01 which lies adjacent to the National Park and Heritage Coast followed by SCZ06 which lies just to the west and SCZ05 which is overlooked from the South Downs ridgeline close to shore further west.

Seascape zone findings

5.6. **SCZ 01** zone lies within 34km of the shore which is the suggested buffer (OESEA, 2020) for all scales of wind farm development to avoid significant adverse effects on a combined National Park and Heritage Coast. This combined with the susceptibility and other values related to the zone suggest an area of strong constraint on windfarm development. Turbines as proposed as part of Rampion 2 scoping area (Zone 6) within the zone would be considered to cause significant harm to the qualities of the National Park through cumulative effects. This potential tripling of the apparent width of the current Rampion 1 array would be substantially exacerbated by extending development much closer to the National Park/Heritage Coast and using larger turbines.

5.7. Development within the Round 4 bidding area would be likely to significantly exacerbate cumulative effects of the developments above and could fundamentally change the character of the seascape, potentially becoming one of the dominant characteristics of the zone. The effects would be greater the closer development is to the coast, and the greater the height of turbine and size of array. Overall, no turbines are acceptable within the zone in terms of effects on the most sensitive National Park and Heritage Coast viewpoints receptors.

5.8. **SCZ 02** lies just offshore from SCZ01, lying between 34km and 40km of the shore which potentially allows consideration of wind farms with turbines between 107-224m high but is a constraint buffer for turbines over 225m high to avoid significant adverse effects on a combined National Park and Heritage Coast. Arrays should avoid a curtaining effect when viewed from the NP/HC coastline. This could be achieved with gaps between arrays of at least 12km, preferably more, and arrays not exceeding 15km width as perceived from shore. A limited extension of Rampion 1 to the south may cause limited effects provided the turbines are of similar in height and spacing to the existing.

5.9. **SCZ 03** which is 40km+ from the combined National Park and Heritage Coast is an area of more limited seascape/visual constraints, especially to the south. Further proposals within the zone, such as in the Round 4 bidding area, should be located as far offshore as possible, and if located towards the northern boundary maintain large gaps (say 12km+) between arrays so clear views of the horizon between arrays is possible from the designated coast and NP viewpoints.

5.10. **SCZ 04** lies 13km-30km from the coast and may be able to accommodate turbines upto 225m high in terms of effects on the most sensitive National Park viewpoint receptors. However, receptors on the edge of the National Park would undergo potentially significant adverse effects as would coastal receptors who would be sensitive to medium magnitude effects

from turbines above 145m in the parts closer to shore and above 225m in the further points from shore. The zone is within the Rampion 2 scoping area (Extension area) and ideally turbines a similar height to Rampion 1 and arranged in a similar pattern in discreet array/s clearly separated from the existing windfarm would reduce effects on the National Park. The key objectives would be to minimise the horizontal extent of arrays along the horizon and the height of turbines and design the turbine layout in coherent blocks. Development in the Round 4 area further offshore and south of the Rampion 1 could accommodate turbines up to 225m high. However, these would need to reflect the pattern and arrangement of Rampion 2 to the north if implemented.

5.11. **SCZ 05** lies 0-13km off the coast and theoretically may be able to accommodate turbines below 145m, 145-175m and 175-225m high in defined bands (see Figure 7) within the zone in terms of effects on the most sensitive National Park viewpoints receptors (on the ridge tops). However, receptors on the edge of the National Park (such as Highdown Hill) would undergo potentially significant adverse effects as would coastal receptors who would be sensitive to medium magnitude effects from all sizes of turbines less than 14km from shore. The zone is not within the Rampion 2 scoping area and it is not expected to be developed for wind turbines in the near future. Round 4 does not appear to take any environmental/visual impact constraints into account and so, when they are, it is unlikely that offshore wind farms would be proposed within this area in the foreseeable future, particularly bearing in mind the heights of turbines coming forward.

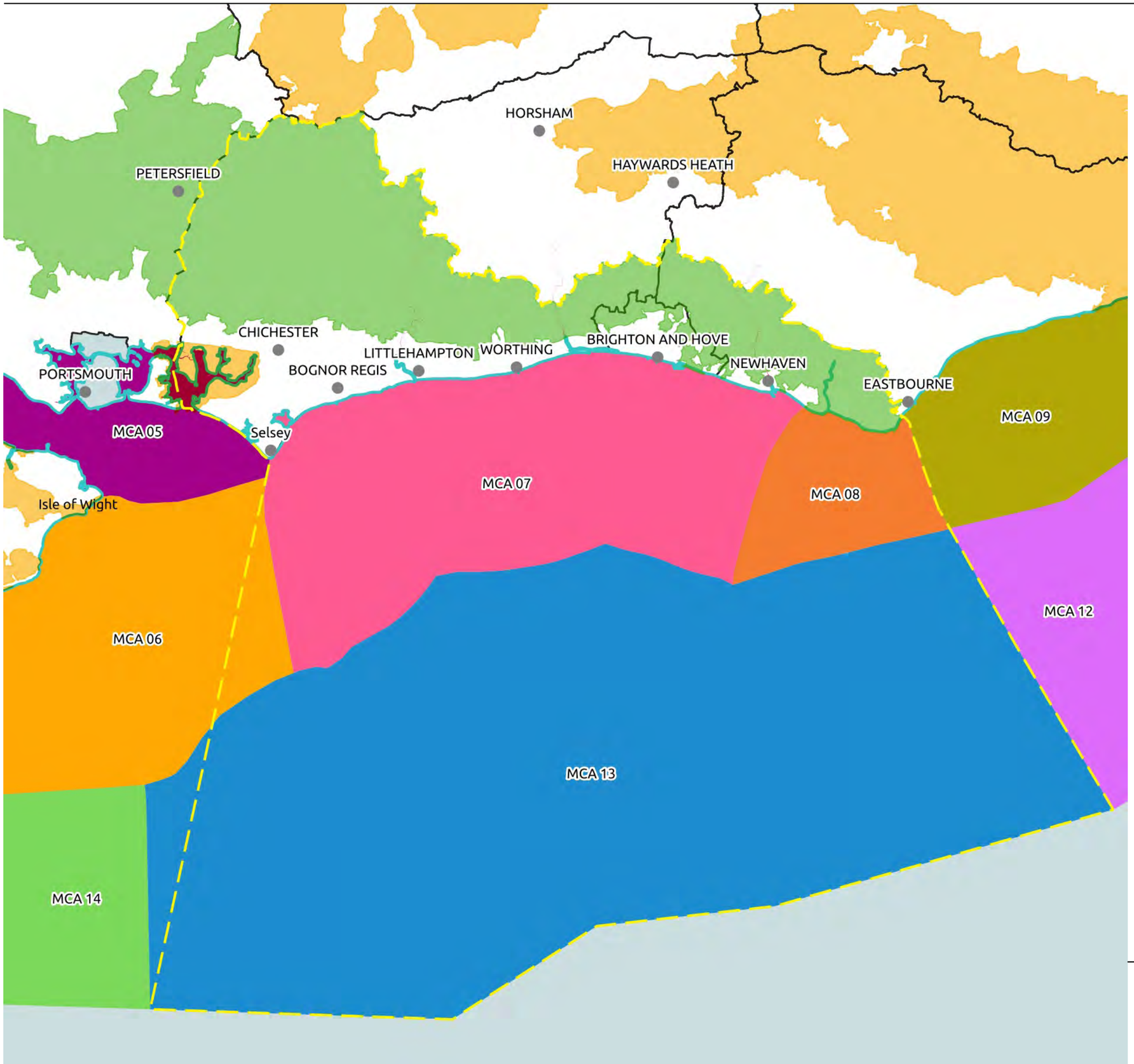
5.12. **SCZ 06** lies largely 0-13km off the coast and within 34km of a combined National Park and Heritage Coast which is the suggested buffer (OESEA, 2020) for all scales of wind farm development to avoid significant adverse effects. This combined with views from sensitive National Park viewpoints inland, and the susceptibility and other values related to the zone suggest an area of strong constraint on windfarm development. Coastal receptors would be sensitive to at least medium magnitude effects from all sizes of turbines less than 14km from shore.

5.13. A very small part of the zone just east of Rampion 1 is within the Rampion 2 scoping area (Zone 6). Turbines in this area would extend the array closer to the NP/HC and increase the extent of the array when viewed from the inland NP viewpoints when viewed from the north. Both would be likely to have significant adverse effects on the National Park. The larger the turbine proposed, the greater the effect. If turbines proposed were the same size and spacing as the existing Rampion 1 this would reduce effects but would still be undesirable. The rest of the zone is not within the Rampion 2 scoping area and it is not expected to be developed for wind turbines in the near future. Round 4 does not appear to take any environmental/visual impact constraints into account and so, when they are, it is unlikely that offshore wind farms would be proposed within this area in the foreseeable future, particularly bearing in mind the heights of turbines coming forward.

Findings in relation to Rampion 2

5.14. Taking the findings for each SCZ into account in relation to **Rampion 2**, it is recommended that development should only occur within the Extension Area west of Rampion 1 and that turbines should not exceed 225m to blade tip in height. In addition, it is recommended that there is clear separation between Rampion 1 and 2 to minimise the horizontal extent of arrays east to west along the horizon and the turbine layout is designed in coherent blocks. It is considered that the full north to south extent of the extension area should be utilised to maximise the size of east/west gaps between the arrays.

5.15. Taking into account layouts for 116 x 210m high turbines prepared as part of preliminary environmental information by the Rampion 2 team some initial conclusions on preferred layouts can be made which achieve the developers' output target. In terms of views from the South Downs National Park two new arrays separated by at least 4km from each other and Rampion 1 would be preferable. This may also reduce harm to views from the series of coastal resorts like Worthing, Bognor Regis and Littlehampton (although outside the scope of this report). Alternatively, a single new array separated by at least 5.5km from Rampion 1 and truncated in extent to the west may be considered when taking other constraints into account. It is recommended that these options are considered by the developer and illustrated with visualisations in taking forward proposals which seek to minimise seascape, landscape and visual harm.



KEY

- Study Area
- County Boundaries
- South Downs National Park
- AONBs
- High watermark/coastline

National Marine Character Areas

- MCA 05 The Solent
- MCA 06 South Wight
- MCA 07 Selsey Bill to Seaford Head
- MCA 08 South Downs Maritime
- MCA 09 Eastbourne, Pevensey & Rye Bays
- MCA 12 English Channel (East)/Dover Strait
- MCA 13 English Channel (Central)
- MCA 14 English Channel (West) & the Wight-Barfleur Reef

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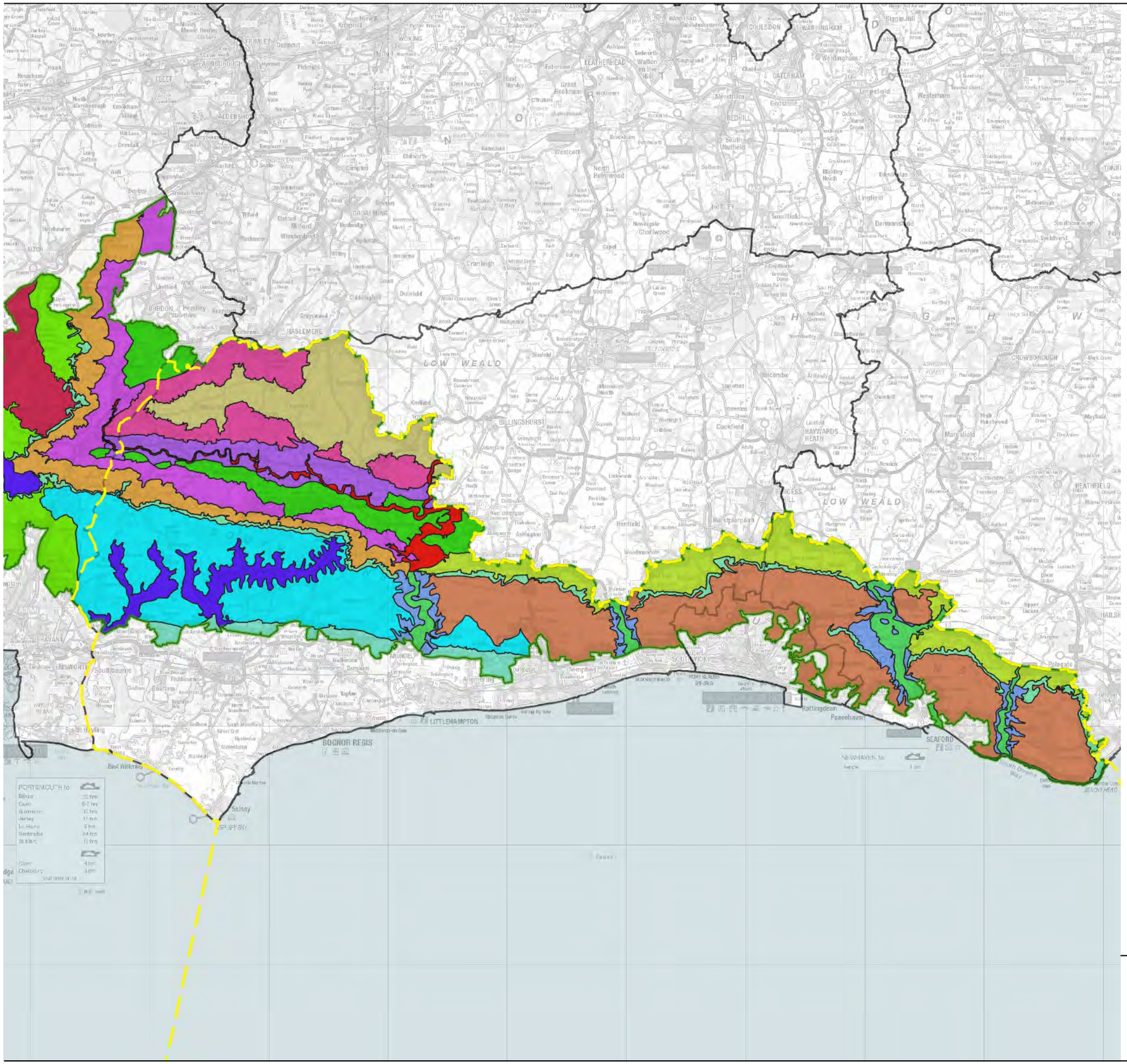
South Downs National Park Offshore wind farms buffer study

Figure 1
National Marine Character Areas



KEY

- Study Area
- South Downs National Park

South Downs landscape character types

- A: Open Downland
- B: Wooded Estate Downland
- C: Clay Plateau
- D: Downland Mosaic
- E: Chalk Valley Systems
- F: Major Chalk River Floodplains
- G: Major Chalk Valley Sides
- H: Wealden River Floodplains
- I: Major Scarps
- J: Scarp Footslopes
- K: Greensand Terrace
- L: Mixed Farmland and Woodland Vales
- M: Wealden Farmland and Heath Mosaic
- N: Valley Farmland
- O: Greensand Hills
- P: Low Weald
- R: Upper Coastal Plain
- S: Shoreline

Source for landscape types is 2019 SDNP Update

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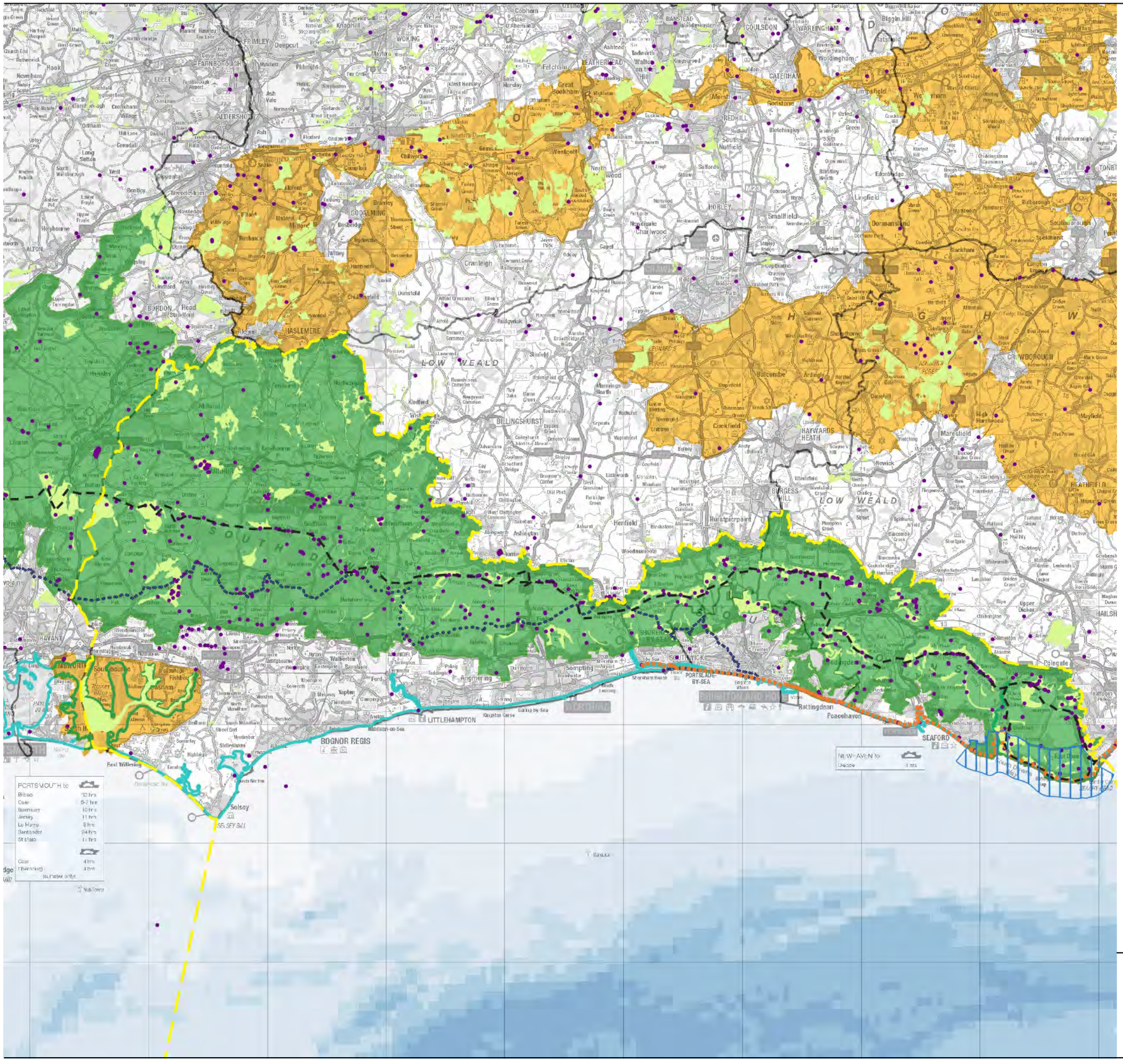
South Downs National Park Offshore wind farms buffer study

Figure 2
South Downs landscape character types



KEY

- Study Area
- County Boundaries
- South Downs National Park
- Sussex Heritage Coast
- AONBs
- Scheduled ancient monuments
- South Downs Way
- England Coast Path
- Monarch's_Way
- CROW access land
- High watermark/coastline

Bathymetry (m)

- -10-0
- -20 - -10
- -30 - -20
- -50 - -40
- -60 - -50
- -40 - -30
- -70 - -60
- -80 - -70
- <= -80

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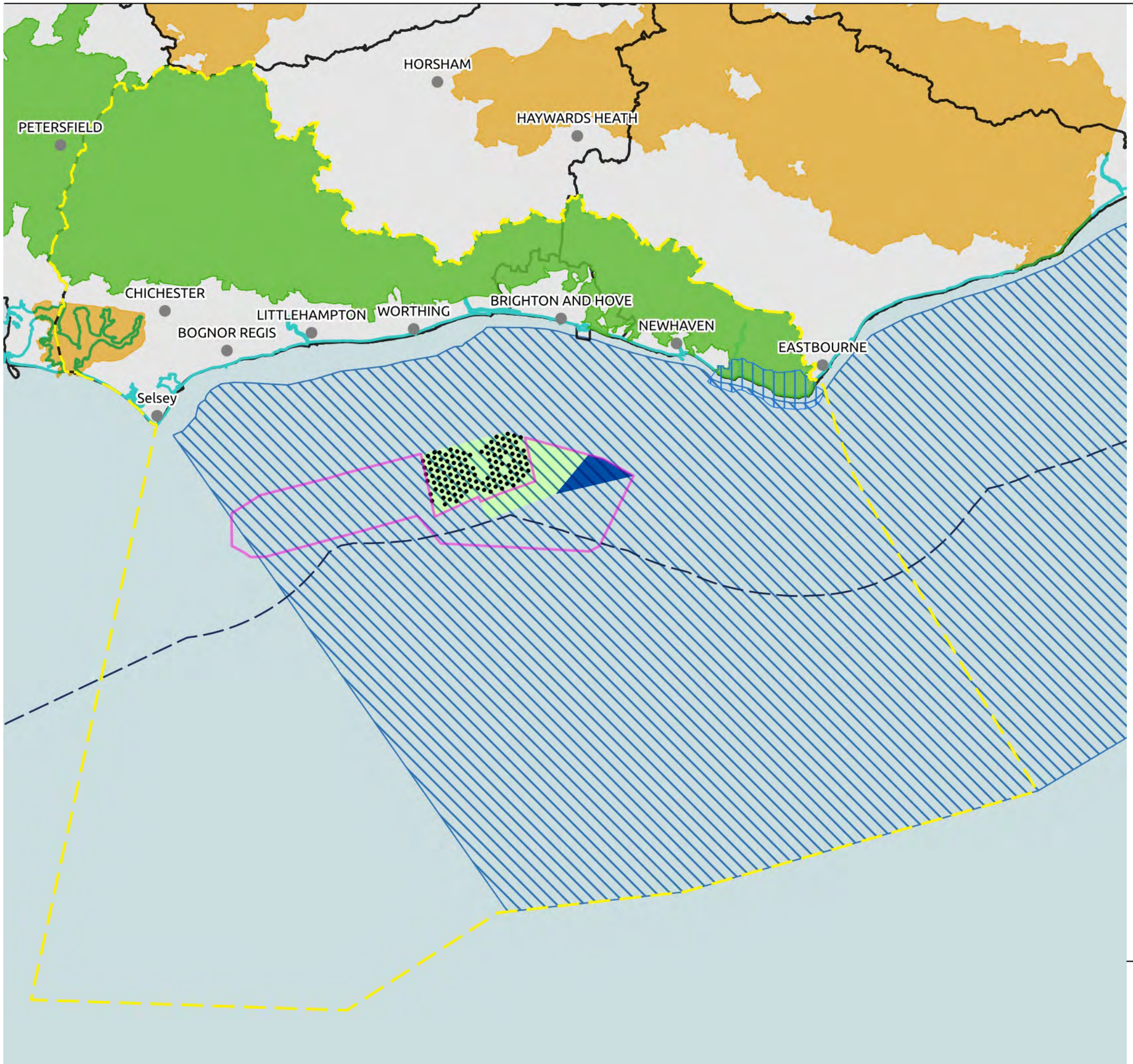
South Downs National Park Offshore wind farms buffer study

Figure 3
Landscape and other designations and accesss



KEY

- Study Area
- County Boundaries
- South Downs National Park
- Sussex Heritage Coast
- AONBs
- High watermark/coastline
- 12 nautical mile limit
- Rampion 1 consented area
- Rampion 1 exclusion zone
- Rampion 1 implemented turbines
- Rampion 2 offshore array scoping area
- Crown Estate Round 4 bidding area

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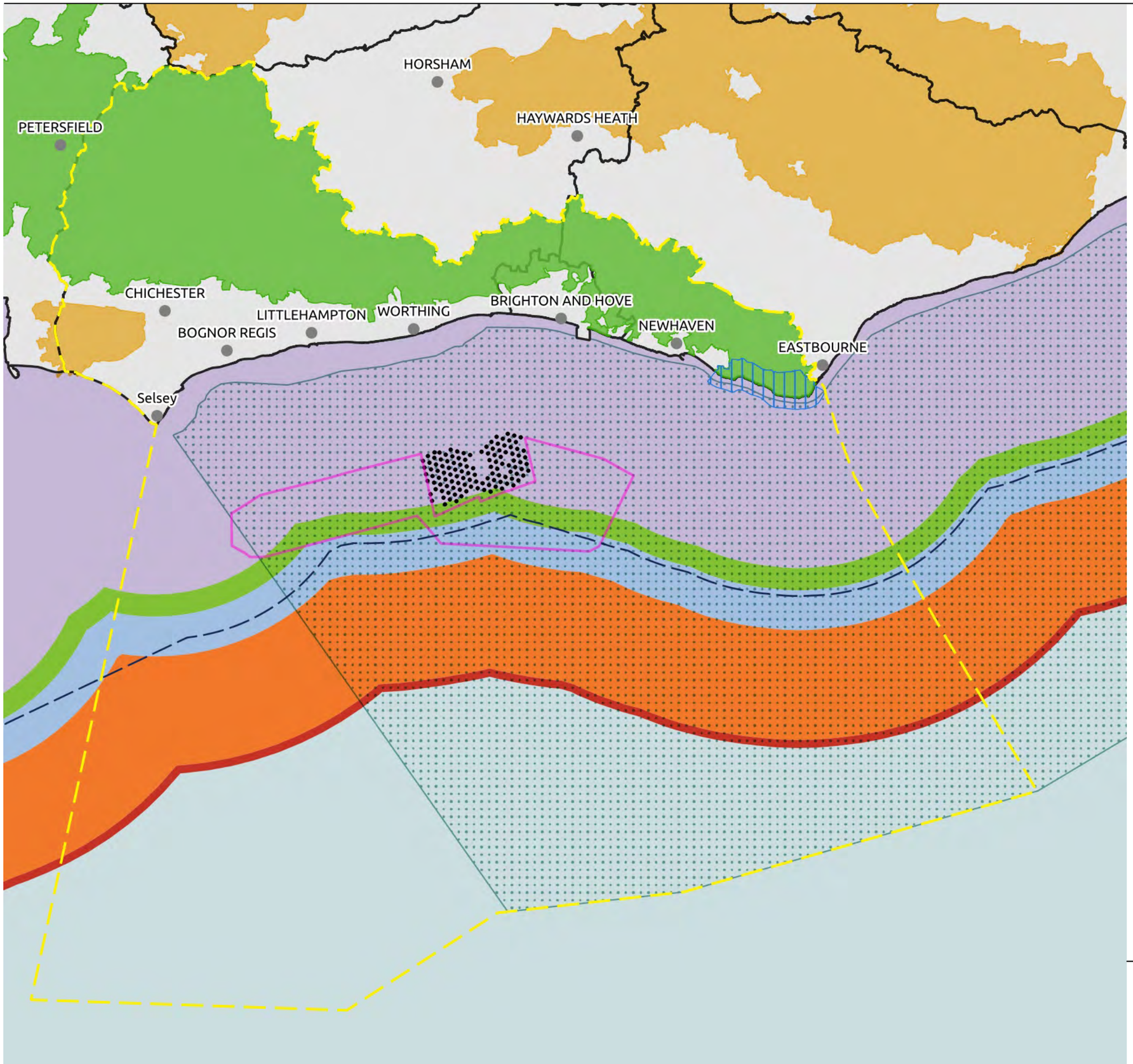
South Downs National Park Offshore wind farms buffer study

Figure 4
Offshore wind farms and Round 4 bidding area



KEY

- Study Area
- County Boundaries
- South Downs National Park
- Sussex Heritage Coast
- AONB
- High watermark/coastline
- 12 nautical mile limit
- Rampion 1 implemented turbines
- Rampion 2 offshore array scoping area
- Crown Estate Round 4 bidding area

Average low* magnitude of effect for wind turbines from coast (OESEA, 2019)

- 107-145m high turbines to blade tip-19.2km
- 150-175m high turbines to blade tip-21.7km
- 176-223m high turbines to blade tip-26.2km
- 250-300m high turbines to blade tip-38.6km
- 301-400m high turbines to blade tip- 39.5km

* The distances represent the zones where there is an average low/moderate or low visual magnitude of effect on coastal receptors. Turbines of the size noted should be placed beyond the distance noted eg 107-145m turbines should be placed at least 19.2km from the coast.

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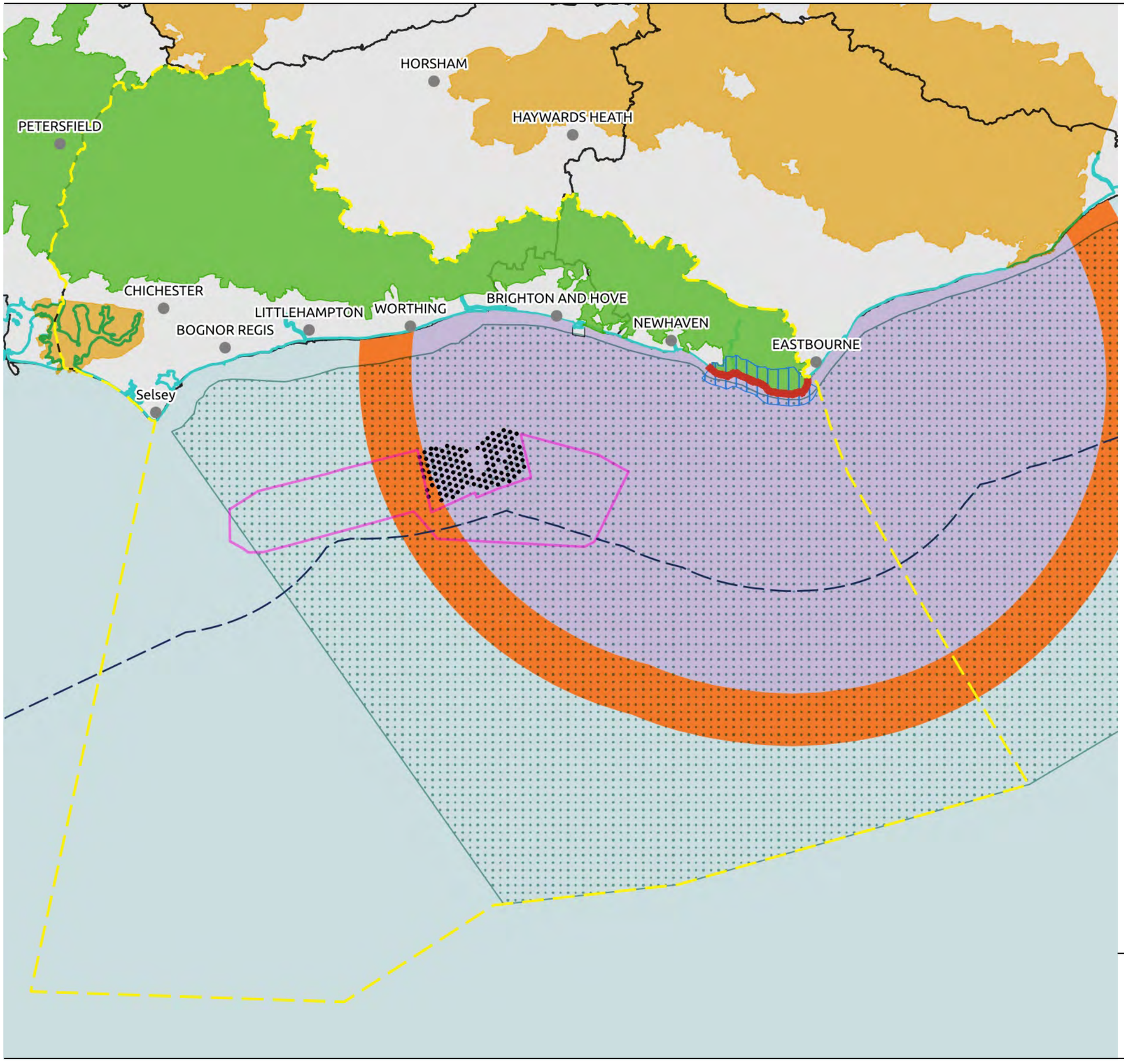
South Downs National Park Offshore wind farms buffer study

Figure 5
Average low magnitude of visual effect for wind



KEY

- Study Area
- County Boundaries
- South Downs National Park
- Sussex Heritage Coast
- AONB
- Coastline
- 12 nautical mile limit
- Rampion 1 implemented turbines
- Rampion 2 offshore array scoping area
- Crown Estate Round 4 bidding area

Recommended buffers for combined National Park and Heritage Coast coastline (OESEA, 2019)

- 107-224m high turbines to blade tip-34km
- 225-400m high turbines to blade tip- 40km

* Turbines of the size noted should be placed beyond the distance noted eg 107-224m turbines should be placed at least 34km from the coast.

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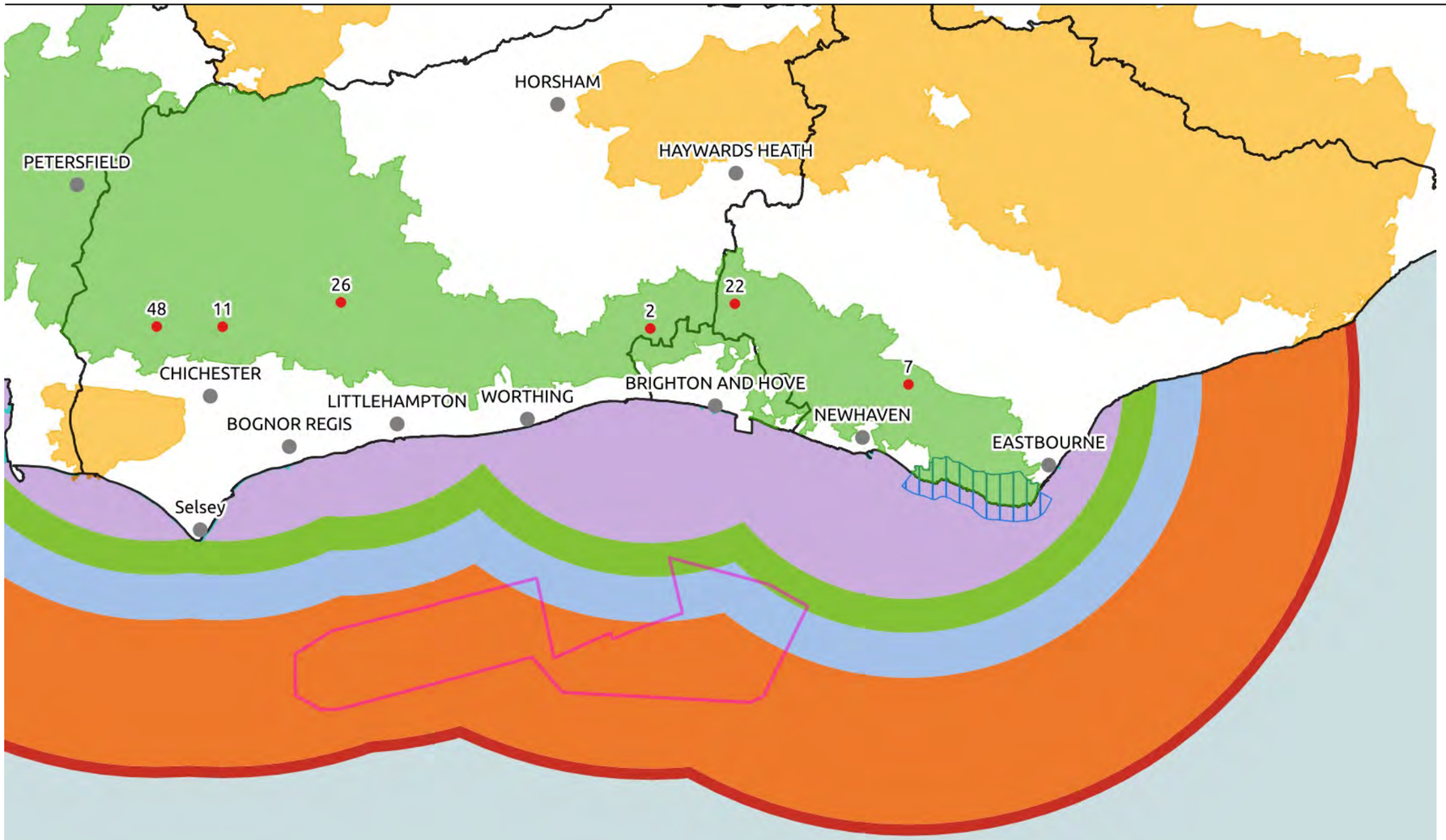
South Downs National Park Offshore wind farms buffer study

Figure 6
Visual buffers for combined National Park and Heritage Coast



KEY

- Study Area
- County Boundaries
- South Downs National Park
- Sussex Heritage Coast
- AONB
- Coastline
- 12 nautical mile limit
- Rampion 1 implemented turbines
- Rampion 2 offshore array scoping area
- Crown Estate Round 4 bidding area
- Selected key viewpoints/inland receptors

Indicative buffers for combined National Park key inland receptors (OESEA, 2019)

- 107-145m high turbines to blade tip-19km
- 146-175m high turbines to blade tip-22km
- 176-224m high turbines to blade tip-26km
- 225-300m high turbines to blade tip- 39km
- 301-400m high turbines to blade tip- 40km

* Turbines of the size noted should be placed beyond the distance noted eg 107-224m turbines should be placed at least 34km from the coast.

'The viewpoints are from the South Downs view characterisation and analysis study, 2015. There may not be continuous visibility of the entire sea area from each viewpoint- refer to the viewsheds for each viewpoint in the

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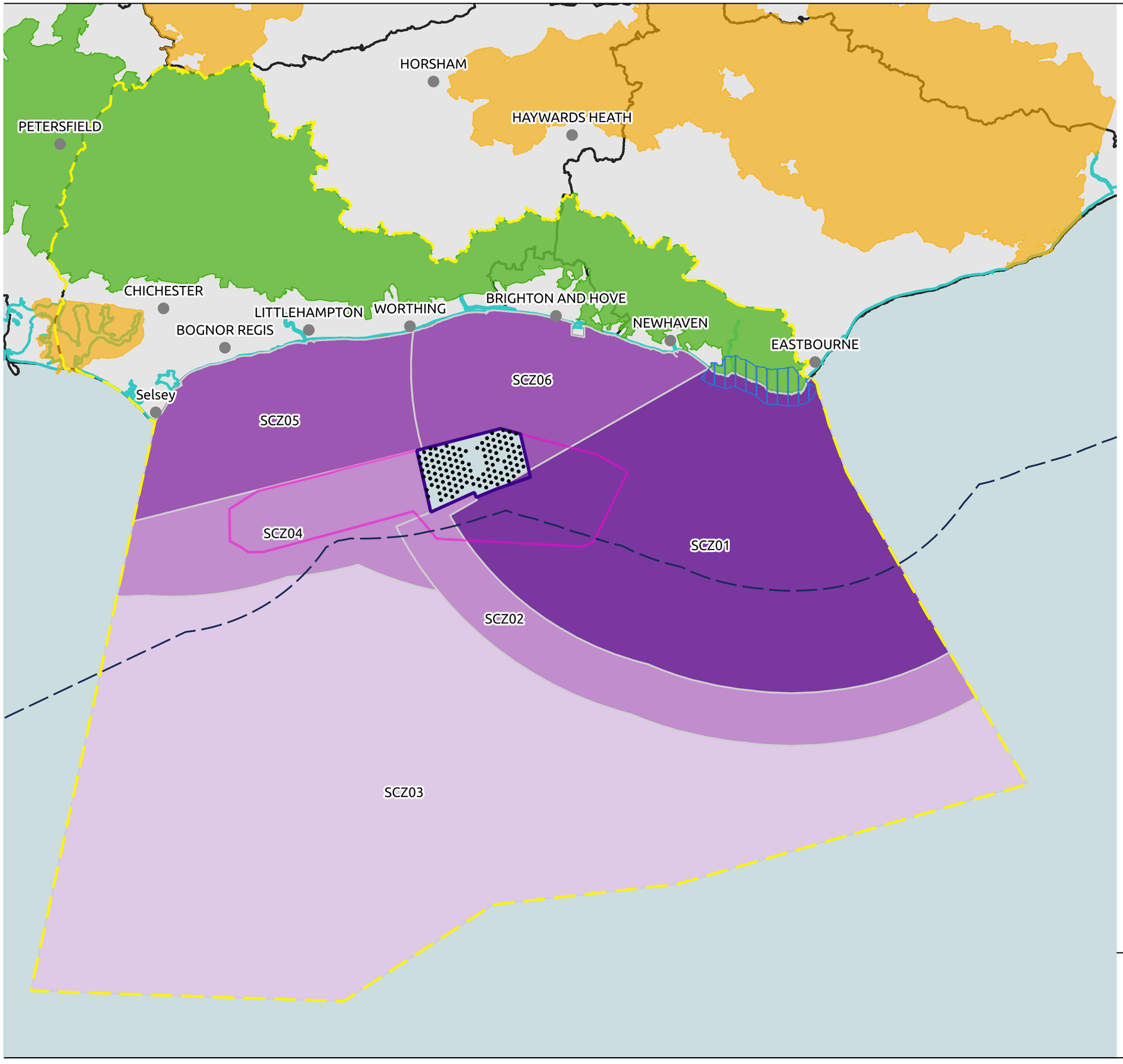
South Downs National Park Offshore wind farms buffer study

Figure 7
Visual buffers for key inland National Park inland receptors



KEY

- Study Area
- County Boundaries
- South Downs National Park
- Sussex Heritage Coast
- AONBs
- High watermark/coastline
- 12 nautical mile limit
- Rampion 1 implemented turbines
- Rampion 2 offshore array scoping area

Seascape sensitivity zones (offshore wind farms) (High to Low)

- High
- High/medium
- Medium
- Medium/low

Note: The sensitivity of seascape zones relate to offshore wind farms only and to receptors in the South Downs National Park only.

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South Downs National Park Offshore wind farms buffer study

Figure 8
Seascape sensitivity to offshore wind farms

PART 2: Detailed seascape zone assessments

Seascape zone No: 1	Name: South Downs NP/Sussex Heritage Coast Inshore
Location	
The seascape zone is defined by the extent of the combined National Park (NP) and Heritage Coast (HC) to the north, the eastern boundary of the study area and MCAs 8 and 13 to the east, a line defined by the edge of the Rampion 1 array aligned with the western extent of the Heritage Coast and the suggested buffer distance for smaller turbines off combined National Parks and Heritage Coasts (34km) to the south and south east (derived from the OESEA study, 2020).	
OVERALL SENSITIVITY	
Sensitivity	High
Summary	
The zone lies between 0-34km offshore from the coast with its highly distinctive chalk cliffs with their rolling profile which is covered by the combined South Downs National Park and Sussex Heritage Coast designations. The coast is open and rural with very limited settlement and development (much of which is leisure related) with hillforts and listed lighthouses. Beachy Head, the Seven Sisters and Cuckmere Haven are significant recreational destinations and are linked by coastal footpaths including the South Downs Way. The sea includes the northern English Channel traffic separation deep water channel with associated shipping and the area is used for fishing, both commercial and leisure. Rampion 1 windfarm lies adjacent to the zone to the west. The zone's susceptibility lies in the breathtaking panoramic views from the coast including the South Down's Way, from Beachy Head as one of the highest points on the South Coast of England, the strong sense of tranquillity, wildness, openness and unspoilt character which the seascape contributes to the distinctive coast, which relate to the National Park's special qualities, the limited number of detractors and lighting both along the coast and offshore. The zone's value lies in its role as a major part of the setting of the combined South Downs National Park and Sussex Heritage Coast designations, the views from the scheduled monuments overlooking the zone including the hillforts at Seaford Head and Belle Tout and barrows (eg Crowlink),the listed lighthouses and MCZ which reflects the natural character of the intertidal area. The factors which slightly reduce sensitivity are the small mast at Beachy Head, but this does not affect the views to the open waters offshore, the occasional shipping but this is transient and at a distance on the horizon and the presence of Rampion 1 wind farm offshore to the west. The latter raises the potential for cumulative effects.	
RECOMMENDATIONS FOR OFFSHORE WIND FARMS IN TERMS OF SEASCAPE AND VISUAL FACTORS	
Summary	
The seascape zone lies within 34km of the shore which is the suggested buffer (OESEA, 2020) for all scales of wind farm development to avoid significant adverse effects on a combined National Park and Heritage Coast. This combined with the susceptibility and other values related to the zone suggest an area of strong constraint on windfarm development. Turbines as proposed as part of Rampion 2 scoping area (Zone 6) within the zone would be considered to cause significant harm to the qualities of the National Park through cumulative effects. This potential tripling of the apparent width of array would be substantially exacerbated by extending development much closer to the National Park/Heritage Coast and using larger turbines. Development within the Round 4 bidding area would be likely to significantly exacerbate cumulative effects of the developments above and could fundamentally change the character of the seascape, potentially becoming one of the dominant characteristics of the zone. The effects would be greater the closer development is to the coast, and the greater the height of turbine and size of array. Overall, it is recommended that no windfarm development should occur within the area.	
SEASCAPE CHARACTER CONTEXT	
National Marine Character Areas	• MCA 07 Selsey Bill to Seaford Head (part) • MCA 08 South Downs Maritime • MCA 13 English Channel (Central) (part)
VISUAL BUFFERS	
Distance offshore- range	0-34km from National Park and Heritage Coast (HC) coastal boundary.

*Size of turbines potentially having low magnitude of effect**	• Turbines below 145m would be likely to exceed low magnitude of effect less than 19.2km from AONB/HC. • Turbines 145-175m would be likely to exceed low magnitude of effect less than 21.7 km from AONB/HC. • Turbines 176-225m would be likely to exceed low magnitude of effect less than 26.2 km from AONB/HC. • Turbines 226-300m would be likely to exceed low magnitude of effect less than 38.6km from shore.
*Size of turbines potentially having medium magnitude of effect**	• Turbines below 145m would be likely to exceed medium magnitude of effect less than 14km from shore. • Turbines 145-175m would be likely to exceed medium magnitude of effect less than 15.8km from shore. • Turbines 176-225m would be likely to exceed medium magnitude of effect less than 20.2km from shore. • Turbines 226-300m would be likely to exceed medium magnitude of effect less than 27.5km from shore. • Turbines 301-350m would be likely to exceed medium magnitude of effect less than 30km from shore. • Turbines 351-400m would be likely to exceed medium magnitude of effect less than 30km+ from shore.

SUSCEPTIBILITY							
Main criteria	**Sub-criteria**	**H**	**H/ M**	**M**	**M /L**	**L**	**Comments**
Natural							
Hinterland	Form/ topography/ character						Large-scale open elevated rolling chalk downland interspersed with flat bottomed Cuckmere valley.
Coastal edge	Cliffs, rocky coasts, upper beach, dunes etc						Gently curving coast with headlands- sheer chalk cliffs forming the distinctive Seven Sisters and headland at Beachy Head interspersed with valleys at Cuckmere Haven and Birling Gap.
Coastal edge	Intertidal						Small intertidal area with wave-cut chalk platform and chalk foreshore reef from Beachy Head to Cuckmere Haven and shingle beaches adjacent to valleys/watercourses.
Key habitats, features and species	Marine, intertidal, coastal edge (if relevant).						Beachy Head Marine Conservation Zones (MCZs) close to shore- unique and extensive subtidal chalk platforms, ridges and gullies. Cliffs are important bird habitats and popular place for watching migrating birds as well as marine life including bottlenose

							dolphins.
Main criteria	**Sub-criteria**	**H**	**H/ M**	**M**	**M /L**	**L**	**Comments**
Cultural/ Social							
Use of the sea *(see under seascape pattern and foci for assessment)*	Navigation, fishing, leisure, energy production, mineral extraction etc.						Dangerous waters close inshore although visitors to beaches and recreational fishing and sailing; inshore and offshore fishing e.g. crustaceans and bass; Newhaven-Dieppe ferry route; English Channel traffic separation scheme and northern deep water channel to the south; Rampion 1 windfarm visible to the west; aggregate extraction to the far south east.
Use of the coast/ hinterland	Settlement, industry, energy, marine related development such as ports, power stations, leisure/tourism, agriculture, conservation etc.						Predominantly undeveloped, rural farmed chalk downland with countryside recreation/access and rural valley floodplain/marshes and steep valley sides; golf course to the west.
Historic features at sea, on seabed or buried below	eg wrecks, paleolandscapes						Numerous shipwrecks associated with busy shipping lane, wreckers and those from the Battles of Beachy Head.
Historic features on coast	eg coastal forts, castles, lighthouses						Listed Belle Tout and Beachy Head lighthouses, scheduled hillforts at Seaford Had and Belle Tout, and barrows. Also range of military sites from Napoleonic batteries through to Second World War pillboxes.
Cultural associations	eg former use of the sea or coast, boatmaking, former trade routes, associations with artists and writers, food traditions, spiritual connections, education and interpretation etc						Association with battles (Beachy Head); offshore there is sea traffic related to English Channel; artistic associations of the area include Kipling who wrote about the influence of the sea in his poem 'Sussex', Virginia Wolf and painter Vanessa Bell. Beachy Head features in the Romantic movement in the arts.

							e.g. J. M. W. Turner painting.
Main criteria	**Sub-criteria**	**H**	**H/ M**	**M**	**M /L**	**L**	**Comments**
Quality/ Condition							
Intactness	Degree of completeness or fragmentation of area character or elements, presence of detractors and extent.						Seascape intact with very few detractors- the developed coast is visible to the west and east of Beachy Head, but only featuring relatively small structures. Rampion 1 is visible in good visibility along the coast to the west south west. Shipping is visible offshore.
State of repair	Condition of coastal natural and built features/ elements, maintained or not maintained.						The condition of the coast is good with natural features intact although subject to natural processes including sea level rise which will turn Cuckmere Haven into a natural estuarial system in due course.
Aesthetic and Perceptual							
Scale	Of sea in relation to coastal form or offshore.						The sea feels large scale with panoramic views
Openness and enclosure	Degree and nature of enclosure of sea by land, framing of views.						Openness is a key characteristic of the coast and downs with generally open views out to sea with some framing by valley sides.
Exposure	Sheltered, calm, exposed.						Exposed, eroding coast.
Aspect	Relationship with sun.						South facing with potential for turbines to be viewed in silhouette in certain light conditions. Turbines to the south west could reflect morning light. Development often seen from higher level on clifftops.
Seascape pattern and foci	Features and elements on/above the sea surface.						Some inshore sailing and fishing. English Channel traffic visible to the south offshore; Rampion 1 windfarm visible to the west south west outside

							area.
Main criteria	**Sub-criteria**	**H**	**H/ M**	**M**	**M /L**	**L**	**Comments**
Seascape pattern and foci - coast and hinterland	eg Headlands, cliffs, high hills or landmarks such as towers or castles.						Generally simple coast and high downland hinterland with few elements but dominated by natural features including highly distinctive and spectacular undulating chalk cliffs with very few man-made landmarks- notably Belle Tout lighthouse and Beachy Head lighthouse. Open, unspoilt views offshore although Rampion 1 to the west.
Contribution to the setting of a coast or seascape character area							The zone is integral to the character of the coast all lying within the limits of visual perception
Weather- visibility modifiers	Based on 10 years at nearest available local weather stations data (outside area), the % of time that visibility is very good (20-40km) or excellent (40km+). (Two % in order to the right).						Lower than average levels of visibility to the west and above average levels of visibility to the east- Hurn (39% and 3.1%) and Manston (37% and 13.7%). *(34% and 11.5% average, OESEA, 2020)*
Visual Characteristics							
Key views- **land to sea** **sea to land** **sea to sea**	Including nature of views and elevation, perhaps including iconic features. Views from within area and from outside.						Land to sea- views seen in the context of the iconic undulating chalk cliff coast; elevated cliff views from Beachy Head, Seven Sisters and associated scheduled monuments including hillforts; lower views from Birling Gap, Cuckmere Haven and beaches; almost continuous views from South Downs Way and England Coast Path; inland view from South Downs Way eg Firle Beacon. Sea to land- views from leisure sailors towards iconic chalk cliffs of Beachy Head (around 160m AOD), Seven

							Sisters (around 60m AOD) and the backcloth of the South Downs (c. 200m AOD).
Main criteria	**Sub-criteria**	**H**	**H/ M**	**M**	**M /L**	**L**	**Comments**
Intervisibility of the area with important visual receptors	Amount/length/extent /nature of intervisibility and distance away from unit/ development. eg relationship in terms of angle of view, topography influences						All of the coast is accessible and directly facing the sea with a direct relationship with the seascape zone. The zone is also visible from the elevated inland part of the South Downs NP.
Typical receptors - type and number	eg coast walkers, visitors to coast/features, beach visitors, residents, leisure sailors, ferries, shipping, urban areas etc. In designated areas or outside designated areas						Users of coast within National Park and Heritage Coast; South Downs Way and England Coast Path users; visitors to beaches; leisure sailing from Brighton Marina, Newhaven, Eastbourne and various other harbours outside the zone.
OVERALL SUSCEPTIBILITY							

VALUE							
DESIGNATIONS							
Landscape designations	*National Park Designation*	South Downs National Park					
	Heritage Coast Designation	Sussex Heritage Coast					
Historic designations	*Key scheduled monuments*	Seaford Head and Belle Tout hillforts, barrows (eg Crowlink).					
	Conservation Areas	-					
	Key listed buildings	Belle Tout and Beachy Head lighthouses, Robertson Wall Memorial bequest Obelisk, Crowlink.					
	Historic parks and gardens	-					
Marine nature conservation designations	*SPA/SAC*	-					
	Marine Conservation Zone	Beachy Head west and east.					
VALUE CRITERIA							
Main criteria	**Sub-criteria**	**H**	**H/M**	**M**	**M/L**	**L**	**Comments**
Landscape designations- National, regional, local	eg National Parks, AONBs, Heritage Coast, local countryside designations, (distance, relationship, extent of role as setting).						South Downs National Park, Sussex Heritage Coast. The zone forms the seascape in the direct view south out to sea and contributes to the setting of the

							designations.
Main criteria	**Sub-criteria**	**H**	**H/ M**	**M**	**M /L**	**L**	**Comments**
Nature conservation designations	Relevant marine and coastal eg MCZ, RAMSAR, SAC, SPA, SSSI etc						Beachy Head west and east MCZs- coastal
Heritage designations	Marine and coastal- eg scheduled monuments, Conservation Areas, listed buildings, historic parks and gardens, and their settings						Seaford Head and Belle Tout hillforts, barrows (eg Crowlink)- strong relationship with the sea
Relevant special qualities	If landscape/ coastal designation overlooks area. (List and define the degree to which the area contributes to these).						The National Park and Heritage Coast directly overlook the seascape zone.
	Diverse, inspirational landscapes and breathtaking views.						The elevated or undulating landform enables panoramic views including long views along the coastline and out to sea.
	Tranquil and unspoilt places.						This tranquil and unspoilt landscape and coast with a windswept character is complemented and reinforced by the undeveloped and wild character of the sea. Rampion 1 to the west is visible and there is some sea traffic offshore.
Community values	Value associated with area or features by people- communities of interest/place, public attitudes.						Leisure sailing from Newhaven, Brighton, Eastbourne and beyond, fishing, Beachy Head is a famous scenic viewpoint, the South Downs Way and Coast Path are very well used and the beaches are popular.
Recreational value	Use for leisure or sport on sea, intertidal, coast.						Leisure sailing, sea and beach angling and walking.
OVERALL VALUE							

CUMULATIVE EFFECTS	Comments
Existing and consented offshore wind farms within zone	Rampion 1 wind farm of 116 turbines 140m high lies just over 23km at its closest point to the west south west. Further development potentially could cause cumulative effects if using larger turbines or extending the perceived width of development along the horizon into the area.
Potential planned further development in zone	The Rampion 2 scoping area would extend Rampion 1 upto 11km into the western part of the zone. The scoping area is 15km at its closest point from this stretch of coast, running out to 34km. The Round 4 bidding area covers almost the entire zone running from around 600m offshore (at Beachy Head) out to sea.
Current relationship of wind farms and effect on seascape character and setting of National Park	At present Rampion 1 wind farm appears as an isolated array 23km offshore at an oblique angle within a wider panorama and open horizon and is within the setting of the National Park and Heritage Coast. It is a detractor and not a key characteristic of the National Park. Its effect is mitigated by the size of turbine, the distance from this stretch of coast, the end on view of the array and thus its apparent width along the horizon, and the influence of visibility modifiers/weather.
Potential cumulative combined effect of existing, consented and potential planned development on seascape character and setting of National Park	In clear visibility, a Rampion 2 array extending the full width of the scoping area would create a curtain of turbines 16.5km long on the horizon (11km plus Rampion 1's 5.5km) to the west south west. This potential tripling of the apparent width of array would cause notable cumulative effects. This would be substantially exacerbated by extending development much closer to the National Park/Heritage Coast and using much larger turbines. Development within the Round 4 bidding area would be likely to significantly exacerbate cumulative effects of the developments above and could fundamentally change the character of the seascape, potentially becoming one of the dominant characteristics of the zone. The effects would be greater the closer development is to the coast, and the greater the height of turbine and size of array.
Compatibility of cumulative combined effects with National Park policies	Rampion 2 would be incompatible with National Park policies especially relating to the purpose of conservation and enhancement and its special qualities. Any extension into the area would increase the apparent width of the array along the horizon increasing its combined cumulative effect and this would be substantially exacerbated by using larger wind turbines as proposed. It is unlikely that any additional development in the Round 4 bidding area would be compatible with National Park policies.
Recommendations for constraint or opportunities setting out the most suitable locations for development with appropriate design, scale and spacing in order to provide benefits and/or mitigate and minimise effects	No wind farm developments are considered appropriate within the zone. They would be considered to cause harm to the qualities and natural beauty of the National Park.

Seascape zone No: 2	Name: South Downs NP/Sussex Heritage Coast Offshore
Location	
34km off the combined National Park and Heritage Coast. The seascape zone is defined by the extent of MCA13 to the east, a line defined by the edge of the Rampion 1 array aligned with the western extent of the Heritage Coast to the west and the suggested buffer distance for larger turbines off combined National Parks and Heritage Coasts (40km) to the south (derived from the OESEA study, 2020).	
OVERALL SENSITIVITY	
Sensitivity	Medium
Summary	
The zone lies between 34km and 40km offshore from the coast with its highly distinctive chalk cliffs with their rolling profile covered by the combined South Downs National Park and Sussex Heritage Coast designations. The coast is open and rural with very limited settlement and development (much of which is leisure related) with hillforts and listed lighthouses. Beachy Head, the Seven Sisters and Cuckmere Haven are significant recreational destinations and are linked by coastal footpaths including the South Downs Way. The sea includes the northern English Channel traffic separation deep water channel with associated shipping and the area is used for fishing, both commercial and leisure. Rampion 1 windfarm lies adjacent to the zone to the west. The zone's susceptibility lies in the breathtaking panoramic views from the coast including the South Down's Way, from Beachy Head as one of the highest points on the South Coast of England, the strong sense of tranquillity, wildness, openness and unspoilt character which the seascape contributes to the distinctive coast, which relate to the National Park's special qualities, the limited number of detractors and lighting both along the coast and offshore. The zone's value lies in its role as a major part of the setting of the combined South Downs National Park and Sussex Heritage Coast designations, the views from the scheduled monuments overlooking the zone including the hillforts at Seaford Head and Belle Tout and barrows (eg Crowlink),the listed lighthouses and MCZ which reflects the natural character of the intertidal area. The factors which reduce sensitivity are the small mast at Beachy Head, but this do not affect the views to the open waters offshore, the distance from shore, the shipping but this is transient and the presence of Rampion 1 wind farm offshore to the north. The latter raises the potential for cumulative effects.	
RECOMMENDATIONS FOR OFFSHORE WIND FARMS IN TERMS OF SEASCAPE AND VISUAL FACTORS	
Summary	
The seascape zone lies between 34km and 40km of the shore which potentially allows consideration of wind farms with turbines between 107-224m high but is a suggested constraint buffer for turbines from 225-400m high to avoid significant adverse effects on a combined National Park and Heritage Coast. This combined with the susceptibility and other values related to the zone suggest an area of constraint on windfarm development over 225m high. Arrays should avoid a curtaining effect when viewed from the NP/HC coastline. This could be achieved with gaps between arrays of at least 12km, preferably more, and arrays not exceeding 15km width as perceived from shore. A limited extension of Rampion 1 to the south may cause limited effects provided the turbines are of similar in height and spacing to the existing. Development of turbines over 225m high within the Round 4 bidding area within the zone would be considered to cause significant harm to the special qualities of the National Park. It is appreciated that the area is crossed by English Channel traffic separation deep water channels so opportunities for development within the area are limited in any case.	
SEASCAPE CHARACTER CONTEXT	
National Marine Character Areas	• MCA 07 Selsey Bill to Seaford Head (very small part to the west) • MCA 13 English Channel (Central) (majority of zone)
VISUAL BUFFERS	

Distance offshore- range	34km-40km offshore from National Park and Heritage Coast coastal boundary. 20km from closest coast to the west.
Size of turbines potentially having low magnitude of effect (on NP/HC)*	• Turbines 176-225m would be likely to exceed low magnitude of effect less than 26.2 km from AONB/HC. • Turbines 226-300m would be likely to exceed low magnitude of effect less than 38.6km from shore. • Turbines 301-350m would be likely to exceed low magnitude of effect less than 40km from shore. • Turbines 351-400m would be likely to exceed low magnitude of effect less than 40km+ from shore.
Size of turbines potentially having medium magnitude of effect (on NP/HC)*	• Turbines 145-400m would not generally be likely to exceed medium magnitude of effect.

SUSCEPTIBILITY							
Main criteria	**Sub-criteria**	**H**	**H/ M**	**M**	**M /L**	**L**	**Comments**
Natural							
Hinterland	Form/ topography/ character	■					Large-scale open elevated rolling chalk downland interspersed with flat bottomed Cuckmere valley.
Coastal edge	Cliffs, rocky coasts, upper beach, dunes etc	■					Gently curving coast with headlands- sheer chalk cliffs forming the distinctive Seven Sisters and headland at Beachy Head interspersed with valleys at Cuckmere Haven and Birling Gap.
Coastal edge	Intertidal			■			Small intertidal area with wave-cut chalk platform and chalk foreshore reef from Beachy Head to Cuckmere Haven and shingle beaches adjacent to valleys/watercourses.
Key habitats, features and species	Marine, intertidal, coastal edge (if relevant).				■		-
Cultural/ Social							
Use of the sea *(see under seascape pattern and foci for assessment)*	Navigation, fishing, leisure, energy production, mineral extraction etc.		■	■			English Channel traffic separation scheme deep water channels and approaches; crossed by Newhaven- Dieppe ferry route; offshore fishing- trawling, potting and netting fleets; Rampion 1 windfarm visible and adjacent to the north.
Use of the coast/ hinterland	Settlement, industry, energy, marine related development such as ports, power stations, leisure/tourism, agriculture, conservation etc.	■					Predominantly undeveloped, rural farmed chalk downland with countryside recreation/access and

							rural valley floodplain/marshes and steep valley sides; golf course.
Main criteria	**Sub-criteria**	**H**	**H/ M**	**M**	**M /L**	**L**	**Comments**
Historic features at sea, on seabed or buried below	eg wrecks, paleolandscapes						Numerous shipwrecks associated with busy shipping lanes, World War I and II.
Historic features on coast	eg coastal forts, castles, lighthouses						Listed Belle Tout and Beachy Head lighthouses, scheduled hillforts at Seaford Head and Belle Tout, and barrows. Also range of military sites from Napoleonic batteries through to Second World War pillboxes.
Cultural associations	eg former use of the sea or coast, boatmaking, former trade routes, associations with artists and writers, food traditions, spiritual connections, education and interpretation etc						Association with World War I and World War II including the Battle of Britain; there is substantial sea traffic through international trade related to English Channel.
Quality/ Condition							
Intactness	Degree of completeness or fragmentation of area character or elements, presence of detractors and extent.						Seascape intact but crossed by busy shipping lanes and approaches. Rampion 1 is visible to the north west.
State of repair	Condition of coastal natural and built features/ elements, maintained or not maintained.						N/A
Aesthetic and Perceptual							
Scale	Of sea in relation to coastal form or offshore.						Large scale open sea
Openness and enclosure	Degree and nature of enclosure of sea by land, framing of views.						Very open away from the coast.
Exposure	Sheltered, calm, exposed.						Highly exposed open sea.
Aspect	Relationship with sun.						South facing with potential for turbines to be viewed in silhouette in certain light conditions. Turbines to the south west could reflect morning light. Development would be often seen from higher level on clifftops.

Main criteria	Sub-criteria	H	H/M	M	M/L	L	Comments
Seascape pattern and foci	Features and elements on/above the sea surface.						Rampion 1 windfarm visible to the north west outside area; English Channel traffic visible; some offshore fishing.
Seascape pattern and foci - coast and hinterland	eg Headlands, cliffs, high hills or landmarks such as towers or castles.						Generally simple coast and high downland hinterland with few elements but dominated by natural features including highly distinctive and spectacular undulating chalk cliffs with very few man-made landmarks- notably Belle Tout lighthouse and Beachy Head lighthouse. Open, unspoilt views offshore at a distance although Rampion 1 to the west.
Contribution to the setting of a coast or seascape character area							The zone is integral to the character of the coast all lying within the limits of visual perception albeit at a distance.
Weather-visibility modifiers	Based on 10 years at nearest available local weather stations data (outside area), the % of time that visibility is very good (20-40km) or excellent (40km+). (Two % in order to the right).						Lower than average levels of visibility to the west and above average levels of visibility to the east- Hurn (39% and 3.1%) and Manston (37% and 13.7%). *(34% and 11.5% average, OESEA, 2020)*
Visual Characteristics							
Key views- **land to sea** **sea to land** **sea to sea**	Including nature of views and elevation, perhaps including iconic features. Views from within area and from outside.						Land to sea- views seen in the context of the iconic undulating chalk cliff coast but at a distance; elevated cliff views from Beachy Head, Seven Sisters and associated scheduled monuments including hillforts; lower views from Birling Gap, Cuckmere Haven and beaches; almost continuous views from South Downs Way and England Coast Path; inland view from South Downs Way eg Firle

							Beacon. Sea to land- views from leisure sailors in the northern part of the area beyond Rampion 1 towards iconic chalk cliffs of Beachy Head (around 160m AOD), Seven Sisters (around 60m AOD) and the backcloth of the South Downs (c. 200m AOD).
Main criteria	**Sub-criteria**	**H**	**H/ M**	**M**	**M /L**	**L**	**Comments**
Intervisibility of the area with important visual receptors	Amount/length/extent /nature of intervisibility and distance away from unit/ development. eg relationship in terms of angle of view, topography influences						All of the coast is accessible and directly facing the sea with a direct relationship with the seascape zone but at a distance. The zone is also visible from the elevated inland part of the South Downs NP.
Typical receptors - type and number	eg coast walkers, visitors to coast/features, beach visitors, residents, leisure sailors, ferries, shipping, urban areas etc. In designated areas or outside designated areas						Users of coast within National Park and Heritage Coast; South Downs Way and England Coast Path users; visitors to beaches; leisure sailing from Brighton Marina, Newhaven, Eastbourne and various other harbours outside the zone.
OVERALL SUSCEPTIBILITY							

VALUE		
DESIGNATIONS		
Landscape designations	*National Park Designation*	South Downs National Park
	Heritage Coast Designation	Sussex Heritage Coast
Historic designations	*Key scheduled monuments*	Seaford Head and Belle Tout hillforts, barrows (eg Crowlink).
	Conservation Areas	-
	Key listed buildings	Belle Tout and Beachy Head lighthouses, Robertson Wall Memorial bequest Obelisk, Crowlink.
	Historic parks and gardens	-
Marine nature conservation designations	*SPA/SAC*	-
	Marine Conservation Zone	Beachy Head west and east.

VALUE CRITERIA							
Main criteria	**Sub-criteria**	**H**	**H/M**	**M**	**M/L**	**L**	**Comments**
Landscape designations- National, regional, local	eg National Parks, AONBs, Heritage Coast, local countryside designations, (distance, relationship, extent of role as setting).		■				South Downs National Park, Sussex Heritage Coast at 34km distance. The zone forms a more distant seascape on/near the horizon in the direct view south out to sea and contributes to the setting of the designations.
Nature conservation designations	Relevant marine and coastal eg MCZ, RAMSAR, SAC, SPA, SSSI etc					■	-
Heritage designations	Marine and coastal- eg scheduled monuments, Conservation Areas, listed buildings, historic parks and gardens, and their settings		■				Seaford Head and Belle Tout hillforts, barrows (eg Crowlink)- strong relationship with the sea.
Relevant special qualities	If landscape/ coastal designation overlooks area. (List and define the degree to which the area contributes to these).	■	■				The National Park and Heritage Coast overlook the seascape zone at a distance.
	Diverse, inspirational landscapes and breathtaking views.	■	■				The elevated or undulating landform enables panoramic views including long views along the coastline and out to sea.
	Tranquil and unspoilt places.		■	■			This tranquil and unspoilt landscape and coast with a windswept character is complemented and reinforced by the undeveloped and wild character of the sea. Rampion 1 to the west is visible and there is substantial sea traffic within the area.
Community values	Value associated with area or features by people- communities of interest/place, public attitudes.				■		Very limited community values- possibly sailing to the north.
Recreational value	Use for leisure or sport on sea, intertidal, coast.				■		Leisure sailing

OVERALL VALUE							

CUMULATIVE EFFECTS	Comments
Existing and consented offshore wind farms within zone	Rampion 1 wind farm with 116 turbines 140m high lies just to the north.
Potential planned further development in zone	The Rampion 2 scoping area would extend Rampion 1 just into the northern part of the zone. The Round 4 bidding area covers the entire zone.
Current relationship of wind farms and effect on seascape character and setting of National Park	At present Rampion 1 wind farm appears as an isolated array 23km offshore at an oblique angle within a wider panorama and open horizon and is within the setting of the National Park and Heritage Coast. It is a detractor and not a key characteristic of the National Park. Its effect is mitigated by the size of turbine, the distance from this stretch of coast, the end on view of the array and thus its apparent width along the horizon, and the influence of visibility modifiers/weather.
Potential cumulative combined effect of existing, consented and potential planned development on seascape character and setting of National Park	In clear visibility, the part of the Rampion 2 array scoping area extending into the zone would create an array of turbines 9km long on the horizon (3.5km plus Rampion 1's 5.5km) to the west south west. This would increase the apparent width of array in views from the NP/HC in clear weather conditions with some cumulative effects but this would also be dependent on the size of the turbines. Development within the Round 4 bidding area further south east would potentially contribute cumulative effects including curtaining and extending the influence of windfarms where not already perceived.
Compatibility of cumulative combined effects with National Park policies	Rampion 2 using turbines larger than 225m high (see caveats below) would be likely to be incompatible with National Park policies especially relating to the purpose of conservation and enhancement and its special qualities. An extension into the area using these larger turbines would increase the apparent width of the array along the horizon increasing its combined cumulative effect. It is unlikely that any additional development in the Round 4 bidding area would be compatible with National Park policies.
Recommendations for constraint or opportunities setting out the most suitable locations for development with appropriate design, scale and spacing in order to provide benefits and/or mitigate and minimise effects	A limited extension within the Rampion 2 scoping area using turbines upto 325m high within the zone as currently proposed may cause effects. The recommended buffer size turbines of upto 225m may be suitable (subject to visualisations and assessment) but ideally the turbines should be similar in height and spacing to the existing in order to avoid an awkward juxtaposition and harm to the qualities and natural beauty of the National Park. Wind farm development using turbines less than 225m high is considered appropriate within the zone but arrays should avoid a curtaining effect when viewed from the NP/HC coastline. This could be achieved with gaps between arrays of at least 12km, preferably more, and arrays not exceeding 15km width as perceived from shore. The constraint of use of the sea by shipping is likely to mean that opportunities are extremely limited in any case.

Seascape zone No: 3	Name: English Channel Offshore
Location	
40km off the combined National Park and Heritage Coast to the north east (the suggested buffer distance for larger turbines derived from the OESEA study, 2020), around 39km from key National Park receptors to the north west (the suggested buffer distance for larger turbines derived from the OESEA study, 2020), the extent of MCA13 to the east, a line from Selsey Bill out to the western extent of MCA 13 to the west and the edge of the EEZ to the south.	
OVERALL SENSITIVITY	
Sensitivity	Medium/low
Summary	
The zone lies over 40km offshore from the iconic chalk cliff coast of the combined South Downs National Park and Sussex Heritage Coast designations to the north east and around 39km from key National Park receptors on the ridges to the north west. These open, exposed offshore waters include deep water channels and approaches for English Channel shipping with commercial fishing and some aggregate production. Rampion 1 lies at least 10km to the north towards the shore. The zone's susceptibility lies in the panoramic views from the coast including the South Downs Way, England Coast Path and Monarchs Way, and the sense of tranquillity, wildness and openness of the sea complementing the NP/HC coast which relate to the NP's special qualities. The zone's value lies in its role as part of the setting of the combined NP/HC, the views from the scheduled monuments and MCZs. However, the effects on these receptors are significantly modified and reduced by the minimum distance of the zone offshore which means that most developments would be perceived as small and would be visible/perceptible between 3-14% of the time.	
RECOMMENDATIONS FOR OFFSHORE WIND FARMS IN TERMS OF SEASCAPE AND VISUAL FACTORS	
Summary	
The seascape zone is an area of more limited seascape/visual constraints, especially to the south. Further proposals within the zone, such as in the Round 4 bidding area, should be located as far offshore as possible, and if located towards the northern boundary maintain large gaps (say 12km+) between arrays so clear views of the horizon between arrays is possible from the designated coast and NP viewpoints.	
SEASCAPE CHARACTER CONTEXT	
National Marine Character Areas	• MCA 06 South Wight (very small part to the west) • MCA 07 Selsey Bill to Seaford Head (very small part to the west) • MCA 13 English Channel (Central) (majority of zone)
VISUAL BUFFERS	
Distance offshore- range	40km offshore from National Park and Heritage Coast coastal boundary. Around 39km from key National Park receptors to the north west .20km from closest coast to the north west.
Size of turbines potentially having low magnitude of effect (on NP/HC)*	• Turbines 226-300m would be likely to exceed low magnitude of effect less than 39km from key viewpoints. • Turbines 301-350m would be likely to exceed low magnitude of effect less than 40km from key viewpoints. • Turbines 351-400m would be likely to exceed low magnitude of effect less than 40km+ from key viewpoints.
Size of turbines potentially having medium magnitude of effect (on NP/HC)*	• Turbines 351-400m would be likely to exceed medium magnitude of effect less than 30km+ from key viewpoints.

SUSCEPTIBILITY							
Main criteria	**Sub-criteria**	**H**	**H/ M**	**M**	**M /L**	**L**	**Comments**
Natural							
Hinterland	Form/ topography/ character						Large-scale open elevated rolling chalk downland interspersed with valleys with coastal plain to the west.
Coastal edge	Cliffs, rocky coasts, upper beach, dunes etc						In NP- Gently curving coast with headland- sheer chalk cliffs forming the distinctive Seven Sisters and headland at Beachy Head interspersed with valleys at Cuckmere Haven and Birling Gap with shingle beaches. Outside NP- wide shallow very gently curving bay with shingle beaches, some small estuaries, low chalk cliffs to the east.
Coastal edge	Intertidal						Shingle beaches with groynes; Pagham harbour mudflats; small estuaries; intertidal wavecut platform to the east.
Key habitats, features and species	Marine, intertidal, coastal edge (if relevant).						-
Cultural/ Social							
Use of the sea *(see under seascape pattern and foci for assessment)*	Navigation, fishing, leisure, energy production, mineral extraction etc.						English Channel traffic separation scheme deep water channels and approaches; crossed by Newhaven- Dieppe ferry route and Shoreham shipping; offshore fishing- trawling, potting and netting fleets; Rampion 1 windfarm visible to the north.
Use of the coast/ hinterland	Settlement, industry, energy, marine related development such as ports, power stations, leisure/tourism, agriculture, conservation etc.						In NP in hinterland (H/M): Rural rolling hills, open to the east and more wooded to the west, with very little development and few vertical elements. Outside NP on coast

							(M/L): Almost entirely developed along the coast including low rise residential and coastal resorts, harbours and ports with a few important green gaps.
Main criteria	**Sub-criteria**	**H**	**H/ M**	**M**	**M /L**	**L**	**Comments**
Historic features at sea, on seabed or buried below	eg wrecks, paleolandscapes						Numerous shipwrecks associated with busy shipping lanes, World War I and II.
Historic features on coast	eg coastal forts, castles, lighthouses						Listed Belle Tout and Beachy Head lighthouses, scheduled hillforts at Seaford Head and Belle Tout, and barrows. Also range of military sites from Napoleonic batteries through to Second World War pillboxes.
Cultural associations	eg former use of the sea or coast, boatmaking, former trade routes, associations with artists and writers, food traditions, spiritual connections, education and interpretation etc						Association with World War I and World War II including the Battle of Britain; there is substantial sea traffic through international trade related to English Channel.
Quality/ Condition							
Intactness	Degree of completeness or fragmentation of area character or elements, presence of detractors and extent.						Seascape intact but crossed by busy shipping lanes and approaches. Rampion 1 is visible to the north.
State of repair	Condition of coastal natural and built features/ elements, maintained or not maintained.						N/A
Aesthetic and Perceptual							
Scale	Of sea in relation to coastal form or offshore.						Large scale open sea
Openness and enclosure	Degree and nature of enclosure of sea by land, framing of views.						Very open away from the coast.
Exposure	Sheltered, calm, exposed.						Highly exposed open sea.
Aspect	Relationship with sun.						South facing with potential for turbines to be viewed in silhouette in certain light conditions. Turbines to the south west could

							reflect morning light but at a long distance.
Main criteria	**Sub-criteria**	**H**	**H/ M**	**M**	**M /L**	**L**	**Comments**
Seascape pattern and foci	Features and elements on/above the sea surface.						Rampion 1 windfarm visible to the north outside area; English Channel traffic visible; some offshore fishing.
Seascape pattern and foci - coast and hinterland	eg Headlands, cliffs, high hills or landmarks such as towers or castles.						In NP- Generally simple coast and high downland hinterland with few elements but dominated by natural features including highly distinctive and spectacular undulating chalk cliffs with very few man-made landmarks- notably Belle Tout lighthouse and Beachy Head lighthouse. Open, unspoilt views offshore although Rampion 1 visible west of HC. Outside NP- Generally low rise and low-lying developed coast with NP high downland hinterland backdrop. Limited landmarks apart from occasional pier and tower blocks.
Contribution to the setting of a coast or seascape character area							The zone lies on the limits of visual perception from the NP/HC and beyond to the south/south west.
Weather-visibility modifiers	Based on 10 years at nearest available local weather stations data (outside area), the % of time that visibility is very good (20-40km) or excellent (40km+). (Two % in order to the right).						Lower than average levels of visibility to the west and above average levels of visibility to the east- Hurn (39% and 3.1%) and Manston (37% and 13.7%). *(34% and 11.5% average, OESEA, 2020)*
Visual Characteristics							
Key views- **land to sea** **sea to land** **sea to sea**	Including nature of views and elevation, perhaps including iconic features. Views from within area and from outside.						Land to sea- views seen in the context of the iconic undulating chalk cliff coast; elevated cliff views from Beachy Head Seven Sisters and associated scheduled monuments including hillforts; lower views

							from Birling Gap, Cuckmere Haven and beaches; almost continuous views from South Downs Way, Monarch's Way and England Coast Path; Sea to land- views from leisure sailors in the northern part of the area beyond Rampion 1 and the backcloth of the South Downs (c. 200m AOD). Sea to sea- ferries.
Main criteria	**Sub-criteria**	**H**	**H/ M**	**M**	**M /L**	**L**	**Comments**
Intervisibility of the area with important visual receptors	Amount/length/extent /nature of intervisibility and distance away from unit/ development. eg relationship in terms of angle of view, topography influences						All of the HC is accessible and directly facing the sea with a relationship with the seascape zone but at a distance. The zone is also visible at a distance from the elevated inland part of the South Downs NP.
Typical receptors - type and number	eg coast walkers, visitors to coast/features, beach visitors, residents, leisure sailors, ferries, shipping, urban areas etc. In designated areas or outside designated areas						Users of coast within National Park and Heritage Coast. South Downs Way, Monarch's Way and England Coast Path users, visitors to beaches. Leisure sailing from Brighton Marina, Newhaven, Eastbourne and various other harbours outside the zone. Newhaven and Portsmouth ferry users.
OVERALL SUSCEPTIBILITY							

VALUE		
DESIGNATIONS		
Landscape designations	*National Park Designation*	South Downs National Park
	Heritage Coast Designation	Sussex Heritage Coast
Historic designations	*Key scheduled monuments*	Seaford Head and Belle Tout hillforts, barrows (eg Crowlink), Ditchling Beacon, Devil's Dyke and The Trundle hillforts, Barrows such as at the Devils Humps (Kingley Vale).
	Conservation Areas	-
	Key listed buildings	Belle Tout and Beachy Head lighthouses, Robertson Wall Memorial bequest Obelisk, Crowlink.

	Historic parks and gardens	-
Marine nature conservation designations	*SPA/SAC*	-
	Marine Conservation Zone	Offshore Overfalls MCZ, Offshore Brighton MCZ.

VALUE CRITERIA

Main criteria	Sub-criteria	H	H/M	M	M/L	L	Comments
Landscape designations- National, regional, local	eg National Parks, AONBs, Heritage Coast, local countryside designations, (distance, relationship, extent of role as setting).				■		Combined South Downs National Park and Sussex Heritage Coast overlook zone but at a distance of 40km+ and most sensitive receptors in NP at 39km distance to the west. The zone forms a distant seascape on/near the horizon in the direct view south out to sea and contributes to the setting of the designations.
Nature conservation designations	Relevant marine and coastal eg MCZ, RAMSAR, SAC, SPA, SSSI etc			■			Offshore Overfalls MCZ, Offshore Brighton MCZ cover large areas to the west
Heritage designations	Marine and coastal- eg scheduled monuments, Conservation Areas, listed buildings, historic parks and gardens, and their settings				■		Heritage assets dotted along the coast and on downland tops overlook the area but at a distance of 40km+.
Relevant special qualities	If landscape/ coastal designation overlooks area. (List and define the degree to which the area contributes to these).				■		The NP/HC directly overlook the seascape zone but at a distance of 40km+.
	Diverse, inspirational landscapes and breathtaking views.				■		The elevated or undulating landform enables panoramic views including long views along the coastline and out to sea.
	Tranquil and unspoilt places.			■			This tranquil and unspoilt landscape and coast with a windswept character is complemented and reinforced by the undeveloped and wild character of

							the sea but this is at a distance. Rampion 1 to the west is visible and there is sea traffic within the area.

Main criteria	Sub-criteria	H	H/M	M	M/L	L	Comments
Community values	Value associated with area or features by people- communities of interest/place, public attitudes.						Very limited community values- possibly sailing to the north.
Recreational value	Use for leisure or sport on sea, intertidal, coast.						Occasional leisure sailing across the Channel.
OVERALL VALUE							

CUMULATIVE EFFECTS	Comments
Existing and consented offshore wind farms within zone	None. Rampion 1 wind farm with 116 turbines 140m high lies to the north.
Potential planned further development in zone	The Round 4 bidding area covers the eastern part of the zone. The Rampion 2 scoping area would extend Rampion 1 to the north of the zone.
Current relationship of wind farms and effect on seascape character and setting of National Park	At present Rampion 1 wind farm appears to the north as an isolated array 23km offshore at an oblique angle to the Heritage Coast within a wider panorama and open horizon and is within the setting of the National Park and Heritage Coast. It is a detractor and not a key characteristic of the National Park. Its effect is mitigated by the size of turbine, the distance from this stretch of coast, the end on view of the array and thus its apparent width along the horizon, and the influence of visibility modifiers/weather.
Potential cumulative combined effect of existing, consented and potential planned development on seascape character and setting of National Park	Development within the Round 4 bidding area within the zone would potentially contribute limited cumulative effects including curtaining and extending the influence of windfarms where not already perceived, but at a distance.
Compatibility of cumulative combined effects with National Park policies	Additional development in the Round 4 bidding area could be compatible with National Park policies if designed to minimise curtaining if implemented to the north but would have minimal/no effects to the south.
Recommendations for constraint or opportunities setting out the most suitable locations for development with appropriate design, scale and spacing in order to provide benefits and/or mitigate and minimise effects	Wind farm developments upto 400m high are considered appropriate within the zone but arrays should avoid a curtaining effect when viewed from the coastline if implemented near 40km. This could be achieved with gaps between arrays of at least 12km, preferably more, and arrays not exceeding 15km width as perceived from shore. Further offshore this would not be necessary due to the limits of visual perception.

Seascape zone No: 4	Name: Selsey Bill to Worthing offshore
Location	
The seascape zone is off the southern part of the Sussex coast from Selsey Bill to Seaford. It is defined by the edge of the Rampion 2 scoping area around 13km from the coast to the north, the western boundary of the study area to the west, Rampion 1 to the east and the low magnitude of effect buffer boundary for 300m high turbines 39km from sensitive receptors in the South Downs to the south.	
OVERALL SENSITIVITY	
Sensitivity	Medium
Summary	
The zone runs from the coast out from 13- 30km offshore with a gently curving low lying coastline backed by a coastal plain, with the backcloth of the South Downs (National Park) behind. The majority of the coast is urban settlement including coastal resorts such as Worthing and Bognor Regis, retirement settlements and the small estuaries such as at Littlehampton. These are interspersed with green gaps, some linking back into the hinterland which is predominantly rural and farmed. In the NP in the hinterland, there scheduled monuments on the ridges such as the Devils Humps in Kingley Vale National Nature Reserve and The Trundle hillfort. There are popular trails running along the ridge including the South Downs Way and Monarchs Way. On the coast there are occasional scheduled monuments such as forts (at Littlehampton). The coast is a significant tourist and leisure attraction and is linked by coastal footpaths including the England Coast Path and various promenades, with very popular beaches and near shore waters used for watersports including diving. The sea has limited use by shipping associated with ports to the east and west, with a minor quay at Littlehampton, and also is used for fishing, both commercial and leisure. Rampion 1 windfarm lies adjacent to the zone to the south east. The zone's susceptibility in relation to the National Park lies in the elevated views from the ridges in the hinterland out to sea including views from the South Downs Way and Monarchs Way, mainly across the open sea west of Rampion 1. The undeveloped nature of the zone reinforces the sense of tranquillity of the ridge tops, which relates to the National Park's special qualities. This is particularly notable where there are limited views of development in the intervening coastal plain. The zone's value lies in its role as a notable part of the setting of the South Downs National Park, and the views from the scheduled monuments overlooking the zone including the hillfort at The Trundle and the barrows at Kingley Vale looking towards the coast and open sea beyond Chichester cathedral. The factors which reduce sensitivity are the distance from the National Park most sensitive viewpoint receptors, the developed coast including the occasional higher rise building and occasional extensive structures such as glasshouses on the coastal plain, the occasional shipping but this is transient and relatively low volume and the presence of Rampion 1 wind farm offshore to the south east. The latter raises the potential for cumulative effects.	
RECOMMENDATIONS FOR OFFSHORE WIND FARMS IN TERMS OF SEASCAPE AND VISUAL FACTORS	
Summary	
Theoretically turbines upto 225m high may be acceptable within the zone (see Figure 7) in terms of effects on the most sensitive National Park viewpoint receptors. However, receptors on the edge of the National Park would undergo potentially significant adverse effects as would coastal receptors who would be sensitive to medium magnitude effects from turbines above 145m in the parts closer to shore and above 225m in the further points from shore. The zone is within the Rampion 2 scoping area (Extension area) and ideally turbines a similar height to Rampion 1 and arranged in a similar pattern in discreet array/s separated from the existing windfarm would reduce effects on the National Park. The key objectives would be to minimise the horizontal extent of arrays along the horizon and the height of turbines and design the turbine layout in coherent blocks. Development in the Round 4 area further offshore and south of the Rampion 1 could accommodate turbines up to 225m high. However, these would need to reflect the pattern and arrangement of Rampion 2 to the north if implemented.	
SEASCAPE CHARACTER CONTEXT	
National Marine Character Areas	MCA 06 South Wight (part) MCA 07 Selsey Bill to Seaford Head (main part) MCA 13 English Channel (central)

VISUAL BUFFERS	
Distance offshore- range	From 13km from the coast to 30km from the coast but around 28-44km from key NP viewpoints (to west)
Size of turbines potentially having low magnitude of effect (from NP viewpoints)- recommended NP buffers (page 116, OESEA, 2020).*	• Turbines below 145m would be likely to exceed low magnitude of effect less than 19.2km from AONB/HC. • Turbines 145-175m would be likely to exceed low magnitude of effect less than 21.7 km from AONB/HC. • Turbines 176-225m would be likely to exceed low magnitude of effect less than 26km from key viewpoints. • Turbines 226-300m would be likely to exceed low magnitude of effect less than 39km from key viewpoints. • Turbines 301-350m would be likely to exceed low magnitude of effect less than 40km from key viewpoints. • Turbines 351-400m would be likely to exceed low magnitude of effect less than 40km+ from key viewpoints.
Size of turbines potentially having medium magnitude of effect (from NP viewpoints)*	• Turbines below 145m would be likely to exceed medium magnitude of effect less than 14km from shore. • Turbines 145-175m would be likely to exceed medium magnitude of effect less than 15.8km from key viewpoints. • Turbines 176-225m would be likely to exceed medium magnitude of effect less than 20.2km from key viewpoints. • Turbines 226-300m would be likely to exceed medium magnitude of effect less than 27.5km from key viewpoints. • Turbines 301-350m would be likely to exceed medium magnitude of effect less than 30km from key viewpoints. • Turbines 351-400m would be likely to exceed medium magnitude of effect less than 30km+ from key viewpoints.

SUSCEPTIBILITY							
Main criteria	**Sub-criteria**	**H**	**H/ M**	**M**	**M /L**	**L**	**Comments**
Natural							
Hinterland	Form/ topography/ character						The undeveloped open downland and wooded estate downland located within the NP rise as a rural backcloth above the coastal plain and upper coastal plain.
Coastal edge	Cliffs, rocky coasts, upper beach, dunes etc						Outside NP- wide shallow very gently curving bay with shingle beaches, some small estuaries, low chalk cliffs to the east.
Coastal edge	Intertidal						Shingle beaches with groynes; Pagham harbour mudflats; Intertidal wavecut platform to the east.
Key habitats, features and species	Marine, intertidal, coastal edge (if relevant).						Interest includes offshore overfalls.

Cultural/ Social							
Use of the sea *(see under seascape pattern and foci for assessment)*	Navigation, fishing, leisure, energy production, mineral extraction etc.						Commercial shipping visible on approach to Shoreham and Solent; commercial fishing from Shoreham, Brighton, Newhaven and Worthing; recreational yachting from Brighton Marina, Littlehampton and Newhaven.
Main criteria	**Sub-criteria**	**H**	**H/ M**	**M**	**M /L**	**L**	**Comments**
Use of the coast/ hinterland	Settlement, industry, energy, marine related development such as ports, power stations, leisure/tourism, agriculture, conservation etc.						In NP in hinterland (H/M): Rural rolling hills, open to the east and more wooded to the west, with very little development and few vertical elements. Recreational routes including South Downs Way and Monarchs Way. Outside NP on coast (M/L): Almost entirely developed along the coast including low rise residential and coastal resorts, harbours and ports with a few important green gaps.
Historic features at sea, on seabed or buried below	eg wrecks, paleolandscapes						Wrecks throughout the area including those sunk in World War I and World War II.
Historic features on coast	eg coastal forts, castles, lighthouses						Outside NP- As a target for invasion there are many small forts and gun batteries including from the Napoleonic period. Coastal retreat limits age of features to the west.
Cultural associations	eg former use of the sea or coast, boatmaking, former trade routes, associations with artists and writers, food traditions, spiritual connections, education and interpretation etc						Outside NP- Associated with the coastal resorts as part of their setting and views, shipping linking UK ports with English Channel and beyond; commercial fishing.
Quality/ Condition							
Intactness	Degree of completeness or						Seascape with some

	fragmentation of area character or elements, presence of detractors and extent.						shipping, fishing and leisure boats with Rampion 1 adjacent.
Main criteria	**Sub-criteria**	**H**	**H/ M**	**M**	**M /L**	**L**	**Comments**
State of repair	Condition of coastal natural and built features/ elements, maintained or not maintained.						N/A
Aesthetic and Perceptual							
Scale	Of sea in relation to coastal form or offshore.						Large scale open sea
Openness and enclosure	Degree and nature of enclosure of sea by land, framing of views.						Very open away from the coast.
Exposure	Sheltered, calm, exposed.						Highly exposed open sea.
Aspect	Relationship with sun.						South facing with potential for turbines to be viewed in silhouette in certain light conditions. Turbines to the south could reflect early morning or evening light in summer.
Seascape pattern and foci	Features and elements on/above the sea surface.						Some commercial shipping, fishing boats and leisure craft within area; Rampion 1 adjacent.
Seascape pattern and foci - coast and hinterland	eg Headlands, cliffs, high hills or landmarks such as towers or castles.						Generally low rise and low-lying developed coast with NP high downland hinterland backdrop. Limited landmarks apart from occasional pier and tower blocks.
Contribution to the setting of a coast or seascape character area							The zone is intervisible with the South Downs NP slopes and ridgeline and is important to its setting lying within the limits of visual perception. It also is integral to the character of the coast.
Weather-visibility modifiers	Based on 10 years at nearest available local weather stations data (outside area), the % of time that visibility is very good (20-40km) or excellent (40km+). (Two % in order to the right).						Lower than average levels of visibility to the west and above average levels of visibility to the east- Hurn (39% and 3.1%) and Manston (37% and 13.7%). *(34% and 11.5% average, OESEA, 2020)*

Main criteria	Sub-criteria	H	H/M	M	M/L	L	Comments
Visual Characteristics							
Key views- **land to sea** **sea to land** **sea to sea**	Including nature of views and elevation, perhaps including iconic features. Views from within area and from outside.						Land to sea in NP- Elevated views from the South Downs Way including Devils Dyke, and Bignor Hill and from Monarch's Way including The Trundle, and also from other key viewpoints such as Kingley Vale NNR/Devil's Humps. All have clear views of the sea, mostly across the coastal plain. The view from Bignor Hill represents views that connect the undeveloped tops of the downs with the sea with limited or no view of the intervening developed coastline. Land to sea outside NP- Views from promenades, piers, beaches. Sea to land- From leisure craft back towards the coast with the unspoilt backdrop of the South Downs.
Intervisibility of the area with important visual receptors	Amount/length/extent /nature of intervisibility and distance away from unit/ development. eg relationship in terms of angle of view, topography influences						The most important visual receptors within the NP are on the tops of the downland within an undeveloped landscape, some with views of key landmarks such as Chichester Cathedral. From these the area is between 28 and 44km away. The views of the sea are intermittent but overall extend the whole length of the zone. The angle of view is generally oblique and at right angles to the direction of travel but from viewpoints, the sea is often the natural focus to the south. Rampion 1

							lies between the zone and the Heritage Coast acting as a partial screen. Closer viewpoints within the NP, such as those on the upper coastal plain, have views of intervening coastal development but the sea is closer and remains a relatively unspoilt natural feature beyond with changing patterns of light and water providing interest.
Main criteria	**Sub-criteria**	**H**	**H/M**	**M**	**M/L**	**L**	**Comments**
Typical receptors - type and number	eg coast walkers, visitors to coast/features, beach visitors, residents, leisure sailors, ferries, shipping, urban areas etc. In designated areas or outside designated areas						Typical receptors within the NP are walkers along the South Downs Way which is very popular and Monarch's Way, and on open access land. The most popular locations will be the key high points such as Devil's Dyke, The Trundle and Kingley Vale.
OVERALL SUSCEPTIBILITY							

VALUE		
DESIGNATIONS		
Landscape designations	National Park *Designation*	South Downs National Park in hinterland
	Heritage Coast Designation	Sussex Heritage Coast to the east outside area/beyond Rampion 1
Historic designations	*Key scheduled monuments*	In NP- Ditchling Beacon, Devil's Dyke and The Trundle hillforts, Barrows such as at the Devils Humps (Kingley Vale).
	Conservation Areas	-
	Key listed buildings	-
	Historic parks and gardens	-
Marine nature conservation designations	*SPA/SAC*	-
	Marine Conservation Zone	Offshore Overfalls MCZ

VALUE CRITERIA							
Main criteria	**Sub-criteria**	**H**	**H/M**	**M**	**M/L**	**L**	**Comments**
Landscape designations- National, regional, local	eg National Parks, AONBs, Heritage Coast, local countryside designations, (distance, relationship, extent of role as						South Downs National Park lies as a backdrop in the hinterland. The

	setting).						zone forms the seascape in the view south out to sea and contributes to the setting of the designations.
Main criteria	**Sub-criteria**	**H**	**H/ M**	**M**	**M /L**	**L**	**Comments**
Nature conservation designations	Relevant marine and coastal eg MCZ, RAMSAR, SAC, SPA, SSSI etc						The MCZ covers part of the area.
Heritage designations	Marine and coastal- eg scheduled monuments, Conservation Areas, listed buildings, historic parks and gardens, and their settings						Prehistoric scheduled monuments on the downs ridge tops.
Relevant special qualities /natural beauty indicators	If landscape/ coastal designation overlooks area. (List and define the degree to which the area contributes to these).						The NP clearly overlooks the sea zone at a distance. The undeveloped character of the zone is important in reinforcing the unspoilt character of the core of the National Park.
	Diverse, inspirational landscapes and breathtaking views.						The elevated and rolling landform of the South Downs enables panoramic views including long views out to sea.
	Tranquil and unspoilt places.						The tranquil and unspoilt landscape of the tops of the South Downs is intervisible with, and connected to, the undeveloped and wild character of the sea. Rampion 1 is visible from parts of the National Park.
Community values	Value associated with area or features by people- communities of interest/place, public attitudes.						Very limited community values
Recreational value	Use for leisure or sport on sea, intertidal, coast.						Limited leisure sailing.
OVERALL VALUE							

CUMULATIVE EFFECTS	Comments
Existing and consented offshore wind farms within zone	Rampion 1 wind farm of 116 turbines 140m high lies just over 19.5km at its closest point from a key NP ridge top viewpoint (Devil's Dyke) to the east, and 13km off the coast. Further development potentially could cause significant cumulative effects if using larger turbines or extending the perceived width of development along the horizon into the zone.
Potential planned further development in zone	The western part of the Rampion 2 scoping area (Extension Area) lies within the zone. The Round 4 bidding area covers around 60% of the zone- to the east.
Current relationship of wind farms and effect on seascape character and setting of National Park	At present Rampion 1 wind farm to the east appears as an isolated array 13km directly offshore within a wider panorama and open horizon and is within the setting of the National Park. It is a detractor within the seascape and not a key characteristic of the National Park. Its effect is mitigated by the size of array and turbine, the distance from receptors within the NP and the influence of visibility modifiers/weather.
Potential cumulative combined effect of existing, consented and potential planned development on seascape character and setting of National Park	In clear visibility, a Rampion 2 array extending the full width of the scoping area would create a curtain of turbines 34.5km long on the horizon (23km plus Rampion 1's 11.5km). This tripling of the apparent width of array would cause notable cumulative effects. This would be substantially exacerbated by using much larger turbines with different spacing. Development within the Round 4 bidding area would have similar effects as Rampion 2. If Rampion 2 was implemented the combined cumulative effects would remain the same but the additional effects would be less marked as the turbines would be further offshore. The degree of effect would depend on the size and arrangement of turbines. Rampion 1 and 2 above and could fundamentally change the character of the seascape, becoming the dominant characteristic of the zone.
Compatibility of cumulative combined effects with National Park policies	It is unlikely that any additional development in Rampion 2 or the Round 4 bidding area would be compatible with National Park policies.
Recommendations for constraint or opportunities setting out the most suitable locations for development with appropriate design, scale and spacing in order to provide benefits and/or mitigate and minimise effects	In terms of the effects on the NP, there is potential for development to cause harm to the special qualities of the National Park. Turbines up 176m may be appropriate closer to the shore and up to 225 m further south, dependent on the arrangement and spacing of clusters and the relationship and separation from Rampion 1. As such, it would have to be demonstrated that effects have been minimised. For example, a clear separation between two arrays would be highly desirable so that any difference in size of turbine is not so marked. Also the size of turbine should be as small as possible/as close to the existing turbine size as possible.

Seascape zone No: 5	Name: Selsey Bill to Worthing inshore
Location	
The seascape zone is off the southern part of the Sussex coast from Selsey Bill to Worthing. It is defined by the coast to the north, the western boundary of the study area to the west, a circumference line 34km from the westernmost point of the combined NP/HC and the boundary of Rampion 1 and the Rampion 2 scoping area to the south. *(Note: the South Downs NP and Sussex Heritage Coast and associated receptors in the character of the seascape itself are the key factors in the assessment- ie coastal receptors are noted as context but do not drive the overall evaluation).*	
OVERALL SENSITIVITY	
Sensitivity	High/medium
Summary	
The zone runs from the coast from 0- 15.5km offshore with a gently curving low lying coastline backed by a coastal plain, with the backcloth of the South Downs (National Park) behind. The majority of the coast is urban settlement including coastal resorts such as Worthing and Bognor Regis, retirement settlements and the small estuaries such as at Littlehampton. These are interspersed with green gaps, some linking back into the hinterland which is predominantly rural and farmed. In the NP in the hinterland, there scheduled monuments on the ridges such as the Devils Humps in Kingley Vale National Nature Reserve and The Trundle hillfort. There are popular trails running along the ridge including the South Downs Way and Monarchs Way. On the coast there are occasional scheduled monuments such as forts (at Littlehampton). The coast is a significant tourist and leisure attraction and is linked by coastal footpaths including the England Coast Path and various promenades, with very popular beaches and near shore waters used for watersports including diving. The sea has limited use by shipping associated with ports to the east and west, with a minor quay at Littlehampton, and also is used for fishing, both commercial and leisure. Rampion 1 windfarm lies adjacent to the zone to the south east. The zone's susceptibility in relation to the National Park lies in the elevated views from the ridges in the hinterland out to sea including views from the South Downs Way and Monarchs Way, mainly across the open sea west of Rampion 1. The undeveloped nature of the zone reinforces the sense of tranquillity and openness of the ridge tops, all of which relate to the National Park's special qualities. This is particularly notable where there are limited views of development in the intervening coastal plain. The zone's value lies in its role as a notable part of the setting of the South Downs National Park, and the views from the scheduled monuments overlooking the zone including the hillfort at The Trundle and the barrows at Kingley Vale looking towards the coast and sea beyond Chichester cathedral. The factors which reduce sensitivity are the developed coast including the occasional higher rise building and occasional extensive structures such as glasshouses on the coastal plain, the occasional shipping but this is transient and relatively low volume and the presence of Rampion 1 wind farm offshore to the south east. The latter raises the potential for cumulative effects.	
RECOMMENDATIONS FOR OFFSHORE WIND FARMS IN TERMS OF SEASCAPE AND VISUAL FACTORS	
Summary	
Theoretically turbines below 145m, 145-175m and 175-225m high may be acceptable in defined bands (OESEA, 2020) (see Figure 7) within the zone in terms of effects on the most sensitive National Park viewpoints receptors (on the ridge tops). However, receptors on the edge of the National Park (such as Highdown Hill) would undergo potentially significant adverse effects as would coastal receptors who would be sensitive to medium magnitude effects from all sizes of turbines less than 14km from shore. In addition, development would be likely to significantly exacerbate cumulative effects of Rampion 1 and 2 due to its proximity to shore and the potential size of turbines. Overall, no wind farm developments are considered appropriate within the zone. In any case, the zone is not within the Rampion 2 scoping area and it is not expected to be developed for wind turbines in the near future. Round 4 does not appear to take any environmental/visual impact constraints into account and so, when they are, it is unlikely that offshore wind farms would be proposed within this area in the foreseeable future, particularly bearing in mind the heights of turbines coming forward.	

SEASCAPE CHARACTER CONTEXT							
National Marine Character Areas	MCA 07 Selsey Bill to Seaford Head						
Main criteria	**Sub-criteria**	**H**	**H/M**	**M**	**M/L**	**L**	**Comments**
VISUAL BUFFERS							
Distance offshore- range	From 0-15.5km from the coast but around 13-30km from key NP viewpoints						
Size of turbines potentially having low magnitude of effect (from NP viewpoints)- recommended NP buffers (page 116, OESEA, 2020).*	• Turbines below 145m would be likely to exceed low magnitude of effect less than 19km from key viewpoints. • Turbines 145-175m would be likely to exceed low magnitude of effect less than 22km from key viewpoints. • Turbines 176-225m would be likely to exceed low magnitude of effect less than 26km from key viewpoints. • Turbines 226-300m would be likely to exceed low magnitude of effect less than 39km from key viewpoints.						
Size of turbines potentially having medium magnitude of effect (from NP viewpoints)*	• Turbines below 145m would be likely to exceed medium magnitude of effect less than 14km from key viewpoints. • Turbines 145-175m would be likely to exceed medium magnitude of effect less than 15.8km from key viewpoints. • Turbines 176-225m would be likely to exceed medium magnitude of effect less than 20.2km from key viewpoints. • Turbines 226-300m would be likely to exceed medium magnitude of effect less than 27.5km from key viewpoints. • Turbines 301-350m would be likely to exceed medium magnitude of effect less than 30km from key viewpoints.						

SUSCEPTIBILITY							
Main criteria	**Sub-criteria**	**H**	**H/ M**	**M**	**M /L**	**L**	**Comments**
Natural							
Hinterland	Form/ topography/ character						The undeveloped open downland and wooded estate downland located within the NP rise as a rural backcloth above the coastal plain and upper coastal plain.
Coastal edge	Cliffs, rocky coasts, upper beach, dunes etc						Outside NP- wide shallow very gently curving bay with shingle beaches and some small estuaries.
Coastal edge	Intertidal						Shingle beaches with groynes; Pagham harbour mudflats.
Key habitats, features and species	Marine, intertidal, coastal edge (if relevant).						Interest includes birds in Pagham Harbour, rock outcrops offshore and reefs.
Cultural/ Social							
Use of the sea *(see under seascape pattern and foci for*	Navigation, fishing, leisure, energy production, mineral extraction etc.						Commercial shipping from Solent, Newhaven and Shoreham; commercial fishing from

assessment)							Newhaven, Brighton, Shoreham and Worthing; some aggregate extraction offshore; recreational yachting from Brighton Marina, Littlehampton and Solent and recreational boating, diving and watersports in places.
Main criteria	**Sub-criteria**	**H**	**H/ M**	**M**	**M /L**	**L**	**Comments**
Use of the coast/ hinterland	Settlement, industry, energy, marine related development such as ports, power stations, leisure/tourism, agriculture, conservation etc.						In NP in hinterland (H/M): Rural rolling hills, open to the east and more wooded to the west, with very little development and few vertical elements. Recreational routes including South Downs Way and Monarchs Way. Outside NP on coast (M/L): Almost entirely developed along the coast including low rise residential and coastal resorts, a harbour (Littlehampton) with a few important green gaps.
Historic features at sea, on seabed or buried below	eg wrecks, paleolandscapes						Wrecks throughout the area including 100 around Selsey Bill and others sunk in World War I and World War II.
Historic features on coast	eg coastal forts, castles, lighthouses						Outside NP- As a target for invasion there are many small forts and gun batteries including from the Napoleonic period e.g. at Littelhampton. Coastal retreat limits age of features to the west.
Cultural associations	eg former use of the sea or coast, boatmaking, former trade routes, associations with artists and writers, food traditions, spiritual connections, education and interpretation etc						Outside NP- Ships still use the area travelling to and from the Solent and small ports including Shoreham. Defensive coast -Napoleonic fort and WWII infrastructure. The use of the area for leisure

							and resorts including several holiday camps such as at Bognor Regis and Selsey and the popularity of the coast for retirement. RSPB reserve at Pagham Harbour.
Main criteria	**Sub-criteria**	**H**	**H/ M**	**M**	**M /L**	**L**	**Comments**
Quality/ Condition							
Intactness	Degree of completeness or fragmentation of area character or elements, presence of detractors and extent.						Outside NP- Developed coast, occasional shipping from small ports, coastal/near shore recreational use of sea throughout, Rampion 1 visible in good visibility.
State of repair	Condition of coastal natural and built features/ elements, maintained or not maintained.						Outside NP- Generally well maintained and protected coast often with groynes and occasional seawalls.
Aesthetic and Perceptual							
Scale	Of sea in relation to coastal form or offshore.						The sea feels large scale with panoramic views.
Openness and enclosure	Degree and nature of enclosure of sea by land, framing of views.						Openness is a key characteristic with generally open views out to sea from beaches and from the downs.
Exposure	Sheltered, calm, exposed.						Moderately exposed, eroding coast with sheltered waters in estuary and river mouths.
Aspect	Relationship with sun.						South facing with potential for turbines to be viewed in silhouette in certain light conditions. Turbines to the south could reflect early morning or evening light in summer.
Seascape pattern and foci	Features and elements on/above the sea surface.						Nearshore water recreation, some commercial traffic and some fishing; Rampion 1 windfarm visible to the south east outside area.

Seascape pattern and foci - coast and hinterland	eg Headlands, cliffs, high hills or landmarks such as towers or castles.						Generally low rise and low-lying developed coast to the west with NP high downland hinterland backdrop. Limited landmarks apart from piers, Butlins at Bognor and occasional tower blocks eg Worthing.
Main criteria	**Sub-criteria**	**H**	**H/ M**	**M**	**M /L**	**L**	**Comments**
Contribution to the setting of a coast or seascape character area							The zone intervisible with the South Downs NP slopes and ridgeline and is important to its setting. It also is integral to the character of the coast all lying within the limits of visual perception.
Weather-visibility modifiers	Based on 10 years at nearest available local weather stations data (outside area), the % of time that visibility is very good (20-40km) or excellent (40km+). (Two % in order to the right).						Lower than average levels of visibility to the west and above average levels of visibility to the east- Hurn (39% and 3.1%) and Manston (37% and 13.7%). *(34% and 11.5% average, OESEA, 2020)*
Visual Characteristics							
Key views- **land to sea** **sea to land** **sea to sea**	Including nature of views and elevation, perhaps including iconic features. Views from within area and from outside.						Land to sea in NP- Elevated views from the South Downs Way including Bignor Hill and from Monarch's Way. These views connect the undeveloped tops of the downs with the sea with limited or no view of the intervening developed coastline. The view from Kingley Vale NNR and various others view the open unspoilt sea beyond the coastal plain with special features such as Chichester Cathedral but also other development such as glasshouses. Land to sea outside NP- Views from promenades, piers,

							beaches. Sea to land- From leisure craft back towards the coast with the unspoilt backdrop of the South Downs.
Main criteria	**Sub-criteria**	**H**	**H/ M**	**M**	**M /L**	**L**	**Comments**
Intervisibility of the area with important visual receptors	Amount/length/extent /nature of intervisibility and distance away from unit/ development. eg relationship in terms of angle of view, topography influences						The most important visual receptors within the NP are on the tops of the downland within an undeveloped landscape, some with views of key landmarks such as Chichester Cathedral. From these the coastline is around 13km and the southern edge of the area up to 30km. The views of the sea are intermittent but overall extend the whole length of the area. The angle of view is generally oblique and at right angles to the direction of travel but from viewpoints, the sea is often the natural focus to the south. Closer viewpoints within the NP, such as those on the upper coastal plain, have stronger views of intervening coastal development but the sea is closer (around 6km) and remains a relatively unspoilt natural feature beyond with changing patterns of light and water providing interest.
Typical receptors - type and number	eg coast walkers, visitors to coast/features, beach visitors, residents, leisure sailors, ferries, shipping, urban areas etc. In designated areas or outside designated areas						Typical receptors within the NP are walkers along the South Downs Way which is very popular and Monarch's Way, and on open access land. The most popular locations are the key high points such as Kingley Vale and The Trundle (which is adjacent to Goodwood racecourse).
OVERALL SUSCEPTIBILITY							

VALUE							
DESIGNATIONS							
Landscape designations	National Park *Designation*	South Downs National Park in hinterland					
	Heritage Coast Designation	Sussex Heritage Coast at a distance to the east outside area					
Historic designations	*Key scheduled monuments*	In NP- The Trundle hillfort, Barrows such as at the Devils Humps (Kingley Vale).					
	Conservation Areas	-					
	Key listed buildings	-					
	Historic parks and gardens	-					
Marine nature conservation designations	*SPA/SAC*	Solent and Dorset Coast SPA to the west around Selsey Bill.					
	Marine Conservation Zone	Selsey Bill and the Hounds MCZ; Pagham Harbour MCZ and Ramsar site; Kingmere MCZ.					
VALUE CRITERIA							
Main criteria	**Sub-criteria**	**H**	**H/M**	**M**	**M/L**	**L**	**Comments**
Landscape designations- National, regional, local	eg National Parks, AONBs, Heritage Coast, local countryside designations, (distance, relationship, extent of role as setting).						South Downs National Park lies as a backdrop in the hinterland. The zone forms the seascape in the view south out to sea and contributes to the setting of the designation.
Nature conservation designations	Relevant marine and coastal eg MCZ, RAMSAR, SAC, SPA, SSSI etc						The MCZs and SPA cover part of the area. Pagham Harbour is a RAMSAR site.
Heritage designations	Marine and coastal- eg scheduled monuments, Conservation Areas, listed buildings, historic parks and gardens, and their settings						Prehistoric scheduled monuments on the ridge tops.
Relevant special qualities /natural beauty indicators	If landscape/ coastal designation overlooks area. (List and define the degree to which the area contributes to these).						The NP clearly overlooks the sea zone at a distance. The undeveloped character of the zone is important in reinforcing the unspoilt character of the core of the National Park.
	Diverse, inspirational landscapes and breathtaking views.						The elevated and rolling landform of the South Downs enables panoramic views including long views out to sea.
	Tranquil and unspoilt places.						The tranquil and

							unspoilt landscape of the tops of the South Downs is intervisible with, and connected to, the undeveloped and wild character of the sea. Rampion 1 is visible from parts of the National Park.

Main criteria	Sub-criteria	H	H/ M	M	M /L	L	Comments
Community values	Value associated with area or features by people- communities of interest/place, public attitudes.						The South Downs Way is very well used.
Recreational value	Use for leisure or sport on sea, intertidal, coast.						Outside NP- used extensively for nearshore and inshore leisure.
OVERALL VALUE							

CUMULATIVE EFFECTS	Comments
Existing and consented offshore wind farms within zone	Rampion 1 wind farm of 116 turbines 140m high lies just over 30km at its closest point from a key NP ridge top viewpoint Bignor Hill, and 13km off the coast. Further development potentially could cause significant cumulative effects if using larger turbines or extending the perceived width of development along the horizon into the area, especially as the zone lies closer inshore.
Potential planned further development in zone	The Round 4 bidding area covers almost the entire zone running from around 1-2.5km offshore out to sea. The Rampion 2 scoping area lies outside the area directly adjacent to the south.
Current relationship of wind farms and effect on seascape character and setting of National Park	At present Rampion 1 wind farm to the south east appears as an isolated array 13km directly offshore within a wider panorama and open horizon and is within the setting of the National Park. It is a detractor within the seascape and not a key characteristic of the National Park. Its effect is mitigated by the size of array and turbine, the distance from receptors within the NP and the influence of visibility modifiers/weather.
Potential cumulative combined effect of existing, consented and potential planned development on seascape character and setting of National Park	Development within the Round 4 bidding area would be likely to significantly exacerbate cumulative effects of Rampion 1 and 2 above and could fundamentally change the character of the seascape, potentially becoming one of the dominant characteristics of the zone. The effects would be greater the closer development is to the coast, and the greater the height of turbine and size of array.
Compatibility of cumulative combined effects with National Park policies	It is unlikely that any additional development in the Round 4 bidding area would be compatible with National Park policies.
Recommendations for constraint or opportunities setting out the most suitable locations for development with appropriate design, scale and spacing in order to provide benefits and/or mitigate and minimise effects	No wind farm developments are considered appropriate within the zone. They would be considered to cause harm to the qualities and natural beauty of the National Park.

Seascape zone No: 6	Name: Worthing to Seaford Head inshore
Location	
The seascape zone is off the Sussex coast from Worthing to Seaford. It is defined by the coast to the north, a line 34km from the combined National Park/Heritage Coast to the west, the line of view from the western extent of the NP/HC to the southern edge of Rampion 1 wind farm and the boundary of Rampion 1 to the south.	
OVERALL SENSITIVITY	
Sensitivity	High/medium (minimum)
Summary	
The zone runs from the coast from 0 to 13-17km offshore with a coastline of distinctive chalk cliffs with their rolling profile with dry valleys and river valleys to the east and coastal plain to the west, with the backcloth of the South Downs (National Park) behind. The combined South Downs National Park and Sussex Heritage Coast designations lie directly adjacent to the east. The majority of the coast is urban settlement including coastal resorts such as Brighton with its marina, retirement settlements and the small ports of Shoreham and Newhaven. These are interspersed with green gaps such as headlands or linking back into the hinterland. There are occasional scheduled monuments such as forts and Martello tower. The coast is a significant tourist and leisure attraction and is linked by coastal footpaths including the England Coast Path and various promenades, with very popular beaches and near shore waters used for watersports. The sea is used by shipping associated with the ports, including a ferry from Newhaven, and also for fishing, both commercial and leisure. Rampion 1 windfarm lies adjacent to the zone to the south. The zone's susceptibility lies in its relationship with the combined NP/HC to the east with dramatic views along the coast seen in juxtaposition with the unspoilt cliffs including the iconic Seven Sisters and often with the developed coast hidden from view by landform within the National Park such as Seaford Head. The undeveloped nature of the zone reinforces the strong sense of tranquillity, wildness and openness which the seascape contributes to the coast, all of which relate to the Natural Parks special qualities. Susceptibility also lies in views from the NP in the hinterland out to sea particularly from the ridge tops including views from the South Downs Way, including the open sea east of Rampion 1. The zone's value lies in its role as an important part of the setting of the combined South Downs National Park and Sussex Heritage Coast designations, the views from the scheduled monuments overlooking the zone including the hillforts at Seaford Head, Belle Tout and Hollingbury and barrows (eg Crowlink),the listed lighthouses and MCZ which reflects the natural character of the intertidal area to the east. The factors which reduce sensitivity are the developed coast including the higher rise buildings and structures, including Shoreham power station, but this does not affect the views to the open waters from the NP/HC coast, the occasional shipping but this is transient and relatively low volume and the presence of Rampion 1 wind farm offshore to the south. The latter raises the potential for cumulative effects. Overall, the sensitivity of zone increases towards the east due to proximity to the NP/HC coast and the relationship with the chalk cliffs and more sensitive receptors.	
RECOMMENDATIONS FOR OFFSHORE WIND FARMS IN TERMS OF SEASCAPE AND VISUAL FACTORS	
Summary	
The zone lies within 34km of a combined National Park and Heritage Coast which is the suggested buffer (OESEA, 2020) for all scales of wind farm development to avoid significant adverse effects. This combined with views from sensitive National Park viewpoints inland, and the susceptibility and other values related to the zone suggest an area of strong constraint on windfarm development. Coastal receptors would be sensitive to at least medium magnitude effects from all sizes of turbines less than 14km from shore. A very small part of the zone just east of Rampion 1 is within the Rampion 2 scoping area (Zone 6). Turbines in this area would extend the array closer to the NP/HC and increase the extent of the array when viewed from the inland NP viewpoints when viewed from the north. Both would be likely to have significant adverse effects on the National Park. The larger the turbine proposed, the greater the effect. If turbines proposed were the same size and spacing as the existing Rampion 1 this would reduce effects but would still be undesirable.	

The rest of the zone is not within the Rampion 2 scoping area and it is not expected to be developed for wind turbines in the near future. Round 4 does not appear to take any environmental/visual impact constraints into account and so, when they are, it is unlikely that offshore wind farms would be proposed within this area in the foreseeable future, particularly bearing in mind the heights of turbines coming forward.	
SEASCAPE CHARACTER CONTEXT	
National Marine Character Areas	MCA 07 Selsey Bill to Seaford Head
VISUAL BUFFERS	
Distance offshore- range	From 0km to 13-17km from the coast, adjacent to the combined NP/HC to the east and between 6-28km from key inland NP viewpoints.
Size of turbines potentially having low magnitude of effect (from NP viewpoints)- recommended NP buffers (page 116, OESEA, 2020).*	• Turbines below 145m would be likely to exceed low magnitude of effect less than 19km from key viewpoints. • Turbines 145-175m would be likely to exceed low magnitude of effect less than 22km from key viewpoints. • Turbines 176-225m would be likely to exceed low magnitude of effect less than 26km from key viewpoints. • Turbines 226-300m would be likely to exceed low magnitude of effect less than 39km from key viewpoints.
Size of turbines potentially having medium magnitude of effect (from NP viewpoints)*	• Turbines below 145m would be likely to exceed medium magnitude of effect less than 14km from shore. • Turbines 145-175m would be likely to exceed medium magnitude of effect less than 15.8km from key viewpoints. • Turbines 176-225m would be likely to exceed medium magnitude of effect less than 20.2km from key viewpoints. • Turbines 226-300m would be likely to exceed medium magnitude of effect less than 27.5km from key viewpoints. • Turbines 301-350m would be likely to exceed medium magnitude of effect less than 30km from key viewpoints.

SUSCEPTIBILITY							
Main criteria	**Sub-criteria**	**H**	**H/ M**	**M**	**M /L**	**L**	**Comments**
Natural							
Hinterland	Form/ topography/ character						The undeveloped open downland located within the NP rise as a rural backcloth above the coastal plain.
Coastal edge	Cliffs, rocky coasts, upper beach, dunes etc						Outside NP- wide shallow very gently curving bay with shingle beaches to the west, some small estuaries, chalk cliffs to the east.
Coastal edge	Intertidal						Shingle beaches with groynes; intertidal wavecut platform to the east.
Key habitats, features and species	Marine, intertidal, coastal edge (if relevant).						Interest includes the intertidal chalk platform to the east.

Cultural/ Social							
Use of the sea *(see under seascape pattern and foci for assessment)*	Navigation, fishing, leisure, energy production, mineral extraction etc.						Commercial shipping from Newhaven and Shoreham; commercial fishing from Newhaven, Brighton, Shoreham and Worthing; recreational yachting from Brighton Marina and Newhaven and recreational boating and watersports in places.
Main criteria	**Sub-criteria**	**H**	**H/ M**	**M**	**M /L**	**L**	**Comments**
Use of the coast/ hinterland	Settlement, industry, energy, marine related development such as ports, power stations, leisure/tourism, agriculture, conservation etc.						In NP/HC adjacent: Undeveloped coast with rural farmed downland, coast paths and golf course. In NP in hinterland (H/M): Rural open rolling hills with very little development and few vertical elements. Recreational routes including South Downs Way and Monarchs Way. Outside NP on coast (M/L): The majority of the coast is developed including mainly low rise residential and coastal resorts, harbours and ports with important green gaps including on cliff tops.
Historic features at sea, on seabed or buried below	eg wrecks, paleolandscapes						Wrecks throughout the area and others sunk in World War I and World War II.
Historic features on coast	eg coastal forts, castles, lighthouses						Outside NP- As a target for invasion there are many small forts and gun batteries including from the Napoleonic period e.g. Martello tower at Seaford. Older remains (Bronze Age and Roman period) can also be found to the east e.g. Newhaven.
Cultural associations	eg former use of the sea or coast, boatmaking, former trade routes, associations with artists and writers, food						Outside NP- Ships use the area travelling to and from

	traditions, spiritual connections, education and interpretation etc						the small ports of Shoreham and Newhaven. Defensive coast -Napoleonic forts and Martello towers, WWII infrastructure. The chalk cliffs to the east have long been a source of inspiration for art and literature. The use of the area for leisure and resorts including the major focus of Regency Brighton ('London-by-the-sea') and the popularity of the coast for retirement.
Main criteria	**Sub-criteria**	**H**	**H/ M**	**M**	**M /L**	**L**	**Comments**
Quality/ Condition							
Intactness	Degree of completeness or fragmentation of area character or elements, presence of detractors and extent.						Outside NP- Developed coast with occasional shipping from small industrialised ports, coastal/near shore recreational use of sea throughout, Rampion 1 visible in good visibility.
State of repair	Condition of coastal natural and built features/ elements, maintained or not maintained.						Outside NP- The condition of coastal is good with natural features intact to the east and overall generally well maintained and protected often with groynes and occasional seawalls.
Aesthetic and Perceptual							
Scale	Of sea in relation to coastal form or offshore.						The sea feels large scale with panoramic views.
Openness and enclosure	Degree and nature of enclosure of sea by land, framing of views.						Openness is a key characteristic with generally open views out to sea from beaches and from the downs.
Exposure	Sheltered, calm, exposed.						Moderately exposed, eroding coast with sheltered waters in estuary and river/dock mouths.
Aspect	Relationship with sun.						South facing with potential for turbines to

							be viewed in silhouette in certain light conditions. Turbines could interfere with sunsets in views from the NP/HC to the east or reflect early morning or evening light in summer. Development seen from higher level on clifftops in NP/HC.
Main criteria	**Sub-criteria**	**H**	**H/ M**	**M**	**M /L**	**L**	**Comments**
Seascape pattern and foci	Features and elements on/above the sea surface.						Nearshore water recreation, some commercial traffic and some fishing; Rampion 1 windfarm visible to the south outside area.
Seascape pattern and foci - coast and hinterland	eg Headlands, cliffs, high hills or landmarks such as towers or castles.						Generally low rise and low-lying developed coast and rising chalk cliffs to the east with NP high downland hinterland backdrop. Limited landmarks apart from piers, occasional tower blocks and Brighton i360 (162m high).
Contribution to the setting of a coast or seascape character area							The zone is intervisible with the South Downs NP/HC to the east and NP slopes and ridgeline to the north and is important to its setting. It also is integral to the character of the coast all lying within the limits of visual perception.
Weather-visibility modifiers	Based on 10 years at nearest available local weather stations data (outside area), the % of time that visibility is very good (20-40km) or excellent (40km+). (Two % in order to the right).						Lower than average levels of visibility to the west and above average levels of visibility to the east- Hurn (39% and 3.1%) and Manston (37% and 13.7%). *(34% and 11.5% average, OESEA, 2020)*
Visual Characteristics							
Key views- **land to sea** **sea to land** **sea to sea**	Including nature of views and elevation, perhaps including iconic features. Views from within area and from outside.						Land to sea in NP/HC- views seen in the context of the iconic undulating chalk cliff coast along the coast; elevated cliff views from Beachy Head

							Seven Sisters and associated scheduled monuments including hillforts; lower views from Birling Gap, Cuckmere Haven and beaches; views from South Downs Way and England Coast Path; Land to sea in inland NP- Elevated views from the South Downs Way including Firle Beacon, Ditchling Beacon, Devils Dyke, and from Monarch's Way. These views connect the undeveloped tops of the downs with the sea with varying perception of the intervening developed coastline. Land to sea outside NP- Views from promenades, piers, beaches. Views east towards the chalk cliffs of the NP/Heritage Coast. Sea to land- From leisure craft back towards the coast including the HC cliffs to the east with the unspoilt backdrop of the South Downs.
Main criteria	**Sub-criteria**	**H**	**H/ M**	**M**	**M /L**	**L**	**Comments**
Intervisibility of the area with important visual receptors	Amount/length/extent /nature of intervisibility and distance away from unit/ development. eg relationship in terms of angle of view, topography influences						The most important visual receptors within the NP are along the HC with associated coast paths with views towards the zone when travelling west except where landform intervenes. Secondarily, users of the tops of the undeveloped downland inland on paths and in open access land are important. The latter are 6-9.5km from the coastline and the southern edge of the area up to 24.5km. The

							views of the sea are intermittent but overall extend the length of the area. The angle of view is generally oblique and at right angles to the direction of travel but from viewpoints, the sea is often the natural focus to the south. Closer viewpoints within the NP, such as Hollingbury Hillfort, have views of intervening coastal development but the sea is closer. Rampion 1 is a noticeable cluster but is set within a wider relatively unspoilt seascape.
Typical receptors - type and number	eg coast walkers, visitors to coast/features, beach visitors, residents, leisure sailors, ferries, shipping, urban areas etc. In designated areas or outside designated areas						Typical receptors within the NP are walkers along the South Downs Way which is very popular, the England Coast Path and Monarch's Way, and on open access land. The most popular locations are the Heritage Coast and the key high points such as Devil's Dyke.
OVERALL SUSCEPTIBILITY							

VALUE		
DESIGNATIONS		
Landscape designations	National Park *Designation*	South Downs National Park to the east outside area and in hinterland
	Heritage Coast Designation	Sussex Heritage Coast to the east outside area
Historic designations	*Key scheduled monuments*	In NP- Seaford Head, Belle Tout, Ditchling Beacon and Devils Dyke hillforts, and barrows (eg Crowlink).
	Conservation Areas	-
	Key listed buildings	-
	Historic parks and gardens	-
Marine nature conservation designations	*SPA/SAC*	-
	Marine Conservation Zone	Beachy Head west MCZ.

VALUE CRITERIA							
Main criteria	**Sub-criteria**	**H**	**H/M**	**M**	**M/L**	**L**	**Comments**
Landscape designations-	eg National Parks, AONBs, Heritage Coast, local countryside						South Downs National Park lies

National, regional, local	designations, (distance, relationship, extent of role as setting).						as a backdrop in the hinterland and Sussex Heritage Coast is to the east. The zone forms the seascape in the view south out to sea and contributes to the setting of the designations.
Main criteria	**Sub-criteria**	**H**	**H/ M**	**M**	**M /L**	**L**	**Comments**
Nature conservation designations	Relevant marine and coastal eg MCZ, RAMSAR, SAC, SPA, SSSI etc						The MCZ covers a small part of the area close to the coast.
Heritage designations	Marine and coastal- eg scheduled monuments, Conservation Areas, listed buildings, historic parks and gardens, and their settings						Prehistoric scheduled monuments on the coast and ridge tops.
Relevant special qualities /natural beauty indicators	If landscape/ coastal designation overlooks area. (List and define the degree to which the area contributes to these).						The NP/HC clearly overlooks the sea zone from along the coast and from inland at a distance. The undeveloped character of the zone is important in reinforcing the unspoilt character of the core of the National Park.
	Diverse, inspirational landscapes and breathtaking views.						The views along the Heritage Coast including the Seven Sisters towards the zone is iconic. The elevated and rolling landform of the South Downs to the north enables panoramic views including long views out to sea.
	Tranquil and unspoilt places.						The relatively tranquil and unspoilt landscape of the HC to the east and the tops of the South Downs is intervisible with, and connected to, the undeveloped and wild character of the sea beyond the developed coastal strip.

							Rampion 1 is visible from parts of the National Park but as a cluster further offshore.
Main criteria	**Sub-criteria**	**H**	**H/ M**	**M**	**M /L**	**L**	**Comments**
Community values	Value associated with area or features by people- communities of interest/place, public attitudes.						The Heritage Coast and South Downs Way are very well used.
Recreational value	Use for leisure or sport on sea, intertidal, coast.						Outside NP used extensively for nearshore and inshore recreation.
OVERALL VALUE							

CUMULATIVE EFFECTS	Comments
Existing and consented offshore wind farms within zone	Rampion 1 wind farm of 116 turbines 140m high lies just over 23km at its closest point to the NP/HC to the west south west. It also lies just over 19.5km at its closest point from a NP ridge top viewpoint (Devil's Dyke), and 13km off the coast. Further development potentially could cause significant cumulative effects if using larger turbines extending towards the NP/HC into the area or extending the perceived width of development along the horizon when viewed from the north, or if further turbines were proposed closer inshore.
Potential planned further development in zone	Part of the Rampion 2 scoping area lies just inside the area to the east of Rampion 1. The Round 4 bidding area covers almost the entire zone running from around 1-2.5km offshore out to sea.
Current relationship of wind farms and effect on seascape character and setting of National Park	At present Rampion 1 wind farm to the south appears as an isolated array 13km directly offshore within a wider panorama and open horizon and is within the setting of the National Park, and Heritage Coast to the east. It is a detractor within the seascape and not a key characteristic of the National Park. Its effect is mitigated by the size of array and turbine, the distance from receptors within the NP and the influence of visibility modifiers/weather.
Potential cumulative combined effect of existing, consented and potential planned development on seascape character and setting of National Park	Development within the Rampion 2 scoping area (Zone 6) extending towards the NP/HC into the area would cause significant cumulative effects, especially if using larger turbines, and extending the perceived width of development along the horizon when viewed from the north. Development within the Round 4 bidding area would be likely to significantly exacerbate cumulative effects of Rampion 1 and 2 above and could fundamentally change the character of the seascape, potentially becoming one of the dominant characteristics of the zone. The effects would be greater the closer development is to the coast, and the greater the height of turbine and size of array.
Compatibility of cumulative combined effects with National Park policies	It is unlikely that any additional development in this part of the Rampion 2 scoping area (Zone 6) or the Round 4 bidding area would be compatible with National Park policies.
Recommendations for constraint or opportunities setting out the most suitable locations for development with appropriate design, scale and	No wind farm developments are considered appropriate within the zone. They would be considered to cause harm to the qualities and natural beauty of the National Park. If development

spacing in order to provide benefits and/or mitigate and minimise effects	did occur in the Rampion 2 scoping area within the zone the turbines should be the same size and spacing as Rampion 1.

Appendix A Factors influencing the sensitivity of seascape character areas

FACTORS INFLUENCING SENSITIVITY

Seascape susceptibility criteria and indicators

Main criteria	Sub-criteria	Indicators of higher susceptibility	Indicators of lower susceptibility
Natural			
Hinterland	Form/ topography/ character	Mountainous or hilly hinterland ie long slopes rising from coast, high elevation	Plateau or flat hinterland. Highly enclosed by topography or land cover
Coastal edge	Cliffs, rocky coasts, upper beach, dunes etc	Intricate, complex, rugged forms and dramatic headlands/ends of peninsulas Where great simplicity is the key characteristic and introduction of structures into very horizontal composition would compromise this.	Flat, horizontal or gently undulating or largely straight coast. Simple forms
Coastal edge	Intertidal	Intricate, complex, rugged forms Simple large beaches	Man-made interventions/ structures in area
Key habitats, features and species	Marine, intertidal, coastal edge (if relevant).	Presence of marine habitats with high biodiversity in area of search.	Limited range and extent of biodiverse areas in area of search.
Cultural/ Social			
Use of the sea	Navigation, fishing, leisure, energy production, mineral extraction etc.	Uses with limited infrastructure.	Presence of energy production and large shipping vessels/trade routes nearby (not through area).
Use of the coast/ hinterland	Settlement, industry, energy, marine related development such as ports, power stations, leisure/tourism, agriculture, conservation etc.	Uses with limited infrastructure. Rural uses or semi-natural land. Small scale, traditional, historic settlements and harbours.	Presence of industry/energy production/dock infrastructure. Urban form
Historic features at sea, on seabed or buried below	eg wrecks, paleolandscapes	Substantial presence of wrecks and other submerged historic features which have significance as a group or make it difficult to microsite turbines.	Limited number or no heritage features.
Historic features on coast	eg coastal forts, castles, lighthouses	Presence of coastal and island historic features such as forts, castles, chapels, monasteries, other buildings and structures and other heritage features which have a strong relationship with the coast and sea visually, physically or	Limited number or no heritage features

		culturally.	
Main criteria	**Sub-criteria**	**Indicators of higher susceptibility**	**Indicators of lower susceptibility**
Cultural associate-ions	eg former use of the sea or coast, boatmaking, former trade routes, associations with artists and writers, food traditions, spiritual connections, education and interpretation etc	Where there are strong collective cultural associations with the sea and coast through people and events and their expression through literature, art, music or other media. These can include religious connections, legends, books and poems, pictures, music, films, plays and other cultural media.	Limited or no cultural associations, or cultural associations which are compatible with development, possibly relating to industry, military infrastructure and trade.
Quality/ Condition			
Intactness	Degree of completeness or fragmentation or area character or elements, presence of detractors and extent.	Intact and consistent character of seascape. Few or no detractors.	Seascape character fragmented. Presence of detractors.
State of repair	Condition of coastal natural and built features/ elements, maintained or not maintained.	Well maintained seascape or landscape character at coast.	Poorly maintained seascape or landscape character at coast. Presence of dereliction/neglect.
Aesthetic and Perceptual			
Scale	Of sea in relation to coastal form or offshore.	Small scale, enclosed, views to horizon limited by landform Introduction of an element of scale into previously unscaled area	Large scale views
Openness and enclosure	Degree and nature of enclosure of sea by land, framing of views.	Where openness is a key characteristic and introduction of built elements would compromise this.	Unframed open views unimpeded by natural elements or features.
Exposure	Sheltered, calm, exposed.	Sheltered and calm seascapes Where seascape is extremely exposed such that the perceived wild, elemental nature is a key characteristic and development would significantly change this perception.	Open, exposed seascapes which does not provide a perception of elemental or wild seascape character and development would be perceived as relating to these characteristics.

Main criteria	Sub-criteria	Indicators of higher susceptibility	Indicators of lower susceptibility
Aspect	Relationship with sun.	Development would interfere with notable views of sunrises and particularly sunsets. Where turbines would be highlighted in contrast to their background by sun light or be highlighted in silhouette from backlighting, thereby increasing visual prominence. Development seen from higher level views, particularly where viewer elevation results in development, and its geometric layout pattern, being seen much closer than on the horizon line.	Development located away from sunrise and sunset positions
Seascape pattern and foci	Features and elements on/above the sea surface.	Complex or unified pattern which would be disrupted by development.	Presence of existing vertical or other elements at sea including shipping/ferries.
Seascape pattern and foci - coast and hinterland	eg Headlands, cliffs, high hills or landmarks such as towers or castles.	Important focal points eg islands, islets, headlands, distinctive sweeping beaches, and high hills. Open unspoilt views of the sea with no signs of development offshore.	Lack of intact pattern Lack of natural or historic feature focal points
Contribut-ion to the setting of a coast or seascape character area		Is perceived from, and forms the setting of, a sensitive coast or seascape character area within the limits of visual perception. (See sensitivity criteria below).	Is perceived from a less sensitive coast or seascape character area. Is beyond the limits of visual perception.
Visual Characteristics			
Key views- **land to sea** **sea to land** **sea to sea**	Including nature of views and elevation, perhaps including iconic features. Views from within area and from outside.	Open or framed views from key viewpoints. Views to key features eg islands, other coasts, headlands. Views from well used sea area for leisure focussed on seascape/scenic quality.	Few or no views from key viewpoints. Sea not used for leisure sailing.
Intervisib-ility of the area with important visual receptors	Amount/length/ extent /nature of intervisibility and distance away from unit/ development. eg relationship in terms of angle of view, topography	Strong intervisibility with coast in terms of length and/or area and/or relatively close to.	Poor intervisibility with coast in terms of length and/or area and/or relatively far away.

	influences		
Main criteria	**Sub-criteria**	**Indicators of higher susceptibility**	**Indicators of lower susceptibility**
Typical receptors - type and number	eg walkers, visitors to coast/features, beach visitors, residents, leisure sailors, ferries, shipping, urban areas etc. In designated areas or outside designated areas	Coast path and users of paths and access land. Visitors to heritage features. Promenade and pier users. Leisure sailors.	Users of ferries. Shipping. People in urban areas at work. Users of roads (unless corniche). Users of railways.

Seascape value criteria and indicators

Main criteria	Sub-criteria	Indicators of higher value	Indicators of lower value
Landscape designations- National, regional, local	eg National Parks, AONBs, Heritage Coast, local countryside designations, (distance, relationship, extent of role as setting).	Presence of National Parks, AONBs, especially if combined with Heritage Coast, overlooking area. Perceived as lying within seascape setting of a designation.	Absence of landscape designations. Not within seascape setting of a landscape designation.
Nature conservation designations	Marine and coastal eg MCZ, RAMSAR, SAC, SPA, SSSI etc (if relevant).	Presence of nature conservation designations within or potentially affected by area of potential development.	Absence of nature conservation designations within or potentially affected by area of potential development
Heritage designations	Marine and coastal- eg scheduled monuments, Conservation Areas, listed buildings, historic parks and gardens, and their settings (if relevant).	Presence of heritage designations overlooking or within area of potential development. Perceived as lying within seascape setting of a designation.	Absence of heritage designations overlooking or within area of potential development
Relevant special qualities /natural beauty indicators	If landscape/ coastal designation overlooks area. (List and define the degree to which the area contributes to these).	Area contributes to special qualities.	Area does not contribute to special qualities.
	Scenic quality- sense of place	A clear and recognisable sense of place which the area contributes to.	A limited sense of place and/or limited contribution to sense of place.
	Scenic quality- panoramic views and	Panoramic views out to sea and along Heritage	No or very limited views out to sea or along coast

	vantage points	Coast Views from elevated vantage points out to sea	No or very limited vantage points
Main criteria	**Sub-criteria**	**Indicators of higher value**	**Indicators of lower value**
	Relative wildness, sense of remoteness, lack of human influence	Sense of remoteness with little indication of development onshore and offshore	Sense of settled landscape with presence of development onshore and offshore
	Relative tranquillity- absence of development	Perception of semi-natural character and absence of development and people	Perception of movement, development, people.
	Relative tranquillity- dark skies	Presence of dark skies with very limited light sources onshore and offshore	Presence of light sources on coast and offshore
	Cultural associations/artistic representations	Area with rich cultural associations.	Area with limited cultural associations.
Community values	Value associated with area or features/elements by people- communities of interest and place, public attitudes.	Area or features highly valued by people.	Area or features with attributed limited value by people.
Recreational value	Use for leisure or sport on sea, intertidal, coast.	Area used extensively for leisure especially related to enjoying seascape character and views.	Area with limited use for leisure, or where leisure relates to motorised pursuits/speed.

Cumulative effects criteria and indicators

Criteria	Indicators of higher cumulative effect	Indicators of lower cumulative effect
Current relationship of existing and consented wind farms and effect on seascape character and setting of National Park	Current development already creates a wind farm seascape or is nearing this state and is beginning to have a significant adverse effect on the setting of the National Park, eg curtaining on the horizon.	There are no existing and consented wind farms or development is at a low density and forms a seascape with occasional wind farms and has a limited or no adverse effect on the setting of the National Park.
Potential cumulative combined effect of existing, consented and potential planned development on seascape character and setting of National Park	Combined development is likely to create a wind farm seascape or is nearing this state and is beginning to have a significant adverse effect on the setting of the National Park, eg curtaining.	There is no or very limited combined development or forms a seascape with occasional wind farms and has a limited or no adverse effect on the setting of the National Park.
Compatibility of potential cumulative combined effects with	Combined development significantly adversely changes the perception of National Park natural beauty/special	Combined development has no or very limited effect on the perception of National Park

National Park policies	qualities.	natural beauty/ special qualities.
Criteria	**Indicators of higher cumulative effect**	**Indicators of lower cumulative effect**
Recommendations for constraint or opportunity.	Recommendations may include avoiding or limiting further development with strict limits on size, scale and design of development.	Recommendations may be limited or include size, scale, location advice to avoid potential seascape issues in the future.

Appendix B Visibility modifiers

OESEA seascape report 2020 information

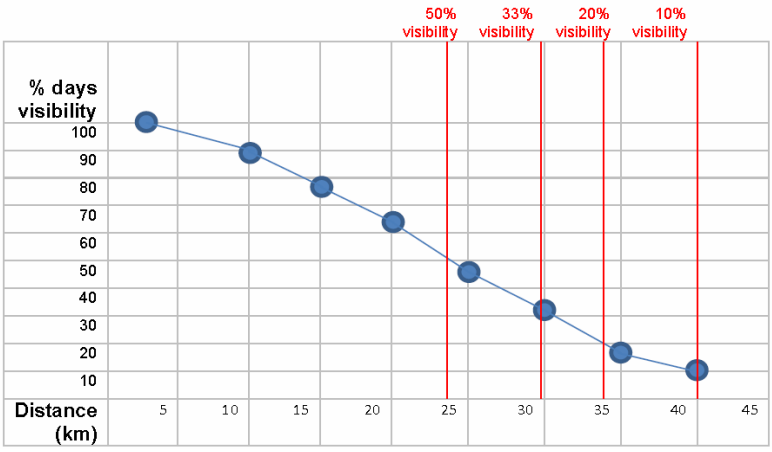
The OESEA study suggests that SVIAs should take into account the frequency of visibility from the nearest two to three coastal weather stations (13.70). The nearest coastal weather stations mentioned in the OESEA study are Manston and Hurn - lying to the east and west of the study area respectively. These are highlighted in the table below.

Visibility Distances for Coastal Stations over a 10 year period (2008-2017) *(Extract from OESEA seascape report 2020)*

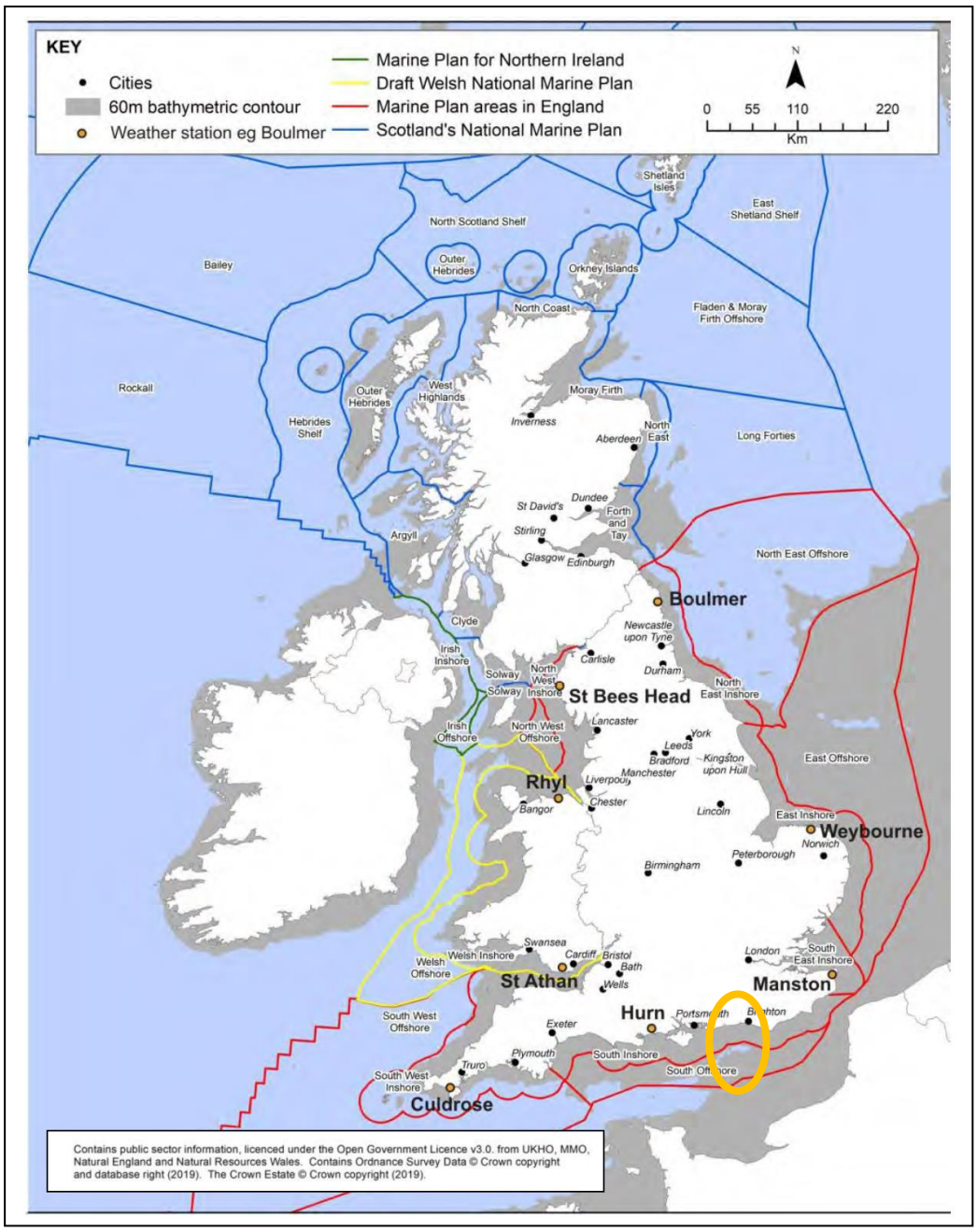
Weather Stations	Visibility Distance (km)							
	0-5	6-10	11-15	16-20	21-25	26-30	35	40+
Boulmer % days visibility	10.9%	12.7%	12.4%	16.3%	13.9%	12.7%	4.6%	16.5%
cumulative totals	100.%	89.1%	76.4%	64.0%	47.7%	33.8%	21.1%	16.5%
Weybourne % days visibility	9.9%	13.0%	13.5%	11.1%	9.8%	14.1%	6.0%	22.6%
cumulative totals	100%	90.1%	77.1%	63.6%	52.5%	42.7%	28.6%	22.6%
Manston % days visibility	10.7%	13.2%	12.7%	13.1%	12.8%	17.0%	6.7%	13.7%
cumulative totals	100%	89.3%	76.1%	63.3%	50.2%	37.4%	20.5%	13.7%
Hurn % days visibility	11.0%	13.1%	13.8%	19.7%	15.1%	20.3%	3.7%	3.1%
cumulative totals	100%	89.0%	75.8%	62.1%	42.3%	27.2%	6.8%	3.1%
Culdrose % days visibility	19.9%	16.1%	17.5%	28.7%	11.8%	4.6%	0.7%	0.7%
cumulative totals	100%	80.1%	64.0%	46.5%	17.8%	6.0%	1.4%	0.7%
St Athan % days visibility	6.5%	9.6%	10.7%	14.3%	14.7%	22.9%	9.2%	12.0%
cumulative totals	100%	93.5%	83.8%	73.1%	58.8%	44.1%	21.2%	12.0%
Rhyl % days visibility	5.4%	7.4%	11.5%	14.0%	13.8%	20.1%	8.8%	19.1%
cumulative totals	100%	94.6%	87.2%	75.7%	61.7%	47.9%	27.9%	19.1%
St Bees Head % days visibility	13.5%	12.7%	17.5%	21.8%	18.3%	10.3%	1.8%	4.0%
cumulative totals	100%	86.5%	73.8%	56.3%	34.5%	16.2%	5.8%	4.0%
Average % days visibility	11%	12.2%	13.7%	17.4%	13.8%	15.2%	5.2%	11.5%
Avg. cumulative totals	100%	89.0%	76.8%	63.1%	45.7%	31.9%	16.7%	11.5%

These indicate that Hurn has less clear visibility than Manston. Whereas Manston has visibility over 35km for at least 20% of the time, Hurn's cut-off tends to be just above 30km with visibility of 35km available for around 7% of the time. This is less than the national average below.

Average national visibility distances related to % days per annum (2008-2017) *(Extract from OESEA seascape report 2020)*



Weather Station Locations (Extract from OESEA seascape report 2020)



Approximate study area shown in orange outline.

South Marine Plan seascape assessment (2014) information

The South Marine Plan seascape assessment cites a single coastal weather station, Thorney Island, which lies closer, to the west of the study area. The 10 year average of frequency of visibility analysis uses a different set of distance parameters to the OESEA (2020) study and so is not directly comparable. However, it indicates that the frequency of visibility over 30km appears to be limited. This ties in with the results for Hurn, also to the west, but not with Manston to the east. Extracts from the report follow.

Appendix C Abbreviations and Glossary

Abbreviations used in text

AOD	Above Ordnance Datum
AONB	Area of Outstanding Natural Beauty
BAP	Biodiversity Action Plan
CLVIA	Cumulative Landscape and Visual Impact Assessment
DCO	Development Consent Order
DPO	Draft Plan Option
EIA	Environmental impact assessment
ES	Environmental statement
ExA	Examining Authority
GLVIA	Guidelines for landscape and visual impact assessment
GIS	Geographic information system
HPMCZ	Highly protected marine conservation zone
HSC	Historic Seascape Characterisation
HWM	High water mark
ICZM	Integrated Coastal Zone Management
km	Kilometres
LCA	Landscape character assessment *or* landscape character area
LDP	Local Development Plan
LVIA	Landscape and visual impact assessment
LWM	low water mark
m	metres
MCA	Marine Character Area
MPA	Marine Planning Area
MPS	Marine Policy Statement
MHW	Mean high water
nm	Nautical miles
NE	Natural England
PEIR	Preliminary Environmental Information Report
PU	Shoreline Management Plan policy unit
RSU	Regional Seascape Unit
SAC	Special Area of Conservation
SCA	Seascape character assessment / seascape character area
SCT	Seascape character type
SDNP	South Downs National Park
SDNPA	South Downs National Park Authority
SLA	Special Landscape Area
SM	Scheduled Monument
SMR	Scheduled Monument Record
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest
SNH	Scottish Natural Heritage
SVIA	Seascape, (landscape) and visual impact assessment
UKCS	United Kingdom Continental Shelf
WHS	World Heritage Site
ZTV	Zone of theoretical visibility
ZVI	Zone of visual influence

Glossary

Term	Definition
Seascape, marine and coastal processes terms	
Abrasion	The mechanical wearing effect on rocks caused by corrosion. The abrading agent can take a variety of forms e.g. sand, pebbles or boulders moving across a rock surface.
Attrition	The mechanism by which the particle size of any material is reduced by friction during transport.
Biogenic	A feature that is created by living organisms, either animal or plant.
Characteristics	elements, features and qualities which make a particular contribution to distinctive character.
Characterisation	the process of identifying areas of similar character, classifying and mapping them and describing their character. (NECR105)
Classification	concerned with dividing the seascape into areas of distinct, recognisable and consistent common character in grouping areas of similar character together. It requires the identification of patterns in the seascape, created by the way the natural and human influences interact and are perceived and experienced to create character in the seascape. (NECR105)
Curtaining	the visual effect of extending arrays of offshore wind turbines along a substantial proportion of the horizon visible from a viewpoint
Description	capturing the overall essence of the character of the seascape, with reference to geology, landform, bathymetry, habitats, use of the coast and sea, cultural associations etc, drawing out the ways in which these factors interact together and are perceived and experienced and are associated with events and people.
Demersal	In relation to marine organisms: those which flourish on the ocean floor.
Elements	individual component parts of the seascape such as beaches, cliffs, submerged reefs, sea walls, groynes and rocky outcrops.
Features	particularly prominent or eye-catching elements such as lighthouses, rock stacks and coastal cliffs.
Fetch	The distance of open water across which wind blows or over which wind generated water wave travels, unobstructed by major land obstacles. The amount of fetch helps to determine the magnitude and energy of a wave and therefore its erosional or depositional tendencies on neighbouring shorelines.
Hydraulic action	Force exerted by moving water on rocks e.g. air forced into cracks in solid rocks by breaking waves is capable of causing their disintegration by expanding the fissures.
Key characteristics	those combination of elements which help given area its distinct sense of place. They can in many cases to be 'positive' characteristics but they may also in some cases be 'negative' features which nevertheless are important to the current character of the seascape. (Natural England, 2014)
Landward limits (of a seascape character assessment)	the distance which the seascape character assessment will expand onshore and inland. Such considerations relate to the mainland, peninsulas and islands, regardless of their distance out at sea. The extent is dependent on the purpose and/or scope of the assessment being undertaken.
Littoral	Pertaining to a shoreline.
Longshore drift	A general movement of beach material along the shoreline due to the effect of waves breaking obliquely on to the beach.
Pelagic	In relation to the environment: the open ocean as distinct from the ocean floor. In relation to marine organisms: those which flourish independent of the ocean floor and shoreline environments.
Perception	perception combines the sensory (that which we receive through our senses) with the cognitive (knowledge and understanding gained from many sources and experiences).
Reef	A line of rocks or material in the tidal zone of the coast, submerged at high water but partly uncovered at low water.
Ria	Submerged coastal valley or estuary resulting from a rise of sea level,

	often associated with post-glacial coasts.
Term	**Definition**
Marine character area	See seascape character area. (Term used for national/regional scale units).
Saltation	Sediment transported by bouncing or hopping along a surface carried by water or wind.
Seascape	Seascape is landscapes with views of the coast or seas, and coasts and the adjacent marine environment with cultural, historical and archaeological links with each other. (MPS)
Seascape character	Seascape character is a distinct and recognisable pattern of elements in the seascape that makes one seascape different from another, rather than better or worse. (NECR105)
Seascape character assessment (SCA)	SCA is the process of identifying and describing variation in the character of the seascape, and using this information to assist in managing change in the seascape. It seeks to identify and explain the unique combination of elements and features that make seascape distinctive. (NECR105)
Seascape or marine character area	These are single unique geographical areas of a particular seascape character type. Each has its own individual character and identity, even though it shares the same generic characteristics with other seascape character areas of the same type. (NECR105)
Seascape or marine character capacity	Seascape capacity refers to the amount of specified development or change which a particular marine or local seascape character area and the associated visual resource is able to accommodate without undue negative effects on its character and qualities. (Adapted from Natural England, 2019)
Seascape or marine character sensitivity	Term applied to marine character and seascape and the associated visual resource, combining judgements of their susceptibility to a specific type of development / development scenario or other change being considered and the value(s) related to that seascape, marine character and visual resource. (Derived from Natural England, 2019)
Seascape or marine character susceptibility	The degree to which a defined seascape or marine character area and its associated visual qualities and attributes might respond to the specified types of development or change without undue negative effects on character and the visual resource. (Adapted from Natural England, 2019)
Seascape or marine character type	These are distinct types of seascape that are relatively homogeneous in character. They are generic in nature in that they may occur in different locations but wherever they occur they share broadly similar combinations of geology, bathymetry, ecology, human influences and perceptual and aesthetic attributes. (NECR105)
Seascape or marine character value	The relative value or importance attached to a seascape or marine character area, which may express national or local consensus, because of its quality, its special qualities including perceptual aspects such as scenic beauty, tranquillity and wildness, natural or historic attributes or features, cultural associations, or its relationship with designated or valued landscapes and coasts. (Adapted from Natural England, 2019)
Seascape quality	The physical state of the seascape. It includes the extent to which typical character is represented in individual areas, sometimes referred to as strength of character, the intactness of the seascape from visual, functional and ecological perspectives and the condition or state of repair of individual elements of the seascape. (NECR105)
Seascape strategy	the objectives and overall vision of what the seascape should be like in the future, and what is thought to be desirable for a particular seascape character type or area, as a whole. (Natural England, 2014)
Seascape, (Landscape) and Visual Impact Assessment (SVIA)	SVIA is an established methodology which is used to assess the impact of the development or other use change on seascape, landscape and visual amenity. It includes analysis of the effects during the construction, operation and decommissioning phases of the development, including any restoration or after uses.
Seaward limits (of an SCA)	distance out to sea that the SCA will extend.
Slack	an area of almost motionless water.
Suspension	The process by which lightweight materials are transported by moving

	water in the zone of turbulent flow.
Term	**Definition**
Swash	The movement of a turbulent layer of water up the slope of the beach as a result of the breaking of a wave. It is capable of moving beach material of substantial size and is an important factor in longshore drift.
Swell	A regular movement of marine waves created by wind stress in the open ocean.
Traction	Solid load carried by water.
Other terms associated with landscape	
Amenity (Planting)	planting to provide environmental benefit such as decorative or screen planting.
Analysis	the process of dividing up the seascape/landscape into its component parts to gain a better understanding of it.
Apparent	object visible in the seascape/landscape.
Approach	the step-by-step process by which seascape/landscape assessment is undertaken.
Arable	land used for growing crops other than grass or woody species.
Aspect	in Wales, an aspect is a component of the LANDMAP information recorded, organised and evaluated into a nationally consistent spatial data set. The landscape information is divided into five aspects- geological landscape, landscape habitats, visual and sensory, historic landscape and cultural landscape.
Aspect area	areas defined in each of the LANDMAP aspect assessments which are mutually exclusive
Assessment	term to describe all the various ways of looking at, analysing, evaluating and describing the seascape/landscape or assessing impacts on seascape/landscape and visual receptors.
Biodiversity	**5.16. the variety of life including all the different habitats and species in the world.**
Conservation	the protection and careful management of natural and built resources and the environment.
Complexity	(in the context of describing a skyline) how varied or complicated the skyline is from dead flat with even vegetation at one end of the scale to mountainous with varied vegetation at the other.
Consistent	relatively unchanging element or pattern across a given area of seascape/landscape.
Cultural heritage asset	see heritage asset
Cultural pattern	expression of the historic pattern of enclosure and rural settlement.
Cumulative impacts/effects	either additional changes caused by a proposed development in conjunction with similar developments or the combined effect of a set of developments, taken together
Distinctiveness	see sense of place
Diversity	(in terms of the function of an area) the variety of different functions of an area.
Dominant	main defining feature or pattern.
Effects	term used in environmental impact assessment (EIA) where effects are changes arising from the action, operation or implementation of a proposed development.
Effects, direct	where development lies within a seascape/landscape and physically removes an element or feature e.g. rocks, cliff, coastal vegetation
Effects, indirect	effects away from the development such as perceived change of character or from associated development such as transport infrastructure
Field Boundary	the defined edge of a field whether fence, hedge, bank, ditch or wall.
Field Size	Large 2 Ha Above, Medium Around 1.5 Ha, Small Less Than 1 Ha.
Geology	the study of the origin, structure, composition and history of the Earth together with the processes that have led to its present state.

Term	Definition
Ground Type	expression of the soil forming environment and its influence in determining the surface pattern of vegetation and land use.
Hedge	fence of shrubs or low trees, living or dead, or of turf or stone. Though strictly a row of bushes forming a hedge, hedgerow has been taken to mean the same as a hedge.
Hedge bank	earth bank or mound relating to a hedge
Heritage asset	a building, monument, site, place, area or landscape positively identified as having a degree of historical significance meriting consideration in planning decisions. Designated heritage assets include world heritage sites, scheduled ancient monuments, protected wreck sites, battlefields, listed buildings and registered parks and gardens.
Horticulture	intensive form of cropping, such as vegetables or fruit.
Impact	used as part of overall term, as in EIA or LVIA, to help describe the process of assessing potentially significant effects- see effects.
Inherent	dictionary definition- 'existing as an inseparable part'. In the context of sensitivity means the sensitivity of the seascape/landscape area itself with all its component elements and features rather than its relationship with types of development or adjacent areas.
Integrity	unspoilt by large-scale, visually intrusive or other inharmonious development
Landcover	combinations of natural and man-made elements including vegetation that cover the land surface.
Landform	combinations of slope and elevation which combine to give shape and form to the land.
Landscape	an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors
Landscape and Visual Impact Assessment (LVIA)	A tool used to identify and assess the likely significance of the effects of change resulting from development both on the landscape as an environmental resource in its own right and on people's views and visual amenity. (GLVIA 3)
Landscape Character	a distinct, recognisable and consistent pattern of elements, features and qualities in the landscape that makes one landscape different from another, rather than better or worse.
Landscape Character Area (LCA)	these are single unique areas which are discrete geographical areas of a particular landscape character. Each has its own individual character and identity. These areas in Wales are primarily derived from LANDMAP aspects.
Landscape Resource	the overall stock of the landscape and its component parts. (The landscape considered as a measurable finite resource like any other e.g. minerals, land, water).
Landscape value	the relative value or importance attached to a landscape (often as a basis for designation or recognition), which expresses national or local consensus, because of its quality, special qualities including perceptual aspects such as scenic beauty, tranquillity or wildness, cultural associations or other conservation issues. In Wales, value is also attributed to each LANDMAP aspect using a variety of criteria.
Magnitude of effect	degree of change
Mixed Farmland	a combination of arable and pastoral farmland
Mosaic	mix of different landcovers at a fine grain such as woodland, pasture and heath.
Objective	method of assessment in which personal feelings and opinions do not influence characterisation or judgements.
Outcrop	the area where a particular rock appears at the surface.
Pastoral	land down to grass either grazed by animals or for cutting.
Physiography	expression of the shape and structure of the land surface as influenced both by the nature of the underlying geology and the effect of geomorphological processes.
Polygon	discrete digitised area in a geographic information system (GIS).
Prominent	Highly conspicuous feature or pattern in the landscape.
Protect	to keep from harm.

	5.17.
Term	Definition
Qualities	aesthetic (objective visible patterns) or perceptual (subjective responses by the seascape/landscape assessor) attributes of the seascape such as those relating to scale or tranquillity respectively.
Receptor, visual	people in a variety of different situations who can experience views within an area and who may be affected by change or development. Receptors can include users of public footpaths, open access land, roads, rail or cycleways or urban or rural residents.
Receptor, seascape/landscape	seascape/landscape character areas, designations, elements or features which may be affected by development
Remoteness	physical isolation, removal from the presence of people, infrastructure (roads and railways, ferry and shipping routes) and settlement
Resource	see seascape/landscape resource.
Restore	repair or renew.
Riparian	vegetation associated with the water body, usually a river or stream.
Scenic quality	seascape/landscape with scenes of a picturesque quality with aesthetically pleasing elements in composition
Semi-natural vegetation	any type of vegetation that has been influenced by human activities, either directly or indirectly. The term is usually applied to areas which are reverting to nature due to lack of management.
Sense of place	the character of a place that makes it locally identifiable or distinctive i.e. different from other places. Some features or elements can evoke a strong sense of place e.g. islands, forts, vernacular architecture
Sensory	that which is received through the senses i.e. sight, hearing, smell, touch.
Setting, of a heritage asset	The surroundings in which the asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or a negative contribution to an asset, may affect the ability to appreciate that significance or may be neutral.
Settlement	all dwellings/habitations, whether single or clustered in cities, towns and villages.
Settlement Pattern	the predominant pattern of settlement in an area.
Significance	a measure of the importance or gravity of the environmental effect, defined by significance criteria specific to the environmental topic. A significant effect needs to be taken into account in decision-making.
Subjective	method of assessment in which personal views and reaction are used in the characterisation process.
Topography	term used to describe the geological features of the Earth's surface e.g. mountains, hills, valleys, plains.
Unity	consistency of pattern over a wide area i.e. the repetition of similar elements, balance and proportion, scale and enclosure.
Value	see landscape value
Vernacular	built in the local style, from local materials.
Visual Effects	effects on specific views and on the general visual amenity experienced by people.

Written Representation - Appendix D
Significant Archaeological Sites and Finds at Blackpatch and Harrow Hills

Further details of the significant archaeological sites and finds has been provided, courtesy of the Sussex Archaeological Society. Please note, this is not a complete list. To be read alongside Figure 1.

Neolithic 4000-2000 BC

Blackpatch Flint Mines, c. 3800 BC - TQ 09432 08935

Over 100 hand-dug shafts at Blackpatch, dating to the early Neolithic. Part of the earliest known industrial landscape in Britain, which includes Harrow Hill to the west, along with Church Hill & Cissbury Ring to the east. Surface evidence of the mine shafts was deliberately destroyed in 1950 by the landowner, despite its protected status. However, significant archaeology will survive immediately below the surface, with the shafts excavated between 1922-1932 by John Pull averaging a depth of 12 feet. There are likely to be further mine shafts outside the Scheduled Area which were buried by earlier activity.

Harrow Hill Flint Mines, c. 3800 BC - TQ 08219 10048

Over 160 hand-dug shafts at Harrow Hill, dating to the early Neolithic. Part of the earliest known industrial landscape in Britain, which includes Blackpatch, Church Hill & Cissbury Ring to the east. Surface evidence of mine shafts & dumps still extant. Mine shafts seem to continue into the ploughed field to the south, and there are certainly more shafts below the Late Bronze Age enclosure on the summit. This mine complex also has evidence for early open quarrying of flint, before the shafts were sunk into deeper depths.

New Barn Down, c. 3800 BC - TQ 08509 09191

Neolithic pit ('Pit X') excavated by Curwen in 1933, containing rare pottery which was contemporary with the flint mining activities to the north and east. Overlain by a Middle Bronze Age 'Itford Hill' style settlement.

General Landscape

Hundreds of flint tools, including polished axes, scrapers etc., have been recovered over the years in the valley between Blackpatch and Harrow Hill. It is likely that most of these finds are contemporary with the flint mining activity nearby, and may represent surface evidence for the first permanent settlements of farming communities in Britain.

Further north, between the summit of Blackpatch and the crest of the Downs, large quantities of flint scrapers and evidence for flint knapping have been found during field walking investigations over the last 120 years. Chantry Post, Kithurst Hill and Storrington Down are the three major concentrations of finds, suggestive of settlement or hunting camps.

Bronze Age 2000-800 BC

Blackpatch Barrow Cemetery, c 2000-1000 BC - TQ 09571 09039

At least twelve burial mounds both within the flint mining area and to the immediate east of it. Some contained evidence for inhumations, along with secondary cremations. An Early Bronze Age date

was suggested by the finds, though a number of these features may date to the later period. Excavated by John Pull 1922-1932. High probability of further buried features of this type, as demonstrated by the Time Team excavation in 2005.

Blackpatch Barrow, c 2000 BC - TQ 09583 09615

Extant burial mound on the summit of Blackpatch Hill, 10.5m diameter, 0.6m in height. No trace of a ditch.

Barrow Groups, 2000 BC – centred TQ 09131 10396

At least five burial mounds to the north of Blackpatch, which may have ditches and intact archaeology surviving as buried features. Two are still visible on LiDAR imagery.

New Barn Down Barrow Group – 2000-1000 BC – centred TQ 08423 09034

A group of at least eight 'ploughed out' burial mounds to the south of the Bronze Age enclosure settlement on New Barn Down. Ditches may survive as buried features.

New Barn Down Barrow Group– 2000-1000 BC – centred TQ 08464 09370

A group of five or more 'ploughed out' burial mounds situated to the north of the Bronze Age enclosure settlement on New Barn Down. Ditches may survive as buried features.

Chantry Post Barrow Cemetery – 2000-1000 BC – centred TQ 08730 11968

A group of four burial mounds situated around the Chantry Post car park.

New Barn Down – Settlement – 1400-1000 BC - TQ 08509 09191

Itford Hill style Middle Bronze Age farmstead/settlement site excavated in 1933 by Curwen. Consisting of a roughly rectangular enclosure, about 220 foot long by 130 foot wide, with 2-6 round houses enclosed on the south side by a low bank with stockade, and by a bank and ditch on the north side.

Fragments of pottery and rare fragmentary remains of a Middle Bronze Age spearhead and knife found.

A chalk cup was found by Curwen during the excavations though not in a dateable context - this could have been associated with the nearby flint mines, as these items are invariably found in Neolithic contexts.

Burnt mound suggested by the discovery of large quantities of burnt flint within an irregular hollow inside the enclosure.

Associated field systems, consisting of banks/lynchets and a trackway.

Cock Hill – Settlement – 1400-1000 BC - TQ 08927 09745

Middle Bronze Age Itford Hill style settlement, originally described as Late Bronze Age, a re-evaluation of pottery in the 1970s now places the settlement in the Middle Bronze Age. Having said this there was a continuation of occupation into the Late Bronze Age.

Finds include three round houses (20 metres in diameter), multiple cremation burials between the houses and near the enclosure entrance, a field system destroyed by Medieval ploughing, large

quantities of charcoal, organic material, burnt flints, animal remains and large quantities of pottery found in the ditch fill. Animal remains included cattle, sheep, horse, plus parts of a red deer skull.

In addition to the cremations and animal remains, a skeleton of a human foetus was found with Middle Bronze Age pottery.

Harrow Hill Enclosure – 1000 BC - TQ 08155 10010

A univallate sub-rectangular earthwork enclosure of early 1st millennium BC date. Located slightly to the west of the summit of Harrow Hill, it measures 70 metres by 60 metres and overlies part of the earlier Neolithic flint mining complex (TQ 01 SE 23). All the earthworks on Harrow Hill were surveyed by RCHME in 1994 as part of the Industry and Enclosure in the Neolithic Project. See the archive report for a full description and discussion.

Excavation within the enclosure has occurred on several occasions. HC Collyer investigated some of the mineshaft hollows in circa 1896, including at least one in the enclosure. Surface survey of the earthworks in 1924 by the Curwen's was followed in 1925 by excavations which focused mainly on the flint mines, while in 1936 Holleyman excavated several trenches around the rampart and within the interior of the enclosure. More recent work, notably by Sieveking and by Holgate in the 1980s was again focused on the flint mining.

Pottery recovered during the excavations by Curwen and by Holleyman can be broadly characterised as Late Bronze Age - Early Iron Age. However, the quantity of finds contemporary with the enclosure is small, suggesting little in the way of permanent occupation. Although the flint mine earthworks within the enclosure are much slighter than those elsewhere on the hill, the remains are not consistent with the deliberate levelling of the site for occupation.

The entrance on the western side of the enclosure was shown by excavation to have featured a substantial four-post gate structure. Another suggested entrance in the north-eastern corner is more problematic once the flint mines are taken into account. This break in the course of the enclosure opens into one of the largest mine-shafts in the complex. The quantity of animal remains, particularly cattle skulls recovered during Holleyman's excavations have given rise to suggestions that the use of the enclosure may have been more ritual than domestic in nature.

Blackpatch Hill – Settlement – c. 1000 BC - TQ 09211 09147

A late Bronze Age farm on Blackpatch hill, when partially excavated, was found to be coeval with and similar to the farm on New Barn Down (see 2030). The enclosure, with associated field systems, was sub-rectangular, measuring c.140ft by c.90ft, and bounded by a low bank with a SW. entrance. Oval depressions occur against the inside and the outside of the S. bank. One hut was found within the enclosure but others may have existed.

There is no conclusive evidence that the site was occupied after the late Bronze Age, though a few sherds of Iron Age and Roman pottery and a probable C1BC Gaulish coin were found. By 1971 all the features had been ploughed out.

Iron Age 800 BC – 43 AD

General – Settlement & Field Systems

There is evidence across the sweep of land from New Barn Down to Chantry Post/Higden Beeches of widespread agricultural terracing during the Iron Age. Pottery dating from the Early, Middle and

Late Iron Age has been found during field walking and archaeological excavations on Harrow Hill, Blackpatch Hill, Cobden Farm and Storrington Down, suggestive of scattered farmsteads.

A probable farmstead existed to the north of Blackpatch Hill, as evidenced by significant numbers of pottery sherds and some Late Iron Age brooches - TQ 09131 10149

It is probable that unenclosed settlements from this period existed across the landscape, most, if not all of which, have been damaged by modern agricultural practices.

Recorded areas of field systems - TQ 09958 11235, TQ 10320 10400, TQ 09548 08311, TQ 08025 09520, TQ 08188 10385.

Romano-British 43 AD – 410 AD

Harrow Hill – Farmstead/Villa c 100-350 AD - TQ 08043 09484

A valley entrenchment, consisting of a ditch with traces of a slight bank on either side of it, forming three sides of a roughly rectangular enclosure. The banks are most easily visible at the NE corner of the work but even here they are no more than 0.4m in height.

All that remains of the earthwork are faint unsurveyable traces of the N and E sides in a field now under wheat stubble at the head of a shallow coombe. On the RAF APs, the earthwork can be seen to be sub-rectangular in shape, with three sharp corners visible. It measured about 80.0m E-W by 60.0m N-S. Unable to classify. Site of earthwork plotted at 1/2500 from RAF APs.

In a review of excavations Mr C Ainsworth reported on a field exercise by Adult Education classes following ploughing on the south side of Harrow Hill (TQ 080 094). A rectangular enclosure "of a Romano-British Farm" was located. Ceramic evidence suggests 2nd to 4th C occupation in the area.

A Roman lynchet system, two probable hut sites and a rectangular medieval enclosure have been surveyed by Dr Densham on the south side of Harrow Hill, TQ 080 095-085 100, which is now regularly ploughed. Quantities of Ro sherds and some building materials have been found in the area by him and the Worthing Museum correspondents.

WS 6 Listed as the possible site of a Roman villa.

Old Gray's Wood – Settlement - TQ 08345 10432

Possible Romano-British settlement in Old Gray's Wood, with associated field systems and house platforms.
The field system has been suggested to be of Romano-British date (3a); three body-sherds of Romano-British grey wares were found in the course of the RCHME survey and the earthworks are consistent with Romano-British or Medieval cultivation. Several of the lynchets are well-preserved and stand up to 1.8m high; they appear to incorporate elements of possible prehistoric lynchets on a different alignment.

General – Settlement & Field Systems

There is ample evidence of significant occupation and farming activity across this block of Downland during the Roman period, with up to 1+ farm per square mile, based on the sites we know of today.

Curwen illustrated the palimpsest of enclosures, field systems and trackways before modern agriculture destroyed much of the above-ground archaeology – (Curwen, Sussex Archaeological Collections, Volume 64, 1923)

Many of the later medieval farms that dotted this landscape made use of the Iron Age or Roman field systems, and often interposed their structures onto earlier occupation sites.

Find spots of Roman pottery, which may indicate more significant settlements - TQ 09062 09119, TQ 08803 10750, TQ 08347 10471, TQ 08555 09269, TQ 10285 11200.

Fig. 1