



Representation Form

Southbourne Parish Neighbourhood Plan Review 2019-2037

The Neighbourhood Planning (General) Regulations 2012 - Regulation 16

Southbourne Parish Council has prepared a Neighbourhood Plan Review. The plan sets out a vision for the future of the parish and planning policies which will be used to determine planning applications locally.

Copies of the Southbourne Parish Neighbourhood Plan Review and supporting documents are available to view on Chichester District Council's website:

<http://www.chichester.gov.uk/neighbourhoodplan>.

All comments must be received by 5:00 pm on 3 June 2021.

There are a number of ways to make your comments:

- Complete this form on your computer and email it to:
neighbourhoodplanning@chichester.gov.uk
- Print this form and post it to us at: **Neighbourhood Planning East Pallant House 1 East Pallant Chichester PO19 1TY**

Use of your personal data

All comments in Part B below will be publicly available and identifiable by name and (where applicable) organisation. Please note that any other personal information included in Part A below will be processed by Chichester District Council in line with the principles and rights set out in the General Data Protection Regulation 2016 (GDPR) and the Data Protection Act 2018, which cover such things as why and for how long we use, keep and look after your personal data.

How to use this form

Please complete Part A in full in order for your representation to be taken into account at the Neighbourhood Plan examination.

Please complete Part B overleaf, identifying to which paragraph your comment relates by completing the appropriate box.

PART A	Your Details
Full Name	Andrew Black
Address	Andrew Black Consulting 17 Egerton Road New Malden
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Email	████████████████████

Organisation (if applicable)	Andrew Black Consulting
Position (if applicable)	Owner
Date	03.05.21

PART B

To which part of the document does your representation relate?

Paragraph Number	Numerous	Policy Reference:	Numerous
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Do you support, oppose, or wish to comment on this paragraph? (Please tick one answer)

Support Support with modifications Oppose Have Comments

Please give details of your reasons for support/opposition, or make other comments here:

Please see separate representations

(Continue on separate sheet if necessary)

What improvements or modifications would you suggest?

Please see separate representations

(Continue on separate sheet if necessary)

If you have additional representations feel free to include additional pages. Please make sure any additional pages are clearly labelled/addressed or attached.

ABC0029/07.01

**Neighbourhood Planning
Chichester District Council
East Pallant House
1 East Pallant
Chichester
PO19 1TY**

3 June 2021

Dear Sir / Madam,

Southbourne Parish Neighbourhood Plan Review 2019-2037

Obsidian Strategic – Land South of Main Road, Hermitage

I write in response to the regulation 16 consultation for the Southbourne Neighbourhood Plan Review 2019-2037 on behalf of my client Obsidian Strategic. Obsidian Strategic have an interest in a site to the South of Main Road, in Hermitage, within the Southbourne Neighbourhood Plan Area.

For the reasons set out within these representations, it is not considered that the Neighbourhood Plan (NP) in its current form complies with the basic conditions requirements under the Neighbourhood Planning Regulations and cannot be considered sound on this basis. These representations set out consideration of the following matters:

- Site Selection Process
- Development in the AONB
- Delivery of Policy SB2 – Land East of Southbourne Village
- Sustainability Appraisal
- Consideration of whether Basic Conditions have been met.

Site Selection Process

Section 2.4 of the Site Selection Paper (February 2021) which form part of the evidence base sets out in section 2 the approach to Developing the Spatial Options.

Figure 2 divides up the parish and the growth options are described accordingly.

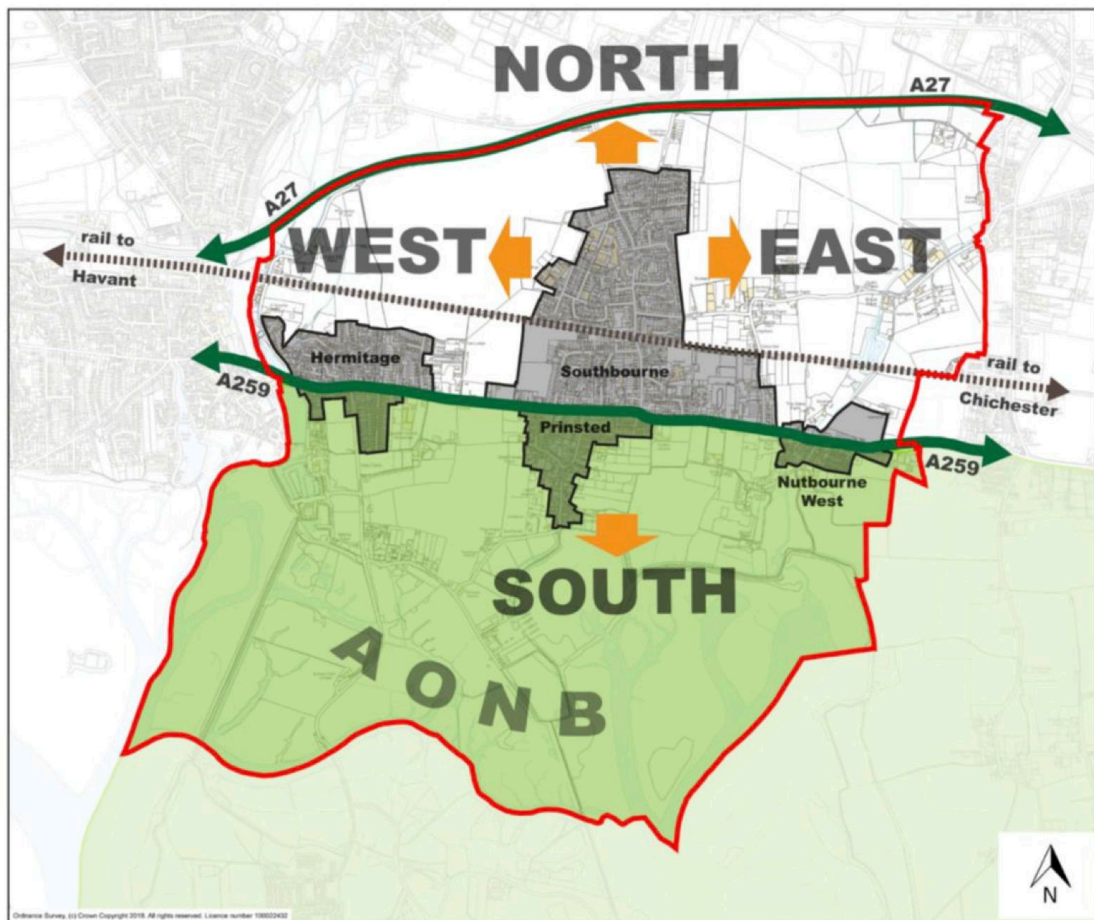


Figure 2 of the Site Selection Paper (February 2021)

Paragraph 2.3 of the paper sets out the constraints associated with the parish. For the area to the east of Southbourne, where the significant development is envisaged under NP Policy SB2, it states:

To the east, a significant area of land is available, but any development would need to have regard to coalescence, heritage and flood risk and the proposed Ham Brook Chalk Stream wildlife corridor

It goes on to set out consideration for the area to the South, where the site at Main Road, Hermitage is located as follows:

To the south, the evidence of the LPR, together with the highest status of protection afforded to Areas of Outstanding Natural Beauty (AONB) by paragraph 172 of the NPPF, indicates that there is no expectation of accommodating major development within the Chichester Harbour AONB, nor is there evidence that exceptional circumstances exist that such development would be in the public interest.

Further consideration of development in the AONB is set out within subsequent sections of these representations.

The Site Selection Paper summarises the options which were considered as ‘reasonable alternatives’ as follows:

- *Option A: Deliver growth on smaller sites to the south of the railway line and to the east of Southbourne Parish. This would comprise multiple smaller sites under a number of landowners.*
- *Option B: Deliver growth to the west of Southbourne. Under this option, development would come forward through one landowner under a single comprehensive masterplan.*
- *Option C: Deliver growth to the east of Southbourne. Under this option, development would come forward through a consortium of landowners under a single comprehensive masterplan.*

Paragraph 2.11 of the Site Selection Paper goes on to state:

Following further consideration of the practicalities of taking these options forward, it was established that Option A is not an option which merits further consideration for the purposes of delivering the housing numbers required through the Neighbourhood Plan. This is given that the option previously sought to deliver smaller sites south of the A259, which lie within the Chichester Harbour AONB. CDC have rejected these sites because of their impact on the AONB. In this context, the combination of the remaining smaller sites proposed through the option, notwithstanding the two additional sites, would be unable to deliver the quantum of housing required to be delivered through the Neighbourhood Plan. The combination of sites delivered through Option A would also not deliver the new infrastructure required to accompany new development, including the new primary school, community facilities and a new road bridge crossing over the rail line

It is accepted that, in isolation, the sites which are only in Option A would not deliver the number of units as required under Local Plan Policy AL13. However, it is not accepted that delivery of housing from option A should have been discounted entirely at this early stage in the site selection process. It is evident that much of the infrastructure as set out in paragraph 2.11 is actually required to mitigate the size of development envisaged to the East of Southbourne and that a lower impact of development should have been considered.

The Site Selection Paper sets out that the Land at The Hermitage was rejected from the process with the reasons for rejection simply stated as ‘Impact on the AONB’. As set out in subsequent sections of these representations, detailed landscape analysis undertaken for the site shows that there would not be an impact on the wider AONB as a result of the proposals.

The council chose to advance on a strategy to meet the housing need in full through a single allocation to either the west of Southbourne (Option B) or to the east of Southbourne (Option C) before selecting Option C. Further commentary on the delivery of the Land East of Southbourne are set out within subsequent sections of these representations.

In pursuing the option to meet the entire housing requirement through a single site, it is considered that the Neighbourhood Plan has not had adequate regard to paragraph 68 of the National Planning Policy Framework (NPPF) which states in full:

Small and medium sized sites can make an important contribution to meeting the housing requirement of an area, and are often built-out relatively quickly. To promote the development of a good mix of sites local planning authorities should:

- a) *identify, through the development plan and brownfield registers, land to accommodate at least 10% of their housing requirement on sites no larger than one hectare; unless it can be shown, through the preparation of relevant plan policies, that there are strong reasons why this 10% target cannot be achieved;*
- b) *use tools such as area-wide design assessments and Local Development Orders to help bring small and medium sized sites forward;*
- c) *support the development of windfall sites through their policies and decisions— giving great weight to the benefits of using suitable sites within existing settlements for homes; and*
- d) *work with developers to encourage the sub-division of large sites where this could help to speed up the delivery of homes.*

Paragraph 69 of the NPPF goes on to state that this is specifically applied to Neighbourhood Plans as follows:

Neighbourhood planning groups should also consider the opportunities for allocating small and medium-sized sites (of a size consistent with paragraph 68a) suitable for housing in their area.

It is considered that the land under control of my client, and that of other sites included in Option A, would comply with the definition of small and medium sites as defined under paragraph 68. Further regard should have been had of such sites and the obligations of the Neighbourhood Plan group to have regard to paragraph 69 of the framework before Option A was discounted.

It is not considered that the selection of the Land to the East of Southbourne as the preferred strategy represents a logical approach to the selection of sites to deliver housing against the established housing need for the area.

Development in AONB

The NPPF sets out the following in relation to development in the AONB at paragraph 172 as follows:

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 and the Broads. The scale and extent of development within these designated areas should be limited. Planning permission should be refused for major development⁵⁵ other than in exceptional circumstances, and where it can be demonstrated that the development is in the public interest. 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 permitting it, or refusing it, upon the local economy;*
- b) the cost of, and scope for, developing 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*

Footnote 55 of paragraph 172 is relevant for the consideration of what is considered as major development and states:

For the purposes of paragraphs 172 and 173, whether a proposal is ‘major development’ is a matter for the decision maker, taking into account its nature, scale and setting, and whether it could have a significant adverse impact on the purposes for which the area has been designated or defined.

No evidence is set out within the NP or supporting documentation to state what is considered to be a major development site in the Neighbourhood Plan area. Neither the *Chichester Harbour AONB: State of the AONB Report (May 2018)* or the *Chichester Harbour AONB Landscape Character Assessment (April 2019)* contain any references to what is considered to constitute a major development.

This is a matter which has been considered at length within other Neighbourhood Plan and Local Plan examinations. As part of the evidence for its Local Plan, the South Downs National Park sought successive legal opinions from James Maurici QC on what should be considered as ‘Major Development’ in the AONB and have subsequently become widely known as the ‘Maurici Opinions’ in other Neighbourhood and Local Plan examinations. The opinions set out the following conclusions:

- It is a matter of planning judgement to be decided by the decision maker.*
- Major development is to be given its ordinary meaning, and it would be wrong to apply the definition of major development contained within the Town and Country Planning (Development Management Procedure) (England) Order 2015. It would also be wrong to apply any set or rigid criteria for defining major development, and the definition should not be restricted to development proposals that raise issues of national significance.*
- The decision maker may consider whether the proposed development has the*

potential to cause a significant adverse impact on the purposes for which the area has been designated or defined, rather than whether there will indeed be a significant adverse impact from the proposed development.

- *The decision maker may consider the proposed development in its local context as a matter of planning judgement.*
- *There may be other considerations but which may not determine whether a proposed development is major development. For example, if the proposed development is Environmental Impact Assessment (EIA) development.*
- *The ordinary sense of the word ‘major’ is important and the decision maker should take a common sense view as to whether the proposed development could be considered major development.*

In the Mid Sussex District Council Site Allocations DPD Evidence Base there is a topic paper setting out consideration of Major Development in the AONB and concludes that several of the allocations, in some cases up to 70 dwellings, would not be classed as major development in the AONB following a detailed review of each of the factors as set out in footnote 55 of the NPPF against each proposed allocation.

It is considered that this approach should have been undertaken for each of the individual sites discounted in option A (including Main Road, Hermitage), rather than simply discounting on the sole fact that they were in the AONB.

Delivery of Policy SB2 – Land East of Southbourne Village

Paragraph 72 of the NPPF sets out that the supply of larger numbers of new homes can often best be achieved through planning for *larger scale development, such as new settlements or significant extensions to existing villages and towns, provided they are well located and designed, and supported by the necessary infrastructure and facilities.*

The NPPF goes on within paragraph 72 to set out a number of criteria which should be considered in selecting this method of housing delivery and part d states that strategic plan-making authorities should:

Make a realistic assessment of likely rates of delivery, given the lead-in times for large scale sites, and identify opportunities for supporting rapid implementation (such as through joint ventures or locally-led development corporations);

It is notable that no evidence of delivery trajectory has been set out within the NP or supporting evidence. Given the scale of the proposals under policy SB2, it is considered that delivery of homes could be considerably slower than that through small and medium sized sites and would not make a meaningful contribution to housing need in the early part of the plan period.

The ‘Start to Finish’ report (second edition – February 2020) produced by Lichfields has been considered at other local and neighbourhood plan examinations as a key piece of evidence on delivery rates for large scale housing sites such as Land East of Southbourne Village.

The findings of the report show that for site sizes averaging 1,000-1,499 (as per Land East of Southbourne) the average planning approval period is 4.6 years. It then shows a further period of 2.3 years from planning approval to completion of the first dwelling. Assuming adoption of the Neighbourhood Plan in 2022, this would mean that for the Land East of South the first completions would not take place until at least 2029. The research then shows that the average delivery from such sites is 107 dwellings per annum. Therefore, there is a distinct possibility that no additional dwellings will be delivered from Land East of Southbourne within the current neighbourhood plan period.

It is therefore considered that the delivery of the Land East of Southbourne must be heavily scrutinised and set out within any subsequent version of the Neighbourhood Plan. Delivery of homes from other suitable, available, and achievable sites must be considered.

Sustainability Appraisal

The draft NP is accompanied by a Sustainability Appraisal (SA) report which is a legal requirement derived from the Planning and Compulsory Purchase Act 2004 (Section 19). Section 39 of the Act requires documents such as the NP to be prepared with a view to contributing to the achievement of sustainable development.

The requirement for Strategic Environmental Assessment, in addition to the SA, is set out in the European Directive 2001/42/EC adopted into UK law as the “Environmental Assessment of Plans or Programmes Regulations 2004”.

In line with best practice the SEA has been incorporated into the SA of the SADPD.

The Planning Practice Guidance sets out detailed consideration as to how any sustainability appraisal should assess alternatives and identify likely significant effects:

The sustainability appraisal needs to consider and compare all reasonable alternatives as the plan evolves, including the preferred approach, and assess these against the baseline environmental, economic and social characteristics of the area and the likely situation if the plan were not to be adopted. In doing so it is important to:

- i) outline the reasons the alternatives were selected, and identify, describe and evaluate their likely significant effects on environmental, economic and social factors using the evidence base (employing the same level of detail for each alternative option). Criteria for determining the likely significance of effects on the environment are set out in schedule 1 to the Environmental Assessment of Plans and Programmes Regulations 2004;*
- ii) as part of this, identify any likely significant adverse effects and measures envisaged to prevent, reduce and, as fully as possible, offset them;*
- iii) provide conclusions on the reasons the rejected options are not being taken forward and the reasons for selecting the preferred approach in light of the alternatives. Any assumptions used in assessing the significance of the effects of the plan will need to be documented. Reasonable alternatives are the different realistic options*

considered by the plan- maker in developing the policies in the plan. They need to be sufficiently distinct to highlight the different sustainability implications of each so that meaningful comparisons can be made. The development and appraisal of proposals in plans needs to be an iterative process, with the proposals being revised to take account of the appraisal findings.

Paragraph: 018 Reference ID: 11-018-20140306

Revision date: 06 03 2014 |

The SA outlines the three options (Options A, B and C) which were considered during the preparation of the NP. The SA sets out that following on from the previous stages, CDC published the updated HELAA which include two additional sites to the south of the railway line (HSB0006a and HSB0022a) which would have been included in Option A. Paragraph 4.17 of SA then sets out the following in relation to the Option A:

Following further consideration of the practicalities of taking these options forward, it was established that Option A is not an option which merits further consideration for the purposes of delivering the housing numbers required through the Neighbourhood Plan. This is given that the option previously sought to deliver smaller sites south of the A259, which lie within the Chichester Harbour AONB. CDC have rejected these sites because of their impact on the AONB. In this context, the combination of the remaining smaller sites proposed through the option would be unable to deliver the housing number required to be delivered through the Neighbourhood Plan. The combination of sites delivered through Option A would also not deliver the new infrastructure identified as being required to accompany new development, including a new primary school, community facilities and a new road bridge crossing over the rail line.

Paragraph 4.18 then goes on to state that only Option B and C were taken through into consideration against the Sustainability Appraisal Themes. This approach is considered at odds with the approach as set out within the Planning Practice Guidance which clearly states that the plan making body should *outline the reasons the alternatives were selected*. It is not considered that the reasons set out were for selecting only option B and C are adequate.

In any event both options B and C consider delivery of the housing requirement through a single masterplan and are effectively the same option, just on alternative sites on the opposite side of Southbourne. The Planning Practice Guidance sets out that each of the reasonable alternatives needs to be *sufficiently distinct* in order for *meaningful comparisons* to be made against each. Aside from geographical position of the two options, it is not considered that Option A and Option B are sufficiently different and therefore do not comply with the guidance in this respect.

It is considered that Option A continues to be a reasonable alternative and should have only been discounted after thorough evaluation as per the guidance which requires the SA to *identify, describe and evaluate their likely significant effects on environmental, economic and*

social factors using the evidence base (employing the same level of detail for each alternative option).

On this basis alone it is considered that the NP is unsound as it has failed to adequately assess the reasonable alternatives as required in legislation and through the planning guidance.

Table 2 of the Sustainability Appraisal (SA) accompanying the submission version of the NP sets out the likely impacts of Option C to deliver growth to the East of Southbourne as per policy SB2. It is clear that there are 'Likely Adverse Impacts' to Biodiversity and Geodiversity; Landscape; and Land Soil and Water Resources. Even with the mitigation measures outlined in the SA it is clear that the impacts from the development to the East of Southbourne will be substantial. These impacts weigh heavily against the selection of Option C as a preferred strategy.

The SA sets out there is an 'uncertain effect' on several SA objectives.

In terms of Air Quality, it is clear that the impact from car use for the 1,250 dwellings would be significant, even accounting for the decarbonisation of modes of transport. The mitigation measures such as enhancing footpath / cycle paths and installing natural features to disperse pollutants will only have minimal effect and it is clear that the impact of this option on Air Quality cannot reasonably be considered to be anything other than a 'Likely Adverse Impact'. This is equally the case with Climate Change which Option C has also been considered to have an 'uncertain effect' upon.

Regarding Historic Environment the SA sets out that there is an 'Uncertain Effect' as a result of Option C. The commentary sets out that there are two grade II listed buildings in the southern section of the land under option C and that *development has the potential to impact upon the integrity of these nationally designate heritage assets*. The mitigation measures set out that *development proposals should be accompanied by a masterplan which appropriately considers the design to respect the local vernacular and the historic character of the existing settlement and protecting and enhancing the setting of the listed buildings*.

The Heritage Risk Appraisal submitted as part of the technical documents on behalf of the consortium for Policy SB2 is also inconclusive and actually sets out that there are six grade II listed buildings directly surrounding the site. The heritage report makes the following conclusion:

Through suitable and sensitive masterplanning, any potential impact on designated heritage assets could likely be mitigated through appropriate buffers and set back, and therefore, in conclusion, heritage assets are not considered to act as a constraint to development.

Despite this, the Southbourne Masterplan Briefing Report as set out in appendix B of the NP makes no reference whatsoever to these heritage assets. It is considered that there is likely to be a likely adverse effect on heritage without significant changes to the proposed areas for

development to provide necessary buffers. The findings of the SA are therefore incorrect in this regard.

The SA sets out that Option C will have a 'Likely Positive Effect' on Population and Community through the delivery of housing which would contribute to the community and economic vitality of the area. There is also deemed to be a 'Likely Positive Effect' on Health and Wellbeing' through the provision of the Green Ring and other infrastructure. Given the comments made within the representations on the lack of delivery of housing within the plan period it is not considered that a 'Likely Positive Effect' will occur as set out within the SA. It is therefore suggested that there are substantial errors in the scoring of Option C within the SA in this respect.

Overall, it is not considered that the SA has been undertaken in a robust manner and that reasonable alternatives have not adequately been considered. This is not a matter that can be remedied through modifications to the plan and it is clearly a matter which has led to an erroneous approach in the selection of sites to meet the housing requirement for Southbourne.

Consideration of whether Basic Conditions have been met.

Only a draft Neighbourhood Plan which meets the required basic conditions as set out in paragraph 8 (2) of Schedule 4B of the Town and Country Planning Act 1990 (as applied by section 38A of the Planning and Compulsory Purchase Act 2004) can be considered sound. Compliance with these basic conditions has been set out in the Basic Conditions Statement (February 2021) which forms part of the evidence base for the plan.

Each of the Basic Conditions (b and c are only relevant for Neighbourhood Orders) are taken in turn with commentary provided against each in turn.

a. having regard to national policies and advice contained in guidance issued by the Secretary of State it is appropriate to make the order (or neighbourhood plan).

As set out within these representations, it is not considered that proper regard has been had to national policies in the preparation of the NP in regard to the following specific areas:

- Use of Small and Medium sized sites to deliver homes in the early part of the plan period.
- The approach taken to the definition of major development in the AONB in line with that set out in the framework.
- The approach to the delivery of sustainable development and infrastructure through a single large allocation.

- d. the making of the order (or neighbourhood plan) contributes to the achievement of sustainable development.***

As set out, the Sustainability Appraisal process undertaken to accompany the application is fundamentally flawed due to the lack of credible reasonable alternatives which have been taken into account. It is also considered that the assessment of the preferred option against sustainability criteria has been undertaken incorrectly and without due regard to several determining factors.

It is highly unlikely that any dwellings will be delivered from the single large allocation within the plan period and therefore it cannot be said with any certainty that the site will contribute to the achievement of sustainable development in the short or medium term. Again this points towards severe failings in the site selection process and the lack of consideration of reasonable alternatives within the Sustainability Appraisal.

- e. the making of the order (or neighbourhood plan) is in general conformity with the strategic policies contained in the development plan for the area of the authority (or any part of that area).***

It is considered that a high degree of emphasis has been placed on Policy AL13: Southbourne Parish of the emerging Chichester Local Plan. This consultation process for the emerging Plan is still ongoing and the Plan, and Policy AL13 is yet to be considered at Examination. It is not considered that the whole of the requirement of 1,250 should be delivered within a single allocation. There is likely to be intense scrutiny on the delivery trajectory of any policy in that regard. As a result, it is considered that alternative sites which can be delivered in the early part of the plan period should be considered as part of this Neighbourhood Plan.

- f. the making of the order (or neighbourhood plan) does not breach, and is otherwise compatible with, EU obligations.***

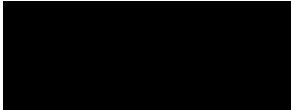
No comments are made in this regard

- g. prescribed conditions are met in relation to the Order (or plan) and prescribed matters have been complied with in connection with the proposal for the order (or neighbourhood plan).***

No comments are made in this regard.

Overall, it is considered that the Neighbourhood Plan fails to meet several of the Basic Conditions required under the necessary legislation for the examination of this Neighbourhood Plan. It is not considered that these short comings can be remedied through modifications to the existing plan and a more radical reconsideration of the strategy to site selection must be undertaken by prior to submission of the Neighbourhood Plan for examination.

Yours Sincerely



Andrew Black



MAIN ROAD, HERMITAGE

Site Context

The Site extends to 3.23 ha and is located along Main Road (A259), Hermitage in the west of the district. The Site falls within the parish of Southbourne, although it is more closely aligned to Emsworth to the west. The Site therefore sits within the Southbourne Neighbourhood Plan area and if allocated, would contribute to the requirement of 1,250 units set out in the Local Plan Review under policy AL13.

The Site consists of a pasture field used as a paddock with access gained from the access road that runs along the western boundary. The Site is located adjacent to the settlement boundary of Hermitage and on the northernmost edge of the Chichester Harbour Area of Outstanding Natural Beauty ("AONB"). There are no other planning designations on the Site.

There is a public right of way (ref no.203) that runs along the western boundary that connects to a public right of way (ref no.204) that runs along the southern boundary.

Proposed Scheme

A layout showing the indicative scheme proposed for the Site can be found in Appendix 1. The Site has a capacity for approximately 80 units providing a mix of 1, 2, 3 and 4 bed units. Each dwelling has private amenity space and the proposal also benefits from significant open space within the centre of the Site and along both the southern and eastern boundaries within the landscape buffer.

The Site is able to accommodate the 30% affordable housing requirement in the form of affordable rent, intermediate housing or starter homes as required and subject to viability. This will be in line with Policy S6 of the Local Plan Review.

The layout seeks to create a development with a distinctive sense of place and high quality living environment that responds appropriately to the Site's location within the AONB. The Site provides sufficient open space in its centre, visible and accessible from the main entrance road and benefits from good access to public transport and local service provision.

The scheme is capable of achieving an appropriate density, with a mix of dwellings reflective of the surrounding area and local need as set out within Policy DM2 of the Local Plan Review.

The latest scheme for the site is submitted with these representations as appendix 1.

AONB and Landscape Impacts

The Site is located within the Chichester Harbour AONB. A preliminary Landscape and Visual Impact Assessment ("LVIA") has been undertaken to assess the potential impact of a scheme on the AONB and is submitted with these representations as appendix 2. As demonstrated in figure 1 of the LVIA, the Site is located on the northern edge of the AONB.

The Chichester Harbour AONB covers a significant area and is oriented towards protecting the harbour. As demonstrated in figure 1, the Site is removed from the harbour setting by way of its setting at the edge of the AONB. When compared to a site in the heart of the AONB, the impacts of development on the landscape are diminished.

The LVIA demonstrates that no medium or long-distance views are anticipated to be significantly adversely affected through the development of the Site. The overall effect would be limited to the local landscape and this would not be significant. A landscape-led approach has been taken in producing the initial masterplan which demonstrates that the distinctive features and natural beauty of the AONB will be conserved and enhanced.

The Site benefits from existing mature trees and hedges around the boundary that currently give the Site an inward facing character and limit its direct contribution to the AONB. This existing planting screens views into the Site from the surrounding open landscape within the AONB and will therefore serve to restrict views of future development. The indicative masterplan (see Appendix 1) demonstrates additional landscape buffers that can be accommodated on the Site to further limit any potential impact. Through a landscape-led approach the Site can accommodate development which will integrate it into the wider landscape and will reinforce the setting of the genuinely open landscape, particularly to the east and south of the Site.

Along the road frontage on the southern side of Main Road the settlement of Hermitage currently extends east towards Southbourne, beyond the Site's eastern edge. There is a distinct gap between the settlements of Hermitage and Southbourne, south of Main Road, which comprises of a single open field, forming the landscape setting of both settlements.

Given the existing development on the road frontage, the development to the north and the Site's inward facing character, it is considered that development of the Site will not lead to actual or perceived coalescence between the two settlements.

Whilst the Site is currently undeveloped, careful design of the location of the housing and its height (predominantly limited to two storeys), in addition to a landscape-led approach, will minimise the residual visual effects to be less than significant. The preliminary LVIA has demonstrated that development on the Site could be undertaken without giving rise to such wider and more telling effects, instead limiting this to comparatively limited and modest effects at a local level. Importantly, it also demonstrates that the 'gap' between Hermitage and Southbourne would be retained.

Sustainable Patterns of Development

The Site is located off Main Road and is directly adjacent to bus stops which provide frequent services to Portsmouth, Havant and Chichester. The site is also within close proximity to services and facilities within both Hermitage and Southbourne. Emsworth Train station is located 1.6km from the site and Southbourne Train Station is approximately 1.4km. Both stations provide rail access to London, Southampton, Portsmouth and Brighton.

Policy AL13 which sets the requirement for 1,250 units to be allocated within the Southbourne Neighbourhood Plan, states that sites should be 'well integrated with the existing settlement pattern'. The Site's location at the edge of the settlement boundary of Hermitage, the presence of built form directly north and its proximity to public transport links, makes it a sustainable site for residential development, in accordance with the Revised NPPF (2018) and Emerging Policy AL13.

Appendix 1 – Site Masterplan



COM REGULATIONS 2018. All current drawings and specifications for the project must be read in conjunction with the Designer's Hazard and Environment Assessment Report. All mechanical property rights reserved.

PLEASE NOTE: Drawing produced for information purposes only and is subject to further detailed design and statutory approvals.

Rev	Date	Description
-	28/06/18	First Issue

Drawn	Checked	DATE
BYV	BYV	28/06/2018

Scale	Scale @ A3
1:1000	1:1000

**LAND OFF MAIN ROAD,
HERMITAGE BRIDGE
PROPOSED SITE LAYOUT**

**AA7621/SK001
FOR COMMENT**



Appendix 2 – Landscape and Visual Impact Assessment

LAND TO THE SOUTH OF THE A259 (MAIN ROAD), HERMITAGE, EMSWORTH

PROMOTION FOR RESIDENTIAL DEVELOPMENT

LANDSCAPE REPORT

on behalf of Obsidian Strategic SB Limited

July 2018

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Figure 6 – Viewpoints C and D

Figure 7 – Viewpoints E and F

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- Figure 8 – Viewpoint 1**
- Figure 9 – Viewpoint 2**
- Figure 10 – Viewpoint 3**
- Figure 11 – Viewpoint 4**
- Figure 12 – Viewpoint 5**
- Figure 13 – Viewpoint 6**
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- Figure 15 – Viewpoint 8**
- Figure 16 – Viewpoint 9**
- Figure 17 – Viewpoint 10**
- Figure 18 – Viewpoint 11**
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- Figure 20 – Illustrative Masterplan**

Appendices

- Appendix A Landscape and Visual Appraisal Methodology
- Appendix B National Character Area Profile: South Coast Plain (NCA126)
- Appendix C The West Sussex Landscape Character Assessment (2003): Southbourne Coastal Plain: Sheet SC5
- Appendix D Landscape Supporting Graphics
-

1.0 INTRODUCTION

- 1.1 Enplan is a multi-disciplinary practice of planners, landscape architects and environmental consultants. Enplan were appointed in February 2018 by Obsidian Strategic SB Limited to undertake a preliminary landscape and visual impact appraisal of land at Hermitage, Emsworth (refer to **Figure 1** in **Appendix D** for the site's location) to inform on the implications on the visibility and landscape character of the proposed Site.
- 1.2 This report sets out a preliminary assessment of the potential landscape and visual effects of developing the land for residential use at Hermitage. The report defines the existing landscape conditions, assesses the character and quality of the landscape and analyses the visual and landscape effects of the proposal. Within Section 2.0 a judgement is made concerning the separation of development of Hermitage and Southbourne and the retention of the 'gap'.
- 1.3 The baseline position against which this assessment has been undertaken is as per the current position on the ground. There are no extant planning permissions for the land.
- 1.4 The Study Area for this assessment has been defined to incorporate all parts of the landscape that potentially may have a view of the proposals (referred to later in this chapter as the Zone of Theoretical Visibility or ZTV).
- 1.5 Assessments undertaken within this appraisal have been undertaken in accordance with the 3rd Edition of 'Guidelines for Landscape and Visual Impact Assessment'¹ (GLVIA3). The assessment and landscape design work has been led by Richard Hodgetts BA Hons DipLA CMLI, Landscape Director of Enplan and a Chartered Landscape Architect with over 27 years' experience.
- 1.6 The Hermitage site is located on the south eastern edge of Hermitage to the south of the A259 called main Road. Running along the western boundary is an access road / public right of way (ref no. 203) leading to nos. 134 and 136 and the New Life Christian Centre For location and setting of the site in the urban context see **Figure 1**. The Site comprises of a pasture field used as a paddock with access gained from the access road that runs

¹ Landscape Institute, Guidelines for Landscape and Visual Impact Assessment 3rd Edition, 17 April 2013

along the western boundary. In all the site amounts to around 3.23 Ha in area. The site is located within the Chichester Harbour AONB

2.0 LANDSCAPE RELATED PLANNING POLICY CONTEXT

2.1 This section describes the background of relevant national, regional and local planning policies, in so far as they relate to landscape matters, against which the development proposals will be determined. The site lies in countryside, immediately adjoining the south east of Hermitage. The Site is located within the Chichester Harbour AONB.

National Planning Policy Framework:

2.2 Policies in the National Planning Policy Framework (NPPF), 2012, which relate to landscape are set out below:

Paragraph 17:

- *always seek to secure high quality design and a good standard of amenity for all existing and future occupants of land and buildings;*
- *take account of the different roles and character of different areas, recognising the intrinsic character and beauty of the countryside and supporting thriving rural communities within it;*

Paragraph 58:

- *respond to local character and history, and reflect the identity of local surroundings and materials, while not preventing or discouraging appropriate innovation;*
- *are visually attractive as a result of good architecture and appropriate landscaping.*

Paragraph 61:

- *although visual appearance and the architecture of individual buildings are very important factors, securing high quality and inclusive design goes beyond aesthetic considerations. Therefore, planning policies and decisions should address the connections between people and places and the integration of new development into the natural, built and historic environment*

Paragraph 109:

The planning system should contribute to and enhance the natural and local environment by:

- *protecting and enhancing valued landscapes, geological conservation interests and soils;*

-
- *recognising the wider benefits of ecosystem services;*
 - *minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;*
 - *preventing both new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution or land instability; and*
 - *remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.*

Paragraph 113:

Local planning authorities should set criteria based policies against which proposals for any development on or affecting protected wildlife or geodiversity Sites or landscape areas will be judged. Distinctions should be made between the hierarchy of international, national and locally designated Sites, so that protection is commensurate with their status and gives appropriate weight to their importance and the contribution that they make to wider ecological network.

Planning Background

2.3 The adopted development plan for Chichester District comprises the Chichester Local Plan: Key Policies 2014- 2029 (2015). With regard to designations, the following is relevant to landscape considerations, set out in further detail below:

- The Promotion Site is within the Chichester Harbour AONB (Policy 43 of the Chichester Local Plan: Key Policies (2015)).

The Council are currently undertaking a Local Plan Review, however, this is at an early stage and there are no emerging landscape policies at this time. The Local Plan Review is targeted for adoption in March 2020.

Chichester Harbour AONB

2.4 The Chichester Harbour AONB was designated in 1964 and, at 74km², is the smallest AONB in the South East region. It is located on the south coast of England between the cities of Portsmouth and Chichester and straddles the boundary between the counties of Hampshire and West Sussex. Backed by the South Downs, the harbour is the easternmost of three natural harbours, namely Portsmouth, Langstone and Chichester and the only one designated as an AONB.

Policy 43 of the Chichester District Local Plan: Key Policies states that:

“The impact of individual proposals and their cumulative effect on Chichester Harbour AONB and its setting will be carefully assessed. Planning permission will be granted where it can be demonstrated that all the following criteria have been met:

- 1. The natural beauty and locally distinctive features of the AONB are conserved and enhanced;*
- 2. Proposals reinforce and respond to, rather than detract from, the distinctive character and special qualities of the AONB;*
- 3. Either individually or cumulatively, development does not lead to actual or perceived coalescence of settlements or undermine the integrity or predominantly open and undeveloped, rural character of the AONB and its setting; and*
- 4. Is appropriate to the economic, social and environmental well-being of the area or is desirable for the understanding and enjoyment of the area (where this is consistent with the primary purpose of conserving and enhancing natural beauty); and*
- 5. The policy aims of the Chichester Harbour AONB Management Plan.*

Opportunities for remediation and improvement of damaged landscapes will be taken as they arise.”

Additional guidance is set out in the Joint Chichester Harbour Area of Outstanding Natural Beauty SPD (2017).

Natural Environment

2.5 Policy 47 of the Chichester District Local Plan states that:

Planning permission will be granted where it can be demonstrated that all the following criteria have been met:

There is no adverse impact on:

- 1. - The openness of the views in and around the coast, designated environmental areas and the setting of the South Downs National Park; and*
- The tranquil and rural character of the area.
- 2. Development recognises distinctive local landscape character and sensitively contributes to its setting and quality;*

-
3. *Proposals respect and enhance the landscape character of the surrounding area and site, and public amenity through detailed design;*
 4. *Development of poorer quality agricultural land has been fully considered in preference to best and most versatile land; and*
 5. *The individual identity of settlements, actual or perceived, is maintained and the integrity of predominantly open and undeveloped land between settlements is not undermined.*

2.6 Policy 52 of the Chichester Local Plan (2015) expects development to contribute towards the provision of additional green infrastructure and protect and enhance existing green infrastructure. In terms of landscape, “where appropriate, the proposals [should] incorporate either improvements to existing trees, woodland, landscape features and hedges or the restoration, enhancement or creation of additional provision/areas.”

3.0 LANDSCAPE CONTEXT

Published Landscape Character Assessments

3.1 The relevant published landscape character data and related assessments include the following:

- National Character Area Profile: South Coast Plain (NCA 126)²;
- The West Sussex County Council: A Strategy for the West Sussex Landscape (October 2005): South Coast Plain. Sheet SC5: Southbourne Coastal Plain ³.

National Context

3.2 At a national level the application site lies within National Character Area (NCA) 126 South Coast Plain. The key characteristics, relevant to this assessment, are defined as:

- *The plain slopes gently southwards towards the coast. From the coastal plain edge there are long views towards the sea and the Isle of Wight beyond.*
- *The underlying geology of flinty marine and valley gravels extends several miles inland to the dip slope of the South Downs and the South Hampshire Lowlands. This gives rise to deep and well-drained high quality soils.*
- *In places, streams and rivers flow south from the higher land of the Downs to the sea.*
- *Coastal inlets and 'harbours' contain a diverse landscape of narrow tidal creeks, mudflats, shingle beaches, dunes, grazing marshes and paddocks.*
- *There are stretches of farmed land between developed areas, often with large arable fields defined by low hedges or ditches.*

- *There are isolated remnants of coastal heath in the west.*
- *Sand dune grasses and intertidal marsh communities are characteristic of*

² <http://publications.naturalengland.org.uk>

³ <https://www.westsussex.gov.uk/land-waste-and-housing/landscape-and-environment/landscape-character-assessment-of-west-sussex/>

the coastline, while small areas of species-rich meadow remain inland.

- *The coastline provides feeding grounds for internationally protected populations of overwintering waders and wildfowl and is also extensively used for recreation.*
- *Along the exposed, open coastal plain and shoreline, tree cover is limited to isolated wind-sculpted woodlands and shelterbelts.*
- *The area has significant urban development, with settlements along the coastline dominated by the Portsmouth conurbation, suburban villages and seaside towns including Bognor Regis, Littlehampton and Worthing linked by major road and rail systems.*

Regional and Borough Context

3.3 In 2005 West Sussex County Council published 'A Strategy for the West Sussex Landscape' which was based upon the Landscape Assessment of West Sussex (1995) This is supported by The Landscape Character Assessment and *Land Management Guidelines* for individual Landscape Character Areas within the county. The Site falls within South Coast Plan Sheet SC9 Southbourne Coastal Plain.

3.4 The key characteristics, historic features, biodiversity, change, key issues and Landscape and Visual sensitivities of the character area relevant to the Site can be summarised as follows:

Southbourne Coastal Plain (SC5):

Key Landscape Characteristics:

- *Low lying flat open landscape.*
- *Long views to Chichester Harbour and to the distinctive spire of Chichester Cathedral.*
- *Suburban settlement dominates the area.*
- *Small towns, villages and road crossings hug the tops of inlets to Chichester Harbour.*
- *Degraded tree and hedgerow framework. A low density of hedgerows and hedgerow trees with occasional shelterbelts.*
- *Meandering rifees and drainage ditches.*
- *Large-scale arable farming and market gardening.*
- *Clusters of greenhouses.*
- *Winterbourne chalk streams flow through this area.*

- *Frequent urban fringe influences of horse paddocks, agricultural and light industry.*
- *Busy minor and major roads which also serve as bypasses. Minor roads run mainly north-south between the A259 and A27.*
- *Narrow gaps of open land between Hermitage, Southbourne, Nutbourne and Chidham. The gaps between settlements provide important visual relief to the built up areas, although their landscape character is often poorly defined, with a degraded hedgerow network.*
- *A few parts of this area retain elements of a smaller-scale, more varied landscape with quiet hamlets and traditional villages enclosed by small pastures.*

Historic Features:

- *Inlets, small waterways and ditches.*
- *Few visible prehistoric monuments, apart from crop marks.*
- *Large regular fields, mostly the product of Parliamentary enclosure.*

Biodiversity:

- *Semi-natural habitats are scarce due to intensive arable agriculture.*
- *The rife and ditch systems, together with occasional ponds, are of particular ecological value, supporting an important but fragile population of water voles.*
- *Fragments of woodland, some of which are ancient*
- *Occasional village ponds and greens provide local havens for wildlife.*
- *Hedgerow pattern is fragmented with occasional isolated woods. Linking features assume a greater significance in an otherwise cultivated landscape.*

Change- Key Issues:

- *Urban development pressures, especially in the gaps between settlements and on the edge of Chichester.*

Landscape and Visual Sensitivities:

- *Farm diversification and garden centres leading to introduction of signs and fencing.*
- *Proximity to Chichester Harbour Area of Outstanding Natural Beauty.*
- *Key views to Cathedral and Chichester Harbour.*

Landscape Context

- 3.5 The Hermitage site is located on the south eastern edge of Hermitage to the south of the A259 called main Road. Running along the western boundary is an access road / public right of way (ref no. 203) leading to nos 134 and 136 and the New Life Christian Centre For location and setting of the site in the urban context see **Figure 1**. The Site comprises of a pasture field used as a paddock with access gained from the access road that runs along the western boundary. In all the site amounts to around 3.23 Ha in area. The site is not designated. The existing character of the site can be seen on the **Figure 5** Landscape and Visual (Location of Viewpoints and Site Appraisal Views) for location and **Views A to F** on **Figures 5-7**.
- 3.6 There is a public right of way (ref no.203) that runs along the western boundary that connects to a public right of way (ref no.204) that runs along the southern boundary. In the wider landscape to the south there is a long distance Public Right of Way (Sussex Border Path) that runs from the south of Southbourne to connect to the western edge of Hermitage. To the north of the Site within Hermitage there are other footpaths running north south.
- 3.7 The site is flat and at the 7m AOD (refer to **Figure 2**). Beyond the Site to the south the topography falls to the Thorney Island peninsula at 5m AOD. To the north at Westbourne the local topography rises to 40m AOD beyond the A27.
- 3.8 The Site is contained on three of its boundaries by mature leylandii trees and the remaining boundary by a tall hedge all that help to protect its inter visibility locally as described below. This is also aided by the flat topography of the Site. There are local views into the site and these are described in **Section 4.0**.
- 3.9 The northern boundary comprises of a low stone wall approximately 1.0m tall with mature 20+m high leylandii trees located behind. The trees restrict views further north out and into the Site. To the eastern end of the northern boundary is an existing dwelling (no.146) which overlooks the Site. The boundary of this dwelling comprises of a a group of trees, a 1.2m tall hedge and brick wall. See **Views A and F** on **Figures 5 and 7**. The locations of these are shown on **Figure 4**.
- 3.10 The eastern boundary comprises of a circa 2.0m tall hedge with a post and rail fence on the inside Site side. There are some views beyond the hedge to the western extremities of Southbourne, these are largely restricted to the upper portion of the line of trees

marking the western edge of the settlement. See **Views A to F** on **Figures 5 to 7**. The locations of these are shown on **Figure 4**.

- 3.11 The southern boundary comprises of semi mature trees on the eastern end which then forms semi mature Leylandii trees all being approximately 20 m + in height. The tree belt restricts views further south. In addition a 3m tall stone wall forms the boundary to no 136 Main Road along the eastern end thus restricting views beyond. The public right of way ref no 204 runs along this boundary. See **Views A, B, C, D and F** and **Viewpoints 2, 4** on **Figures 5, 6, 9 and 11** The locations of these are shown on **Figure 4**.
- 3.12 The western boundary is defined by the access road to no 134 and 136 Main Road and the New Life Christian Centre. This is also Public Right of Way (ref no 203). The boundary is lined with 20m+ Leylandii trees that restrict views into and out of the Site but allows for ground level views due to the height of the canopy of the trees.. The boundary is defined by a post and rail fence at ground level. See **Views C, D, E, F** and **Viewpoint 6** on **Figures 5, 6 and 13**. The locations of these are shown on **Figure 4**.
- 3.13 A potential Zone of Theoretical Visibility (ZTV) is illustrated at **Figure 3**. The area highlighted is based on a bare earth analysis, i.e. without vegetation or other structures, and on a building height of 7.5m above ground level; ground level being assumed as a worst case, i.e. the highest point on the site at 5m AOD. Due to the flat nature of the existing topography the ZTV assumes full visibility but the existing areas of conurbation and existing trees restrict inter visibility across the landscape.

4.0 LANDSCAPE AND VISUAL IMPACT APPRAISAL

Outline Proposals

4.1 Based upon the current masterplan (See **Figure 20** in **Appendix D**) the following mitigation key landscape principles should be considered in the layout going forward:

- The need for a landscaped buffer along the eastern boundary as a way of protecting the gap between Hermitage and Southbourne and to restrict views from Southbourne towards the Site;
- Within any scheme going forward a new open space should be provided as a focal feature along the new access into the Site. This space could provide the location for a new play area but would also provide a sense of place for the development;
- Provision of suds features ,open space and mitigation tree planting along the southern boundary as an interface between the proposed site and the adjoin dwellings and public right of way.
- To provide additional pedestrian links (and cycle where appropriate) to the adjoining public right of way network retaining the existing public rights of way; and,
- To provide extensive tree planting along the road hierarchy to integrate the proposed development into the existing landscape fabric.

Visual Impact Assessment

4.2 The purpose of this preliminary visual impact assessment is to identify a number of publicly accessible viewpoints within the relative close proximity to the site at which locations significant visual effects may be likely. If there were any especially prominent long distance views that would be affected, for example from well-known viewpoint locations or long distance trails these would have been included but there are no such locations where the effects would be noticeable and not significant.

4.3 Paragraph 3.13 above has described the ZTV and of the general nature of the views from the wider surrounding area; these being very limited. **Figures 1** and **4** identifies the location of twelve viewpoints local to the site (within 2km).

- 4.4 Viewpoint 1 (Figure 8) is located on Public Right of Way ref no 204 looking north west towards the eastern boundary of the Site. The view demonstrates how the existing mature Leylandii trees on the northern and western boundaries screen and provide visual containment to the Site. It also shows how the mature trees on the southern boundary contain the Site. In the middle of the view the existing circa 2.0m hedge is visible which restricts ground level views into the Site. However proposed development would be visible above this boundary. Within the mitigation strategy it is suggested that this boundary is strengthened with additional tree buffer planting that would screen views of the proposed development. The effect of this on the view would be noticeable but not necessarily an adverse effect and not significant.
- 4.5 Viewpoints 2, 3 and 4 (Figures 9, 10 and 11) are located on Public Right of Way ref no 204 looking north between gaps in the vegetation towards the Site. In all the cases the views demonstrate that the northern and western boundaries provide containment to the Site. Viewpoints 3 and 4 demonstrate how the eastern boundary hedge provides a degree of ground level containment and that the garden boundary to no 146 Main Road does not provide much containment and would benefit from additional planting. The proposed mitigation buffer planting along the eastern boundary and around no 146 Main Road will reduce the impact of the site proposals. Initially there would be an adverse and significant effect from no 146 Main Road into the Site but after time and the proposed planting matures may reduce to not an adverse effect and not significant.
- 4.6 Viewpoint 5 (Figure 12) is located on Public Right of Way ref no. 203 looking north east under the canopy of the existing leylandii trees towards the Site. The view demonstrates that the southern end of the western boundary is devoid of vegetation and from this location there would be views into the Site. It may be prudent to provide a mitigation strategy along this boundary by the introduction of additional tree and understorey planting to restrict views into the Site. The effect of this on the view would be noticeable but not necessarily an adverse long term effect and not significant.
- 4.7 Viewpoint 6 (Figure 13) is taken from the A259 (Main Road) looking south into the Site down the existing access road/ public right of way ref no 203. Viewpoint 7 (Figure 14) is taken from the A259 Main Road looking directly into the Site. The views are also representative of the views from the existing residential dwellings on the northern side of Main Road. The views demonstrate how the existing mature Leylandii trees screen the site but allow filtered views into the site through the understorey of the trees. With a suitable mitigation buffer at ground level all views into the Site may be screened. The effect of this on the view would be barely noticeable but not necessarily an adverse effect and not significant.
- 4.8 Viewpoint 8 (Figure 15) is taken from the A259 (Main Road) looking south into the Site over the access gate to no 146 Main Road. From this location the southern boundary of

the Site can be seen. However with an appropriate mitigation strategy along the northern boundary the proposed development would be screened from the view. There maybe an immediate adverse and significant effect at construction but over time this may lessen to not adverse and not significant as the buffer planting matures.

- 4.9 Viewpoint 9 (Figure 16) is taken from the A259 (Main Road) looking south west between the dwellings nos. 168 and 146 Main Road towards the Site. The view demonstrates that the existing dwellings restrict views into the Site. There maybe views of roofs but these can be mitigated by a suitable mitigation strategy and thus would not be an adverse effect and not significant.
- 4.10 Viewpoint 10 (Figure 17) is taken from the A259 (Main Road) adjacent to the Entrance of Tuppenny Barn looking south west towards the dwellings nos. 180,178,168 and 146 Main Road towards the Site. The view demonstrates that the existing dwellings restrict views into the Site. The horizon view is broken by the mature *Leylandii* trees that form the western boundary There maybe views of roofs but these can be mitigated by a suitable mitigation strategy and thus would not be an adverse effect and not significant.
- 4.11 Viewpoint 11 (Figure 18) and Viewpoint 12 (Figure 19) are located on the Public Right of Way ref no 3000 looking north west towards the southern and eastern boundary of the Site. Viewpoint 12 particularly shows the importance of the existing hedge creating a defensible boundary and how the field beyond retains the 'gap' between hermitage and Southbourne. The views demonstrate how the existing mature *Leylandii* trees on the western boundary and the mature planting associated with nos. 134 and 136 Main Road screen and provide visual containment to the Site. In the middle of the view the existing circa 2.0m hedge is visible which restricts ground level views into the Site. However proposed development would be visible above this boundary. Within the mitigation strategy it is suggested that this boundary is strengthened with additional tree buffer planting that would screen views of the proposed development. The effect of this on the view would be noticeable but not necessarily an adverse effect and not significant.
- 4.12 In summary, no medium and long distance views are anticipated to be significantly adversely affected. The main visual effects would be experienced at close distances to the site as in:
- from the Main Road on the northern boundary through the understorey of the existing *Leylandii* trees;
 - through the understorey of the existing mature *leylandii* trees on the western boundary access road and public right of way
 - from the rear of dwelling no 146 Main Road along the northern boundary; and,

- glimpsed views of the proposed development over the existing hedge on the eastern boundary
- 4.13 Careful design of the location of the housing and its height (limited to two storeys), plus landscape treatment comprising of ground level planting along the northern and western boundaries along with tree buffer planting along the eastern boundary would have the potential to reduce the residual visual effects to less than significant. This preliminary assessment has demonstrated that development at the Hermitage site could be undertaken without giving rise to such wider and more telling effects than the comparatively limited and modest effects at a local level. It also demonstrates that the 'gap' between Hermitage and Southbourne would be retained.

Landscape Character Effects

- 4.14 It is considered that the appropriate value for the site is of local value only. Its landscape susceptibility to residential development is considered to be moderate particularly given its close relationship to the existing urban edge of Hermitage and its relatively lack of a visual relationship with that wider landscape. Combining value and sensitivity generates an assessment of the site's landscape sensitivity and it is considered that the sensitivity is low.
- 4.15 The consideration of landscape character effects takes two parts; the first relates to changes to the fabric of landscape features on the site and, the second, a consideration of how these changes would alter the key characteristics of the landscape of the site and its context. Evidently there is a link between the extent and degree of visual effects and the extent and degree of landscape character effects, as the former to a considerable degree is an expression of how such changes are perceived.
- 4.16 In respect of the site and the changes to it, the change from a paddock to a residential development would be a substantial change but one that is inevitable with greenfield development. Good design of the layout, architecture and the landscape would mitigate these changes but in landscape terms, the effect has to be considered an adverse one in principle.
- 4.17 As the visual impact assessment has highlighted the proposals would be barely visible from publicly accessible locations. Given the localised and limited visual effects the changes to landscape character of the wider area considered to be slight.

4.18 The overall effect on the character and appearance of the landscape would be a balance of localised and limited visual effects on a few views from the local landscape. Overall, a slight adverse magnitude of effect on a site of low sensitivity. This would represent an effect that would be of a minor significance but not significant in the meaning of significance as expressed in the EIA Regulations.

5.0 CONCLUSIONS

5.1 The main landscape and visual issues associated with the proposals are considered to be:

- The visual impact on users of the public highways, public rights of way, and on nearby residencies; and
- The character and appearance of the landscape;

5.2 The visual impact assessment has highlighted virtually all of the available views of the proposed development from the publicly accessible locations, i.e. those from public rights of way, roads, and nearby residences.

5.3 The preliminary landscape and visual assessment has been used to inform initial proposals. The principles that should be considered as part of future development of the site are as follows:

- The need for a landscaped buffer along the eastern boundary as a way of protecting the gap between Hermitage and Southbourne and to restrict views from Southbourne towards the Site;
- Within any scheme going forward a new open space should be provided as a focal feature along the new access into the Site. This space could provide the location for a new play area but would also provide a sense of place for the development;
- Provision of suds features ,open space and mitigation tree planting along the southern boundary as an interface between the proposed site and the adjoin dwellings and public right of way.
- To provide additional pedestrian links (and cycle where appropriate) to the adjoining public right of way network retaining the existing public rights of way; and,
- To provide extensive tree planting along the road hierarchy to integrate the proposed development into the existing landscape fabric..

5.4 In summary, no medium and long distance views are anticipated to be significantly adversely affected. The main visual effects would be experienced at close distances to the site as in:

- from the Main Road on the northern boundary through the understorey of the existing Leylandii trees;
- through the understorey of the existing mature Leylandii trees on the western boundary access road and public right of way;
- from the rear of dwelling no 146 Main Road along the northern boundary; and,
- glimpsed views of the proposed development over the existing hedge on the eastern boundary.

5.5 Careful design of the location of the housing and its height (predominantly limited to two storeys), plus landscape treatment comprising of ground level planting along the northern and western boundaries along with tree buffer planting along the eastern boundary would have the potential to reduce the residual visual effects to less than significant. This preliminary assessment has demonstrated that development at the Hermitage site could be undertaken without giving rise to such wider and more telling effects than the comparatively limited and modest effects at a local level. It also demonstrates that the 'gap' between Hermitage and Southbourne would be retained.

5.6 The overall effect on the character and appearance of the landscape would be a balance of localised and limited visual effects on a few views from the local landscape. Overall, a slight adverse magnitude of effect on a site of low sensitivity. This would represent an effect that would be of a minor significance but not significant.

APPENDIX A: METHODOLOGY

APPENDIX A: METHODOLOGY

Methodology

The landscape and visual impact assessment has followed established methodologies practised by the landscape profession and in accordance with 'Guidelines for Landscape and Visual Impact Assessment' 3rd Edition, published by The Landscape Institute and Institute for Environmental Management & Assessment (April 2013). The photography has been undertaken in accordance with the Landscape Institute's Advice Note 01/11 'Photography and Photomontage in Landscape and Visual Impact Assessment' (January 2011).

The overall extent of the visibility of the proposals was established; this represents the Zone of Theoretical Visibility (ZTV) for the development. This was determined through a combination of desk top studies checked with fieldwork analysis, including the walking of most of the public highways and rights of way within the area. The desk top study identified the area from which it could potentially be possible to see a part of the development according to Ordnance Survey topographical information. The fieldwork then refined this area taking into account local features that would prevent these views, for example dense vegetation, local topographical changes, buildings or fences

The study area for the landscape and visual impact assessment was determined by the ZTV exercise. It was estimated that an area of 3.0km would be used for this assessment.

Tables 7.1 to 7.3 below set out the criteria for the assessments of the value and susceptibility of visual receptors (i.e. people) and, in combining these, to determine an overall assessment of visual receptor sensitivity. These are compatible with the principles outlined in paragraphs 6.30 – 6.41 of GLVIA3. Such categories are not strict and receptors may be more or less sensitive within each category depending on the particular circumstances. Table 7.4 sets out the terms and criteria used in the visual impact assessment to describe the magnitude of visual effects

Table 7.1: Visual Receptor Value Criteria

Value of Location or View	Description
Very High or National Value	A scenic view in a landscape that has been designated at a national level, e.g. National Parks or Areas of Outstanding Natural Beauty, particularly views from a national long distance trail or promoted routes in these landscapes, or a recognised view to or from a distinctive feature designated at a national level, e.g. Scheduled Ancient Monument, Listed Building and Registered Historic Park & Garden.
High or County Value	A view from within a designated landscape or a popular view recognised in publications and/or visitor guides for promoted routes and locations of interest.
Moderate or Community Value	A view in an undesignated landscape which may be locally valued and displays evidence of responsible use.
Low or Unvalued	Where the landscape has been despoiled and there is evidence that society does not value the view or landscape
Private Value	A private view, e.g. from a residential property, that is likely to be valued by the occupants.

Table 7.2: Visual Receptor Susceptibility

Receptor Group	Location Susceptibility
Residents	<p>High - would view the proposed development in the primary views from their property (e.g. principal living rooms and sitting areas in gardens), would be stationary or moving slowly about their property, would see the development on a daily basis, could be orientated towards the development, and would value these views.</p> <p>High/Moderate - would view the proposed development in the secondary views from their property (e.g. bedrooms and driveway), would be stationary or moving slowly at these locations, would see the development on a daily basis, could be orientated towards the development, and would value these views.</p> <p>Moderate - would view the proposed development from limited locations on their property (e.g. bathrooms and attic windows), would be stationary or moving slowly at these locations, would see the development on a daily basis, could be orientated towards the development, and would value these views.</p>
Recreational Receptors	<p>High - are stationery or moving slowly (e.g. walking, cycling or horse riding), can be orientated towards the development, are at that location primarily in order to enjoy the view/landscape.</p> <p>High/Moderate - are stationery or moving slowly (e.g. walking, cycling or horse riding), can be orientated towards the development, are at that location primarily in order to enjoy the view/landscape but also for other purposes.</p> <p>Moderate - are stationery or moving slowly, can be orientated towards the</p>

	development, may be at that location in order to enjoy the view/landscape but would have another primary purpose for being there (e.g. playing sport).
Road and rail users (motorists, passengers, bus and train travellers)	High/Moderate – in locations where they are moving steadily/swiftly, can be orientated towards the development, are likely to be at that location primarily in order to enjoy the view/landscape. Moderate - in locations where they are moving steadily/swiftly, can be orientated towards the development, may be at that location in order to enjoy the view/landscape but may also have other purposes (e.g. journey to work). Moderate/Low - in locations where they are moving swiftly, with a direction of travel that is oblique or side-on to the development, are likely to be travelling for a purpose other than in order to enjoy the view (e.g. higher speed long distance travel).
Outdoor workers	Moderate - outdoor workers and school children in locations where they may be moving slowly, can be orientated towards the development, may experience the view on a daily basis, may be at that location in order to enjoy the view but will have other purposes. Medium/Low - outdoor workers in locations where they may be moving slowly, can be orientated towards the development, may experience the view on a daily basis, but are at that location primarily to undertake activities unconnected with the view.
Indoor workers	Low - indoor receptors with limited views in this direction, who are in that location primarily to undertake activities unconnected with the view.

Table 7.3: Visual Receptor Sensitivity Criteria

Visual Receptor Sensitivity	Description
Very High Sensitivity	Where the receptor would be stationary or moving slowly, would be likely to be exposed for consistent and prolonged periods and/or whose attention or main interest would be likely to be the landscape and views; particularly, but not necessarily limited to, users of promoted Public Rights of Way within landscapes designated at a national level, users of national trails and promoted long distance routes or at heritage assets, in these landscapes or other valued landscapes, where awareness of changes to visual amenity is likely to be acute.
High Sensitivity	Where the receptor would be stationary, moving slowly or steadily, would be likely to be exposed for consistent and prolonged periods and/or whose attention or interest is likely to include the landscape and views; typically residents at home, users of Public Rights of Way and country lanes, where awareness of changes to visual amenity is likely to be elevated.
Moderate Sensitivity	Where the receptor would be moving steadily or swiftly, would be likely to be exposed to the change for infrequent and short periods, and/or whose attention and interest may include the landscape or views but not primarily; typically travellers on roads, rail or other transport routes where awareness of change to visual amenity is likely to be limited.
Low Sensitivity	Where the receptor would be moving swiftly, would be exposed to the change occasionally and for very short periods, and/or whose attention or interest is not on views or landscape; typically people engaged in higher speed travel, engaged in organised outdoor sport (which does not involve an appreciation of views) and outdoor workers where the setting may be of importance to the quality of working life.
Negligible Sensitivity	Where the receptor would be predominantly inside and at their place of work focused on their work activity and where setting is not important to the quality of working life and awareness of change to visual amenity is likely to

	be negligible.
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Table 7.4 Magnitude of Visual Effects Criteria

Magnitude of Change	Description
Very Substantial	Where the proposed development would be perceived to be close to the viewpoint and openly visible in its entirety or near entirety, the development would be in stark contrast to the landscape context such that it would be the dominant feature in the scene.
Substantial	Where the proposed development would be perceived to be in the near or middle distance and visible in its entirety or partly screened, the development would contrast with the landscape context such that it would stand out as a prominent feature in the scene.
Moderate	Where the proposed development would be perceived to be in the middle distance and visible in its entirety or partly screened or at closer distances and more considerably screened, the development may contrast with the landscape context such that it would be evident as a noticeable feature in the scene.
Slight	Where the proposed development would be perceived to be in the distance or far distance and visible in its entirety or partly screened or at closer distances and substantially screened, the development may contrast with the landscape context such that it would be a visible feature in the scene.
Negligible	Where the proposed development would be perceived to be in the far distance, partly or largely screened or at closer distances and almost entirely screened, the development may contrast with the landscape context such that it would be a barely discernible feature

For landscape character effects, as per the principles outlined in paragraphs 5.38 – 5.57 of GLVIA3, assessments have been made as to landscape value and landscape susceptibility and, in combining these, to determine overall landscape sensitivity. The criteria used for assessing these are reproduced at Tables 7.5 to 7.7 below and the magnitude of landscape effects at Table 7.8.

Table 7.5 Landscape Value Criteria

Landscape Value	Description
International Value	Where the landscape has been designated at an international level, e.g. a World Heritage Appeal Site, and the purposes of which include landscape and/or recreational opportunities.
National Value	Where the landscape has been designated at a national level, e.g. National Parks (England, Scotland and Wales), Areas of Outstanding Natural Beauty (England, Wales and NI), Heritage Coasts (England and Wales), LANDMAP VSAA Outstanding Overall Evaluation (Wales) or where a landscape feature has been designated at a national level, e.g. Scheduled Ancient Monument, and forms a highly distinctive landscape feature.
County/District Value	Regional Parks, landscape designations in Structure, Unitary or Local Development Plans, LANDMAP VSAA High Overall Evaluation (Wales) or a landscape feature that has been designated at a County/Borough/District level and forms a distinctive landscape feature.
Local Value	For undesignated landscapes and landscape features which are locally

	valued, LANDMAP VSAA Moderate Overall Evaluation (Wales) and display evidence of responsible use and value.
Unvalued	Where the landscape and/or landscape features have been despoiled and there is evidence that society does not value the landscape and/or landscape features, e.g. fly tipping, abandoned cars, litter, vandalism, etc.

Table 7.6 Landscape Susceptibility Criteria

Landscape Susceptibility	Description
Very Susceptibility	Where the clarity of the key characteristics are very strongly expressed and/or their robustness to change is fragile and/or views are an essential characteristic, and/or policies and strategies aim to achieve “no change” to landscape character, and the changes to landscape character that could be brought about by a development of the type, scale and location proposed would be incompatible with these factors.
Susceptible	Where the clarity of the key characteristics are strongly expressed and/or their robustness to change is weak and/or views are an important characteristic and/or policies and strategies aim to conserve the key characteristics, and the changes to landscape character that could be brought about by a development of the type, scale and location proposed would have a poor compatibility with these factors.
Moderate susceptibility	Where the clarity of the key characteristics are clearly expressed and/or their robustness to change is moderately strong and/or views contribute to landscape character and/or policies and strategies promote or accept limited changes to key characteristics, and the changes to landscape character that could be brought about by a development of the type, scale and location proposed would have a moderate compatibility with these factors.
Slight susceptibility	Where the clarity of the key characteristics are vaguely expressed and/or their robustness to change is strong and/or views are incidental to landscape character and/or policies and strategies promote or accept that the landscape could evolve, and the changes to landscape character that could be brought about by a development of the type, scale and location proposed would have a good compatibility with these factors.
Negligible susceptibility	Where the key characteristics are muddled and/or their robustness to change is very strong and/or views are irrelevant to landscape character and/or policies and strategies promote or accept major changes to key characteristics and the changes to landscape character that could be brought about by a development of the type, scale and location proposed would have excellent compatibility with these factors.

Table 7.7 Landscape Sensitivity Criteria

Landscape Value	Description
Very High sensitivity	A landscape with international or national value and/or with features, elements, areas or special qualities of international or national value, that could be very susceptible to the type, scale and location of development proposed.
High sensitivity	A landscape with national or County/Borough/District value and/or with features, elements, areas or special qualities of national value, that could be susceptible to the type, scale and location of development proposed.
Moderate sensitivity	A landscape with County/Borough/District or local value and/or with features, elements, areas or special qualities of County/Borough/District or local value, that could have a moderate susceptibility to the type, scale and location of development proposed.

Low sensitivity	A landscape with local value and/or with features, elements, areas or special qualities of local value, that could have a slight susceptibility to the type, scale and location of development proposed.
Negligible sensitivity	A landscape that is unvalued and/or with features, elements, areas or special qualities that are unvalued, and that could have a negligible susceptibility to the type, scale and location of development proposed.

Table 7.8 Magnitude of Landscape Effects Criteria

Magnitude of Change	Description
Very Substantial adverse (or beneficial)	Where the proposals would become a defining characteristic of the landscape, would override and be in stark contrast with (or would substantially enhance) the existing landscape context, would be in the context of no similar developments (or would reinstate particularly valued features that had been previously lost or degraded) and would be a dominant additional feature(s).
Substantial adverse (or beneficial)	Where the proposals would become a key characteristic of the landscape, would compete with and detract from (or enhance) the existing landscape context, would be in the context of few similar developments (or would reinstate particularly valued features that had been previously lost or degraded) and would be a prominent additional feature(s).
Moderate adverse (or beneficial)	Where the proposals would become a characteristic of the landscape and would contrast with (or complement) the existing landscape context, may be in the context of a few similar developments (and/or would reinstate valued features that had been previously lost or degraded) and would be a noticeable additional feature(s).
Slight adverse (or beneficial)	Where the proposals would become a characteristic of the landscape and would contrast with (or complement) the existing landscape context, may be in the context of some similar developments (and/or would reinstate features that had been previously lost or degraded) and would be a visible additional feature(s).
Negligible adverse (or beneficial)	Where the proposals may contrast with (or would complement) the existing landscape context, may be in the context of several similar developments (and/or would reinstate minor features that had been previously lost or degraded) and would be a barely discernible additional feature(s).

What constitutes a significant effect; the meaning of a significant effect in a broad planning context; and what weight should be attached to it, are all matters which do not have any specific definition in any related guidance. GLVIA3 requires the process of the assessment of significance to be clearly defined for each EIA project and to be expressed as transparently as possible. It defines (at Table 5.10 of the GLVIA3) a sliding scale of significance (for landscape effects) and, at Table 7.9 below, a matrix is used to help structure the overall assessment of the significance of landscape or visual effect when the magnitude of change is combined with sensitivity, together with the degree of significance that applies. The gradation invites the decision-maker to consider the amount of weight that should be applied based on the degree of significance as part of the planning balance. However, also identified are those effects which are considered to be significant in the terms required for assessment by the EIA Regulations (those highlighted in bold type and in the darker blue shaded boxes) as distinct from those which are not

and the reasoning is set out within the narrative of the assessment.

Table 7.9 Overall Assessment of Landscape and Visual Effects Criteria (Significance)

Receptor/ character area sensitivity	Magnitude of change				
	Very Substantial	Substantial	Moderate	Slight	Negligible
Very High	Major ++	Major +	Major	Major - Moderate	Moderate
High	Major +	Major	Major - Moderate	Moderate	Moderate - Minor
Moderate	Major	Major - Moderate	Moderate	Moderate - Minor	Minor
Low	Major - Moderate	Moderate	Moderate - Minor	Minor	Minor - Negligible
Negligible	Moderate	Moderate - Minor	Minor	Minor - Negligible	Negligible

Key

	Significant effect
	Potentially significant effect considered with other viewpoint effect evaluations
	Not a significant effect

APPENDIX B:
National Character Area Profile: South Coast Plain (NCA126)

126. South Coast Plain

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Introduction

As part of Natural England's responsibilities as set out in the Natural Environment White Paper¹ Biodiversity 2020² and the European Landscape Convention,³ we are revising profiles for England's 159 National Character Areas (NCAs). These are areas that share similar landscape characteristics, and which follow natural lines in the landscape rather than administrative boundaries, making them a good decision-making framework for the natural environment.

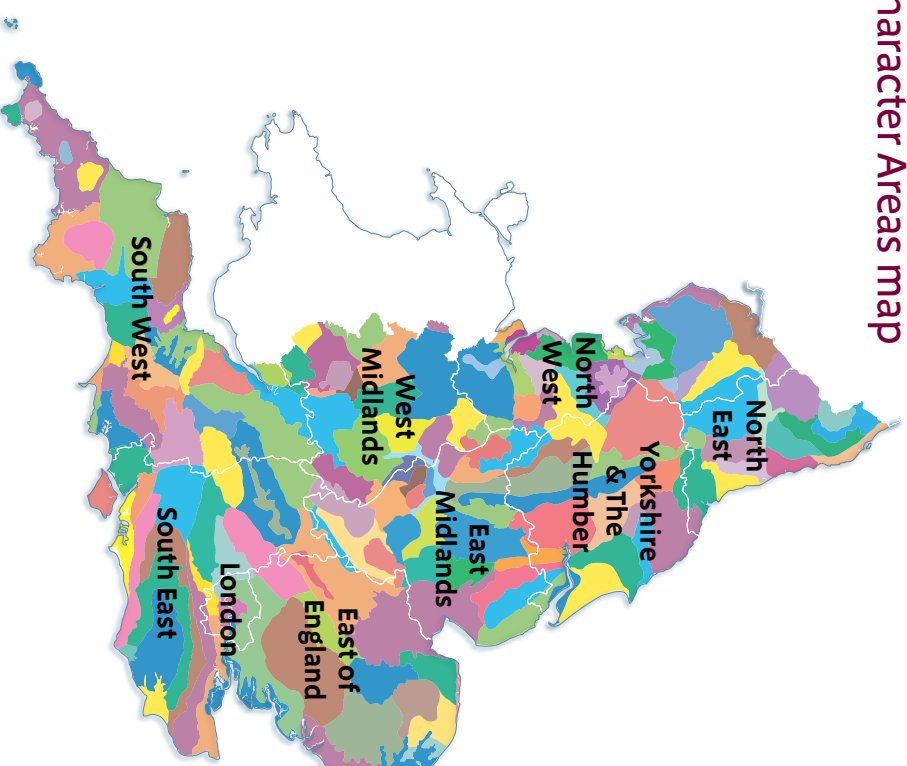
NCA profiles are guidance documents which can help communities to inform their decision-making about the places that they live in and care for. The information they contain will support the planning of conservation initiatives at a landscape scale, inform the delivery of Nature Improvement Areas and encourage broader partnership working through Local Nature Partnerships. The profiles will also help to inform choices about how land is managed and can change.

Each profile includes a description of the natural and cultural features that shape our landscapes, how the landscape has changed over time, the current key drivers for ongoing change, and a broad analysis of each area's characteristics and ecosystem services. Statements of Environmental Opportunity (SEOs) are suggested, which draw on this integrated information. The SEOs offer guidance on the critical issues, which could help to achieve sustainable growth and a more secure environmental future.

NCA profiles are working documents which draw on current evidence and knowledge. We will aim to refresh and update them periodically as new information becomes available to us.

We would like to hear how useful the NCA profiles are to you. You can contact the NCA team by emailing ncaprofiles@naturalengland.org.uk.

National Character Areas map



¹ The Natural Choice: Securing the Value of Nature, Defra (2011); URL: www.official-documents.gov.uk/document/cm80/8082/8082.pdf

² Biodiversity 2020: A Strategy for England's Wildlife and Ecosystem Services, Defra (2011); URL: www.defra.gov.uk/publications/files/pb13583-biodiversity-strategy-2020-111111.pdf

³ European Landscape Convention, Council of Europe (2000); URL: <http://conventions.coe.int/Treaty/en/Treaties/Html/176.htm>

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The South Coast Plain National Character Area (NCA) is a flat, coastal landscape with an intricately indented shoreline lying between the dip slope of the South Downs and South Hampshire Lowlands and the waters of the English Channel, Solent and part of Southampton Water. The coastline includes several major inlets which have particularly distinctive local landscapes and intertidal habitats of international environmental importance for wildfowl and waders. Chichester Harbour Area of Outstanding Natural Beauty lies within the NCA and the foothills of the South Downs, along the northern boundary, fall within the South Downs National Park.

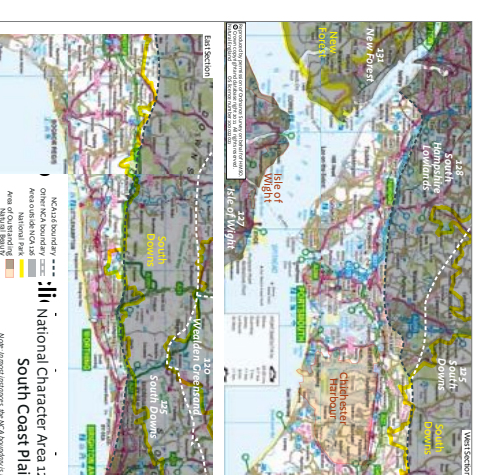
Some three per cent of the area is designated as a Site of Special Scientific Interest, and there are four Special Protection Areas, two Special Areas of Conservation and four Ramsar sites: Chichester and Langstone Harbour, Pagham Harbour, The Solent and Southampton Water and Portsmouth Harbour.

The harbours and the Manhood Peninsula, a small triangular peninsula south of Chichester, are the last relatively undeveloped stretches of coastline within the NCA. Elsewhere, there is significant urban development, with settlements along the coast dominated by the Portsmouth conurbation, trunk roads, suburban villages and an extensive string of seaside towns between Brighton and Southampton. Modern marinas and boatyards have also added to the harbour landscape. Although heavily developed and highly populated, there is a feeling of openness, particularly where sea views reveal wide expanses of sea and sky, with the Isle of Wight forming a backdrop in the west of the area. Long, linear shingle beaches and more locally, sand dunes, are important coastal features.

The area is generally very low lying and heavily defended against flooding and erosion with various schemes in place, including the country's first managed realignment on the open coast at Medmerry.

The economy is intricately linked to marine and recreational activities such as sailing, boat-building, fishing, heritage sites and recreational sports. Other commercial interests are mainly concentrated in the large urban centres such as Portsmouth and Gosport. The area also supports intensive arable farming and horticulture. Demand for residential and commercial property is ever increasing due to the NCA's attractive nature and strategic location for national and international trade.

Future management of this NCA requires balancing the needs of often competing interests. Protection against flooding remains a priority to encourage growth and allow internationally important habitats and species to flourish, while also maintaining the productive landscape and historic and geological features of the area.



Click map to enlarge; click again to reduce

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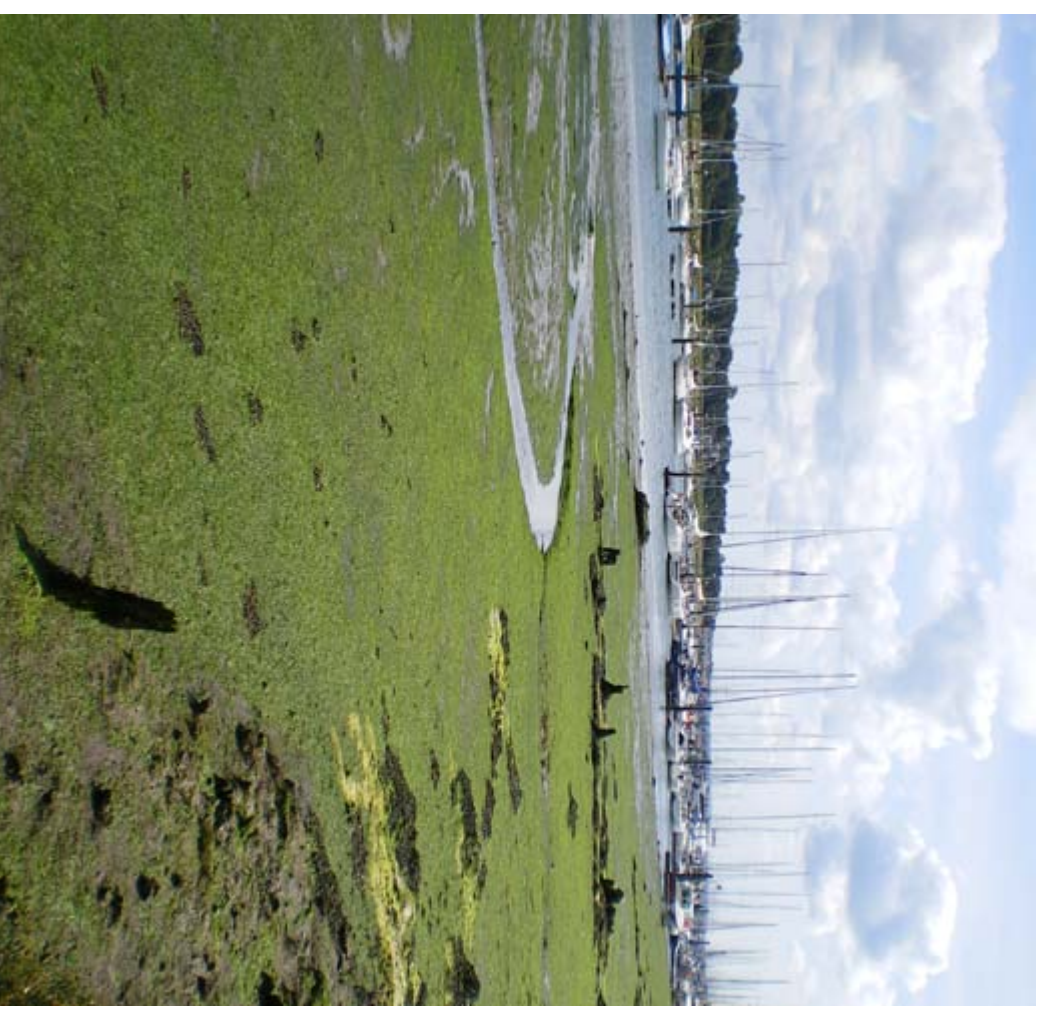
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Statements of Environmental Opportunities:

- **SEO 1:** Plan for and manage the effects of coastal change by allowing the operation of natural coastal processes and improving the sustainability of current management practices along the diverse coastline to successfully integrate the needs of the natural environment, landscape, local communities, agriculture, tourism and recreation amid significant urban stretches.
- **SEO 2:** Plan for the creation of a strong landscape framework within and around major settlements and identified growth areas, while managing and enhancing existing greenspace and access, and balancing the needs of agriculture, communities and the natural environment.
- **SEO 3:** Manage and significantly enhance the area's rivers and chalk streams and their wetland valley habitats to provide resilience against climate change and improve flood protection and water quality, particularly in the internationally designated sites such as Chichester and Pagham harbours, for the benefit of local communities and wildlife.
- **SEO 4:** Manage the rich archaeological and historic resource and geological exposures within the farmed, coastal and peri-urban landscape, including the longstanding associations of horticultural and maritime industries and the military, enhancing a strong sense of place.



Hamble Estuary.

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Physical and functional links to other National Character Areas

The South Coast Plain National Character Area (NCA) is a narrow strip running along the Hampshire and Sussex coast from the edge of Southampton in the west to Brighton and Hove in the east. The South Hampshire Lowlands NCA rises gently in the north until Portsmouth, after which the higher South Downs NCA forms the backdrop along the remaining northern boundary. The underlying geology is part of the Hampshire Basin which stretches to Dorset and the northern half of the Isle of Wight, within the chalk borders of the Purbeck Hills, Cranborne Chase, South Downs and Salisbury Plain.

The Arun, Adur, Hamble and Meon rivers drain south from the higher ground of the Downs, through this NCA to the coast, along with other smaller streams and rifes. Public water supply relies on surface water abstractions and groundwater from the Lower Greensand aquifer and the Worthing and Chichester chalk blocks. The Solent and Southampton Water Special Protection Area (SPA) and Solent Maritime Special Area of Conservation (SAC) connect this coastline with the South Hampshire Lowlands NCA and New Forest NCA in the west and the Isle of Wight, to which it is also connected by Solent and Isle of Wight Lagoons SAC.

In the west, there are views to the Isle of Wight across the Solent and to the New Forest NCA across Southampton Water. East–west trunk roads define the northern boundary; the M27 starts at Portsmouth and runs west to the New

Forest NCA and the A27 runs east to Brighton and Hastings. The A3(M) cuts north through the Downs, linking this NCA with Surrey and London. The West Coastway Line railway runs between Southampton and Brighton and the port of Portsmouth provides international links.

The Manhood Peninsula is a small triangular peninsula south of Chichester and remote from the rest of the NCA. Its southern headland, Selsey Bill, is a prominent coastal deposition feature, which projects out into the Solent well beyond the line of the rest of the coast. It is one of the last, and largest, relatively undeveloped stretches of coastline between Newhaven and Southampton.

Distinct areas

- Manhood Peninsula.

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Key characteristics

- The plain slopes gently southwards towards the coast. From the coastal plain edge there are long views towards the sea and the Isle of Wight beyond.
 - The underlying geology of flinty marine and valley gravels extends several miles inland to the dip slope of the South Downs and the South Hampshire Lowlands. This gives rise to deep and well-drained high-quality soils.
 - In places, streams and rivers flow south from the higher land of the Downs to the sea.
 - Coastal inlets and 'harbours' contain a diverse landscape of narrow tidal creeks, mudflats, shingle beaches, dunes, grazing marshes and paddocks. These include the internationally important Chichester, Langstone, Portsmouth and Pagham harbours, the Hamble Estuary and the recent coastal realignment site at Medmerry between Chichester Harbour and Selsey.
 - There are stretches of farmed land between developed areas, often with large arable fields defined by low hedges or ditches.
 - There are isolated remnants of coastal heath in the west.
 - Sand dune grasses and intertidal marsh communities are characteristic of the coastline, while small areas of species-rich meadow remain inland.
 - The coastline provides feeding grounds for internationally protected populations of overwintering waders and wildfowl and is also extensively used for recreation.
- Along the exposed, open coastal plain and shoreline, tree cover is limited to isolated wind-sculpted woodlands and shelterbelts.
 - The area has significant urban development, with settlements along the coastline dominated by the Portsmouth conurbation, suburban villages and seaside towns including Bognor Regis, Littlehampton and Worthing linked by major road and rail systems.
 - Historic fortifications along the coast include the Roman fort at Portchester and 19th-century defences and later naval installations built to protect the Portsmouth naval dockyard.



Catamaran departing Portsmouth Harbour.

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South Coast Plain today

The South Coast Plain NCA is broadly divided into the coastal margins which are heavily influenced by the sea; the expansive lower coastal plain which occupies most of the area; and the upper coastal plain which forms the transition between the lower plain and the chalk dip slopes of the South Downs and the South Hampshire Lowlands. Superficial deposits have given rise to a range of fertile soils which combine with the flat terrain and favourable climatic conditions to result in high-quality agricultural land. The east–west fold of chalk known as the Littlehampton anticline forms an isolated ridge to the north of Portsmouth, known as Portsdown, which forms a prominent setting to the harbour. Elsewhere, the Downs form a strong backdrop to the whole plain, while there are extensive views to the Isle of Wight.

The plain is crossed by rivers flowing south from the Downs to the sea, including the Meon, Hamble, Adur and Arun, which locally form wide alluvial flood plains. It is also cut by southward-facing chalk streams which each have dry headwater extensions over the upper plain and on into the dip slope of the South Downs. Flooded gravel pits, a legacy of historic extraction, make up some of the largest areas of freshwater in the region.

The lower coastal plain is heavily urbanised. In between development and transport links is a farmed landscape of large open fields with few trees or hedgerows. Drainage ditches, wire fences or low banks are more usual as field boundaries.

To the north and east of the area, the upper coastal plain comprises flat, regular patterns of large fields with the gentle forms and patterns, blending into the

openness of the lower dip slope of the South Downs with a small part of the South Downs National Park falling within the NCA. Here the landscape is varied, incorporating both open arable farmland and low-density settlements, with a more wooded and semi-enclosed (somewhat suburban) character locally, particularly to the west of Chichester. Along the north of the area there is a network of small- and medium-sized broadleaved woodlands, including ancient and semi-natural, well linked by hedgerows and garden exotics providing an enclosed field framework. Elsewhere tree cover varies. This is a fertile area that supports intensive arable farming and horticulture, particularly soft fruit. There are concentrations of glasshouses in some areas and increasing use of polytunnels. Areas where soils are shallow, stony and poorly drained – such as the Arun flood plain – often support good-quality permanent grassland. The thicker gravel deposits support a mixture of high- and medium-quality soils which are intensively farmed where the soils are flintier.

East of Chichester the exposed shoreline is an open, linear landscape of shingle and sand. To the west, the coastline is deeply indented by three natural harbours separated by the Portsmouth and Hayling Island peninsulas. Here broad expanses of sheltered water are edged by an attractive mix of mudflats, marshes, wetland scrub and low-lying fields occasionally interrupted by creeks. Chichester Harbour, for example, is one of the largest natural harbours along the south coast with a diverse landscape of numerous inlets interspersed with fairly open agricultural peninsulas and wind-sculpted woodlands. It is an Area of Outstanding Natural Beauty (AONB) and one of four Ramsar sites and two SPA in this NCA, designated primarily for internationally important numbers of wildfowl and waders, including Brent

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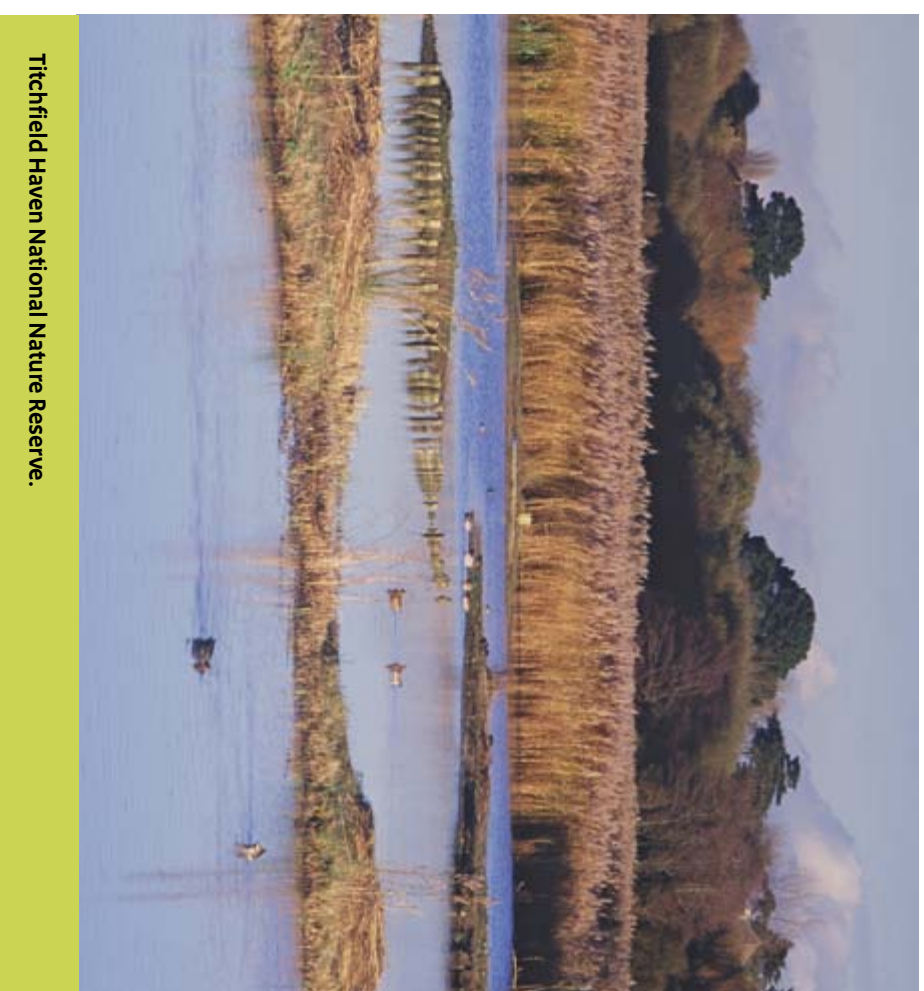
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geese and dunlin. There are also two SAC – Solent Maritime and Solent and Isle of Wight Lagoons. Along the coastline itself, the vegetation is typified by a scant covering of low-growing, often mat-forming, specialised plants which can tolerate the saline conditions and mineral substrate. On the newly formed ground of the mudflats in the inlets, pioneering intertidal marsh communities have colonised and these demonstrate a well-defined succession of plant types and species towards the land.

The long history of intervention to reduce the risk of flooding and erosion means that the shoreline is generally in a highly modified form and realignment schemes protect the coast, including the country's first managed realignment on the open coast at Medmerry.

Generally the impression is of an overwhelmingly urban landscape, dominated by the Portsmouth conurbation, the city of Chichester and suburban villages, including a few traditional flint hamlets and farm buildings and fragmented by trunk roads and infrastructure. The west is dominated by historic fortifications and marine infrastructure from all periods, reflecting the enduring importance of Portsmouth as the home of the Royal Navy. Portsmouth Harbour has a heavily developed shoreline with docks and associated industrial development dominating the landscape. East along the coast, extensive seaside towns form one of the most concentrated stretches of shoreline ribbon development in Britain. Each coastal town or village has developed almost to the high water mark and there are also caravan parks between some settlements. The harbours and the Manhood Peninsula are the only relatively undeveloped sections. Picturesque harbourside settlements are typically clustered around small boatyards and marinas while moored sailing boats dot the harbour edge. Some inlets, such as Pagham Harbour, still retain an overriding sense of remoteness contrasting with Portsmouth Harbour and the bustling Solent, constantly busy with sailing boats, cross-channel ferries and naval warships and the influence of seaside activities and recreational sailing all along the coast.



Titchfield Haven National Nature Reserve.

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The landscape through time

Structurally, the South Coast Plain is part of the larger Hampshire Basin formed when the underlying chalk rocks were folded and faulted by the Alpine Orogeny (mountain-building episode) approximately 15 million years ago. The landform is dominated by the low relief of Tertiary sands, silts and clays that overlie the chalk. An initial fall in sea level, approximately 54–51 million years ago, saw the deposition of the Lambeth Group sands and clays. These are exposed on the shore at Felpham, east of Bognor Regis, and contain a unique diversity of fossil flora. A rise in sea level led to the deposition of the London Clay, a sequence of dark marine clays rich in fossil plants typical of a subtropical rainforest, yielding many type specimens of fossil birds, insects, fish and plants, particularly at Bognor Reef. The overlying Bracklesham Group of sediments were then deposited in alternating intertidal and offshore environments.

Earth movements, associated with the Alpine Orogeny, folded this sequence of rocks, producing the Littlehampton chalk ridge and a parallel ridge to the south, remnants of which now form the Isle of Wight chalk downs. The ancient Solent River flowed between these two ridges until rising sea levels eventually isolated the Isle of Wight from the mainland. Terrace gravels marking the historic shore of the Solent River contain vertebrate remains associated with warmer phases between ice ages, known as interglacials, during the Pleistocene Period 350,000–125,000 years ago. These gravels – exposed on the coast at Lee-on-the-Solent, Bracklesham Bay and Selsey – contain important Pleistocene vertebrate remains and Palaeolithic artefacts. The remains of a nomadic hunter-gatherer ('Boxgrove Man') found in the gravel deposits of a raised beach represent the earliest known human occupation of the British Isles.

The sand and shingle beaches have been shaped by successive processes of erosion and deposition since the last major change in sea level, forming spits across river mouths and inlets.

Neolithic clearance of woodland first opened up the landscape to allow farming of the fertile soils and evidence shows continuous and increasing occupation during the Bronze and Iron ages. The Romans established Chichester as an important new market town and military centre within 20 years of invading, and evidence of continued occupation is reflected by the Roman Palace at Fishbourne, villa and farmstead sites, a temple on Hayling Island and Portchester Castle, developed as one of the Saxon Shore forts.

The coastal plain continued to be densely settled in the Saxon and medieval periods as market towns increased. Some Saxon towns such as Littlehampton developed detached ports. Important examples of Anglo-Saxon architecture survive at sites such as Titchfield Church. In the west, distinctly urban settlements developed during the medieval period. Richard I ordered the construction of a dockyard at Portsmouth and granted the town its first charter in 1194. Havant, Emsworth, Fareham, Gosport and Titchfield developed into market towns and a string of fishing villages developed along the coast.

Portsmouth's strategic location on the south coast of England, protected by the natural defence of the Isle of Wight, made it an ideal base for England's (and later Britain's) Navy. Defensive structures were built to protect the area from the 14th century onwards in response to French raids. Most visible is the 19th-century ring of forts that extend onto Portsdown in the South Hampshire Lowlands NCA. Non-military operation – such as passenger

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steamers, fishing and recreational sailing – also flourished, and maritime and associated industries continue to dominate the landscape and economy.

The coastal plain's fertile soils, along with grazing on the adjacent Downs and timber and stock rearing on the Weald, allowed the economy to diversify and the number of market towns to expand.

The agriculture of the area was stimulated by demand from the dockyard and its victualling yard at Gosport, a town which also developed around its military barracks, hospitals and ordnance depots. The area was also important for market gardening. Soft fruits have been harvested in the Hamble Valley for over 150 years, giving it the title of the 'Strawberry Coast'.

The thin, stony soils suited shallow-rooted strawberries and the warm prevailing wind coming over the Solent reduced the risk of early frosts.

Railways enabled fruit to be delivered across the country on 'strawberry specials' from the mid 1800s.

The coast continued to be of strategic importance during the 20th century. Fortifications were increased during both the First and Second World Wars, such as anti-tank beach block defences at Eastney and pillboxes. Military air bases were established in the First World War and played a significant role in national defence during the Second World War, for example the Battle of Britain airfield at Tangmere, now marked by its control tower and museum. Portsmouth remains the home of the Royal Navy and its historic dockyard and attractions such as HMS Victory and the Mary Rose entice thousands of visitors to the area every year.

This is an area of competing pressures for land. The rich arable lands combined with access to local urban markets and London allowed many farmers to re-build their farmsteads, particularly in the 18th and 19th centuries. As a result there are very few pre-1750 farm buildings. During the 19th and 20th centuries, medieval towns expanded to the extent that few areas of countryside remain near the Hampshire coast. To the east, development of seaside resorts also resulted in the spread of urban areas such as Worthing, particularly after the coming of the railways in the 19th century. The depression of the interwar years, disease, higher wages for agricultural workers and competition from abroad forced many fruit growers out of business during the 20th century, while cheap imports and improved storage and transportation systems also led to a decline in local cereal production and sheep grazing. By the 1980s much of the land previously covered by the vast strawberry fields was developed for housing.

The high rate of urbanisation, coupled with a continued reduction of agriculture and grasslands and combined with coastal squeeze, has led to increasing fragmentation of semi-natural habitats. Farlington Marshes, for example, is surrounded by motorways and housing on three sides while threatened by the rising sea on the other.

In 2005, the 170-metre Spinnaker Tower opened as part of the redevelopment of Portsmouth Harbour. It is visible from miles around, including from the Manhood Peninsula and Isle of Wight.

Realignment schemes, such as at Medmerry and Cobnor Point, continue to alter the coastline and provide opportunities for habitat creation and recreational provision as well as flood protection.

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Ecosystem services

The South Coast Plain NCA provides a wide range of benefits to society. Each is derived from the attributes and processes within the area. These benefits are known collectively as ‘ecosystem services’. The predominant services are summarised below. Further information on ecosystem services provided in the South Coast Plain NCA is contained in the ‘Analysis’ section of this document.

Provisioning services (food, fibre and water supply)

- **Food provision:** The fertile soils of the lower plain support intensive arable farming and horticulture, with some dairy, beef and poultry. Permanent grassland is a feature of the poorer quality land. Mixed farming occurs on the thicker gravel deposits.

Fish are an important food source. Shellfish are harvested from the harbour areas and fish landed from the open sea. During the oyster fishing season of 2012/13, 60 tons of oysters were harvested from Chichester Harbour.⁴ The harbours are also vital nursery areas for species including bass, bream, mullet, sole and plaice.

- **Water availability:** Public water supply relies on surface water abstraction and groundwater from the Lower Greensand aquifer and the Worthing and Chichester chalk blocks. Water supply is under pressure throughout the area.

- **Genetic diversity:** The Home Farm of the Goodwood Estate favours rare breeds such as pedigree Southdown sheep, continuing a tradition long held by the dukes of Richmond.

⁴ Sussex Inshore Fisheries and Conservation Authority (URL: www.sussex-ifca.gov.uk/)

Regulating services (water purification, air quality maintenance and climate regulation)

- **Climate regulation:** The soils in this NCA predominantly have low levels of soil carbon (0–5 per cent). However, there are some very small patches, in the west, that reach carbon levels of up to 20–50 per cent. The relatively large areas of flood plain grazing marsh have additional locked-up carbon stores, as do the small areas of woodland.

- **Regulating soil erosion:** Lighter soils make up just under half of the NCA and exposed soils are at risk of erosion on sloping land, exacerbated where organic matter levels are low after continuous arable cultivation or where soils are compacted. Sand dune soils are very unstable, with the extent of erosion depending on the degree to which vegetation has stabilised the dune system.

- **Regulating water quality:** There are three main sources of groundwater pollution within the NCA – agricultural activities, saline intrusion and urban-related activities such as sewage leakage, road run-off and weed control. All the area’s rivers are subject to diffuse pollution arising from outside the NCA, including the catchment of Chichester and Pagham harbours, which is of particular concern given their international designations. There are a number of ongoing initiatives to improve water quality in this area.⁵

- **Regulating water flow:** Much of the flood storage capacity has been lost through drainage of marshlands and conversion to intensive agriculture or development both within and upstream of this NCA, particularly affecting the Arun’s wide flood plain. Many settlements within the NCA are protected by flood banks.

⁵ Downs and Harbours Clean Water Partnership (www.cleanwaterpartnership.co.uk/here.html)

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Policies to reduce flood risk include the storage of water within the Adur catchment on the South Downs (outside this NCA), as well as encouraging the creation of sustainable urban drainage systems and the River Lavant Flood Alleviation Scheme.

- **Pollination:** Nearly 2,000 ha of grassland provides important sources of nectar for pollinating insects, along with hedges, which are vital for the success of many of the area's horticultural crops.

- **Regulating coastal flooding and erosion:** Large lengths of this complex stretch of coastline are in an unnatural form. Much of the coastal frontage has been developed so only limited sections of the shoreline are free to erode naturally, meaning little sediment material goes into the coastal system. As a result of higher water levels, 'coastal squeeze' will occur. This will lead to beaches, intertidal areas and amenity value being reduced or lost. Defences are in place to protect the vulnerable clay headland of Selsey Bill from erosion though not necessarily trying to lock the feature into its present size, shape and orientation.

Reclamation of former coastal lowland for development has produced many areas where the shoreline is artificially seaward of its natural position. Rising sea levels will increase the probability of flooding for low-lying areas. The relevant Shoreline Management Plans are pursuing an overall policy of 'holding the line' and 'managed realignment' such as at the scheme at Medmerry which was the first of its kind on the open coast.

Cultural services (inspiration, education and wellbeing)

- **Sense of place/inspiration:** Views of the sea and maritime and seaside influences generally have inspired artists from Oscar Wilde to Eric Coates, who was inspired to write 'Sleepy Lagoon' (the theme tune for BBC Radio 4's Desert Island Discs) while watching the sea from Selsey.



Sea wall at Southsea, Portsmouth.

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■ **Sense of history:** The area is rich in historical evidence from all ages including the internationally important Fishbourne Roman Palace. Chichester has enjoyed continuous occupation since it was founded by the Romans as Noviomagus Reginorum, and is dominated by its medieval cathedral, described by Pevsner as ‘the most typical English cathedral’.⁶ The area has a long history of maritime activity. Portsmouth’s historic dockyard, with attractions including Nelson’s flagship HMS Victory and the Mary Rose, entices thousands of visitors to the area every year. Further east, a string of fishing villages grew into popular seaside towns from the Georgian period and include Bognor Regis, Littlehampton and Worthing.

■ **Tranquillity:** Tranquillity is a scarce but greatly prized resource within this heavily urbanised NCA. Only 7 per cent of area is classed as undisturbed, while 35 per cent of the area is classified as urban. Pockets of tranquillity are associated with the central rural areas, the Manhood Peninsula and undeveloped harbours, including Chichester Harbour AONB.

■ **Recreation:** Coastal and water-borne activities are popular in this NCA and are an important contributor to the local economy. Chichester Harbour alone has over 5,200 moorings and marina berths and 16 sailing clubs. Chichester Harbour AONB has approximately 1.5 million visitors each year. Walkers, cyclists, artists and birdwatchers all enjoy the area. Many just sit and enjoy the view. East Head is one of the most popular recreation sites in the South East. Along the coast, tourism is also vital to the economies of seaside towns such as Worthing and Littlehampton.

⁶ The Buildings of England: Sussex, N Pevsner and I Naim (1965)

■ **Biodiversity:** Three per cent (1,700 ha) of the area is designated as Sites of Special Scientific Interest (SSSI) and there are four Special Protection Areas (SPA, two Special Areas of Conservation (SAC and four Ramsar sites. Priority habitats include around 2,000 ha of coastal and flood plain grazing marsh and 1,000 ha of reedbeds.

Chichester Harbour has been designated as a wetland of international importance under the Ramsar Convention (1971) as it regularly holds 20,000 or more wildfowl and waders in winter. It has the third largest population of dark-bellied Brent goose in the country⁷ and supports internationally important populations of dunlin and black-tailed godwit. It also has a small resident harbour seal population. Pagham, Langstone and Portsmouth harbours also have wildfowl numbers of national or international importance and the whole area is important for breeding terns.

A survey of the fish population of Chichester Harbour carried out in 2004 by the University of Portsmouth recorded 32 species, with sand goby, painted goby and black bream the most abundant. Also numerous at some sites were bass, ballan wrasse and corkwing wrasse. Twenty-two species were identified in 2012. The harbours are also vital nursery areas for species such as bass, bream, mullet, sole and plaice which make use of the seagrass beds.

■ **Geodiversity:** This NCA includes the site of the remains of Homo heidelbergensis, the world-famous ‘Boxgrove Man’, found in river gravels overlying chalk in a gravel pit just outside Chichester. Terrace gravels marking the historic shore of the Solent River contain important Pleistocene vertebrate remains and Palaeolithic (Early Stone Age) artefacts.

⁷ Wetland Bird Survey data (URL: www.bto.org/volunteer-surveys/webs/data)

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Statements of Environmental Opportunity

SEO 1: Plan for and manage the effects of coastal change by allowing the operation of natural coastal processes and improving the sustainability of current management practices along the diverse coastline to successfully integrate the needs of the natural environment, landscape, local communities, agriculture and recreation amid significant urban stretches.

For example, by:

- Supporting the adaptability of coastal features and habitats to sea level rise and enhancing/creating opportunities for natural adaptation and/or migration where appropriate, to aid the long-term alleviation of coastal flooding in accordance with the strategies of the Shoreline Management Plans.⁸
- Conserving coastal geomorphological features (and the natural processes needed to sustain them).
- Enhancing the area's internationally important natural coastal landscapes, namely Chichester and Langstone harbours, Pagham Harbour, Solent and Southampton Water, and Portsmouth Harbour Special Areas of Protection (SPA), significantly restoring and expanding their coastal habitats – including intertidal mudflats, coastal salt marsh, saline lagoons and coastal grazing marsh – to improve resilience to climate change while aiding flood alleviation and contributing significantly to biodiversity.
- Where existing flood defences are reinforced, working with partners to limit adverse impacts on biodiversity, public access and historic interest.
- Maintaining sites of geomorphological importance and coastal exposures of Lower Tertiary deposits with diverse fossil assemblages, such as at Felpham, Bognor Reef and Bracklesham Bay.
- Identifying further opportunities to create compensation habitats for those lost to 'coastal squeeze', aiming to ensure no net loss of habitat, benefiting biodiversity and the regulation of coastal erosion and flooding.
- Working in partnership to monitor the impact of erosion, particularly at East Head, and responding to change, for example by developing a strategy for managing coastal footpaths at risk from rising sea levels and failing sea defences.
- Promoting access opportunities which educate people about the vulnerability of the coastal habitats in the National Character Area (NCA) and encourage visits of a low-impact nature that avoid any adverse impacts on agricultural management, landscape, habitats and wildlife.
- Improving access to the coast for walking, cycling and disabled people and encouraging reduced car use; and securing opportunities for the public to enjoy the natural environment through the implementation of the England Coast Path while ensuring appropriate protection of sensitive sites.

⁸ South East Coastal Group Shoreline Management Plans (URL: www.se-coastalgroup.org.uk/bh-to-sb-2006/), North Solent Shoreline Management Plan (URL: www.northsolentsmp.co.uk/index.cfm?articleid=6554&articleaction=nthslnt&CFID=8104695&CFTOKEN=57030621)

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SEO 2: Plan for the creation of a strong landscape framework within and around major settlements and identified growth areas, while managing and enhancing existing greenspace and access, and balancing the needs of agriculture, communities and the natural environment.

For example, by:

- Developing a comprehensive framework of green infrastructure throughout the NCA and the creation/improvement of other green spaces that link into the heart of urban areas and contribute to urban greening, meeting Accessible Natural Green Space Standards (ANGS⁹) where possible.
- Working in partnership with local authorities to develop effective solutions to address negative impacts of recreational pressure on bird populations as identified by the Solent Disturbance and Mitigation Project.⁹
- Seeking potential compensation sites and ensuring that adequate mitigation is provided for development that will cause significant adverse impact upon the area's internationally important bird populations.
- Ensuring that all coastal development and access provision respects the area's particular sensitivity to bird disturbance issues.
- Creating new areas of multifunctional greenspace within and surrounding identified growth areas, including community food gardens and significant areas of new saline and freshwater wetlands forming sustainable urban drainage systems to improve water quality, provide a local recreational resource, enhance landscape setting and aid flood alleviation.
- Working with local groups such as the Local Enterprise Partnerships, Local Nature Partnerships, Chichester Harbour Conservancy, Local planning authorities and individual businesses to take a strategic view of commercial opportunities that can be delivered in a way that supports the natural environment.
- Engaging early in the scoping of new developments to ensure that they maximise their contribution to sustainable development.
- Seeking to maintain and enhance areas of open countryside in this heavily urbanised NCA, to preserve the distinct settlement pattern and ensure that local communities have access to greenspace for their wellbeing and enjoyment.
- Encouraging a strategic approach to the planning of land use around Chichester and Langstone harbours and the Manhood Peninsula to address the pressures of climate change and development, ensuring that natural processes continue to function and the comparatively wild and tranquil character is retained.
- Ensuring that development and its associated infrastructure (including light, noise and air pollution) does not intrude on the special qualities of Chichester Harbour Area of Outstanding Natural Beauty (AONB) and the South Downs National Park; and ensuring that the landscape character within these areas and their settings is conserved, restored, reinforced or created as appropriate to reflect the ambitions of their respective management plans.
- Promoting and enhancing the rights of way network throughout the area, especially along the coast and linking to the South Downs, while developing new permissive access that links towns and settlements to quality greenspace and other areas of interest as part of a cohesive network of inspiring access provision for all.

⁹ Solent Disturbance and Mitigation Project (URL: www.solentforum.org/forum/sub_groups/Natural_Environment_Group/Disturbance_and_Mitigation_Project/)

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SEO 3: Manage and significantly enhance the area's rivers and chalk streams and their wetland valley habitats to provide resilience against climate change and improve flood protection and water quality, particularly in the internationally designated sites such as Chichester and Pagham harbours, for the benefit of local communities and wildlife.

For example, by:

- Working with the Solent Water Quality Association and other partners to achieve the highest water quality and the aims of the Water Framework Directive.
- Promoting the installation of holding tanks for recreational vessels and seeking to provide the necessary infrastructure to pump out holding tanks; ensuring that there are adequate reception facilities for vessel-landed waste and maintaining a Maritime and Coastguard Agency-compliant Port Waste Management Plan.
- Reducing the amount of nutrients entering the harbours from domestic and industrial sources by engaging with the planning process to ensure that new developments incorporate the best possible waste reduction measures, including sustainable urban drainage systems.
- Reducing the amount of nutrients entering the harbours from agricultural sources by continuing with catchment initiatives that engage with and challenge farmers to reduce nutrient leaching, pesticide contamination and soil erosion, especially by establishing buffers of permanent grassland alongside watercourses.
- Seeking opportunities to increase capacity and improve the level of treatment for waste water treatment works discharging into the harbours.
- Expanding and re-linking lowland meadows, flood plain grazing marsh, saline lagoons and other wetland habitats found on the flood plains of the rivers Meon, Adur and Arun and the chalk streams, to enhance adaptation to climate change, increase flood storage capacity, improve water quality and provide wildlife corridors for biodiversity.
- Seeking opportunities to restore natural river geomorphology, bringing rivers back into continuity with their flood plains and re-creating backwaters as a refuge for aquatic species in times of drought.
- Creating wide grassland buffer strips running across slopes and alongside watercourses in areas of arable production, especially within the Arun priority catchment, to provide a buffer to soil erosion and nutrient run-off thereby helping to improve river water quality.
- Minimising the risk of spreading non-native invasive species to new sites through human activity, for example by promotion of the Check, Clean, Dry' campaign¹⁰ and working with partners to co-ordinate and promote control measures for non-native invasive species.
- Working to improve and protect the area's chalk streams, for example by reviewing ecological designations and expanding areas of semi-natural habitat in chalk stream flood plains, within the NCA and upsteam. This will to act as pollution filtration while also providing biodiversity benefits and information about chalk stream ecology and the negative impacts of unsustainable water use.

¹⁰ The Check, Clean Dry campaign, Environment Agency (URL: <http://www.environment-agency.gov.uk/homeandleisure/wildlife/129217.aspx>)

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- Targeted expansion of woodland on steeper slopes and adjacent to watercourses to reduce soil erosion, especially within the catchments of the Arun and Meon and the Pagham and Chichester harbours, which may also provide a local source of wood fuel where managed by coppicing.
- Restoring hedgerow boundaries, where they will help to impede cross-land flows within the catchments of the Arun and Meon. This will aid improvements in water quality and provide food sources for pollinating insects, as well as restoring the character of native hedgerows and traditional field patterns – especially where lost in peri-urban areas.
- Seeking appropriate levels of commercial use of the harbours, balancing the need to maintain a vigorous tourism industry with preserving the natural beauty and ecology of the areas; working with partners to educate groups using the water bodies on the needs of others and to give guidance on behaviour and good practice; and supporting changes which encourage users to enjoy congested areas such as Chichester Harbour outside peak times.
- Engaging with local communities and schools to increase appreciation and understanding of their local rivers and water resources.



Portsmouth Harbour and Spinnaker Tower.

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SEO 4: Manage the rich archaeological and historic resource and geological exposures within the farmed, coastal and peri-urban landscape, including the longstanding associations of horticultural and maritime industries and the military, enhancing a strong sense of place.

For example, by:

- Promoting the heritage of the urban areas, including the strong maritime and military associations; and engaging communities with their local history and strengthening the physical links with the important historic landscapes that surround them.
 - Promoting and protecting the historic environment along the coast – notably Portchester Castle and military remains, including the Napoleonic coastal fortification – and recording heritage features at risk of sea level rise.
 - Providing educational opportunities and interpretation of historic and geological features to improve understanding and enjoyment.
 - Restoring the traditional field patterns of the rural peninsulas, such as Chichester Harbour AONB and the Manhood Peninsula, through the replacement of lost hedgerows and improvement in the condition of existing hedgerows through replanting gaps.
 - Supporting the use of traditional breeds and varieties to provide distinct quality produce to encourage marketing initiatives.
 - Working with partners and local interest groups to promote an appreciation and understanding of the geodiversity of the NCA and connecting communities with their local heritage.
- Considering reversion of arable to pasture and scrub clearance where current land cover threatens the integrity of earthworks and monuments, including numerous Roman and medieval remains.
 - Maintaining the setting of the cathedral city of Chichester and long views to its prominent cathedral spire, viewed from the Chichester Harbour AONB to the south and the South Downs National Park to the north, and wider views out over the sea.
 - Maintaining important inland geology exposed in pits and quarries, for example Downend Chalk Pit Site of Special Scientific Interest, helping to promote an appreciation and understanding of the geodiversity of the NCA and connecting communities with their local heritage.
 - Encouraging the use of traditional building materials (such as timber frame, flint, cob and thatch) in conservation projects and promoting the use of the Chichester Harbour AONB design guidance for replacement dwellings in the AONB.
 - Supporting the work of partners including Chichester Harbour Conservancy and environmental education groups to establish closer links between the education service and the local farming community, sustainable schools, healthy eating programmes and community services.

Supporting document 1: Key facts and data

South Coast Plain National Character Area (NCA): 52,245 ha

1. Landscape and nature conservation designations

Eight per cent (4,186 ha) of the NCA falls within the Chichester Harbour Area of Outstanding Natural Beauty (AONB).

- www.conservancy.co.uk

Source: Natural England (2011)

1.1 Designated nature conservation sites

The NCA includes the following statutory nature conservation designations:

Tier	Designation	Designated site(s)	Area (ha)	% of NCA
International	Ramsar sites	Chichester and Langstone Harbours; Pagham Harbour; Solent and Southampton Water; Portsmouth Harbour	1,288	2
European	Special Protection Area (SPA)	Chichester and Langstone Harbours SPA; Pagham Harbour SPA; Solent and Southampton Water SPA; Portsmouth Harbour SPA	1,271	2
		Solent Maritime SAC; Solent and Isle of Wight Lagoons SAC	238	<1
National	National Nature Reserve (NNR)	Trichfield Haven NNR	120	<1
National	Site of Special Scientific Interest (SSSI)	A total of 22 sites wholly or partly within the NCA	1,688	3

Source: Natural England (2011)

Please note: (i) Designated areas may overlap (ii) all figures are cut to Mean High Water Line, designations that span coastal areas/Views below this line will not be included.

There are 253 local sites in South Coast Plain covering 2,827 ha, which is 5 per cent of the NCA.

Source: Natural England (2011)

- Details of individual Sites of Special Scientific Interest can be searched at: <http://www.sssi.naturalengland.org.uk/Special/sssi/search.cfm>
- Details of Local Nature Reserves (LNR) can be searched at: http://www.lnr.naturalengland.org.uk/Special/Lnr/Lnr_search.asp
- Maps showing locations of Statutory sites can be found at: <http://magic.defra.gov.uk/website/magic/> – select 'Rural Designations Statutory'

1.1.1 Condition of designated sites

Condition category	Area (ha)	% of SSSI land in category condition
Unfavourable declining	65	4
Favourable	1,056	63
Unfavourable no change	73	4
Unfavourable recovering	476	29

Source: Natural England (March 2011)

- Details of SSSI condition can be searched at: <http://www.sssi.naturalengland.org.uk/Special/sssi/reportIndex.cfm>

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2. Landform, geology and soils

2.1 Elevation

Elevation ranges from below sea level (areas by the coast) to a maximum of 99 m across the plain slopes. The average elevation of the landscape is 12 m above sea level.

Source: [Natural England 2010, South Coast Plain Countryside Character Area description](#)

2.2 Landform and process

Landform is dominated by the low relief of Tertiary sands, silts and clays that overlie the Chalk. The east-west fold of Chalk known as the Littlehampton anticline forms an isolated ridge to the north of Portsmouth known as Portsdown Hill. This rises from near sea level to over 100 m and creates a dramatic backdrop to Portsmouth Harbour.

Source: [South Coast Plain Countryside Character Area description](#)

2.3 Bedrock geology

Structurally, the South Coast Plain is part of the larger Hampshire Basin which was formed when the underlying chalk rocks were folded and faulted by the Alpine Orogeny (mountain-building episode). The Littlehampton anticline, an east-west fold of chalk, forms an isolated ridge called Portsdown Hill to the north of Portsmouth.

During the Tertiary, sediments of the Thanet Sands Formation and Lambeth Group sands and clays were deposited onto the Chalk in a shallow marine setting. As sea levels rose and the sea deepened, the fossiliferous London Clay was laid down. Subsequently, as the sea became shallower again, the Bracklesham Group of clays, silts and sands were deposited in an intertidal

and offshore environment on a large coastal plain. Bracklesham Bay is the type locality for these deposits, and together with the foreshore deposits of this type near Gosport they have yielded fossil fish, bird and plant remains.

Source: [South Coast Plain and Hampshire Lowlands Natural Area Profile, South Coast Plain Countryside Character Area description, British Geological Survey maps](#)

2.4 Superficial deposits

Terrace gravels marking the historic shore of the Solent River contain vertebrate remains associated with warmer phases between ice ages, known as interglacials, during the Pleistocene period, 350,000 to 125,000 years ago. These gravels, exposed on the coast at Lee-on-the-Solent, Bracklesham Bay and Selsey contain important Pleistocene vertebrate remains and Palaeolithic (Early Stone Age) artefacts.

The entrances to Chichester, Langstone and Pagham Harbours and the Hamble estuary are guarded by classic sand dune and shingle spit features. At Browndown, west of Gosport, and at other points along the coast, shingle deposits form well developed shingle features, those at Browndown showing clearly defined apposition ridges that have been deposited over many centuries. Further sand dune formations occur at Climping, west of Bognor Regis, where the dunes have formed at the mouth of the River Arun. The estuaries within the area also contain many important examples of salt marshes of differing age and state of evolution. The area provides classic examples of coastal features and valuable opportunities to study modern coastal processes at work.

Source: [South Coast Plain and Hampshire Lowlands Natural Area Profile, South Coast Plain Countryside Character Area description, British Geological Survey maps](#)

2.5 Designated geological sites

Designation	Number
Geological Site of Special Scientific Interest (SSSI)	5
Mixed interest SSSI	4

There are no Local Geological Sites within the NCA

- Details of individual Sites of Special Scientific Interest can be searched at: <http://www.sssi.naturalengland.org.uk/Special/sssi/search.cfm>



Chichester Harbour AONB.

2.6 Soils and Agricultural Land Classification

Over the superficial gravel lie deep and well-drained brown earths which occur widely over much of the area. Chalky thinner soils have formed over the chalk outlier of Highdown Hill. The range of fertile soils throughout the area combined with the flat terrain and favourable climatic conditions result in high quality agricultural land. Grade 1 land is found predominantly through a central strip, east of Chichester Harbour. Grade 2 is found predominantly east of Chichester Harbour. Grade 3 and 4 land is found in patches mainly to the east of the NCA.

Source: **South Coast Plain and Hampshire Lowlands Natural Area Profile, South Coast Plain Countryside Character Area description**

The main grades of agricultural land in the NCA are broken down as follows (as a proportion of total land area):

Agricultural Land Classification	Area (ha)	% of NCA
Grade 1	6,911	13
Grade 2	12,832	25
Grade 3	10,798	21
Grade 4	1,866	4
Grade 5	40	<1
Non-agricultural	3,781	7
Urban	15,370	29

Source: Natural England (2010)

- Maps showing locations of statutory sites can be found at: <http://magic.defra.gov.uk/website/magic/> - Select 'Landscape' (shows ALC and 27 types of soils)

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3. Key water bodies and catchments

3.1 Major rivers/canals

The following major rivers/canals (by length) have been identified in this NCA.

Name	Length in NCA (km)
Chichester Canal	6
River Arun	3
River Meon	6

Source: Natural England (2010)

Please note: other significant rivers (by volume) may also occur. These are not listed where the length within the NCA is short.

The rivers crossing the plain locally form wide alluvial flood plains.

Southward facing streams, that are locally referred to as 'rifes', cut through the lower plain. Flooded gravel pits comprise some of the largest areas of freshwater in the region.

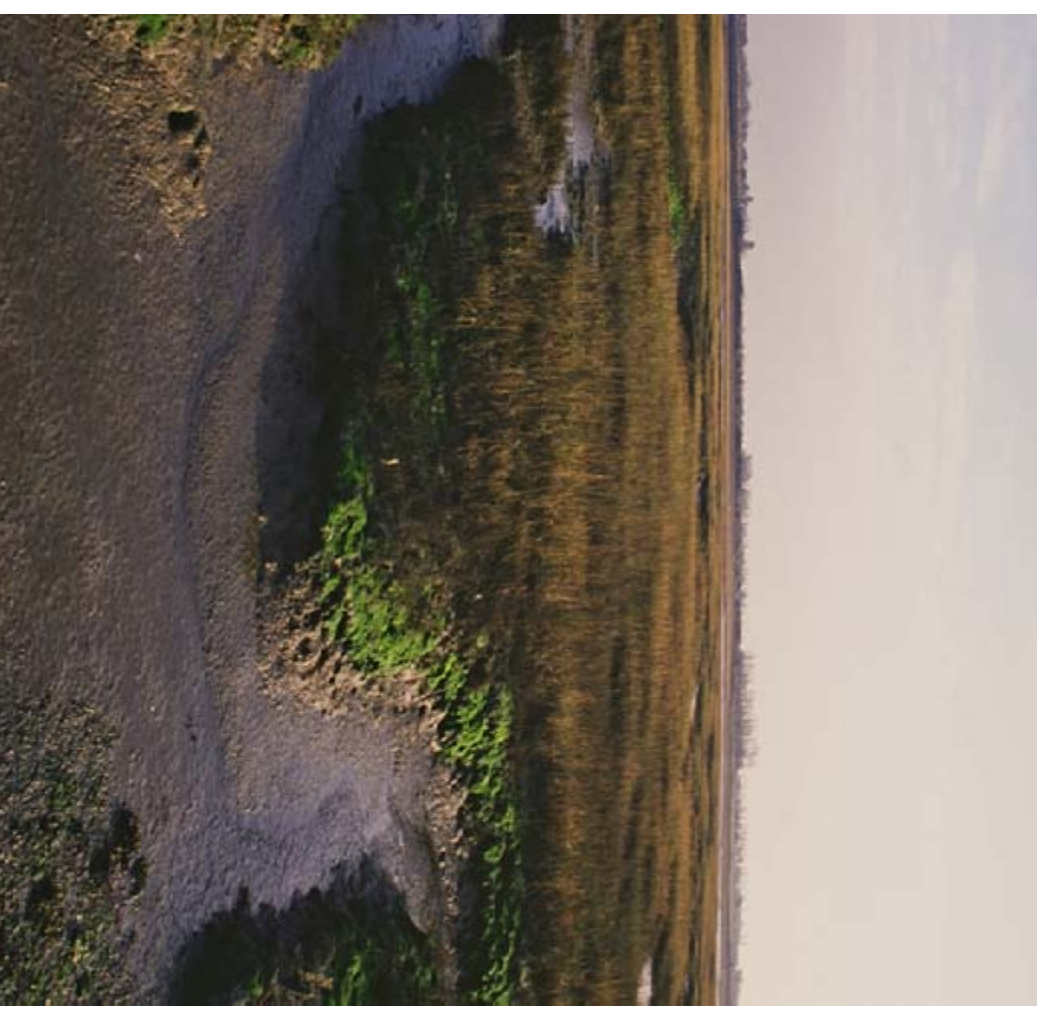
3.2 Water quality

The total area of Nitrate Vulnerable Zone is 37,784 ha, or 72 per cent of the NCA.

Source: Natural England (2010)

3.3 Water Framework Directive

Maps are available from the Environment Agency showing current and projected future status of water bodies at: http://maps.environment-agency.gov.uk/wiyby/wiybyController?ep=maptopics&lang=_e



Saltmarsh at East Head.

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4. Trees and woodlands

4.1 Total woodland cover

The NCA contains 2,633 ha of woodland (where woodlands are over 2 ha in size), covering 5 per cent of the NCA and including 780 ha of ancient woodland.

Source: Natural England (2010), Forestry Commission (2011)

4.2 Distribution and size of woodland and trees in the landscape

There is a strong network of small and medium sized broadleaf woodlands throughout the upper coastal plain. The landscape pattern comprises some ancient woodland, coniferous plantations and small fields, hedgerows and woods. In contrast, the lower coastal plain is relatively treeless and entails a typically homogenous landscape of large fields with few hedgerows or trees. Small areas of wind-sculpted woodland persist on some coastal fringes, particularly around the sheltered inlets.

Source: Natural England (2010)

4.3 Woodland types

A statistical breakdown of the area and type of woodland found across the NCA is detailed below.

Area and proportion of different woodland types in the NCA (over 2 ha).

Woodland type	Area (ha)	% of NCA
Broadleaved	2,241	4
Coniferous	139	<1
Mixed	68	<1
Other	185	<1

Source: Forestry Commission (2011)

Area and proportion of Ancient Woodland and Planted Ancient Woodland within the NCA:

Type	Area (ha)	% of NCA
Ancient semi-natural woodland	620	1
Ancient re-planted woodland (PAWS)	160	<1

Source: Natural England (2004)

5. Boundary features and patterns

5.1 Boundary features

The lower coastal plain has few trees or hedgerows and drainage ditches, wire fences or low banks are more usual as field boundaries. In contrast the upper coastal plain is more wooded and well linked by hedgerows.

Source: South Coast Plain Countryside Character Area description; Countryside Quality

Counts (2003)

5.2 Field patterns

Fields throughout the lower coastal plain tend to be large and arable. In contrast, the upper coastal plain typically has smaller fields. The fields largely appear to have been created through a process of enclosure by agreement, with some small areas of more regular enclosure. Typically the fields surrounding settlements are small.

Source: South Coast Plain Countryside Character Area description; Countryside Quality

Counts (2003)

6. Agriculture

The following data has been taken from the Agricultural Census linked to this NCA.

6.1 Farm type

Horticulture is the most common farm type in terms of number of holdings (89), followed by cereals (73) and then grazing livestock (55). Between 2000 and 2009 horticulture lost the most number of holdings, falling by 73 holdings or 45 per cent. Both cereals and grazing livestock gained holdings, by 7 and 8 respectively. Most other farm types lost holdings, including mixed farms (9 holdings), general cropping (6) and dairy (2).

Source: Agricultural Census, Defra (2010)

6.2 Farm size

The small farm sizes are most numerous in terms of numbers of holdings, with 78 holdings under 5 ha and 97 holdings between 5 ha and 20 ha, although together these account for just 6 per cent of the farmed area. There are 67 holdings over 100 ha size, which by contrast make up 70 per cent of the farmed area. Farms under 5 ha declined dramatically, losing 74 holdings or around 50 per cent. Farms of over 100 ha also declined by 8 holdings. Farms sized between 20 ha and 50 ha gained the most number of holdings (18), while farms sized between 50 ha and 100 ha also increased by 10 holdings.

Source: Agricultural Census, Defra (2010)

6.3 Farm ownership

2009: Total farm area = 19,824 ha; owned land = 12,007 ha
2000: Total farm area = 22,194 ha; owned land = 14,292 ha

Source: Agricultural Census, Defra (2010)

6.4 Land use

Cereals and grassland dominate this area in roughly equal proportions, with cereals covering 6,950 ha (35 per cent of the farmed area) and grass and uncropped land covering 6,681 ha (34 per cent). Other arable crops cover 1,642 ha (8 per cent). There are also significant areas of vegetables (1,555 ha or 8 per cent) and oilseeds (1,433 ha or 7 per cent). The most significant change between 2000 and 2009 was the decline in cereals, which reduced by 2,506 ha or 26 per cent. Other arable crops also declined by 368 ha. Grass and uncropped land by contrast increased slightly by 274 ha, as did oilseeds which increased by 309 ha.

Source: Agricultural Census, Defra (2010)

6.5 Livestock numbers

Sheep are the most numerous of the livestock (7,100) followed by cattle (5,700) and then pigs (407). All types of livestock fell in numbers between 2000 and 2009, with pigs becoming near absent, falling by 10,500 or 96 per cent. Sheep numbers fell by 3,100 (30 per cent) and cattle numbers by 1,300 (18 per cent).

Source: Agricultural Census, Defra (2010)

6.6 Farm labour

The figures suggest that the majority of holdings are run by principal farmers (440) compared with salaried managers (228). There are more full-time workers (824) than part-time workers (157). There are also 1,050 casual/gang workers. Trends between 2000 and 2009 show a decrease in the number of principal farmers by 148 and an increase in salaried managers by 6. Full-time worker and part-time worker numbers both decreased (by 374 and 285 respectively), while the number of casual/gang workers remained roughly constant (increased by 8).

Source: Agricultural Census, Defra (2010)

Please note: (i) Some of the Census data is estimated by Defra so will not be accurate for every holding (ii) Data refers to Commercial Holdings only (iii) Data includes land outside of the NCA belonging to holdings whose centre point is within the NCA listed.

7. Key habitats and species

7.1 Habitat distribution/coverage

There is a scanty covering of low growing, saline tolerant plants along the coastline. Sand dunes and shingle beaches are found along the shoreline. The most extensive and well developed occur at the mouths of the main harbours such as shingle beaches at Pagham Harbour and sand dunes at East Head at the entrance of Chichester Harbour.

Saline lagoons are found in areas along the coast, including within Pagham Harbour, Birdham Pool in the north-eastern edge of Chichester Harbour and the entrance of Portsmouth Harbour. Salt marshes occur along the harbours and estuaries, particularly within Chichester Harbour. Scrub and small areas of wind-sculpted woodland occur on some coastal fringes. There are a small number of isolated coastal heaths and woodlands on the open plain. A network of broadleaved woodlands, including ancient woodland, is present in the upper coastal plain. Areas of medium quality agricultural land support good quality grassland such as in the Arun flood plain. In addition the NCA contains important arable habitats. These support nationally important assemblages of arable birds.

Source: South Coast Plain and Hampshire Lowlands Natural Area Profile

7.2 Priority habitats

The Government's new strategy for biodiversity in England, Biodiversity 2020, replaces the previous Biodiversity Action Plan (BAP) led approach. Priority habitats and species are identified in Biodiversity 2020, but references to BAP priority habitats and species, and previous national targets have been removed. Biodiversity Action Plans remain a useful source of guidance and information. More information about Biodiversity 2020 can be found at;

<http://www.naturalengland.org.uk/ourwork/conservation/biodiversity/protectandmanage/englandsbiodiversitystrategy2011.aspx>

The NCA contains the following areas of mapped priority habitats (as mapped by National Inventories). Footnotes denote local/expert interpretation. This will be used to inform future national inventory updates.

Priority habitat	Area (ha)	% of NCA
Coastal and flood plain grazing marsh	2,085	4
Broadleaved mixed and yew woodland (broad habitat)	1,462	3
Reedbeds	274	1
Lowland meadows	188	<1
Coastal vegetated shingle	122	<1
Coastal sand dunes	108	<1
Fens	98	<1
Saline lagoons	64	<1
Lowland dry acid grassland	64	<1
Mudflats	48	<1
Lowland heathland	45	<1
Lowland calcareous Grassland	38	<1
Purple moor grass and rush pastures	1	<1

Source: Natural England (2011)

Maps showing locations of priority habitats are available at

- <http://magic.defra.gov.uk/website/magic/> select 'Habitat Inventories'

7.3 Key species and assemblages of species

- Maps showing locations of priority habitats are available at: <http://magic.defra.gov.uk/website/magic/>
- Maps showing locations of 541 species are available at: <http://data.bn.org.uk/>

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8. Settlement and development patterns

8.1 Settlement pattern

The lower coastal plain is dominated by suburban villages and extensive seaside towns between Brighton and the edge of Southampton.

Smallholdings and bungalows are scattered along Southampton Water, but merge with the suburban outreaches of Fareham towards the Solent. East of Chichester numerous villages form a fairly continuous sprawl, including some farm buildings and traditional flint hamlets. Settlement is more dispersed to the north of the chalk dip slope.

Source: South Coast Plain Countryside Character Area description; Countryside Quality Counts (2003)

8.2 Main settlements

Main towns/cities within and adjacent to the NCA (with populations recorded in 2001) are; Southampton (304,400), Fareham/Portchester (56,160), Gosport (69,348), Havant (45,435), Portsmouth (187,056), Chichester (27,477), Bognor Regis (62,141), Littlehampton (55,716), Worthing (96,964), Brighton (134,293), and Hove (72,335). The total estimated population for this NCA (derived from ONS 2001 census data) is: 505,822.

Source: ONS 2001 Census, Natural England (2012)

8.3 Local vernacular and building materials

Building materials within the coastal margins traditionally reflect the proximity of the sea for importing raw materials, such as timber frames, thatch, flint and cob. Timber framing was widely used for houses until after the 17th century, after which brick was a more common option. The medieval churches around the harbours are made of flint and stone. Many of the villages have retained

their medieval core and are often arranged round a market or green area. The varied vernacular architecture reflects strong ties with its region.

Source: South Coast Plain Countryside Character Area description; Countryside Quality Counts (2003)



View of harbour and Old Portsmouth from fortifications.

9. Key historic sites and features

9.1 Origin of historic features

Evidence of Mesolithic people has been discovered from the mud of areas such as Langstone Harbour. Settlements, such as the palace at Fishbourne and civitas capital of Chichester, reflect that the coastal landscape was well occupied in the Roman period. There are still some existing examples of Anglo-Saxon work, such as in Portchester and Titchfield church. The strategic importance of the area has resulted in significant defence works along the coast. Portchester Castle dates from the Roman period but from the 14th century onwards measures to defend the important naval base of Portsmouth have been constructed, most visibly the 19th century rings of forts that extend onto Portsdown in the South Hampshire Lowlands character area. Other military features include several hospitals and First and Second World War airfields at Tangmere and Shoreham.

Source: [Countryside Quality Counts Draft Historic Profile](#), [Countryside Character Area description](#)

9.2 Designated historic assets

This NCA has the following historic designations:

- 10 Registered Parks and Gardens covering 427 ha
- No Registered Battlefields
- 99 Scheduled Monuments
- 3,619 Listed Buildings

Source: [Natural England \(2010\)](#)

- More information is available at the following address:
www.english-heritage.org.uk/caring/heritage-at-risk/
- www.english-heritage.org.uk/professional/protection/process/national-heritage-list-for-england/

10. Recreation and access

10.1 Public access

- Three per cent of the NCA ha is classified as being publically accessible.
- There are 673 km of public rights of way at a density of 1.3 km per km².
- There are no National Trails within the South Coast Plain NCA.

Source: [Natural England \(2010\)](#)

The following table shows the breakdown of land which is publically accessible in perpetuity:

Access designation	Area (ha)	% of NCA
National Trust (Accessible all year)	120	<1
Common Land	61	<1
Country Parks	83	<1
CROW Access Land (Section 4 and 16)	232	<1
CROW Section 15	95	<1
Village Greens	29	<1
Doorstep Greens	0	0
Forestry Commission Walkers Welcome Grants	629	1
Local Nature Reserves (LNR)	933	2
Millennium Greens	0	0
Accessible National Nature Reserves (NNR)	120	<1
Agrri-environment Scheme Access	0	0
Woods for People	416	<1

Sources: [Natural England \(2011\)](#)

Please note: **Common Land** refers to land included in the 1965 commons register; **CROW** = **Countryside and Rights of Way Act 2000**; **OC** and **RCL** = **Open Country and Registered Common Land**.

11. Experiential qualities

11.1 Tranquillity

Based on the CPRE map of tranquillity (2006) it appears that the lowest scores for tranquillity are associated with the major urban areas, particularly along the coast from Portsmouth and Southampton to Brighton. The highest scores for tranquillity are associated with land north of Selsey.

A breakdown of tranquillity values for this NCA are detailed in the table below:

Category of tranquillity	Score
Highest	35
Lowest	-105
Mean	-21

Sources: CPRE (2006)

More information is available at the following address: www.cpre.org.uk/what-we-do/countryside/tranquil-places/in-depth/item/1688-how-we-mapped-tranquillity

11.2 Intrusion

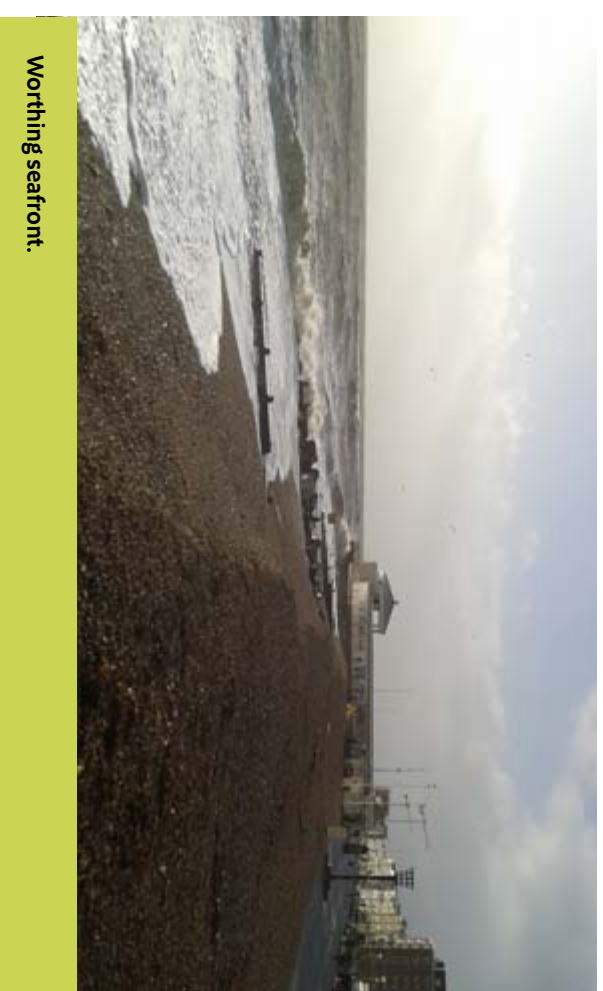
The 2007 Intrusion Map (CPRE) shows the extent to which rural landscapes are 'intruded on' from urban development, noise (primarily traffic noise), and other sources of visual and auditory intrusion. This shows that there is very little undisturbed land within the NCA as it covers the large urban areas of Southampton and Portsmouth and the arterial route of the A/M27 runs the length of it. A breakdown of intrusion values for this NCA is detailed in the following table:

Intrusion category	1960s (%)	1990s (%)	2007 (%)	Percentage change (1960s-2007)
Disturbed	44	58	58	14
Undisturbed	28	11	7	-21
Urban	23	24	35	12

Sources: CPRE (2007)

Notable trends from the 1960s to 2007 are the dramatic loss of undisturbed areas (a loss of 21 per cent).

- More information is available at the following address: www.cpre.org.uk/resources/countryside/tranquil-places



Worthing seafront.

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12. Data sources

- British Geological Survey (2006)
- Natural Area Profiles, Natural England (published by English Nature 1993-1998)
- Countryside Character Descriptions, Natural England (regional volumes published by Countryside Commission/Countryside Agency 1998/1999)
- Joint Character Area GIS boundaries, Natural England (data created 2001)
- National Parks and AONBs GIS boundaries, Natural England (2006)
- Heritage Coast Boundaries, Natural England (2006)
- Agricultural Census June Survey, Defra (2000,2009)
- National Forest Inventory, Forestry Commission (2011)
- Countryside Quality Counts Draft Historic Profiles, English Heritage (2004)*
- Ancient Woodland Inventory, Natural England (2003)
- Priority Habitats GIS data, Natural England (March 2011)
- Special Areas of Conservation data, Natural England (data accessed in March 2011)
- Special Protection Areas data, Natural England (data accessed in March 2011)
- Ramsar sites data, Natural England (data accessed in March 2011)
- Sites of Special Scientific Interest, Natural England (data accessed in March 2011)
- Detailed River Network, Environment Agency (2008)
- Source protection zones, Environment Agency (2005)
- Registered Common Land GIS data, Natural England (2004)
- Open Country GIS data, Natural England (2004)
- Public Rights of Way Density, Defra (2011)
- National Trails, Natural England (2006)
- National Tranquillity Mapping data, CPRE (2007)
- Intrusion map data, CPRE (2007)
- Registered Battlefields, English Heritage (2005)
- Record of Scheduled Monuments, English Heritage (2006)
- Registered Parks and Gardens, English Heritage (2006)
- World Heritage Sites, English Heritage (2006)
- Incorporates Historic Landscape Characterisation and work for preliminary Historic Farmstead Character Statements (English Heritage/Countryside Agency 2006)

Please note all figures contained within the report have been rounded to the nearest unit. For this reason proportion figures will not (in all) cases add up to 100 per cent. The convention <1 has been used to denote values less than a whole unit.

Supporting document 2: Landscape change

Recent changes and trends

Trees and woodlands

- An increase in Woodland Grant Schemes suggests that the character of the areas woodlands is probably being maintained. Both the restoration of existing woodlands and coppice management have been identified as being of high priority within the area, as well as the high potential for the creation of new woodlands.

- Dutch elm disease and storm events have also had a significant visual impact, with the loss of many of the characteristic, wind-shaped trees and woodlands.

Boundary features

- Between 1999 and 2003, Environmental Stewardship capital agreements for linear features included fencing (14 km), hedge management (4 km), hedge planting and restoration (21 km) and restored boundary protection (8 km). The estimated boundary length for the NCA is 1,347 km. Total length of agreements between 1999 and 2003 is equivalent to about 4 per cent of this total.

- By 2011 a further 200 km of hedges had been brought into management through Environmental Stewardship.

- Many hedgerows are in need of restoration.

Agriculture

- According to Countryside Quality Counts data there has been a continued reduction in agricultural area and extent of grasslands between 1990 and 2003 suggesting that the erosion of agricultural character (coupled with that of boundary features) was ongoing, albeit at a reduced rate.

- Hampshire Fare is a successful campaign championing local produce established in 1991.

- Goodwood Farm achieved full organic status in 2004, becoming the largest lowland organic farm in the UK.

- Uptake of agri-environment schemes has been good within the AONB since 2005 with 11 farms and 998 ha within Entry Level (including organic), five farms and 592 ha within the Higher Level tier (including organic) and 1,023 ha with older schemes such as Countryside Stewardship.

Settlement and development

- The area has a high rate of change to urban, with most of the larger settlements showing evidence of extension of urban and fringe into peri-urban. However, extent of new development beyond the peri-urban is limited and so overall character has probably been maintained.

- The South East Plan originally identified significant areas of growth throughout and surrounding the NCA.

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- The Solent Disturbance and Mitigation Project⁸ has produced evidence regarding visitor access patterns from current and future housing around the coast and how their activities and the distances and time for which different bird species respond to different activities.

- The realignment scheme at Medmerry will create footpaths, bridleways and viewpoints to enjoy, which will be an asset for the local community and local tourism.

Semi-natural habitat

- The extent of agri-environment agreements for management of grazing marshes is limited. Littoral sediment SSSI are mostly in favourable or recovering condition. Character of the resource has probably been maintained.

- The coastal realignment scheme at Medmerry will create 183 ha of new intertidal habitat and up to 300 ha of other wetland habitats. This will make a significant contribution to intertidal habitat gains in the Solent. The site will be managed by the Royal Society for the Protection of Birds under a management plan.

- The scheme removes the need to manage shingle defences. This will allow the Medmerry beach to develop and evolve naturally with coastal processes and form a more sustainable and valuable vegetated shingle habitat.

Historic features

- In 1918 about 2 per cent of the NCA was historic parkland. By 1995 it is estimated that 53 per cent had been lost. About 28 per cent of the remaining parkland is covered by a Historic Parkland Grant, and about 15 per cent is included within an agri-environment scheme.

- About 68 per cent of historic farm buildings remain unconverted. About 93 per cent are intact structurally. These data suggest that important aspects of the historic landscape remain neglected.

- The remains of *Homo heidelbergensis* were first found at Boxgrove in 1994, comprising the partial tibia of a male. In 1996 two incisor teeth from another individual were found. In 2003 English Heritage announced it would buy the remains of the quarry to ensure the preservation of the site complex.

- The historic dockyard in Portsmouth Harbour was restored as one of the Millennium Projects and there are a number of other projects planned within the area, including the establishment of a research and teaching centre for maritime heritage studies.

- Significant archaeological discoveries at the Medmerry site may revise traditional views regarding the historical development of the area. Investigation of the medieval fish weir is increasing understanding of how this structure was used to corral fish and a bronze-age cremation area is also being excavated and researched.

¹¹ Solent Disturbance and Mitigation Project (URL: www.solentforum.org/forum/sub_groups/Natural_Environment_Group/Disturbance_and_Mitigation_Project/)

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- The Heritage Lottery funded 2004 Archaeological Research Framework and accompanying 2007 Research Synthesis provide a comprehensive baseline of the archaeological resource of the AONB. The HLF programme developed a strong archaeology partnership through a steering group that continues to oversee research.

Coast and rivers

- The Medmerry managed realignment scheme between Chichester Harbour and Selsey Bill was the first of its kind on the open coast and one of the most significant flood management achievements on the south coast to date in terms of climate change adaptation and managing the effects of coastal change. It involved the realignment of the coastline to a newly constructed floodwall several kilometres long and one kilometre inland, providing flood protection for over 300 homes, the local water treatment works and the only road in to Selsey. It also created over 183 ha of new intertidal habitat and over 300 ha of new terrestrial wetland habitats.

- Medmerry will create important new wildlife habitats and open up new footpaths, cycleways and bridleways. There is another habitat creation project at Cobnor Point.

- There is limited uptake of management agreements for coastal and riverine habitats. The biological river water quality in 1995 was predominantly good and it has been maintained. The chemical water quality in 1995 was predominantly very good and it has been maintained.

- In 2008, a £29m nitrogen removal scheme to improve the quality of treated wastewater at Peel Common Treatment Works at Fareham was completed.

- 2009 saw the launch of the Downs and Harbours Clean Water Partnership set up to tackle diffuse water pollution issues affecting the quality of ground, surface and coastal waters in West Sussex and East Hampshire.¹²

- Preparation work for major dredging of Portsmouth Harbour to allow passage of the Royal Navy's 65,000-tonne aircraft carriers has begun.

- The Arun and Rother Connections project (ARC), is a HLF funded collaborative project involving all interested partners to improve water quality and flow in the catchments and encourage local people to appreciate the services provided by these rivers. It involves major works to ease fish passage, river and chalk stream restoration, surveys and removal of non-native invasive aquatic plant species, wetland habitat and heathland restoration as well as engaging communities and landowners and improving access and interpretation.

Minerals

- Lidsey Oil Field has been in production since 2008. Lidsey has one vertical producing well in the Jurassic, Great Oilite reservoir.

¹² Downs and Harbours Clean Water Partnership (URL: www.cleanwaterpartnership.co.uk/here.html)

Drivers of change

Climate change

- As a low-lying coastal area in south-east England, this NCA is vulnerable to the effects of climate change, particularly sea level rise, increased severity and frequency of storm events and drought.
- The coastline is particularly vulnerable to sea level rise, with flooding a major issue for the future of the urban-dominated area. Accurate measurements from the tidal gauge at Portsmouth show that since 1991, sea level has risen by 10 cm, an increase of 6.6 mm a year. Sea level rise is inevitably worrying in a landscape where ground height differences are measured in only a few metres. Relatively small increases in sea level will have an impact on the coastal communities, habitats and the species they support and how people currently use and manage the land.
- North Solent Shoreline Management Plan (SMP) aims to identify sustainable coastal defence options based upon economic criteria, while having an overview of both the natural environment and the human and built environment.
- Important semi-natural habitats, including those of the designated natural harbours of Chichester and Langstone, may suffer. Mudflats, salt marsh and shingle habitats may be adversely affected by coastal squeeze where flood defences prevent migration. There may also be loss of coastal grazing marsh, reedbeds and saline lagoons where coastal realignment is permitted. Further realignments are required to ensure that losses of intertidal habitat in the Solent between 2025 and 2100 are offset. Finding and implementing further sizable opportunities in the Solent is a considerable challenge.
- Flooding due to increased autumn/winter rainfall and more frequent, more intense storm events could also potentially affect stretches of the area's rivers, including the Arun, Adur, Meon and Hamble, while hotter, drier summers could lead to summer drought, exacerbated by increased demand for irrigation with a resulting deterioration of semi-natural wetland habitats along the flood plain, including species-rich meadows and field ponds, as well as remnant areas of heath along the coast.
- A longer growing season with increasing temperatures may encourage the introduction of novel crops such as sunflowers, navy beans and soya and different crop timings into the arable-dominated landscape, altering its character.
- The composition of the semi-natural woodlands of the upper coastal plain may be affected by increased storminess, periods of drought and the prevalence of pests and diseases. Rising sea levels and coastal erosion may also lead to the loss of coastal oaks.
- The south coast generally is liable to be first point of entry for new species moving north from the continent.
- Most of the area's coastal footpath network is located along existing sea defences, embankments or the foreshore itself. Options will need to be sought to relocate footpaths and other recreational resources inland if significant change seems likely.

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Other key drivers

- The Solent coastline provides feeding grounds for internationally protected populations of overwintering waders and wildfowl and is also extensively used for recreation. The Solent Disturbance and Mitigation Project resulted in comprehensive research to assess human activity on bird populations and there is support for a mitigation and avoidance plan to minimise impact.
- Portsmouth is identified as a centre of significant change, a regional hub and an international gateway, and is expected to accommodate around 20 per cent of the new dwellings planned for the South Hampshire sub-region as a whole by 2026.



The area supports internationally important populations of bird species including the black-tailed godwit.

- An urban extension is planned at Chichester, with over 7,000 new dwellings to be accommodated, while significant growth is also planned for the coastal settlements that dominate the east, including Worthing, Shoreham (a growth point) and Brighton and Hove (lying just outside the boundary).
- A strategic development area (SDA) will be allocated within Fareham Borough, north of the NCA, to comprise 10,000 new dwellings, with significant employment land to be provided on greenfield sites.
- Just outside the NCA in the South Hampshire Lowlands, the city of Southampton is identified as a regional hub and centre of significant change.
- There are various discharges of waste into the NCA from urban populations, roads, industry and through dispersed inputs such as agricultural run-off. The area includes part of one of the world's busiest shipping lanes and there are resulting problems with litter disposal as well as the constant danger of serious pollution incidents (and the 'clean-up' operations which follow them which may also be damaging) all of which can threaten the fragile ecology of the designated sites
- Most of the NCA is densely populated and includes what amounts to a linear conurbation which is under constant pressure for further development.
- There is likely to be further pressure for solar arrays in this area due to its geographical location.

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Supporting document 3: Analysis supporting Statements of Environmental Opportunity

The following analysis section focuses on a selection of the key provisioning, regulating and cultural ecosystem goods and services for this NCA. These are underpinned by supporting services such as photosynthesis, nutrient cycling, soil formation and evapo-transpiration. Supporting services perform an essential role in ensuring the availability of all ecosystem services.

Biodiversity and geodiversity are crucial in supporting the full range of ecosystem services provided by this landscape. Wildlife and geologically-rich landscapes are also of cultural value and are included in this section of the analysis. This analysis shows the projected impact of Statements of Environmental Opportunity on the value of nominated ecosystem services within this landscape.



Sailing in Chichester Harbour AONB.

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Statement of Environmental Opportunity	Ecosystem Service																		
	Food provision	Timber provision	Water availability	Genetic diversity	Biomass provision	Climate regulation	Regulating water quality	Regulating water flow	Regulating soil quality	Regulating soil erosion	Pollination	Pest regulation	Regulating coastal erosion	Sense of place / Inspiration	Sense of history	Tranquillity	Recreation	Biodiversity	Geodiversity
SEO 1: Plan for and manage the effects of coastal change by allowing the operation of natural coastal processes and improving the sustainability of current management practices along the diverse coastline to successfully integrate the needs of the natural environment, landscape, local communities, agriculture, tourism and recreation amid significant urban stretches.	↗*	↔**	↔**	○*	↔***	↓***	↗**	↓***	↓**	↓***	↗*	↗**	↓***	↓***	↗**	↗*	↓***	↓**	↗**
SEO 2: Plan for the creation of a strong landscape framework within and around major settlements and identified growth areas, while managing and enhancing existing greenspace and access, and balancing the needs of agriculture, communities and the natural environment.	↗*	↗***	↔**	↗*	↔**	↗**	↗***	↗***	↗**	↗**	↗***	↗***	↓***	↓***	↗**	↗**	↓***	↓***	↔*
SEO 3: Manage and significantly enhance the areas rivers and chalk streams and their wetland valley habitats to provide resilience against climate change and improve flood protection and water quality, particularly in the internationally designated sites such as Chichester and Pagham harbours, for the benefit of local communities and wildlife.	↗**	↔**	↗***	↗***	↗***	↓***	↓***	↓***	↓***	↓***	↓***	↓***	↗***	↓***	↓***	↓***	↓***	↓***	↔***
SEO 4: Manage the rich archaeological and historic resource and geological exposures within the farmed, coastal and peri-urban landscape, including the longstanding associations of horticultural and maritime industries and the military, enhancing a strong sense of place.	↗***	↔***	↔***	↓***	↔***	↗***	↗***	↔***	↗***	↓***	↓***	↗***	↔***	↓***	↓***	↗***	↓***	↓***	↓***

Note: Arrows shown in the table above indicate anticipated impact on service delivery: ↗ = Increase ↘ = Slight Increase ↔ = No change ↙ = Slight Decrease ↓ = Decrease. Asterisks denote confidence in projection (*low **medium***high) ° symbol denotes where insufficient information on the likely impact is available.

█ National Importance; █ Regional Importance; █ Local Importance

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Landscape attributes

Landscape attribute	Justification for selection
Coastal inlets and 'harbours' contain a diverse landscape of narrow tidal creeks, mudflats, shingle beaches, dunes, grazing marshes and paddocks.	<ul style="list-style-type: none"> Internationally designated wetland and coastal habitats. Picturesque harbour-side settlements. The coastal area (particularly in and around Langstone Harbour) has extensive palaeoenvironmental evidence. Future changes in sea level may become an important issue given that the South Coast Plain is flat and low-lying. Pressures for recreational uses and marina/harbour developments along the coast. The conservation of wetlands, including those of the intertidal zone, is important to the area.
Major urban development including Portsmouth and Worthing linked by the A27/M27 corridor dominate much of the South Coast Plain.	<ul style="list-style-type: none"> Small villages engulfed by the expansion of urban coastal developments with many locally valued 'strategic gaps'. Ribbon development of seaside towns and caravan parks. Pressures for recreational uses and marina/harbour developments along the coast. Major east–west road and rail routes.
Fertile soils support a prosperous market garden and horticultural trade reflecting the relatively warm temperatures and long growing season.	<ul style="list-style-type: none"> Concentrations of large modern glasshouses and small but increasing use of polytunnels. Historically associated with fruit growing, especially strawberries for London, the passenger steamer trade and the Royal Navy. Successful schemes to boost local produce. Loss of hedges and hedgerow trees owing to field enlargement. Areas of medium-quality agricultural land where soils are shallow, stony and poorly drained often support good quality permanent grassland.
The Plain is crossed by several rivers in places forming wide alluvial flood plains.	<ul style="list-style-type: none"> The lower plain is cut by southward-flowing streams, locally termed 'rifes', each of which have dry headwater extensions over the upper plain. Many chalk streams. Some projects to improve water quality such as ARC (Arun and Rother Connections). The chalk rivers of the NCA are of importance for several key wetland and aquatic species.
The landscape is part of a broad plain of flinty marine and valley gravels extending several miles inland.	<ul style="list-style-type: none"> Historic mineral extraction, landfill and flooded gravel pits. Flooded gravel pits make up some of the largest areas of freshwater in the region.
Open and exposed coastal landscape.	<ul style="list-style-type: none"> Views to the Isle of Wight. Rock islands as coastal protection measures immediately off the coast have a major visual influence.

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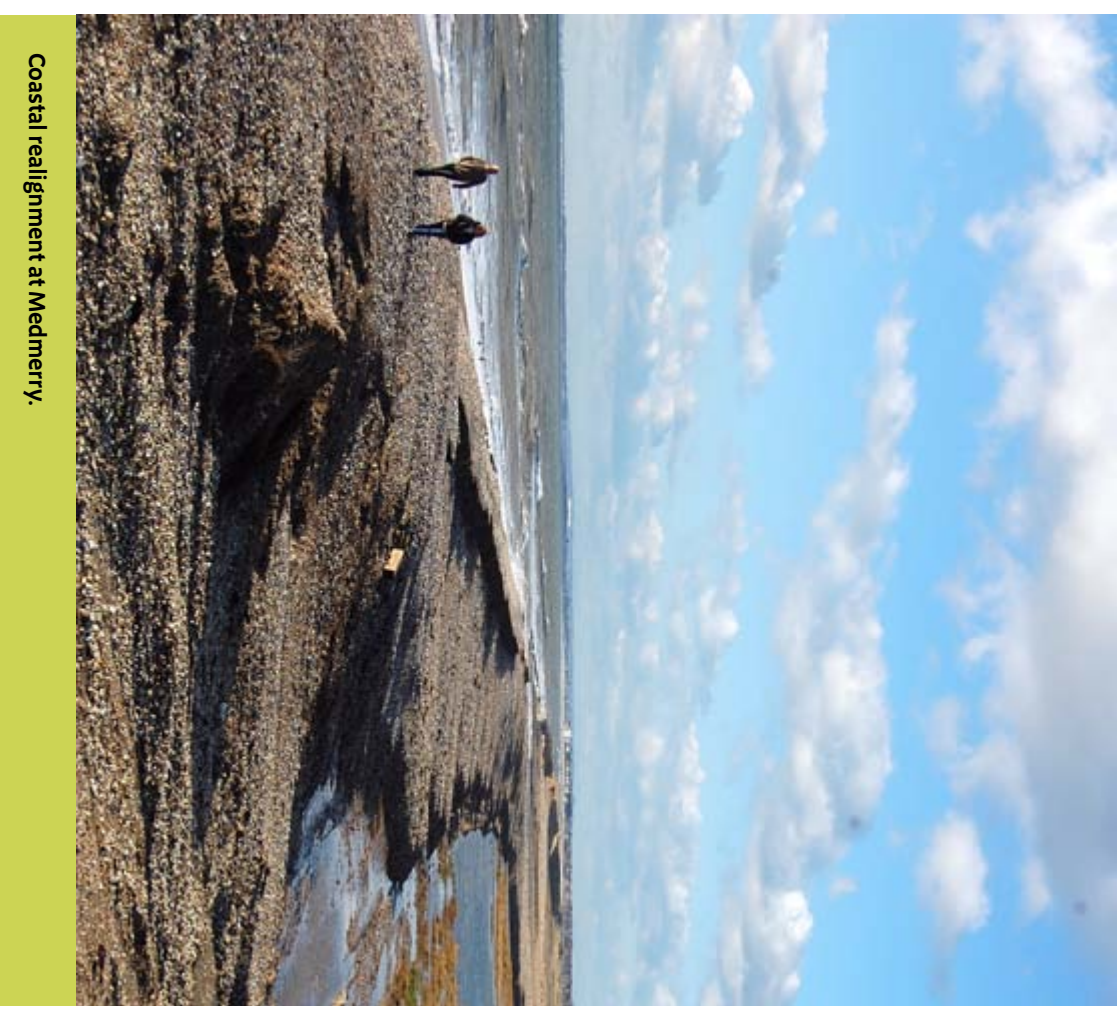
Landscape attribute	Justification for selection
Important historical sites from all periods.	<ul style="list-style-type: none">■ Defensive structures demonstrating the area's long association with the military (especially Royal Navy) and strategic importance.■ Many significant Roman sites including Fishbourne Roman Palace.■ Medieval buildings including Chichester Cathedral.■ Bosham is traditionally the place where King Canute demonstrated that he was unable to hold back the sea.■ Surviving field barns are an important remnant of a once widespread building type.■ Dovecotes are found on some high status farms.
Areas of remnant heathland.	<ul style="list-style-type: none">■ Once a common and widespread feature of the landscape in the Hampshire Basin and now confined to small isolated fragments within the NCA such as Hamble Common.■ Remaining sites offer considerable potential for heathland restoration.■ The Solent coastline provides feeding grounds for overwintering waders and wildfowl and is also extensively used for recreation.
Large flocks of wildfowl.	<ul style="list-style-type: none">■ Internationally important numbers of several overwintering species including dark-bellied Brent geese, black-tailed godwit and dunlin.■ Also significant breeding area for many species, such as terns.■ The southern tip of the Manhood Peninsula is a favoured migratory point for many species of birds and insects.



Arable fields in the South Coast Plain with the South Downs in the background.

Landscape opportunities

- Manage the coastal habitats and features that include intertidal sand and mud, coastal salt marsh, coastal sand dunes coastal vegetated shingle, coastal heathland, beaches, coastal and flood plain grazing marsh and saline lagoons including areas of international importance, promoting opportunities for natural regeneration/migration where appropriate or possible and/or creating compensation habitats in areas of managed realignment to ensure no net loss of habitats such as salt marsh and mudflats.
- Manage and improve the productive agricultural landscape, including the creation of arable field margins, restoration of hedgerows and conservation headlands that help to support the area's farmland bird populations and pollinators.
- Promote and enhance the area's surviving historic environment that includes important Roman remains across the area, as well as the significant military and maritime heritage assets, historic parkland and traditional buildings.
- Plan for the creation of significant new landscapes that provide a framework for new and existing development and its associated infrastructure.
- Ensure realignment site management allows intertidal habitats to develop and expand effectively to support and enhance the biodiversity interest and characteristic landscape.



Coastal realignment at Medmerry.

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Service	Assets/attributes: main contributors to service	State	Main beneficiary	Analysis	Opportunities	Opportunities	Principal services offered by opportunities
Food provision	Soils Climate – relatively high temperatures and long growing season Market gardening Dairy, sheep and pigs Arable Vineyards Poultry Fish	High proportion (38 per cent) of Grade 1 and 2 land in between large urban centres. This is a fertile area which supports intensive arable farming and horticulture, with some dairy, beef and poultry. Areas of medium-quality agricultural land where soils are shallow, stony and poorly drained often support good quality permanent grassland such as on the Arun flood plain. Fish, and particularly shellfish, are widely harvested from the harbour areas. The Selsey crab is a particular delicacy.	Regional	The western part of the NCA falls into an area known as ‘highlight zone’ – south-facing landscape reflecting light off Solent and protected by Isle of Wight creates ideal conditions, particularly for fruit. Vineyards are increasing in popularity and there have been experiments with other more exotic crops such as olives. County food group Hampshire Fare is a not-for-profit community interest company established in 1991, representing around 200 producers, hospitality venues, shops and cookery schools, which campaigns to heighten the awareness and consumption of Hampshire’s quality produce. Goodwood Farm achieved full organic status in 2004, becoming the largest lowland organic farm in the UK. Milk and cream from the Dairy Shorthorn herd are processed at the farm, including being made into traditional cheeses. Produce is sold locally or used in facilities on site or during events. During the oyster fishing season of 2007/08, 58 tons of oysters were harvested from Chichester Harbour. Seven charter fishing boats operate within Chichester Harbour. Deterioration in water quality in the harbours would threaten this service.	Support safeguarding high-quality agricultural land and encourage land management practices which protect soil assets and the benefits they provide. Manage the agricultural landscape in sustainable ways to improve soil and water regulation and improve long-term viability of agriculture and yields, protecting the natural assets of the area. There is a need to safeguard soils and high quality agricultural land when planning development. Crop diversity within the farming system could also be beneficial for maintaining soil quality. Opportunities to enhance the agricultural landscape through creation of habitat mosaics where forage and nesting sites are provided for pollinators such as conservation headlands, arable field margins and wildflower mixes. Support measures to protect and improve water quality to the harbours such as modifications to water treatment works and control of agricultural run-off through the catchment sensitive farming scheme to allow the harvesting of seafood to continue. Support sustainable harvest of native oysters.	Food provision Regulating soil quality Regulating water flow Regulating water quality Biodiversity Sense of place/ inspiration	

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Timber provision	Parkland Woodland	Woodland cover for this NCA is 5 per cent, covering a strong network of small and medium sized broadleaf woodlands	Local	This NCA is sparsely wooded and there are few suitable locations to extend woodland.	There are limited opportunities to improve management of broadleaf woodlands in this NCA to produce more timber.	Timber provision
Water availability	Chichester aquifer Rivers Chalk streams	Public water supply relies upon surface water abstractions and groundwater from the Lower Greensand aquifer and the Worthing and Chichester chalk blocks. Most of the area overlies post-Carboniferous rock, although there are small areas to the east that overlie an important chalk aquifer. Water supply is under pressure throughout the area, with the River Meon in the west mostly classed as over-abstracted, and most of the remaining area classed as over-licensed or no water available (including the groundwater units around Portsmouth and North Hayling). The Chichester chalk aquifer supports baseflows to spring fed rivers such as the rivers Ems and Lavant.	Regional	The main abstractions in the Arun and West Sussex Streams are for public water supply followed by industry and agriculture while in the west, it is for public water supply followed by fish farming and watercress growth. Consequently, summer flows are naturally low. Exploitation of the aquifer to supply potable water is seriously threatening this natural resource of chalk rivers and spring fed fens and fen-grasslands that are dependent upon the continual supply of unpolluted chalk spring water. This is likely to be an increasing problem as drought caused by climate change and increasing population put extra pressure on water supply.	Action to reduce demand would ease pressure on supplies that, in some case, are already fully exploited in dry years. Encourage the incorporation of sustainable drainage systems into all new developments. Ensure that sufficient water levels are maintained in ecologically sensitive and important streams and rivers. Seek opportunities to restore natural river geomorphology, bringing rivers back into continuity with their flood plains and re-creating backwaters as a refuge for aquatic species in times of drought. Encourage cultivation practices that reduce demand for water for irrigation of crops.	Water availability Regulating water quality Regulating soil quality Biodiversity

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Genetic diversity	Traditional breeds Local varieties	The Home Farm of the Goodwood Estate favours rare breeds such as Dairy Shorthorn and Sussex cattle, Southdown sheep and Tamworth and Saddleworth pigs.	Regional	The pedigree Southdown sheep are also shown locally, continuing a tradition long held by the dukes of Richmond.	Opportunities exist to build on the Hampshire Fare campaign to promote more use of traditional breeds to produce high-quality produce.		Genetic diversity Food production Sense of history
Biomass energy	Fertile soils Woodland	5 per cent of the area is woodland and biomass from existing woodland sources will be limited.	Local	Potential miscanthus yield is predominantly high as a result of the fertility of the soil, with areas of low/medium potential around Portsmouth and Chichester harbours and the urban areas to the east, while short rotation coppice yields may be restricted close to the coast due to prevailing salt laden winds. For information on the potential landscape impacts of biomass plantings within the NCA, refer to the tables on the Natural England website. ¹³	There are potential opportunities for both short rotation coppice and miscanthus to be accommodated but these would need to be located appropriately within the landscape.		Biomass energy
Climate regulation	Soils Wetlands, including grazing marsh Woodland	The soils in this NCA predominantly have low levels of soil carbon (0–5 per cent). However, there are some very small patches, in the west, that reach carbon levels of up to 20–50 per cent. 2,000 ha of grazing marsh contribute significantly to carbon sequestration.	Regional	The relatively large areas of flood plain grazing marsh have additional locked up carbon stores, as do the small areas of woodland. Realignment schemes, such as Medmerry, can increase the extent of wetland habitats which will help compensate for the effects of climate change.	Where habitats are lost to coastal squeeze, compensation habitats have to be sought where natural regeneration is not possible or practical. There is potential to increase organic matter levels on arable land. Improvements in soil structure will also help improve water quality.		Climate regulation Regulating soil quality Regulating water quality Regulating soil erosion

¹³ URL: www.naturalengland.org.uk/ourwork/farming/funding/ecs/sitings/areas/default.aspx

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Regulating water quality <i>continued on next page</i>	Rivers and chalk streams Estuaries Aquifers Treatment works	72 per cent of the area is a nitrate vulnerable zone. All the areas' rivers are subject to diffuse pollution arising from outside the NCA. ¹⁴ There are three main sources of groundwater pollution within the unit: agricultural activities, saline intrusion and urban related activities (sewage leakage, road run-off, weed control etc.). Potentially polluting agricultural activities include the application of organic and inorganic fertilisers and the use of pesticides and herbicides. The pollution risks from agricultural sources are locally a real threat to groundwater quality due to the large expanses of arable land and the nature of the chalk aquifer and soils which allow rapid leaching of pollutants. Where groundwater quality has been assessed it is generally good with an area of poor quality in the centre of the NCA. The ecological quality of the areas' rivers is more varied, with stretches classed as either moderate or bad towards the east but good in the west.	Regional	The area is heavily urbanised and intensive agriculture, recreational activities and transport systems all add to pressures on water quality. These are likely to increase with further planned development and effects of climate change such as drought causing low flows and more frequent storm events leading in increased run-off. As well as recreational sailing in the harbours, the area includes part of one of the world's busiest shipping lanes and there are resulting problems with litter disposal as well as the constant danger of serious pollution incidents (and the 'clean-up' operations which follow them and may also be damaging) all of which can impact upon water quality and threaten the fragile ecology of the designated sites. The River Arun suffers from the effects of diffuse agricultural pollution largely arising in the wider catchment outside this NCA, forming part of the Arun and Western Rother Defra Priority Catchment. Equally the River Meon and the catchments of Chichester and Pagham harbours are vulnerable to diffuse agricultural pollution arising from outside the NCA. This is of particular concern given the international designations of these harbours as SPAs. Many of the rivers are heavily modified. In 2008, a £29m nitrogen removal scheme to improve the quality of the treated wastewater returned to the environment at Peel Common was completed.	Work with water companies to investigate and implement innovative solutions to point source pollution and untreated waste water. Consider reviewing ecological designations for the area's chalk streams. Work with partners to expand areas of semi-natural habitat in chalk stream flood plains, within the NCA and upstream, to act as pollution filtration. Provide information about chalk stream ecology and the negative impacts of unsustainable water use. Reduce the amount of nutrients entering the harbours from domestic and industrial sources by engaging with the planning process to ensure that new developments incorporate the best possible measures for reducing problems from waste, including sustainable drainage systems (SUDS). Promote the installation of holding tanks for recreational vessels and seek to provide the necessary infrastructure to pump out holding tanks. Ensure adequate reception facilities for vessel landed waste and maintain a Maritime and Coastguard Agency-compliant Port Waste Management Plan. Increase the amount of farmland in and upstream of this NCA managed under principles established by the Catchment Sensitive Farming Programme or its water company equivalent.	Regulating water quality Regulating soil quality Regulating soil erosion Biodiversity Recreation	

¹⁴ Defra catchment priorities identified under the England Catchment Sensitive Farming Project

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<p>Regulating water quality <i>continued from previous page</i></p>				<p>Serious concerns have been raised at the ability of waste water treatment facilities to cope with current and future housing development.</p> <p>The quality of water in Chichester Harbour is not statutorily assessed as bathing water and is not therefore monitored in accordance with the EC Bathing Water Directive by the regulator. However, the discharge of sewage into the Harbour may have environmental health implications particularly for people enjoying activities on the water such as sailing and kayaking.</p> <p>There have been a number of efforts to improve water quality in this area including Portsmouth Water's Downs and Harbours Clean Water Partnership</p> <p>The Arun and Rother Connections project (ARC), is a HLF funded project to improve water quality and flow in the catchments and encourage local people to appreciate the services provided by their river. It involves major works to ease fish passage, river and chalk stream restoration, surveys and removal of non-native invasive aquatic plant species, wetland habitat restoration (fen, reedbed, species rich flood plain meadow and wet woodland) and heath restoration as well as engaging communities and landowners and improving access and interpretation.</p>	<p>Opportunities</p> <p>Buffer watercourses with semi-natural vegetation – permanent grassland, scrub, woodland – to intercept diffuse pollution by sediment run-off and nutrients, particularly upstream beyond the borders of the NCA.</p> <p>Seek opportunities to restore natural river geomorphology, bringing rivers back into continuity with their flood plains.</p> <p>Expand and link lowland meadows, flood plain grazing marsh and other wetland habitats found on the flood plains of the rivers and chalk streams.</p> <p>Work with the Solent Water Quality Association and other partners to achieve the highest water quality and achieve the aims of the Water Framework Directive.</p> <p>Control the amount of nutrients entering the harbours from agricultural sources by encouraging catchment initiatives that engage and challenge farmers to reduce nutrient leaching, pesticide contamination and soil erosion.</p>	

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Regulating water flow	Rivers Flood plains Wetland Harbours Coast	The Arun has a wide flood plain with slow river flows, although much of this flood storage capacity has been lost through drainage of marshlands and conversion to intensive agriculture both within and upstream of this NCA. The Meon runs over chalk, rainfall soaks into the ground here instead of running off into the river. A tidal sluice on the Lower Meon maintains the freshwater marsh of Titchfield Haven, with storage of water identified as being important to both long-term flood alleviation and wetland conservation. There are also several chalk-fed streams that run in this NCA such as the Lavant and the Bosham stream. Settlements within the NCA, such as Arundel and Littlehampton, are protected by flood banks. The River Lavant has a long history of flooding in Chichester.	Regional	significant flood events have occurred several times in the last 40 years in the Arun and Western streams catchments and river banks need repair and maintenance. The River Lavant Flood Alleviation Scheme is designed to divert flows away from Chichester and then safely discharge them into Pagham Harbour. Policies to reduce flood risk in Worthing, Shoreham and Brighton include the storage of water within the Adur catchment on the South Downs (outside this NCA) and encouraging the adoption of Sustainable Urban Drainage Systems. Major dredging work has begun in Portsmouth Harbour to enable it to accommodate new 65,000-tonne aircraft carriers.	Explore and where appropriate implement water retention measures to help maintain water levels in rivers during periods of drought. Seek opportunities to restore natural river geomorphology, bringing rivers back into continuity with their flood plains and re-creating backwaters as a refuge for aquatic species in times of drought. Incorporate sustainable drainage systems (SuDs) in all new development, including features such as porous surfaces, swales, green roofs and more green space. Plan for and manage for the effects of coastal change by allowing the operation of natural coastal processes and the creation of new habitats to reduce flooding to built-up areas. Ensure that realignments are managed so that intertidal habitats can develop and expand effectively.	Regulating water flow Regulating water quality Biodiversity	

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Regulating soil quality	Soils	High proportion (38 per cent) of Grade 1 and 2 land in between large urban centres.	Regional	The freely draining slightly acid loamy soils may be valuable for aquifer recharge, requiring the maintenance of good structural conditions to aid water infiltration and requiring the matching of nutrients to needs to prevent pollution of the underlying aquifer.	Continue to apply the principles and best practices employed through initiatives such as Catchment Sensitive Farming.	Regulating soil quality	
	Coastal salt marshes	There are nine main soilscape types in this NCA.		The loamy soils with naturally high groundwater have a low bearing strength where groundwater remains high and are therefore at increased risk of soil compaction from mechanised operations, stock grazing or recreational use in wetter conditions.	Identify areas where soils are most at risk of damage from cultivation and work with landowners and farmers to adopt sensitive soil management practices as appropriate.	Food provision Regulating soil erosion	
	Harbours	<ul style="list-style-type: none"> Freely draining slightly acid loamy soils, covering 43 per cent of the NCA. Loamy soils with naturally high groundwater (33 per cent). Loamy and clayey soils of coastal flats with naturally high groundwater (7 per cent). Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils (7 per cent) Loamy and clayey flood plain soils with naturally high groundwater (2 per cent). Shallow lime-rich soils over chalk or limestone (1 per cent). Sand dune soils (1 per cent). Freely draining slightly acid but base-rich soils (1 per cent). Freely draining very acid sandy and loamy soils (1 per cent). 		Diffuse pollution (such as from applied manures and very fine sediments) is also possible as a result of run-off due to persistently high groundwater levels or from local flooding. Both of these soils may have potential, especially under arable cropping, for increased organic matter levels through management interventions.	Work to improve treatment of waste water and prevent run-off from roads by promoting measures such as extending verges and hedgerows.	Biodiversity Regulating water quality	
				The large urban centres and transport links surrounding agricultural land mean that pollution of soils via run-off from roads is a constant problem.	Maintain salt marsh and other intertidal habitats as a buffer between the sea and agricultural land and to protect against saline intrusion.		
				Maintaining quality of soils will help safeguard future yields and wider ecosystem service provision.	Seek to keep the highest quality soils in agricultural production.		

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Regulating soil erosion	Soils Rivers	The River Arun forms part of the Arun and Western Rother Deira Priority Catchment under the England Catchment Sensitive farming and suffers from sedimentation largely as a result of soil erosion higher in the catchment outside this NCA. Many parts of the area are susceptible to flooding.	Local	The lighter soils make up just under half of the NCA (dominated by freely draining slightly acid loams), and have enhanced risk of soil erosion on moderately or steeply sloping land where cultivated or bare soil is exposed, often exacerbated where organic matter levels are low after continuous arable cultivation or where soils are compacted. There is also the potential for wind erosion on some coarse textured cultivated variants of the freely draining slightly acid loams. Sand dune soils are very droughty and unstable, with the extent of erosion depending on the degree to which vegetation has stabilised the dune system. A few of the component soils of the freely draining base-rich soils (just 1 per cent of the NCA) may be susceptible to capping and slaking, increasing the risk of soil erosion, and these soils need to be managed carefully to reduce risks with careful timing of cultivations and maintenance of vegetation cover. The remaining soils have a low risk of soil erosion, except where coarser textured variants of loamy soils with naturally high groundwater occur on sloping or uneven ground. The light soils of the coastal plain may be susceptible to wind erosion in the future under climate change. Coastal flooding can damage soils and cause erosion.	Continue to apply and extend the reach of tried and tested techniques for reducing soil erosion resulting from agriculture that are being promoted among the farming community by projects such as Catchment Sensitive Farming. Opportunity to create areas of semi-natural habitat and low-input grasslands (including grassland buffer strips) to minimise soil compaction, allow dense vegetation to improve water retention to minimise soil run-off and improve water quality. Promote the retention of mudflats, coastal salt marshes and sand dunes to provide a cost effective defence against soil erosion and prevent saline intrusion from damaging soils.	Regulating soil erosion Regulating water quality Regulating soil quality Regulating water flow	

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Pollination	Grassland parks and gardens	With nearly 2,000 ha of grassland, this area provides important sources of nectar for pollinating insects. Gardens and allotments within urban areas also provide food sources for pollinating insects	Regional	In a productive agricultural area, including soft fruit, pollinators are critical for the future of insect dependent crops and increases in this service may be required in order to provide greater options for future cropping.	Opportunities to enhance the agricultural landscape through creation of habitat mosaics where forage and nesting sites are provided for pollinators such as conservation headlands, arable field margins and wildflower mixes providing additional environmental benefits.	Pollination	
	Hedges						Food production
	Heathland			This service could be increased by restoration of wetland habitats, and the creation of conservation headlands and arable field margins. This could have a beneficial impact on biodiversity by linking habitats and creating network of habitats in close proximity.	Seek opportunities to increase field margins, species-rich hedgerows and beetle banks to encourage a network of habitats and food sources for pollinating insects close to areas of agricultural production.	Biodiversity	
Pest regulation	Grassland	The semi-natural habitats adjacent to arable farm and support populations of pest regulating invertebrate, bird and mammal species.	Local	This service could be increased by restoration of wetland habitats, verges, conservation headlands and arable field margins creating connecting networks of habitats.	Opportunities for a landscape scale approach which provides the necessary connectivity and extent of habitats to sustain populations of predators and enable them to move between sites.	Pest regulation	
	Wetland						Food production
	Woods						Biodiversity
	Rivers						
	Field margins			Manage semi-natural habitats to increase diversity of structure and composition and increase populations of pest-regulating species.	Seek opportunities to increase field margins, species-rich hedgerows and beetle banks to encourage a network of habitats for pest regulating species close to areas of agricultural production.		
	Parks and gardens						

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Regulating coastal erosion and flooding	Coastal vegetated shingle Intertidal sand and mudflats Coastal sand dunes Shingle beaches Hard sea defences Estuaries	A complex stretch of coastline including river estuaries and shingle beaches. Much of the coastal frontage is developed, with the major settlements including Portsmouth, Worthing and Bognor Regis. Large lengths of this shoreline are in an unnatural form and the reclamation of extensive areas of former coastal lowland for development has produced many areas where the shoreline is artificially seaward of its natural position. The clay headland of Selsey Bill shelters the coastline to the immediate east from the predominant south-westerly storms; sea defences are in place to protect the vulnerable cliffs from erosion.	Regional	The relevant shoreline management plans are pursuing an overall policy of 'holding the line' and 'managed realignment' ¹⁵ such as the scheme at Medmerry which was the first of its kind on the open coast. ¹⁶ Some of the coastal features are highly valued for their geodiversity and the rare plants and animals they support. Because it is highly developed, limited sections of the shoreline are free to erode naturally meaning that there is little material going into the system. Changing climatic patterns are likely to result in increased weathering of coastal cliffs and more extreme weather events, which will test coastal defences. As a result of higher water levels 'coastal squeeze' will occur. This will lead to beaches, intertidal areas and amenity value being reduced or lost. This is particularly threatening to low lying tidal mudflats and salt marshes in areas of conservation importance, especially Chichester and Pagham harbours that are internationally designated as an SPA and Ramsar site, supporting bird populations that are highly dependent on the habitats provided by the intertidal areas. An issue of special interest to local residents and boat owners in the AONB is the continued erosion of East Head. Proposals for the medium to long-term management of East Head are contained within the Pagham to East Head Coastal Defence Strategy. ¹⁷ This is a complex problem as any major defence works would undermine the area's character and the reasons for its nature conservation designations. The Strategy proposes a scheme of Adaptive Management that seeks to respond to change and to preserve the social, economic, environmental and amenity value of East Head for the 100-year life of the Strategy. The emphasis will not necessarily be on trying to lock the feature into its present size, shape and orientation.	Opportunities to create compensation habitats for those lost to 'coastal squeeze', aiming to ensure no net loss of habitat, benefiting biodiversity and the regulation of coastal erosion and flooding. Ensure that realignment sites are managed to develop their full potential to support and enhance the biodiversity interest and characteristic landscape.	Regulating coastal erosion and flooding Recreation Biodiversity

¹⁵ South Downs Shoreline Management Plan, South Downs Coastal Group (URL: www.sdcg.org.uk/)

¹⁶ Medmerry managed realignment scheme (URL: www.environment-agency.gov.uk/homeandleisure/floods/109062.aspx)

¹⁷ Pagham to East Head Coastal Defence Strategy, Environment Agency (2009; URL: www.environment-agency.gov.uk/static/documents/Leisure/PEHCDS_STAR_v5_Final_-_compressed.pdf)

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Sense of place/ inspiration	Coastal landscape Harbours Views of Isle of Wight and the South Downs	Sense of place is provided by the sea and intricately indented shoreline of the exposed coastal landscape, and notably the natural harbours of Chichester and Pagham. Across the Solent, the Isle of Wight forms a distinctive backdrop. There are also a few surviving traditional settlements displaying a unifying local vernacular of timber frame, flint, cob and thatch. This is further supported by the pattern of large rectilinear fields enclosed by drainage ditches, remnant tracts of valley meadow and coastal heath.	Regional	In such an urban area, sense of place is achieved primarily by views of the sea, which are possible from most places within the NCA. Eric Coates was inspired to write 'Sleepy Lagoon', the theme tune for Desert Island Discs, while watching the sea from Seley. Portsmouth, with its importance as a major route to the continent and military connections, was a frequent inspiration to artists and writers during the 19th century. In Jane Austen's novel Mansfield Park, Portsmouth is the hometown of the main character Fanny Price, Dickens' Nicholas Nickleby joins a theatre troupe in the town and Gilbert and Sullivan's HMS Pinafore is set in the harbour. Oscar Wilde wrote The Importance of Being Earnest during a visit to Worthing. Spinnaker Tower is a 170-metre tower opened in 2005 as part of the redevelopment of Portsmouth harbour. It is visible from miles around and affords 360-degree views of the surrounding area, including from the Manhood Peninsula and Isle of Wight.	Encourage a strategic approach to the planning of land use around Chichester and Langstone harbours and the Manhood Peninsula to address the pressures of climate change and development, ensuring that natural processes continue to function and the comparatively wild and tranquil character is retained. Ensure that realignment sites are managed to develop their full potential to support and enhance the characteristic landscape.	Sense of place/ inspiration Tranquillity Sense of history Biodiversity	

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Service	Assets/contributors to service	State	Main beneficiary	Analysis	Opportunities	Principal services offered by opportunities
Sense of history	<p>Roman sites</p> <p>Historic buildings</p> <p>Naval defences</p> <p>Harbour settlements</p> <p>Traditional buildings</p> <p>Parkland</p>	<p>Several important Roman sites and medieval buildings.</p> <p>Small flint villages, isolated dwellings and farm buildings.</p> <p>Military sites and structures from all periods.</p> <p>About 68 per cent of historic farm buildings remain unconverted. About 93 per cent are intact structurally.</p> <p>The Heritage Lottery Funded 2004 Archaeological Research Framework and accompanying 2007 research synthesis provide a comprehensive baseline of the archaeological resource of the AONB.</p> <p>There are 10 registered parks and gardens within the NCA covering 427 ha.</p>	International	<p>Archaeological and historical features include Roman villa sites such as Fishbourne Roman Palace, Chichester cathedral set within the historic city of Chichester and a post-medieval abbey at Titchfield. Picturesque harbourside settlements such as Bosham and isolated hamlets in rural areas provide additional historic context. There are also numerous historic naval associations at Portsmouth including Napoleonic fortifications such as the distinctive line of round Napoleonic forts that march out across the Solent guarding its eastern entrance and the entrance to Portsmouth Harbour, locally known as Palmerston's Follies.</p> <p>The area also has strong associations with aerial combat, with Goodwood Aerodrome, Shoreham Airport and Lee-on-Solent still operational. The former First World War, Second World War and Cold War airfield at Tangmere now houses an aviation museum. Displays include the aircraft in which world air speed records were achieved in 1946 and 1953 along the coast at Littlehampton. Shoreham is the oldest licensed airfield in the UK and has a Grade II* listed Art Deco style terminal building.</p> <p>The rich arable lands combined with access to local urban markets and London allowed many farmers to re-build their farmsteads, particularly in the 18th and 19th centuries. This re-building means that there are very few pre-1750 farm buildings.</p> <p>Buildings for cattle are predominantly 19th century. Earlier cattle buildings would be considered important.</p> <p>Traditional building materials are of timber frame, flint, cob and thatch that all contribute to the area's sense of place. Many villages have retained their attractive medieval and late medieval core.</p> <p>A number of historic settlements and heritage assets now subsumed into the larger conurbation are considered at risk of losing their identity and historical context.</p> <p>The HLF programme developed a strong archaeology partnership through a steering group that continues to oversee research within the AONB which informs engagement with local schools, visitors, landowners and residents within the AONB to help develop a wider understanding and appreciation of the historical value.</p>	<p>Opportunities should be sought to enhance the setting, interpretation and condition of the remaining assets.</p> <p>The restoration and conversion of vernacular buildings should be sympathetic to local distinctiveness and use local materials where possible.</p> <p>Encourage partners to use the results of the Archaeological Framework when prioritising and commissioning research both within and around the AONB, to guide the management of the historic environment.</p> <p>Encourage and support communities to seek funding to develop local heritage projects and initiatives.</p> <p>Encourage interpretation to improve understanding of the area's heritage including internationally recognised assets such as Portsmouth historic dockyard, Fishbourne Roman Villa and Chichester Cathedral. Support initiatives to improve sustainable transport links between these sites.</p>	<p>Sense of history</p> <p>Recreation</p> <p>Sense of place/inspiration</p>

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Service	Assets/attributes: main contributors to service	State	Main beneficiary	Analysis	Opportunities	Opportunities	Principal services offered by opportunities
Tranquillity	Harbours Coastline Woodland	Only 7 per cent of the area is classed as undisturbed, down from 28 per cent in the 1960s; 35 per cent of the area is classified as urban. The main areas of low level tranquillity are around the major towns – Portsmouth, Chichester, Fareham, Bognor Regis and Worthing and along road corridors such as the A27, M27 and the M275.	Local	Tranquillity is a scarce resource within this heavily urbanised NCA. Pockets of tranquillity are associated with the central rural areas and undeveloped harbours, including parts of Chichester Harbour. Tranquillity is also associated with the edges of remoter ancient woodlands at the foothills of the South Downs.	Encourage a strategic approach to the planning of land use around Chichester and Langstone harbours and the Manhood Peninsula to address the pressures of climate change and development, ensuring that natural processes continue to function and the comparatively wild and tranquil character is retained.		Tranquillity Sense of place/ inspiration Biodiversity

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Service	Assets/attributes: main contributors to service	State	Main beneficiary	Analysis	Opportunities	Opportunities	Principal services offered by opportunities
Recreation <i>continued on next page</i>	Coastline Harbours Rights of way Open access land One National Nature Reserve (NNR) parks and gardens Historic attractions Wildlife	Recreation is dominated by the seaside resorts of the urban east (such as Worthing and Bognor Regis) as well as the caravan parks, ribbon development and harbour-side tourism that characterise much of the rest of the coast. There is a 670 km rights of way network at a density of 1.29 km per km ² and 230 ha of open access land, covering 0.45 per cent of the NCA. Titchfield Haven NNR is managed by Hampshire County Council. Water-borne recreation is popular in this NCA. Chichester Harbour with 28 km ² of water, 27 km of well marked and lit channels and with easy access to the Solent is an ideal water recreation centre. The Harbour has over 5,200 moorings and marina berths, and 16 sailing clubs. Chichester Harbour AONB has approximately 1.5 million people visiting each year. The internationally designated wildlife sites make this a popular area for birdwatching.	National	With a low beach gradient and the lack of any obvious dangers such as rips or obstacles, East Wittering and the whole stretch of Bracklesham Bay is a favourite with surfers with one of the UK's longest running surf clubs, Shore Surf Club, founded in 1969. Most of the coastal footpath network is located along existing sea defences, embankments or the foreshore itself. Should significant changes appear likely, options will need to be sought to relocate footpaths and other recreational resources inland. Popular birdwatching areas outside the internationally designated sites include Titchfield Haven, which has a network of accessible routes and a hide. Chichester Harbour AONB is one of the most important areas for water recreation in the country. There is considerable congestion and overcrowding on the water, particularly at weekends in the summer and conflict between different types of harbour user. Chichester Canal is currently under-used Walkers, cyclists, artists and birdwatchers are among those who enjoy Chichester Harbour AONB. There are strong indications that the number of visitors will continue to increase. Continuing development within and adjacent to the AONB is likely to lead to increased population pressure. Visitor impact needs to be monitored and addressed to minimise the effect on the very resource people come to enjoy.	Secure the long-term future of the coastal footpaths, investigating managed realignment and permissive route options where possible. Develop a strategy for managing those at risk from rising sea levels and failing sea defences. Support the provision of a high-quality network of footpaths, cycle routes and wheelchair paths through the Rights of Way Improvement Plans and other initiatives. Promote the Solent Disturbance Mitigation Project as a basis for formulating coherent policies for minimising impact of increased development and recreation provision on internationally important bird populations. Work with partners to educate groups using the water bodies on the needs of others and to give guidance on behaviour and good practice and balance the demand for more and improved boating facilities with environmental considerations. Support changes which encourage users to enjoy congested areas such as Chichester Harbour outside peak times. Support the use of Chichester Canal to link Chichester to the AONB through the Chichester Canal Trust.	Recreation Sense of place/ inspiration Sense of history Biodiversity	

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Service	Assets/attributes: main contributors to service	State	Main beneficiary	Analysis	Opportunities	Opportunities	Principal services offered by opportunities
Recreation <i>continued from previous page</i>		In response to concerns over the impact of recreational pressure on birds within protected areas in the Solent, the Solent Disturbance and Mitigation Project was initiated to determine visitor access patterns around the coast and how their activities may influence the birds.	National	Much work has already been undertaken by Chichester Harbour Conservancy in association with Action in Rural Sussex, Age Concern and other local organisations to further the work of the Local Strategic Partnership group to reduce isolation among older people. Goodwood Estate runs an extensive education programme including forest schools and hands-on sessions at its farm. The peregrine falcon nest on the spire of Chichester Cathedral is widely viewed via a webcam each spring and receives great attention from local and national media. The Solent Disturbance and Mitigation Project (SDMP) provides evidence that recreational pressures from new development within 5.6 km of the Solent coastline may have an adverse affect on internationally protected birds.	Support the work of partners including Chichester Harbour Conservancy and Environmental Education Groups to establish closer links between the harbour education service and the local farming community, sustainable schools and healthy eating programmes and community services. Ensure that realignment sites are managed to develop their full potential to support and enhance access and interpretation where appropriate. Work with partners to develop a plan for avoidance and mitigation to minimise impact of recreational activities on internationally protected bird population.		

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Service	Assets/attributes: main contributors to service	State	Main beneficiary	Analysis	Opportunities	Principal services offered by opportunities
Biodiversity <i>continued on next page</i>	Internationally designated sites SSSI One NNR Coastal habitats Grazing marsh Heathlands Meadows Woodlands Gardens	Some 3 per cent (1,700 ha) of the area is designated as Site of Special Scientific Interest (SSSI) and there are four Special Protection Areas (SPAs), two Special Areas of Conservation (SAC) and four Ramsar sites. The marine environment of Chichester Harbour AONB is afforded protection through the Solent Maritime SAC European designation.	International	Chichester Harbour has been designated as a wetland of international importance under the Ramsar Convention (1971) as it regularly holds 20,000 or more wildfowl and waders in winter, has the third largest population of dark-bellied Brent geese in the country (with Pagham, Langstone and Portsmouth harbours also in the top 12) and has internationally significant populations of Dunlin and black-tailed godwit. It is also an important site for nesting terns. A subtidal survey of habitats and species within the harbour identified 200 maritime taxa including invertebrates, algae and fish. There is also a colony of harbour seals and water voles are regularly seen. In recent years Chichester Harbour has not regularly supported significant numbers of breeding terns, probably due to a combination of disturbance and erosion of historical breeding sites. However, the NCA as a whole is important for breeding terns. Between Shoreham and Bognor Regis the coastline supports fringing shingle beaches where pioneer plant communities survive in places. These contain characteristic plants such as yellow-thorned poppy and sea kale as well as rarities such as starry clover. The relict dunes at Bognor Reef support the nationally rare chiding pink, as does Pagham Beach where the long-winged coneheld, sand dart and Matthew's wainscot moth can also be found. The Hampshire Wildlife Trust reserve at Farlington Marshes and the marshes on the eastern side of Hayling Island provide some more extensive and well developed examples of coastal grazing marsh.	Ensure that realignments are managed so that intertidal habitats can develop and expand effectively. Where existing flood defences are reinforced, work with partners to limit adverse impacts on biodiversity. Improve water quality by reducing the amount of nutrients entering the harbours from domestic and industrial sources by engaging with the planning process to ensure that new developments incorporate the best possible measures for reducing problems from waste, including SUDS. Improve water quality by reducing the amount of nutrients entering the harbours from agricultural sources by continuing with catchment initiatives that engage and challenge farmers to reduce nutrient leaching, pesticide contamination and soil erosion. Seek to secure the future of breeding terns (particularly Little Terns) in the harbours. There are opportunities to extend and possibly link areas of coastal grazing marsh as part of flood defence measures. Preserve scarce areas of heathland and seek opportunities to improve and extend.	Biodiversity Food production Regulating water quality Regulating water flow Regulating coastal erosion and flooding Recreation Sense of place/ inspiration

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Service	Assets/attributes: main contributors to service	State	Main beneficiary	Analysis	Opportunities	Opportunities	Principal services offered by opportunities
Biodiversity <i>continued from previous page</i>		European native oyster populations have experienced an acute decline since the 19th century due to the combination of over-fishing and associated habitat loss, combined with the anthropogenic and environmental pressures of pollution, disease and the presence of non-native species.		Historically heathland was much more extensive, linking with the hunting forests of Bere and Walkham Chase in south Hampshire so there may be opportunities to extend or re-create small areas. There is increasing concern at the disturbance caused to nature conservation interests by increased recreational pressure from housing development. IFCA identified 22 species of fish within Chichester Harbour. A survey carried out in 2004 by the University of Portsmouth recorded 32 species, with sand and painted gobies and black bream the most abundant. Also numerous at some sites were bass, ballan wrasse and corkwing wrasse. Several species, such as the bass, bream, mullet, sole and plaice use the harbour as a nursery area with a large percentage of juveniles making up the survey samples. ¹⁸ The Solent oyster population has declined in the last decade and shows no sign of broad scale recovery. The Chichester oysters are considered to be a component of this wider population. The native oyster fishery has been locally important in Chichester Harbour since at least Roman times. Closer scrutiny of the impact of activities, such as oyster dredging and bait digging, on the subtidal and intertidal biodiversity within the AONB may be required in future to determine the impact on favourable conservation status.	Support inclusion of high-quality greenspace within new and extended development for the wellbeing of local communities and to provide links between important biodiversity sites. Support the Sussex Sea Fisheries Committee in maintaining the bass nursery area. Support management of native oysters in Chichester Harbour, including implementation of temporary closure of fisheries to allow populations to recover when necessary. ¹⁹ Support the bait digging Code of Conduct and work within the SEMS Management Scheme to monitor the level and impact of bait digging.		

¹⁸ A survey of the fish population of Chichester Harbour, P Farrell, University of Portsmouth (2005)

¹⁹ Chichester Harbour Oyster Partnership Initiative (URL: www.sussex-ifca.gov.uk/index.php?option=com_content&view=article&id=132&Itemid=204)

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Service	Assets/attributes: main contributors to service	State	Main beneficiary	Analysis	Opportunities	Opportunities	Principal services offered by opportunities
Geodiversity	Upper raised beach deposits Coastal exposures	Remains of Homo heidelbergensis were first found at Boxgrove in 1994, comprising the partial tibia of a male. In 1996 two incisor teeth from another individual were found. In 2003 English Heritage announced it would buy the remains of the quarry to ensure the preservation of the site complex.	International	Boxgrove is a site of national archaeological importance because of the discovery in 1994 and 1995 of 500,000 year old human fossils of a nomadic hunter-gatherer ('Boxgrove Man' and associated artefacts), found in the gravel deposits of a raised beach which remain the oldest such fossils ever discovered in the UK. There were also animal bones which are the oldest found specimens of their species, such as the wing bone of the great auk found at the site in 1989. The coastal exposures of Lower Tertiary deposits reveal diverse fossil assemblages, such as at Felpham, Bognor Reef and Bracklesham Bay. Selsey is a key Quaternary site for a sequence of freshwater and estuarine deposits of Ipswichian Interglacial age. Mammal remains including rhinoceros, horse and hippopotamus have also been recorded from the deposits. Much potential exists for vertebrate research at this locality, particularly with regard to stratigraphy and pollen zonation. East of Langstone a low cliff line at high water mark exhibits a complex of Brickearth and Coombe Rock deposits and at East Head there is a sizeable sand dune and shingle system both of which are of geomorphological importance. Pagham Harbour is a key site for coastal geomorphology and also has an outstanding palaeobotanical site of great importance to studies of Tertiary floras. Generally a good place to study coastal processes at work.	Interpret and promote the Boxgrove site to encourage interest and understanding of the area's geodiversity. Maintain coastal exposures of Lower Tertiary deposits revealing diverse fossil assemblages, such as at Felpham, Bognor Reef and Bracklesham Bay. Maintain important inland geology exposed in pits and quarries, such as Downend Chalk Pit SSSI, helping to promote an appreciation and understanding of the geodiversity of the NCA and connecting communities with their local heritage. Conserve coastal geomorphological features (and the natural processes needed to sustain them) including sand dune systems, sand and shingle spits and banks (for example East Head). Encourage the use of traditional building materials in conservation projects (for example timber frame, flint, cob and thatch) and promoting the use of the Chichester Harbour AONB Design Guidance for replacement dwellings in the AONB. Continue to research, monitor and record geomorphological processes to inform management decisions. Provide access to sites of geological interest where appropriate and interpret the geological features and dynamic coastal processes to improve understanding and appreciation. Encourage research, monitoring and recording of geomorphological processes.	Geodiversity Recreation Sense of place/inspiration Sense of history	

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APPENDIX C:

**The West Sussex Landscape Character Assessment (2003): Southbourne Coastal Plain:
Sheet SC5.**

Overall Character

This character area extends from Hampshire in the west to Chichester in the east and runs along the northern boundary of the Chichester Harbour Area of Outstanding Natural Beauty. Much of this area lies below the high spring tide level and has been reclaimed from the sea. The relatively open character allows long views to the Harbour area and occasional views of the spire of Chichester Cathedral. Sporadic settlements hug the tops of the inlets of Chichester Harbour and are mainly located along the coastal road, the A259, which crosses the area east-west. A landscape which, despite lacking strong distinctive character, has strategic value and has great potential to improve the setting of the surrounding urban areas. Intensive horticulture, glasshouses, horse paddocks, busy roads and bypasses are features of this landscape.

Key Characteristics

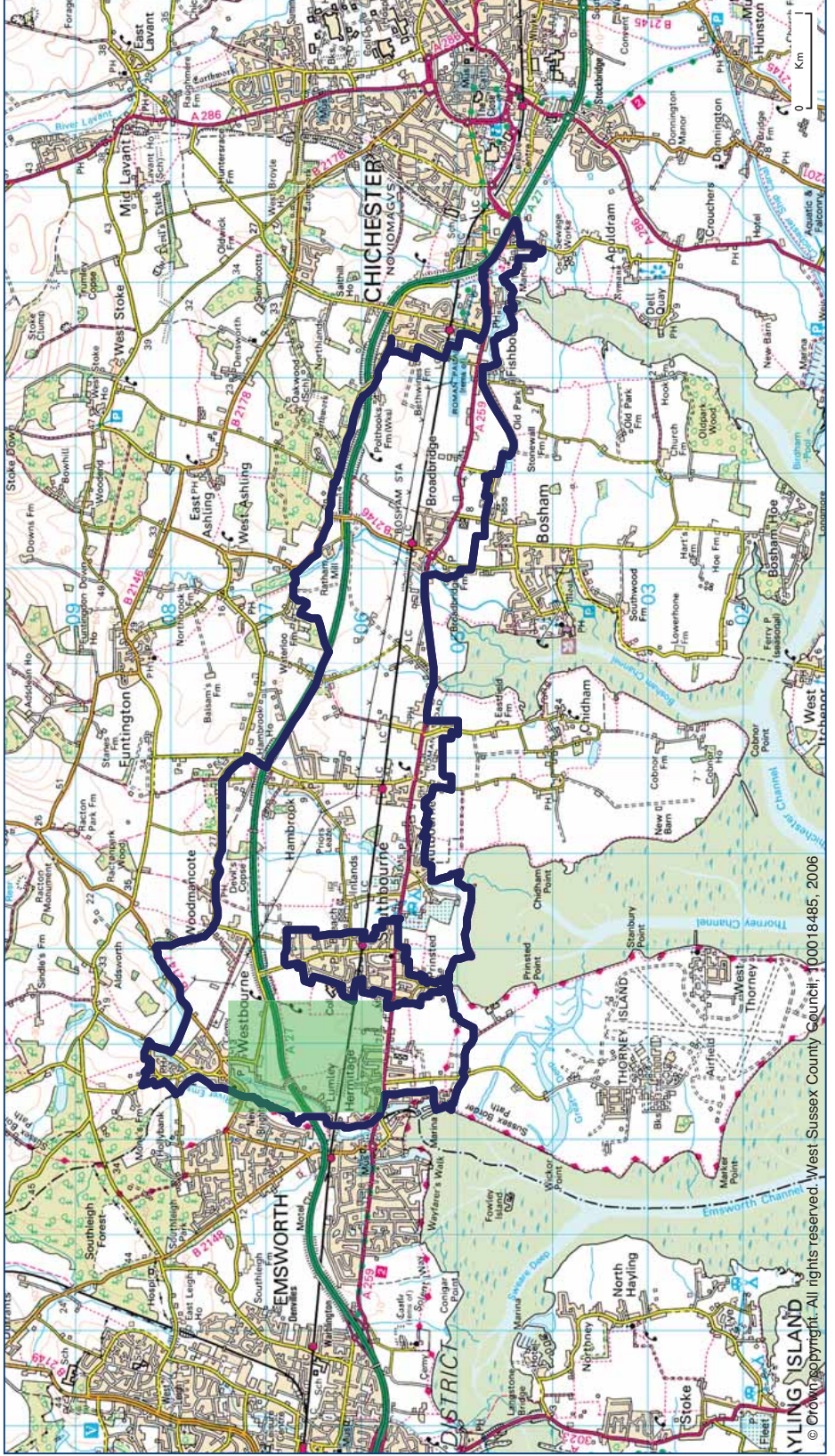
- Low lying flat open landscape.
- Long views to Chichester Harbour and to the distinctive spire of Chichester Cathedral.
- Suburban settlement dominates the area.
- Small towns, villages and road crossings hug the tops of inlets to Chichester Harbour.
- Degraded tree and hedgerow framework. A low density of hedgerows and hedgerow trees with occasional shelterbelts.
- Meandering rife and drainage ditches.
- Large-scale arable farming and market gardening.
- Clusters of greenhouses.

- Winterbourne chalk streams flow through this area.
- Frequent urban fringe influences of horse paddocks, agricultural and light industry.
- Busy minor and major roads which also serve as bypasses. Minor roads run mainly north-south between the A259 and A27.
- Narrow gaps of open land between Hermitage, Southbourne, Nurbourne and Chidham. The gaps between settlements provide important visual relief to the built up areas, although their landscape character is often poorly defined, with a degraded hedgerow network.
- A few parts of this area retain elements of a smaller-scale, more varied landscape with quiet hamlets and traditional villages enclosed by small pastures.

Southbourne Coastal Plain South Coast Plain

The area covered by the Sheet is derived from:

Chichester to Shoreham Coastal Plain (C1) Landscape Character Area as defined in the unpublished **West Sussex Landscape Character Assessment** (November 2003).



Historic Features

- Inlets, small waterways and ditches.
- Few visible prehistoric monuments, apart from crop marks.
- Large regular fields, mostly the product of Parliamentary enclosure.
- West of Chichester, Fishbourne Villa is unparalleled in Roman Britain for size and splendour. Roman building at Broadbridge.
- Medieval churches at Fishbourne and Westbourne.
- Watermills (post medieval - medieval) located around the small waterways and inlets feeding into Chichester Harbour; at Fishbourne, Nutbourne, Westbourne, Lumley and Ratham.
- Brickworks.

Biodiversity

- Semi-natural habitats are scarce due to intensive arable agriculture.
- The rife and ditch systems, together with occasional ponds, are of particular ecological value, supporting an important but fragile population of water voles.
- Fragments of woodland, some of which are ancient.
- Winterbourne chalk streams flow through this area and interact with saline estuaries causing unique conditions.
- Occasional species-rich meadows along rifes.
- Wetland reed bed and tall fen habitat associated with the tops of inlets flowing into Chichester Harbour.
- Occasional village ponds and greens provide local havens for wildlife.
- Hedgerow pattern is fragmented with occasional isolated woods. Linking features assume a greater significance in an otherwise cultivated landscape.

Change - Key Issues

- Urban development pressures, especially in the gaps between settlements and on the edge of Chichester.
- Major existing road improvements and the possibility of new ones.
- Conversion of agricultural buildings to light industrial uses.
- Introduction of large scale glasshouses with distribution sheds.
- Climate change may increase the risk of storm surges associated with flooding, with consequences for land currently adjacent to inter-tidal landscapes and habitats, increasing pressure for possibly insensitive coastal defences.
- Management and possible realignment of sea defences, due to predicted sea level rises, will have significant implications for landscape over the coming decades.

Landscape and Visual Sensitivities

Key sensitivities are:

- Farm diversification and garden centres leading to introduction of signs and fencing.
- Derelict glasshouses and agricultural holdings.
- Changes in transport infrastructure.
- Proximity to Chichester Harbour Area of Outstanding Natural Beauty.
- Development at the top of waterways and inlets feeding in to Chichester Harbour.
- Key views to Cathedral and Chichester Harbour.
- Managed retreat of the coastline may be particularly influential in the future, providing opportunities for creation of new coastal and inter-tidal habitats and could result in a more naturally functioning landscape.



Major road - A27



Reed bed - Fishbourne



Horse paddocks - Westbourne



Flat landscape with arable farmland and degraded hedgerows - Fishbourne

Land Management Guidelines



Conserve the long views to Chichester Harbour and the spire of Chichester Cathedral.

- Create a new large scale tree and hedgerow framework to complement the open, intensively farmed landscape, whilst maintaining important views.
- Maintain and strengthen field boundaries such as hedgerows and shelterbelts.
- Conserve and link existing hedgerows and trees.
- Restore field boundaries through shelter belt planting, especially around horse paddocks.
- Establish landscape management plans for urban edges.
- Encourage conservation and community involvement in urban open spaces and village greens.
- Encourage the creation of new suburban woodlands, preferably with community involvement, for recreation and to link up with existing woodlands to the north.
- Encourage bold tree planting adjacent to roads to enhance both the visual and wildlife value of these areas.
- Restore and strengthen the landscape of the gaps between settlements.
- Encourage landscape enhancements around villages and on their approaches.
- Strengthen the landscape framework and filter the views of the urban edge through planting of woodland, tree and shrub belts and groups. Use these to screen and unify disparate suburban elements, especially along roadside verges, on village edges and around glasshouses.
- Conserve, manage and enhance existing village ponds.
- Maintain and enhance the landscape and biodiversity of rifes, waterways and inlets.
- Encourage and promote land management schemes to increase species-rich grassland areas.

The Guidelines should be read in conjunction with:

- County-wide Landscape Guidelines set out in *A Strategy for the West Sussex Landscape* (November 2005) published by West Sussex County Council.
- Chichester Harbour Area of Outstanding Natural Beauty Management Plan 2004 - 2009.

APPENDIX D:
Landscape Supporting Graphics

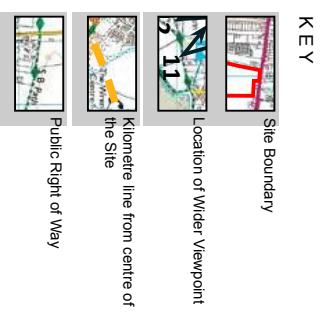
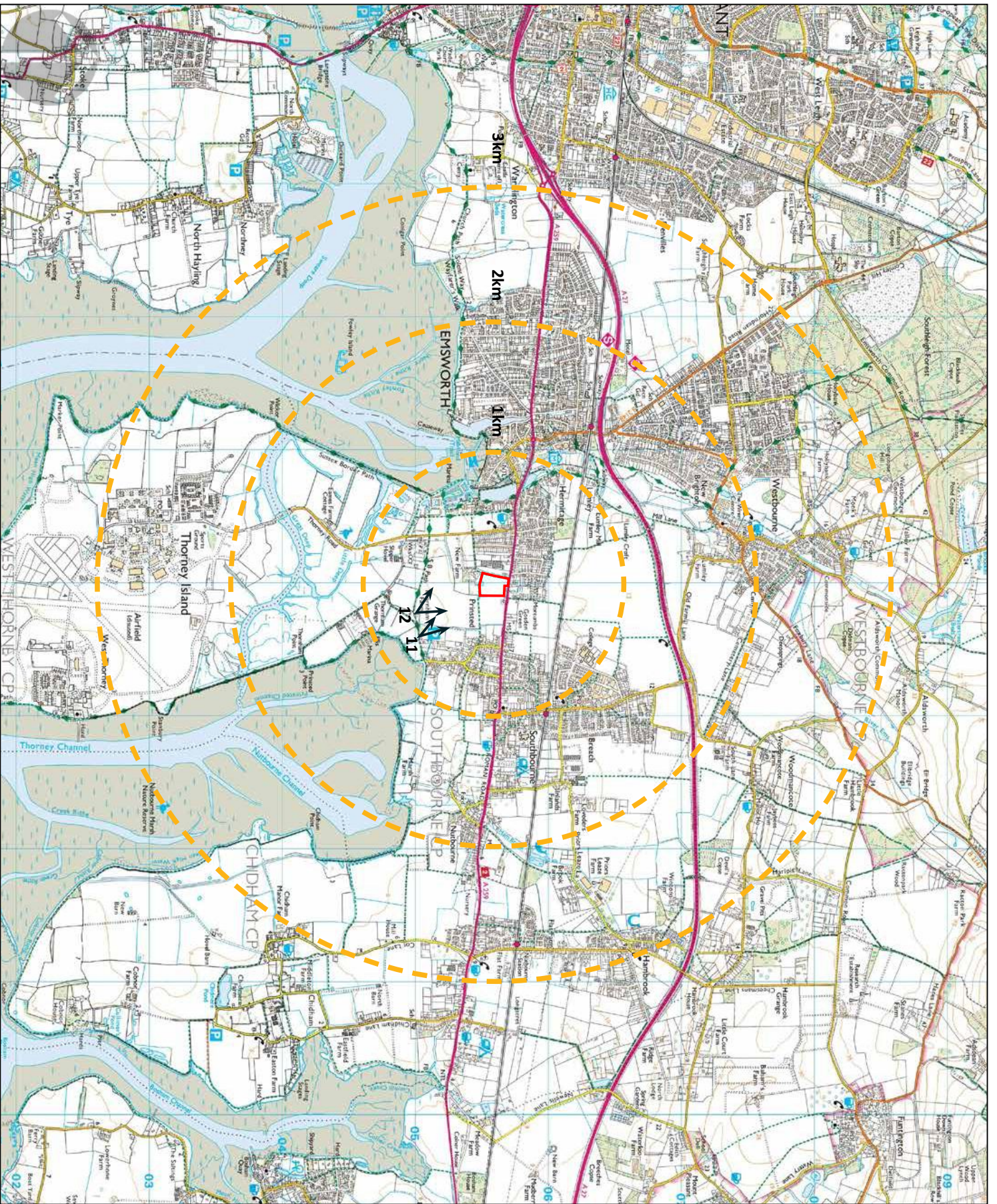
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Hermitage, Emsworth

Landscape Supporting Graphics

July 2018



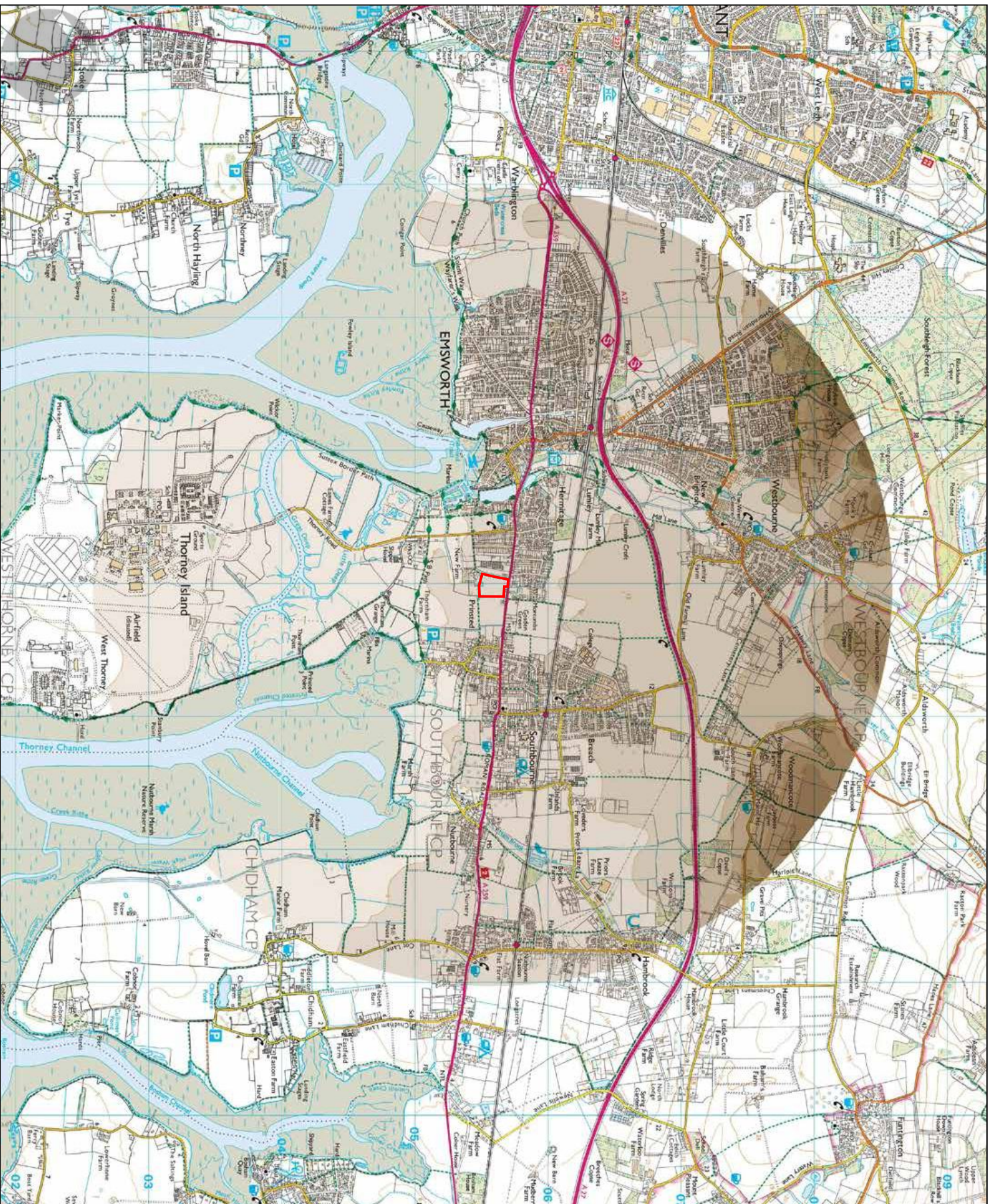


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project	scale
Heritage, Emsworth	1:25000 @ A3
title	date
Site Context (Location of Wider Viewpoints)	04/07/2018
drawing number	drawn by
	SS
revision	checked
	RH

Figure 1



KEY

 Site Boundary

 0.5m AOD

 5-10m AOD

 10-15m AOD

 15-20m AOD

 20-25m AOD

 25-30m AOD

 30-35m AOD

 35-40m AOD

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project: Hermitage, Emsworth
 scale: 1:25000 @ A3
 date: 04/07/2018

title: Contour Plan
 drawn by: SS
 checked: RH

drawing number: _____
 revision: _____

Figure 2

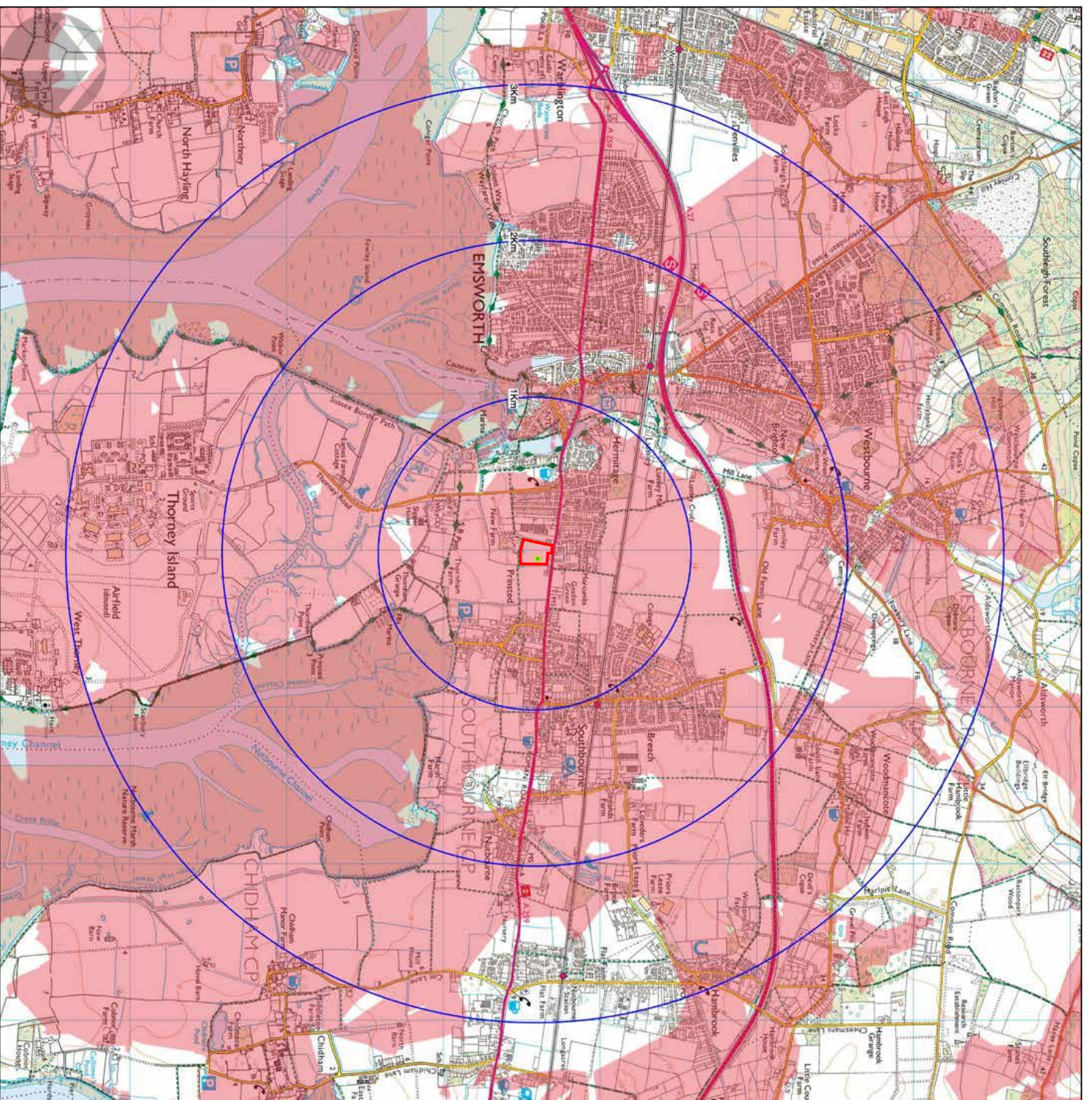
-  Site Boundary
-  Extent of ZTV
-  Location of reference markers
-  Radius lines from site centre
in km

Notes:

Zone of Theoretical Visibility (ZTV)

The reference marker could possibly be seen from within the area shaded red. The reference marker is at the highest point of the proposed building 7.5m above existing ground level.

A ZTV map illustrates the potential (or theoretical) visibility of an object in the landscape. The phrase "potential visibility" is used to describe the result because the analysis does not take into account any landscape features such as trees, woodland or buildings, etc. The analysis is made on the basis of topography alone using O.S Terrain 5 data.

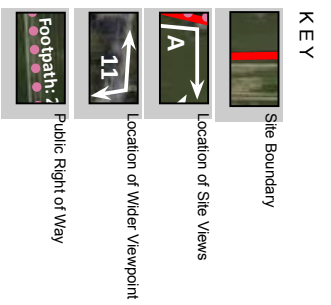


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revision	date	description	dwn	chkd
project	scale	1:25000 @ A3		
Heritage, Emsworth	date	04/07/2018		
title	drawn by	SS		
Zone of Theoretical Visibility (ZTV) Bare Earth	checked	RH		
drawing number	revision			

Figure 3



revision	date	description	dwn	chkd

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enplan
incorporating Vista

project: **Heritage, Emsworth**
scale: NTS
date: 04/07/2018

title: **Landscape and Visual Appraisal Views**
drawn by: SS
checked: RH

drawing number	revision

Figure 4



View A - Viewpoint taken from the north western boundary looking south east across the Site



View B - Viewpoint taken from the northern boundary looking south across the Site adjacent to No. 146 Main Road

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 5250 Spring Boulevard
 Milton Keynes
 MK9 2AH
 T 01908 303701
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revision	date	description	drawn	chkd
		View A & B	SS	
			checked	RH

project
Heritage, Emsworth
 scale
 NTS
 date
 04.07.2018
 drawing number
Figure 5
 revision



View C - Viewpoint looking south across the Site from the northern boundary adjacent to No. 146 Main Road



View D - Viewpoint taken looking south west from the north east corner of the Site adjacent to the dwelling No. 168 Main Road

Gloucester House
 5250 South Parade
 Milton Keynes
 MK9 2AH
 T 01908 303701
 www.enplan.net



revision	date	description	drawn	chkd
			SS	
			RH	

project
 Hermitage,
 Emsworth

scale
 NTS
 date
 04.07.2018

drawing number
Figure 6

DO NOT SCALE FROM THIS DRAWING | DRAWING SUBJECT TO ©



View E - Viewpoint taken from the south eastern boundary of the Site looking north west across the Site



View F - Viewpoint taken from the south western boundary looking north east across the Site

revision	date	description	drawn	check
			drawn by	
			SS	
			checked	
			RH	

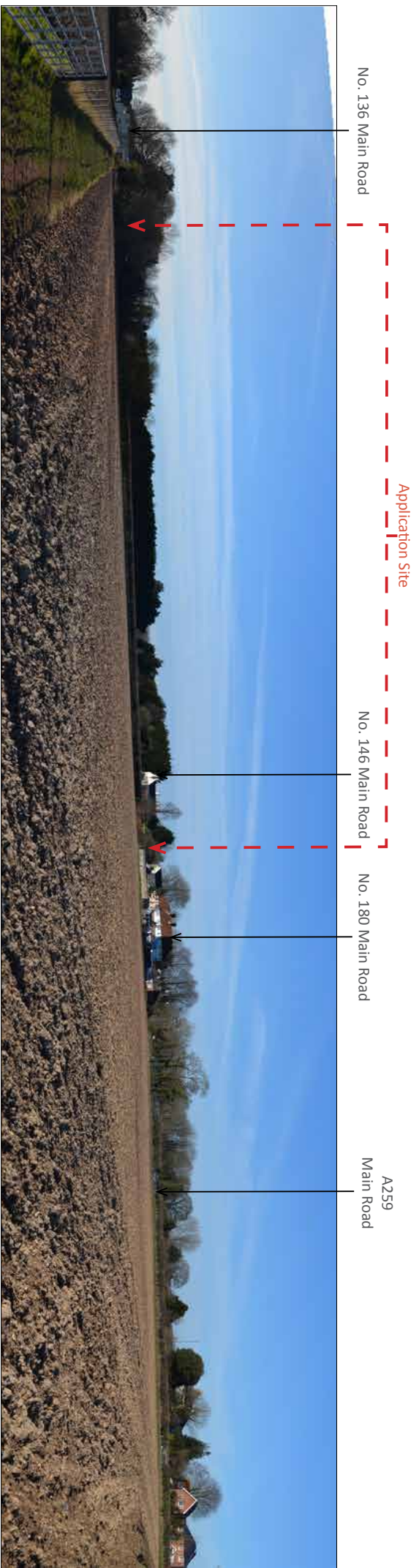


Gardener House
 5250 Spring Road
 Milono Key, Vic
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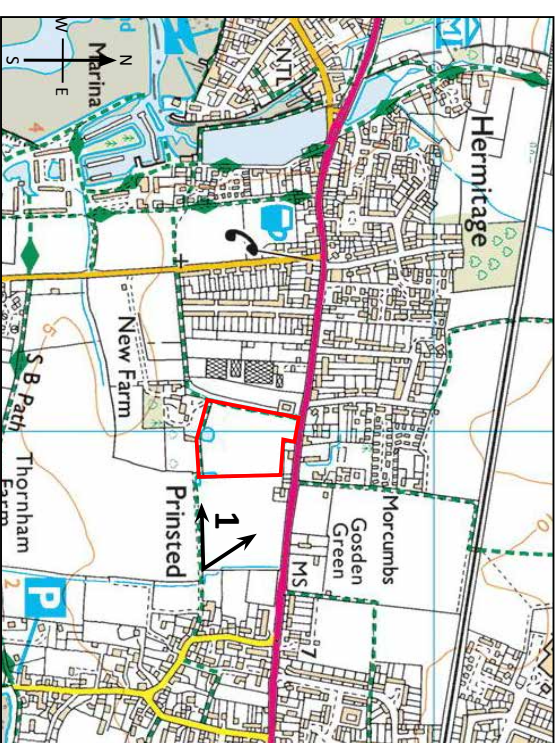
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Figure 7

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**Heritage,
 Emsworth**
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 date
 04.07.2018



Viewpoint 1	Viewpoint taken from the Public Right of Way Reference Number: Footpath 204 looking north west towards the Application Site (Recreational Corridor)
Visual Sensitivity	High (Users of the Public Right of Way)
Camera Type	Nickon D3100 with 35mm lens equivalent
Date	07.02.2018
Approx Elevation	5m AOD
Distance to Site	240m



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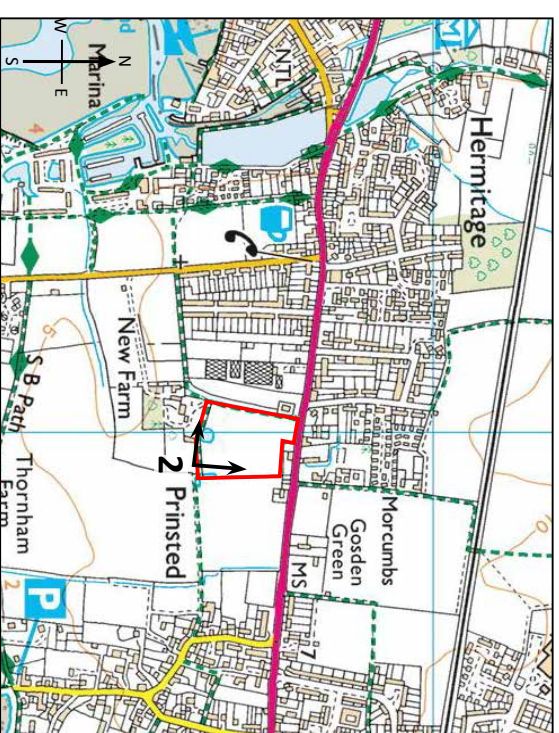
date
 04.07.2018

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Viewpoint 2	Viewpoint taken from the Public Right of Way Reference Number: Footpath 204 which runs to the south of the Site (Movement Corridor)
Visual Sensitivity	High (Users of the Public Right of Way)
Camera Type	Nikon D3100 with 35mm lens equivalent
Date	07.02.2018
Approx Elevation	5m AOD
Distance to Site	1m



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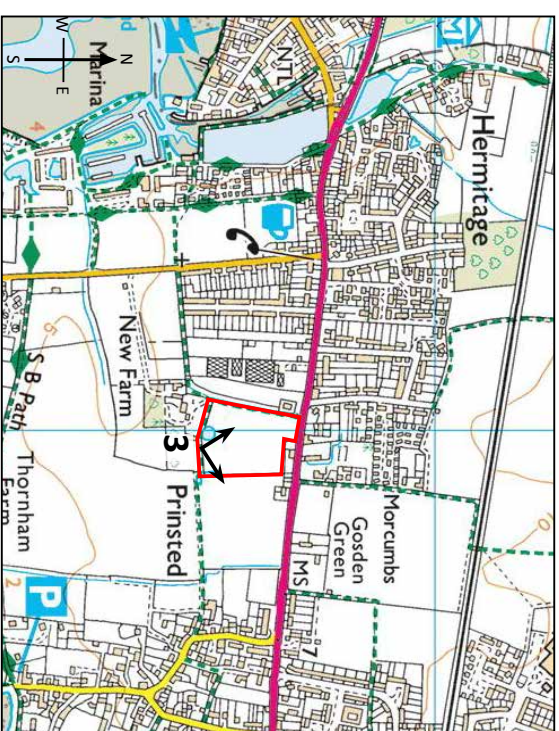
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Emsworth

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04.07.2018



Viewpoint 3	Viewpoint taken from the Public Right of Way Reference Number: Footpath 204 looking north across the Site towards the northern boundary (Recreational Corridor)
Visual Sensitivity	High (Users of the Public Right of Way)
Camera Type	Nikon D3100 with 35mm lens equivalent
Date	07.02.2018
Approx Elevation	5m AOD
Distance to Site	1m



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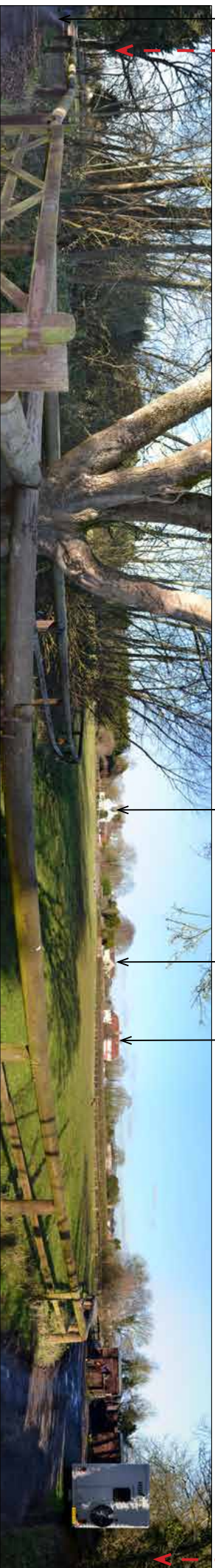
Application Site

Public Right of Way Reference
Number: Footpath 204

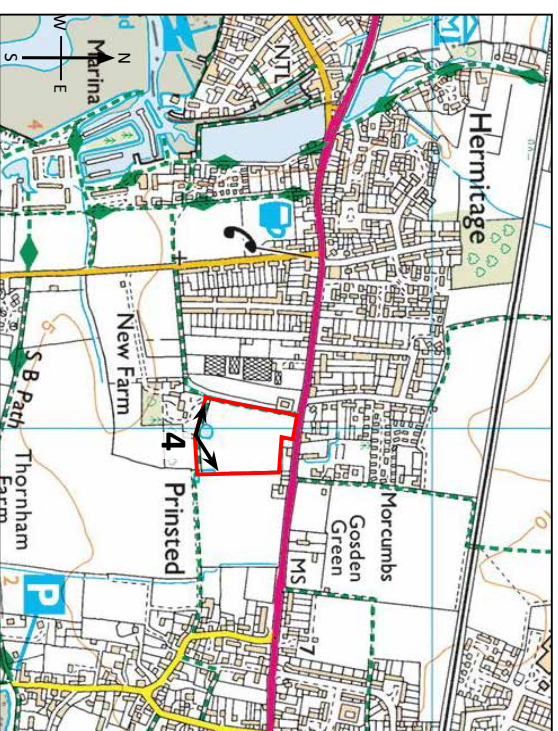
No. 146
Main Road

No. 168
Main Road

No. 178 & 180
Main Road



Viewpoint 4	Viewpoint taken from the Public Right of Way Reference Number: Footpath 204 looking north towards the Application Site, adjacent to the entrance of Dwelling 136 Main Road (Residential & Recreational Corridor)
Visual Sensitivity	High (Residents) High (Users of the Public Right of Way)
Camera Type	Nikon D3100 with 35mm lens equivalent
Date	07.02.2018
Approx Elevation	5m AOD
Distance to Site	1m



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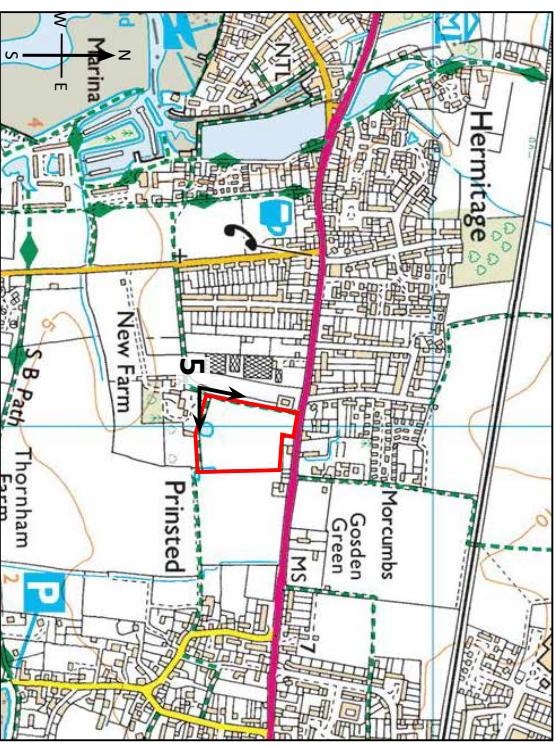
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04.07.2018

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Figure 11

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Viewpoint 5	Viewpoint taken from the Public Right of Way Reference Number: Footpath 203 looking north east towards the Application Site adjacent to the Entrance of the New Life Christian Church (Recreational Corridor)
Visual Sensitivity	High (Users of the Public Right of Way)
Camera Type	Nikon D3100 with 35mm lens equivalent
Date	07.02.2018
Approx Elevation	5m AOD
Distance to Site	20m



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Viewpoint 5

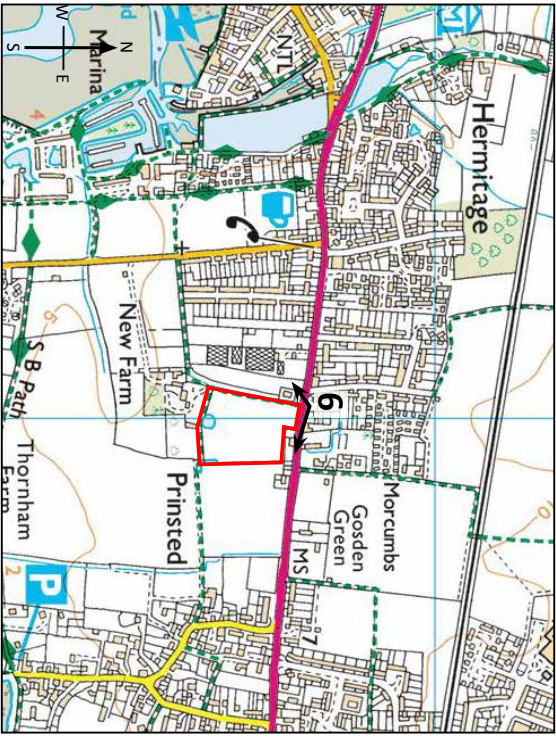
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Viewpoint 6	Viewpoint taken from the footpath on Main Road looking south towards the Application Site adjacent to 123a Main Road (Movement Corridor)
Visual Sensitivity	High (Residential) Moderate (Users of the Public Highway)
Camera Type	Nikon D3100 with 35mm lens equivalent
Date	07th March 2018
Approx Elevation	4m AOD
Distance to Site	15m



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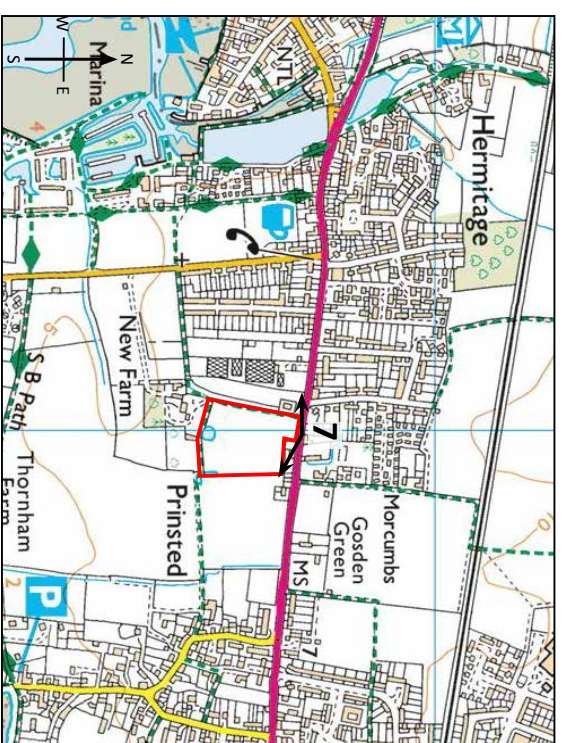
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Viewpoint 7	Viewpoint taken on the footpath adjacent to Main Road looking south towards the Application Site adjacent to the Dwelling 129 Main Road (Residential & Movement Corridor)
Visual Sensitivity	High (Residents) Moderate (Users of the Public Highway)
Camera Type	Nikon D3100 with 35mm lens equivalent
Date	07.02.2018
Approx Elevation	5m AOD
Distance to Site	10m



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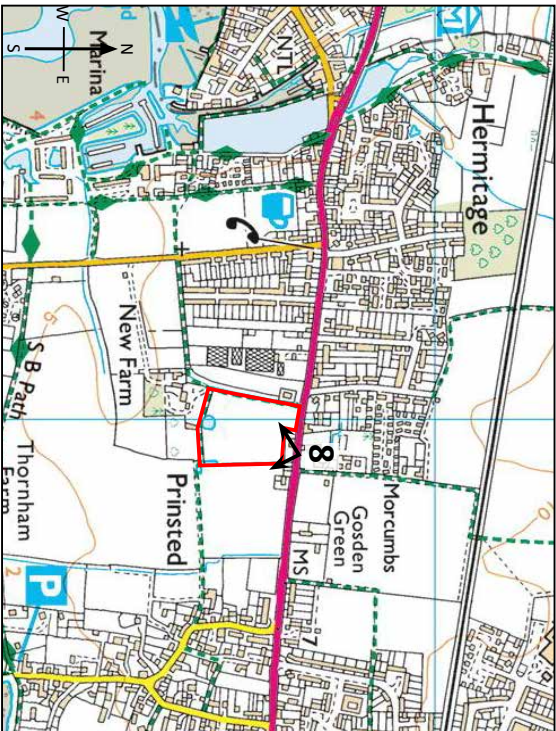
project
Hermitage, Emsworth

Application Site

Southern Boundary
of the Site



Viewpoint 8	Viewpoint taken from Main Road looking south towards the Application Site from the side access gate of Dwelling No. 146 Main Road (Residential & Movement Corridor)
Visual Sensitivity	High (Residents) Moderate (Users of the Public Highway)
Camera Type	Nikon D3100 with 35mm lens equivalent
Date	07.02.2018
Approx Elevation	5m AOD
Distance to Site	40m



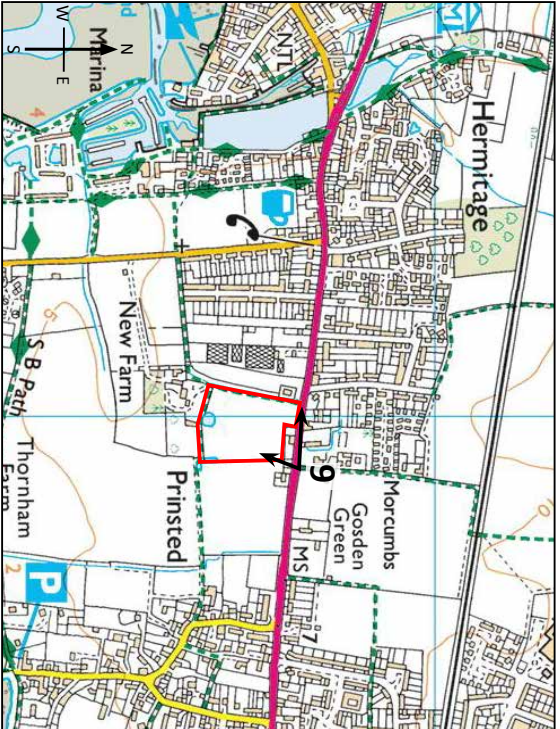
Gloagster House
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date	04.07.2018							



Viewpoint 9	Viewpoint taken from Main Road looking south west towards the Application Site adjacent to the Public Right of Way Reference Number: 241 (Recreational & Movement Corridor)
Visual Sensitivity	High (Users of the Public Right of Way) Moderate (Users of the Public Highway)
Camera Type	Nikon D3100 with 35mm lens equivalent
Date	07.02.2018
Approx Elevation	5m AOD
Distance to Site	60m



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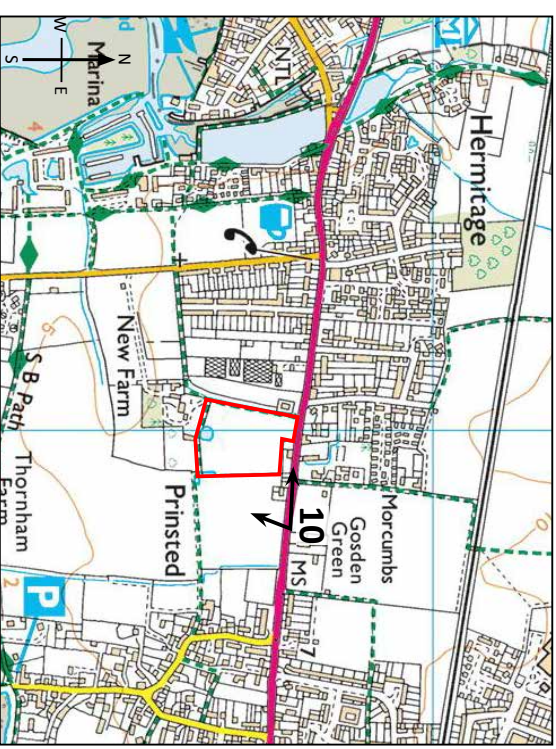
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Application Site



Viewpoint 10	Viewpoint taken from the footpath on Main Road adjacent to the Entrance of Tuppenny Barn looking south west towards the Application Site (Movement Corridor)
Visual Sensitivity	Moderate (Users of the Public Highway)
Camera Type	Nikon D3100 with 35mm lens equivalent
Date	07.02.2018
Approx Elevation	5m AOD
Distance to Site	110m



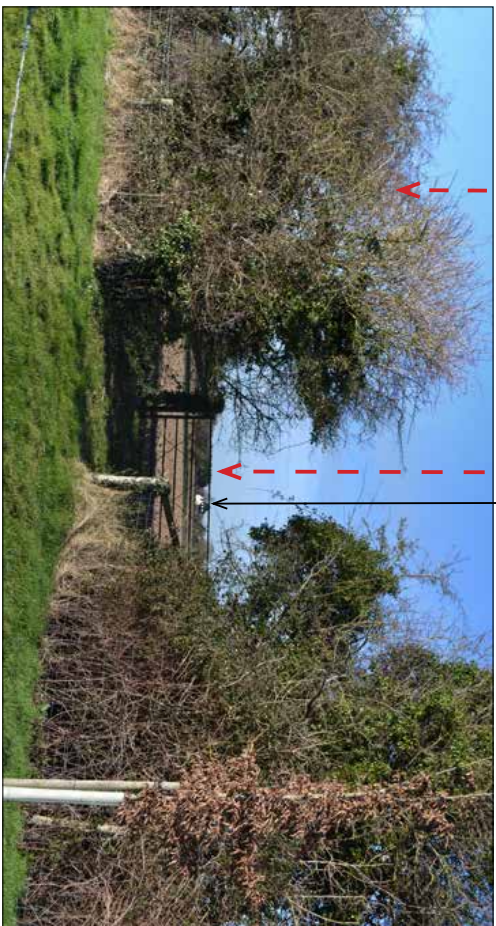
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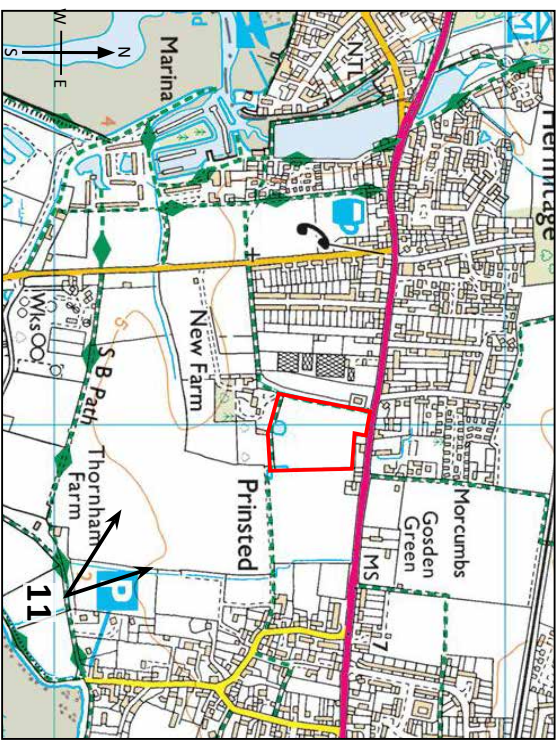
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scale	drawing number	checked
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date	revision	
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Approximate Location
of the Application Site

No. 146 Main Road



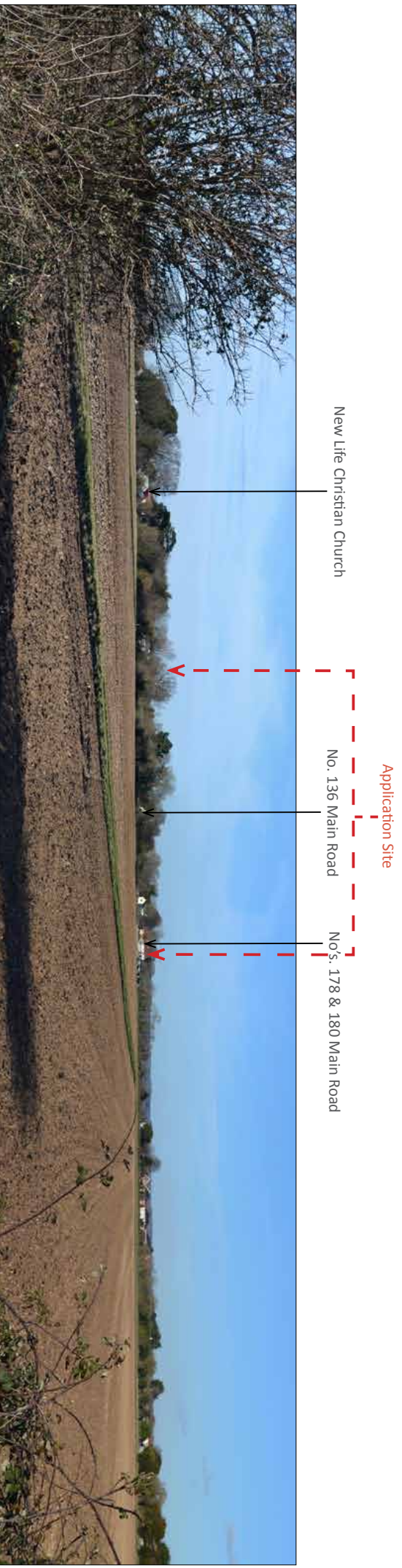
Viewpoint 11	Viewpoint taken from the Public Right of Way Reference Number: Footpath 3000 looking north west towards the Application Site (Recreational Corridor)
Visual Sensitivity	High (Users of the Public Right of Way)
Camera Type	Nikon D3100 with 35mm lens equivalent
Date	07.02.2018
Approx Elevation	5m AOD
Distance to Site	600m



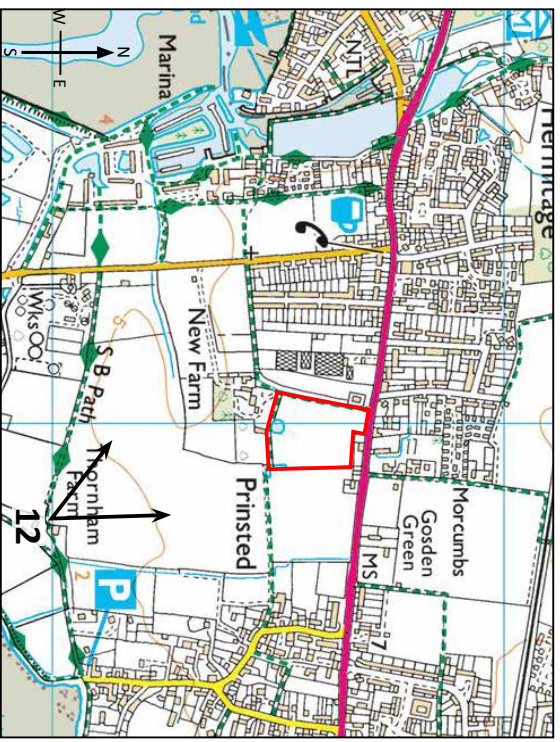
Cloudfaster House
540 South Boulevard
Millon Keynes
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Heritage, Emsworth	Viewpoint 11	SS
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Viewpoint 12	Viewpoint taken from the Public Right of Way Reference Number: Footpath 205 looking north west towards the Application Site (Recreational Corridor)
Visual Sensitivity	High (Users of the Public Right of Way)
Camera Type	Nikon D3100 with 35mm lens equivalent
Date	07.02.2018
Approx Elevation	5m AOD
Distance to Site	550m



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 date
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 date: 04/07/2018

title: **Illustrative Masterplan**
 drawn by: SS
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Figure 20