West Wight Technology Park

Landscape Technical Appendix

For

Your Energy Ltd

Terence O'Rourke

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1.0 INTRODUCTION

1.1 Appointment

Terence O'Rourke Ltd was appointed by Your Energy Ltd to update and complete a landscape and visual assessment of the proposed West Wight wind farm by E4 Environmental and Sinclair Knight Merz (SKM).

This landscape Technical Appendix form part of a full Environmental Statement produced for the proposed West Wight Project.

1.2 Overview

The purpose of this Technical Appendix is to evaluate the significance of the potential effects of the proposals on the landscape and visual resources within a 30km radius study area centred on the site.

The site, which extends to over 278 hectares, is currently in agricultural use, predominately being farmed as arable. The land fall gradually from south to north and is incised by several small streams issuing from the site and flowing northwards in shallow valleys. The site is mostly open: the majority of the hedgerows were removed over 50 years ago, and today only a few isolated copses remain located in the valleys, the largest being Hummet Copse in the centre of the site. The Hamstead Trail long distance footpath, a bridleway and several local footpaths cross the site, in north-south and east-west directions.

There are no statutory or local nature landscape designations within the site, although Prospect Quarry Site of Special Scientific Interest (SSSI) is situated close to its southern boundary. The SSSI designation covers part of the quarry and is designated both for its geological and biological qualities.

A 33kV overhead electricity line (wooden pole mounted) cuts across the northwest corner of the site. The south west and west of the site is defined by Broad Lane, a single track minor road with passing places, that links the B3399 at Shalcombe to the B3401 at Thorley.

To the north of the site are the villages of Thorley and Wellow, linked by the B3401. To the east lies open farmland, Churchills Farm and Dodpits Lane, a minor road linking the B3401 near Newbridge with the B3401 at Chessell. To the south is Stone Quarry (a small active quarry), the

B3401and B3399 and the hamlets of Chessell and Shalcombe. There are also several farmsteads and individual properties in the immediate environs, but none within the site boundary.

South of the B3401, and clearly visible from the site, lies Compton Down, a prominent and dramatic steep sided chalk hill which forms part of the upper chalk ridgeline that runs east west along the southern coast of West Wight. Compton Down, along with much of the surrounding landscape, is designated an Area of Outstanding Natural Beauty (AONB) and Heritage Coast, the boundaries of both approximately 1.1km from the proposed turbines, at the nearest point. These nationally important designations, along with the New Forest National Park on the mainland, indicate the sensitivity of much of the landscape within the study area.

Throughout this text reference is made to other published documents, including relevant national and local policy and assessment documents. Table 1 below set out all of the background data sources referred to as part of this assessment.

Table 1: Date Sources.

Data Sources
Landscape Character Assessment –Guidance for England and Scotland Swanwick C&LUC, 2002
Guidelines for landscape and Visual Assessment. 2nd Addition. Landscape /Institute of Environmental Management & Assessment.
Planning policy Statement 22: renewable Energy.ODPM, 2004
Isle of Wight Unitary development Plan, 1996
Supplementary Planning Guidelines: Wind Turbines and Wind Farms. Isle of Wight Council, September 2004
The Countryside Agency's Countryside Character –the character of England's natural and man-made landscape- Volume 7:South east & London.
Isle of Wight Landscape: An Assessment of the Area of outstanding natural Beauty.

Isle of Wight AONB Management plan2004-2009
West Wight Landscape Character Assessment, September 2005 LUC.
Christchurch Borough Wide Character Assessment.
New Forest District Landscape Character Assessment, July 2000.
New forest National Park (designation) Order 2002. Countryside agency.
National Parks and Access to the Countryside Act 1949.
The Environmental Act 1995.
The Countryside and Rights of Way Act 2000
The AONB management Plan 2004-2009. Isle of Wight AONB Partnership, 2004.
Tranquillity mapping, Campaign for the Protection of Rural England: ASH Consulting 1995.

1.3 Consultations and scope of the assessment

The scope of the assessment has been defined as part of the consultation with officers from the Isle of Wight Council (IWC), the Isle of Wight Area of Outstanding Natural Beauty Unit (AONBU), Hampshire Country Council (HCC) and New Forest District Council (NFDC). New Forest National Park (NFNP) and various other stakeholders (a full list of which is provided in the Scoping and Consultation Technical Appendix) have also been consulted as part of the scoping report. The key issues identified during this consultation exercise were:

- Effects on landscape character;
- Effects on landscape designations (particularly the Isle of Wight AONB, New Forest National Park and Heritage Coast);
- Effects on tranquillity;
- The need to consider historic landscapes as part of the wider assessment of affect on landscape character;
- Effects on seascape;

- Effects on views from a wide selection of receptor locations (including residential areas and roads local to the site, footpaths and bridleways, the Solent, the mainland coastal strip and inland in the New Forest); and
- Cumulative effects.

The scoping report dated March 2006 was agreed with the Isle of Wight Council and determined that landscape was a primary issue.

1.4 Assessment methodology

This section outlines the methodology used to undertake the landscape assessment. It describes the guidance documents on which the methodology is based, the iterative assessment process and the assessment tools used.

Wherever possible, the analysis has been objective, the residual effects quantified and any subjective judgements described in clearly defined terms. However, the nature of landscape and visual assessment requires both objective analysis and subjective professional judgement.

The following assessment process uses published or "industry standard" guidance, information and data analysis techniques, uses quantifiable factors wherever possible and subjective professional judgement where necessary, and is based on clearly defined terms.

The assessment process has been based on current published guidelines for landscape character assessment and landscape and visual impact assessment. It has been undertaken for the purposes of the Town & Country Planning (Environmental Impact Assessment) (England & Wales) Regulations 1999, and takes into account advice in PPS22.

It has considered the requirements of the policies in the Isle of Wight Unitary Development Plan and in the Isle of Wight Council's Supplementary Planning Guidance (SPG) for Wind Turbines and Wind Farms.

The assessment has also drawn on information in landscape character assessments undertaken on behalf of the local planning authorities in the study area, in the various Local Development Plans that cover the study area, and on Ordnance Survey Explorer and Landranger maps .The assessment is set out in six sections:

- ***Baseline Assessment:*** a review of the existing landscape character and visual amenity of the site and its landscape setting, identifying landscape designations, and a review of the types and locations of visual receptors in the study area and classifying them in terms of sensitivity and importance;
- ***Description of the Proposals and Predicted nature of change:*** a description of the physical characteristic of the proposals and their appearance in the landscape. This includes a description of primary mitigation inherent in the scheme design
- ***Predicted Potential Impacts on Landscape and Visual Resources:*** This includes a visibility analysis to ascertain the locations in the study area from where the proposed development could be visible, and a viewpoint analysis to predict the potential affects to views that would occur as the result of the proposed development, from a selection of representative viewpoint locations in the study area. An assessment to identify the potentially significant effects of the development on the landscape including the fabric of the site, landscape character and the special characteristics and purposes of the landscape designations in the study area;
- ***Proposed Mitigation Measures*** – describes secondary mitigation designed to reduce or eliminate adverse impacts highlighted at as part of the assessment. This may include, for example, additional planting the primary purpose of which is to reduce adverse visual impacts.
- ***Residual Landscape and Visual Impacts*** – describes the effects predicted to remain following mitigation; and.
- ***Cumulative Appraisal:*** a review of the potential for significant cumulative effects of the development in conjunction with the permitted (but not yet constructed) 3-turbine scheme on Cheverton Down
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The site and surroundings has been visited to obtain familiarity with the landscape. Field Studies and desk studies of photographs, map information and local plans have enabled the recording of landscape elements such as topography, drainage, land-use development, vegetation and other

features. This has allowed an evaluation of the landscape character and resources and the recording of views and establishment of representative views within the study area.

Landscape and visual effects can be positive or negative and are therefore referred to as either beneficial or adverse. In some cases the nature of the effect may be dependent upon personal perspective and in those cases the effect can be recorded as subjective.

The effects, which are identified during the evolution of the proposals, are described as predicted potential effects. Adverse effects identified at this stage inform the mitigation measures.

Mitigation has been considered during all stages of design development with the purpose of avoiding or reducing predicted potential effects. Mitigation has not only been a secondary measure designed to address a specific adverse effect identified once a scheme design is complete, but importantly has been an intrinsic part of the iterative design process. Mitigation has therefore been incorporated into a scheme from the outset and influenced design decisions from inception, for example, determining the site layout of the turbines. This primary mitigation is included as part the proposals and has therefore been assessed as part of section 4.0. Secondary mitigation is outlined in section 5.0. Where adverse effects remain after secondary mitigation, these are referred to as residual effects.

Defining the study area

The study area for the landscape and visual assessment has been defined in accordance with the following:

- Town and Country Planning (Environmental Impact Assessment) Regulations 1999 – which require *"a description of the aspects of the environment likely to be significantly affected by the development"* (Schedule 4, Part 1, clause 3);
- Guidance provided in the GLVIA 2nd edition (LI/IEMA 2002), which advises that:
  - the study area for a landscape assessment needs to cover, "the site itself and its wider landscape context, within which the proposed development may influence landscape character" (p72, para 6.24).
- Consultations with the Local Planning Authorities regarding appropriate study area sizes and locations of interest or concern; and

- Responses from statutory consul tees and third parties – in which locations of interest or concern were identified.

A 30km radius study area, centred on the site, has been used for the landscape and visual assessment. Beyond this area it has been determined that potential visual impacts will not be significant. The extent of the study area is shown on figure 8.1

Within the 30km study area, a computer- generated zone of visual influence (ZVI) was generated to ascertain the general locations and extent of the study area where the proposals would be potentially visible in the landscape. As the ZVI is based on topography alone and did not take account of the screening effects of surface features such as hedgerows, woodlands and buildings, it can present an over-representation of visibility in the study area. However, ZVI's are a useful tool for establishing the potential zones of "no visibility", enabling the zones of "potential visibility" to be examined in more detail in the viewpoint analysis. A more detailed methodology of how the ZVI was mapped is provided in Appendix A.

Landform is a major influence on the visibility of wind energy developments in the landscape. In relatively flat terrain, the majority of the development would be visible in near views, but intervening surface features (hedgerows an d built development) then become very effective at screening the development in many middle and distant views. In contrast, hilly terrain tends to permit open views of the development from high points in the study area, but effectively screens the development from all the valleys and slopes on the far side of hills. As a result, a ZVI based on topography alone can provide a fair representation of actual visibility in open or hilly terrain, but are much less representative of actual visibility in flat, well-vegetated or developed locations.

Definition and Classification of Effects on Landscape Resources

An assessment of the potential effects on the landscape resources has been undertaken. This includes an assessment of the potential effects on landscape character, landscape fabric and landscape designations within the study area.

Landscape characterisation

As part of the baseline study, and in accordance with the latest guidance on landscape character assessment (Swanwick & LUC 2002), the landscape of the study area has been subdivided into landscape character units. Landscape character is composed of physical, biological and social components (such as landform, flora, land use, land cover, landscape elements, field and settlement patterns), combined with aesthetic and perceptual factors (such as colour, form, texture and pattern, sounds, smells, memories, associations, stimuli and preferences).

In addition to landscape character, the cultural, historical and intellectual dimensions of landscape influence our broader appreciation of our environment. These include our cultural background, our awareness of historical and contemporary influences, and our personal and professional interests. Cultural, historical and intellectual dimensions are issues that have not been considered in detail in this assessment in relation to landscape character. Our experience and, therefore, appreciation of landscape will also vary depending on other factors such as time of day, season, weather conditions and lighting. These influences will vary from person to person and from day to day, and are commented upon in the assessment only where they influence the key characteristics of a landscape unit.

This study area has already been characterised in one or more published studies undertaken by or on behalf of the various planning authorities. These assessments have been examined in accordance with the methodology described in the LCA guidance (Swanwick & LUC 2002), by reference to Ordnance Survey maps, other published information on the study area landscape, fieldwork observations and photography, and some subjective professional judgement and the fieldwork observations and information generally concur with the characterisation in the published studies. Accordingly, these have been used as the basis of the landscape characterisation and the key characteristics of each landscape unit are presented in Appendix B.

Landscape Importance

For each of the character areas, an evaluation of *landscape importance* has been made**.** The baseline section has identified factors that can be used to assess the relative value society attaches to the landscape, often in the form of designations. The guidance set out in table 2 has been used in this assessment to arrive at an evaluation of landscape importance. The judgement may be modified by reference to one or more of the additional criteria shown, such as landscape rarity or cultural and conservation interest It is a professional judgement based on fieldwork observations and a subjective assessment define in this report as high, medium, low or negligible.

Magnitude of Change

The magnitude of change is a function of the degree to which the scale and/or nature and/or extent of the changes are at variance with the character and qualities of the receiving landscape. The guidance set out in table 3 has been used for this assessment. Physical landscape characteristics such as topography, scale, vegetation and land use, which may affect the capacity of the landscape to accommodate change, should be taken into account. Evaluation of magnitude of change is a matter of professional judgement and is defined in this report as large, medium, small or negligible.

Degree of Significance of Landscape Effects

The degree of significance of effects on the landscape resource (adverse, beneficial or subjective) is judged from a combined evaluation of the landscape importance and the magnitude of change. The matrix in table 4 has been used to guide this judgement. The definitions used are listed below. They can be applied to potential effects pre-mitigation, and to residual effects post-mitigation.

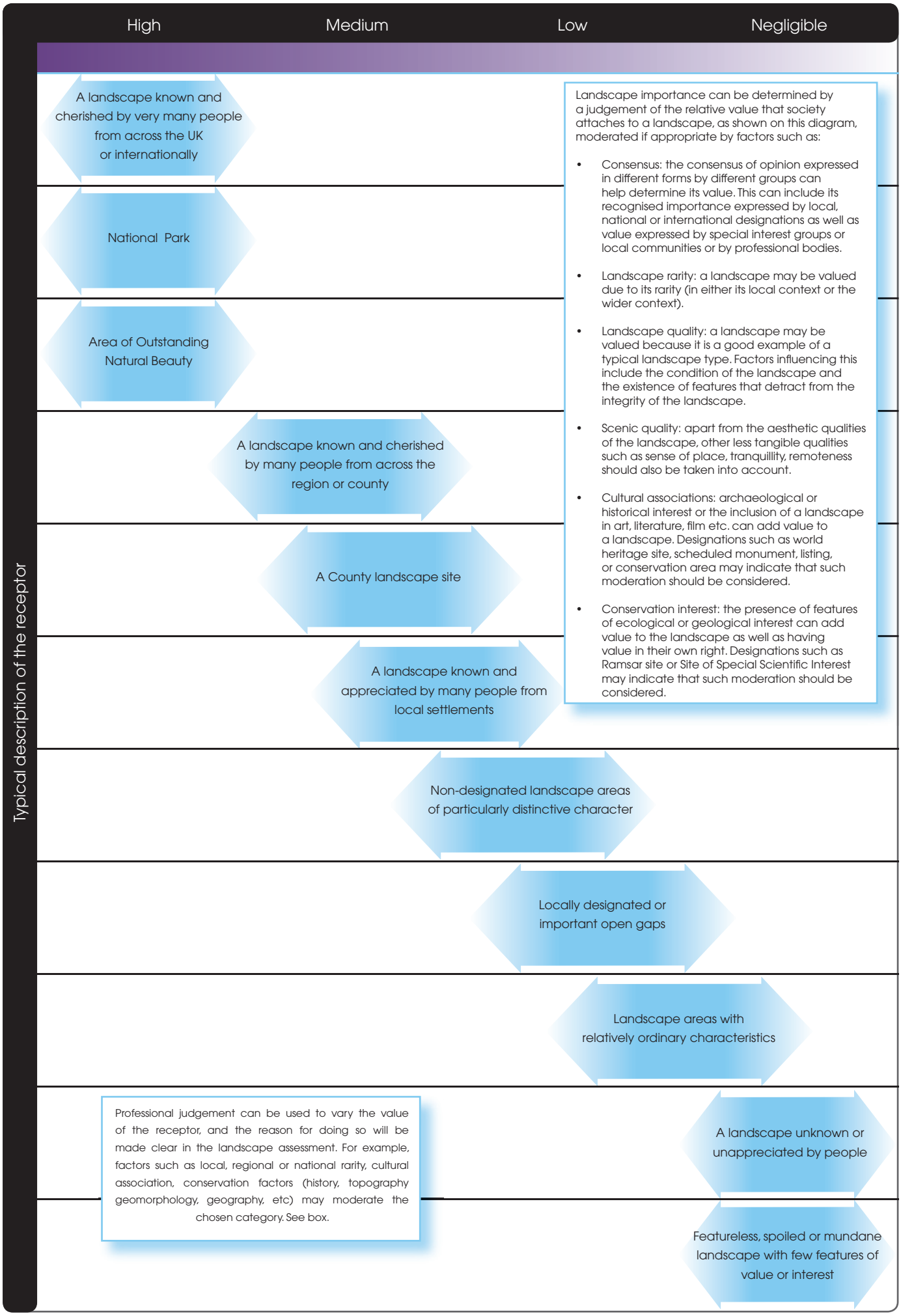


Table 2 : Sensitivity of receptor - landscape

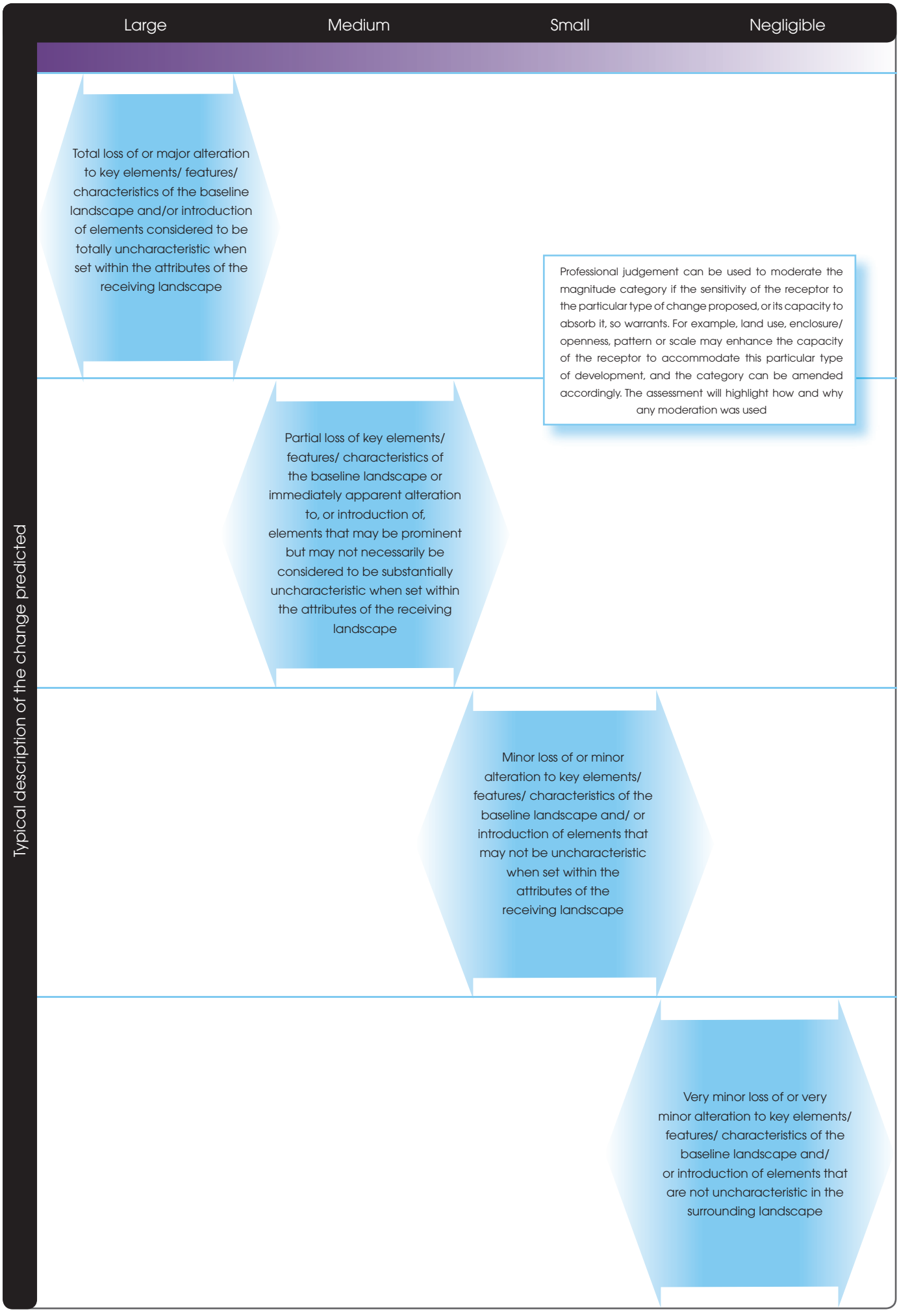
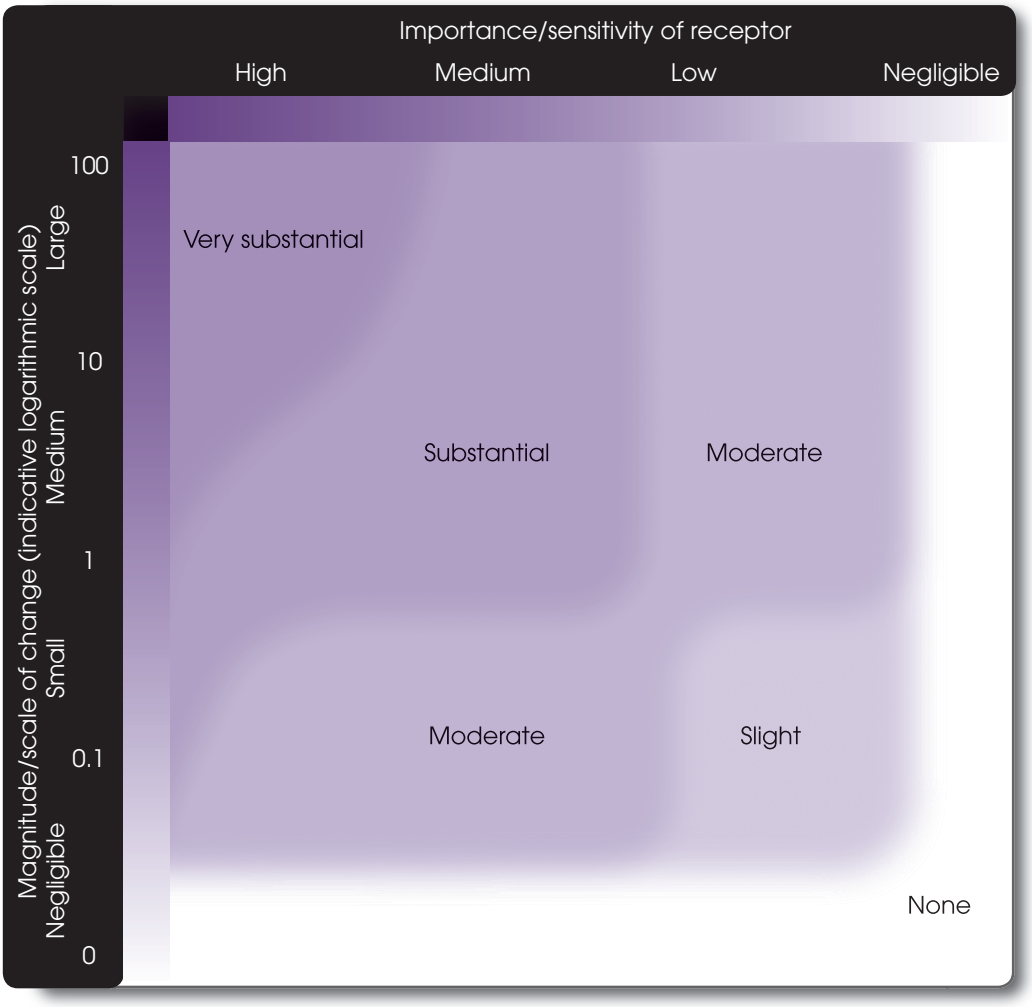


Table 3 : Magnitude of change - landscape


Importance/sensitivity of receptor
High
Medium
Low
Negligible
Magnitude/scale of change (indicative logarithmic scale)
Large
Medium
Small
Negligible
100
10
1
0.1
0
Very substantial
Substantial
Moderate
Moderate
Slight
None

- **Very substantial**

  The proposals become the dominant feature in, and fundamentally change the character of, a very important landscape, such that other elements become subordinate.

  Substantial

  The proposals form an immediately apparent feature in a moderately or very important landscape, such that they affect and change its overall character.

- **Moderate**

  The proposals form a recognisable new element within a moderately or very important landscape, but are of such a design or small scale that the change in character may not be readily noticed by a casual observer. Alternatively, the proposals cause an immediately apparent or fundamental change in character in a landscape of low importance.

- **Slight**

  The proposals form a recognisable new element of different character within a landscape of low importance, but to such a small degree that they may not be readily noticed by a casual observer.

- **None**

  No part of the proposals has any effect on the landscape, such that they are scarcely or not appreciated and the character remains substantially unchanged.

Effects on Landscape Fabric

Landscape fabric is composed of the physical components of the landscape. Developments can bring about both direct and indirect effects on landscape fabric. Direct effects occur where changes to the fabric of the landscape arise as the result of physical disturbance, for example, the loss of landscape elements such as hedgerows, walls and trees. Indirect effects are consequential changes that are separated from the source of the change in a temporal or spatial manner, for example changes in vegetation downstream as the result of modifications to surface water patterns in a catchment area.

In general, with wind energy developments, effects on landscape fabric are confined to the site (and access routes if any modifications are required), and so the assessment has concentrated on the landscape fabric of the site and access route.

The assessment of effects on landscape fabric considers the existing landscape fabric of the site and surrounding area and the description of the development and mitigation measures, and makes a judgement as to whether there is likely to be a significant change to landscape fabric (e.g. landform, land use/cover and landscape elements/features).

Essentially, significant adverse effects on landscape fabric could occur where important/mature/diverse/distinctive components will be permanently lost (or long term temporarily lost) and the effect cannot be fully mitigated, and significant beneficial effects on landscape fabric could occur where important/mature/diverse/distinctive components, which may previously have been lost or degraded as the result of agricultural practises or other development, will be added, reinstated or improved.

Landscape designations

Landscape designations are an indication of landscape value, as they are areas that have been recognised for the scenic beauty and recreational potential of the landscape. They are also usually landscapes within which a higher level of development control is in place for the purpose of protecting those qualities.

Statutory National landscape designations in England include National Parks and Areas of Outstanding Natural Beauty (AONBs). National Park boundaries are shown on Ordnance Survey maps, whilst AONB boundaries are shown on the proposals maps of Local/Unitary Development Plans and AONB Management Plans. Their purposes are defined in statute (National Parks and Access to the Countryside Act 1949, as modified by the Environment Act 1990) and their special characteristics are usually defined in management plans.

Non-statutory national landscape designations include Heritage Coasts. These are designated by Local/Unitary Authorities in conjunction with the Countryside Agency (in England) and are shown on the proposals maps of Local/Unitary Development Plans and the website of the

Countryside Agency (www.countryside.gov.uk). Their purposes and special characteristics are defined on the Countryside Agency website.

Local landscape designations include Special Landscape Areas (SLAs) and Areas of Great Landscape Value (AGLVs), which are designated by Local/Unitary Planning Authorities and shown on the proposals maps of Local Development Plans. The purposes of these designations have been deduced from the associated policies and preambles in the Local Development Plans and, where landscape character assessments have informed the process of defining the extent and nature of local designations, these have provided information on the special characteristics of the landscapes in these designations. Otherwise, the special characteristics have been determined from fieldwork observations.

With regards to the national and local landscape designations in the study area, the assessment has examined whether the proposed development is likely to significantly affect the ability of the designations to fulfil their purposes/objectives, by examining the extent to which the development would affect the special characteristics that underpin the purposes/objectives of each designation.

Essentially, significant adverse (or beneficial) effects on landscape designations could occur where the development would bring about a change (permanent/irreversible or long-term/temporary/ reversible) in the special characteristics that underpin the purpose/objectives of the designation, and that change would compromise (or enhance) the ability of the designation to fulfil those purposes/objectives.

As the development is proposed out with any designated landscapes, the assessment has examined the extent to which views into and out of the designated areas are a special characteristic and/or purpose/objective of the designations and whether the development would significantly change those views, such that the ability of the designations to fulfil their purposes would be compromised.

Definition and classification of Effects on Visual Amenity

Visual effects result from the changes in character and quality of people's views arising from the development. The significant of the effect on visual amenity is determined by consideration of the sensitivity of the receptor and the magnitude of change.

The viewpoint analysis has examined a selection of viewpoint locations that represent the main landscape units and visual receptor types in the zones of visual influence in the study area. At each location, the various receptor types have been identified, the sensitivity of the location for each receptor type has been judged, the magnitude of change in the view that would arise as the result of the proposed development has been predicted and the sensitivity and magnitude have been combined in order to determine whether the predicted change in the view would be significant for each receptor type.

Visual receptors

The locations and types of visual receptors within the study area have been identified from Ordnance Survey maps and other published information (such as walking guides), from fieldwork observations and from local knowledge provided during the consultation process.

A typical range of receptors and the locations and activities that they may be undertaking are provided in Table 5 below. As shown in Table 5, these are grouped into three main receptor groups (zone, linear route and marine-based receptors) whose location and activities influence the way that they experience the landscape and views:

- **Zone receptors** – are in locations defined by boundaries within which they are able to roam (e.g. residents within property boundaries, walkers on open access areas, golfers on golf courses). They are, or can be, stationary at a viewpoint or moving slowly over a defined area (such as at scenic viewpoints and visitor facilities, in settlements and in local residential properties) and so can experience a relatively constant view or views. As a consequence, zone receptors can be exposed to a long-term change in a view for an appreciable duration;
- **Linear route receptors** – are those travelling along linear routes (e.g. motorists on roads, train passengers on railway lines, walkers on footpaths, and horse riders on bridleways) and so are already experiencing a constantly changing series of views. As a consequence, linear route receptors may be exposed to long-term changes in any one view for only a momentary

or relatively short period in time but may be exposed to a series of such views of the development; and

- **Marine-based receptors** – are on the sea, some of whom are able to move in various directions according to their preferences (e.g. recreational sea users), whilst others will be confined to routes (e.g. ferry passengers). Marine-based receptors may remain within a zone (e.g. inshore waters) or travel along a route (e.g. shipping route), but are likely to be experiencing a constantly changing series of views and are likely to be in that location for a limited duration. As a consequence, they are likely to be exposed to a series of different views of the development, for relatively short but varying durations.

■ **Table 5: Visual receptors**

	Receptor type	*Typical locations*	*Activities*
Zone receptors:	Residents	Residential properties, farmsteads, settlements and towns	Enjoying views from within the curtilage of their properties, from windows, driveways and gardens
	Walkers	Open access areas	For exercise and to enjoy the landscape and views
	Motorists, walkers, cyclists and horse riders	Scenic vantage points	Stopping a journey to enjoy the view
	People at leisure (outdoors) e.g. golfers, fishermen, campers, bathers	Golf courses, fishing lakes, recreational grounds, picnic sites, camping and caravan sites, holiday villages, beaches	Playing golf, fishing or other outdoor sports, picnicking, camping and caravan holidays, bathing
	People at work (outdoors)	Farms, mineral extraction sites, waste disposal sites, roads	Working but with views of surroundings
	People at leisure (indoors)	Indoor recreational centres, cinemas	Indoor sports and leisure activities with few views of surroundings
	People at work (indoors)	Offices, business parks, industrial estates	Working with few views of surroundings
	Ferry, rail and air travellers	At ferry terminals, railway stations and airports	Waiting to catch their chosen mode of transport
Linear route receptors	Walkers, cyclists and horse riders	On footpaths, cycle routes, bridleways and other public rights of way	Travelling at a steady pace with ample opportunity to enjoy the specific qualities of the landscape
	Motorcyclists, motorists and passengers	On motorways, A – C class roads, minor roads and tracks	Travelling at various speeds, depending on the class of road and driver, with views of surroundings
	Rail and air travellers	On trains and aeroplanes	Travelling at various speeds and with various views
Marine-based viewers	Recreational water users, e.g. swimmers, surfers, water skiers, sailors, fishermen	Moving around the inshore waters	Swimming, surfing, skiing, sailing, fishing, with views
	Passengers, e.g. ferry and cruise ships	On ferry and shipping routes	Passage-making, with views
	Commercial shipping and fishing	On shipping routes	Passage-making, limited views

Visual receptor sensitivity

All visual receptors are people and assumed to be equally sensitive to change. Accordingly, visual receptor sensitivity has been determined in terms of the sensitivity of each location for each type of receptor (rather than the sensitivity of the receptors *per se*), taking into account:

- Receptor activities – for example, relaxing at home, undertaking leisure, recreational and sporting activities, at work, etc.;
- Movement/duration – whether receptors are likely to be stationary or moving, which influences how long they will be exposed to the change;
- Orientation – of receptors in relation to the development;
- Purpose/expectation – of receptors at that location;
- Context – the quality of the landscape; and
- Importance of the view/location – popularity of location as indicated by designations, inclusion in guidebooks, and the provision of visitor facilities.

Typically, location sensitivity is judged to be:

- **High** – locations where receptors are stationary (e.g. occupiers of residential properties or at scenic viewpoints) or moving slowly (e.g. walking, cycling or horse riding), can be orientated towards the development, are likely to be at that location in order to enjoy the view, particularly in high quality landscapes that are nationally designated and well publicised in guidebooks;
- **High/medium** – locations where receptors are stationary (e.g. occupiers of residential properties or at scenic viewpoints) or moving slowly (e.g. walking, cycling or horse riding), can be orientated towards the development, may be at that location in order to enjoy the view but will also have other purposes (e.g. exercising the dog), in landscapes of medium to high quality that are locally designated and well publicised in guidebooks. Also motorists, bus and train travellers on well publicised scenic routes in nationally designated, high quality landscapes;
- **Medium** – locations where receptors are moving (e.g. driving, car, bus, train or ferry passengers), can be orientated towards or oblique to the development, are likely to be travelling for a purpose other than in order to enjoy the view (e.g. journey to work), in landscapes of medium quality that are not designated or well publicised in guidebooks;
- **Medium/low** – locations where receptors are moving, generally orientated away from the development, are likely to be travelling for a purpose other than in order to enjoy the view, in

landscapes of medium to low quality that are not designated or well publicised in guidebooks; and

- **Low** – locations where receptors are mainly indoors, with limited views out, and are in that location primarily to undertake activities unconnected with the landscape and views (e.g. working or indoor leisure activities).

Magnitude of the change

The magnitude of the change in a view is a judgement based on a series of measured parameters, which assumes that the visual receptors are being exposed to the change for the first time. The degree to which those receptors will become accustomed to the change has been taken into account when assessing the acceptability of any predicted significant effects (see below).

Computer-generated wire frames (see Appendix A), a computer-generated viewpoint analysis, fieldwork observations and professional judgement have been used to identify a largely quantifiable set of parameters, which include:

- Distance of the viewpoint from the development;
- Extent of the development visible from the viewpoint. (number and parts of turbines visible);
- Field and proportion of view occupied by the development. (horizontal and vertical angles of view measured in degrees);
- Degree of contrast with the existing landscape and built elements (background, form, composition, pattern, scale and mass, line, movement, colour, texture, etc);
- Influence of latitude and direction of view, time of day and year, different weather, lighting and visibility conditions and different wind directions on visibility of the turbines; and
- Duration and nature of the effect, e.g. temporary/permanent, short term/long term, intermittent/continuous, reversible/irreversible, etc.

For each viewpoint location, these factors have been examined, the findings combined and the assessment of magnitude judged to be *very substantial*, *very substantial/substantial*, *substantial, substantial/moderate*, *moderate, moderate/slight*, *slight, slight/negligible* or *negligible* on the basis of the following definitions:

- **Very substantial** – where the proposed development will be a dominant element in the view;
- **Very substantial/substantial** – where the proposed development will be a highly prominent element in the view;
- **Substantial** – where the proposed development will be a prominent element in the view;
- **Substantial/moderate** – where the proposed development will be a clearly visible element in the view;
- **Moderate** – where the proposed development will be a visible element in the view;
- **Moderate/slight** – where the proposed development will be a clearly noticeable element in the view;
- **Slight** – where the proposed development will be a noticeable element in the view;
- **Slight/negligible** – where the proposed development will be a discernible element in the view; and
- **Negligible** – where the proposed development will be a barely discernible element in the view.

Significance of effects on views

This is the final step in the viewpoint analysis. For each receptor type, the sensitivity of the location is combined with the predicted magnitude of change to determine whether the effects are likely to be significant. In accordance with the GLVIA 2nd edition, large scale changes are likely to be more significant than small changes and changes from more sensitive locations are likely to be more significant than those from less sensitive locations.

Having taken such a wide range of factors into account when assessing sensitivity and magnitude at each location, in most cases, the significance of the change in the view can be derived by combining the sensitivity and magnitude in accordance with the matrix in Table 6 below. However, in certain cases, where additional factors may arise, a further degree of professional judgement has been applied when determining whether the overall change in the view will be significant.

In the following table, where overall effects are predicted to be major/moderate or higher (shaded dark grey), there are likely to be significant changes in the view. Overall effects of moderate+

(shaded mid grey) may be significant if experienced over a sustained length of a route or over most of a zone, area or location, and overall effects of moderate (shaded light grey) may contribute to significance if combined with greater changes at the same location, whereas moderate/minor+ or lower changes are unlikely to result in significant changes to views.

■ **Table 6: Assessment of significance for visual receptors**

LOCATION SENSITIVITY	MAGNITUDE OF CHANGE								
	V sub	V sub/ sub	Sub	Sub/ mod	Mod	Mod/ slight	Slight	Slight/ neg	Neg
High	Major ++	Major+	Major	Maj/ mod+	Maj/ mod	Mod+	Mod	Mod/ min+	Mod/ min
High/ medium	Major +	Major	Maj/ mod+	Maj/ mod	Mod+	Mod	Mod/ min+	Mod/ min	Minor+
Medium	Major	Maj/ mod+	Maj/ mod	Mod+	Mod	Mod/ min+	Mod/ min	Minor+	Minor
Medium/ low	Maj/ mod+	Maj/ mod	Mod+	Mod	Mod/ min+	Mod/ min	Minor+	Minor	Min/ neg+
Low	Maj/ mod	Mod+	Mod	Mod/ min+	Mod/ min	Minor+	Minor	Minor/ neg+	Min/ neg

2.0 BASELINE

2.1 Introduction

The purpose of the baseline study is to record the existing landscape situation against which the effects of the proposals (both adverse, beneficial and subjective) can be recorded. The baseline is recorded by a process of description, classification and evaluation achieved by a combination of desktop study, field survey and analysis. The study area is shown on figure 8.1 and encompasses the whole of the Isle of Wight, the Solent and on the mainland includes the new forest as far north as the A31, the eastern edge of Bournemouth and Christchurch in the west and Southampton and Fareham in the east.

2.2 Topography and hydrology

The topography of the study area is illustrated on figure 8.2.

The Isle of Wight has a varied topography typical of the underlying chalk geology with steep coastal cliffs, undulating coastal plains, shallow valleys and rolling downland. The island is divided along its east west axis by a central steep sided chalk ridge, reaching a maximum height of 214m AOD at Brightstone Down. South of the site, the chalk ridge rises to a maximum height of 164m AOD near Brook Down. The northern half of the island is characterized by low-lying tertiary clays overlained in places by gravels. The site lies with this area and is characterized by a gently undulating landform with shallow valley along river courses. The site falls from approximately 75m AOD in the south to 15m AOD in the north west corner. The streams that issue from the site drain northwards into Thorley Brook that flows into the River Yar to the west.

Several rivers dissect the island and flow in a generally northerly direction into the Solent, including the River Yar in the far west of the island that flows north from Freshwater and enters the sea at Yarmouth; Newtown River in the central west of the island which meanders to form a series of creeks at Newtown National Nature Reserve; and the River Medina in the centre of the island that arises south of Newport and flows through Newport and Cowes.

On the mainland, the coastal zone includes elevated coastal cliffs and undulating coastal plateaux west of Milford on Sea, and low lying land, shingle beaches, mud flats and estuaries along the Solent from Milford on Sea to Southampton Water.

Away from the coastal zone, the land is generally gently undulating and low lying. To the north west in the New Forest the land rises gradually to form an undulating raised plateau generally between 50 and 100m AOD. Major watercourses include the Lymington River, the Beaulieu River (which reaches the sea close to Lepe Country Park) and Southampton Water. There are also numerous lakes, ponds, minor rivers and brooks on the mainland within the study area.

2.3 Land use and vegetation

Land use within the study area is a mixture of agriculture, woodlands, settlements, visitor attractions and leisure facilities, industry, communication and power transmission structures, a network of public rights of way (PROWs) and transport routes including main and minor roads, footpaths, bridleways, off-road cycle routes, by-ways open to all traffic and other routes with public access, ferry links and a short length of railway line.

A more full description is provided below:

2.3.1 *Vegetation*

Principal areas of vegetation within the study area are illustrated on figure 8.3.

The site is very open with almost no hedgerows and only a few isolated copses. The lack of vegetation contrasts strongly with the adjacent low-lying areas, especially to the north and east where the hedgerows and woodland has been retained – this is discussed more fully as part of the landscape character analysis. The principal areas of woodland in the locality include Brighstone Forest to the south east, Tapnell Furze and Withybed Copse to the west and Lee and Bouldnor Copse to the north. On the island itself there are large tracts of mixed woodland such as Parkhurst Forest near Newport and Combley Great Wood. Estate woodland associated with historic parklands is also significant including Swainston and Westover to the east.

On the mainland, the New Forest is a patchwork of heaths, bogs, pine forests, moorland, and ancient and ornamental beech and oak woodlands. Estate woodlands and landscapes, small copses and individual trees set within the landscape are also a feature of the study area. Figure 8.3 clearly illustrates that a large part of the study area in the New Forest is heavily wooded including significant areas of coniferous plantations – this is discussed further as part of the visual analysis.

2.3.2 *Agriculture*

The principal land use of the site, and the surrounding area is agriculture. Currently the site is farmed as arable. The site lies within an area of land categorised as ' intensive agricultural land' in the Isle of Wight AONB landscape character plan. This intensive farmland contrasts strongly with the pastoral farmland to the north and east. Across the island the agriculture on the island is a mix of arable and pastoral farmland with both sheep and cattle grazing. In the New Forest grazing animals include wild deer and ponies, which are privately owned, but are left to graze and roam freely throughout the heaths and woodlands. In addition, sheep, cattle and pigs also graze the open forest in keeping with the ancient rights of pasture.

2.3.4 *Settlements*

The settlements in the study area are generally nucleated and are a mix of cities, towns, villages/hamlets and individual properties. These include the following (with the approximate distance from the nearest turbine to the settlement boundaries in brackets):

- Towns (Isle of Wight) - Freshwater (4km west of the site), Yarmouth (3km northwest), Cowes (11km northeast), Newport (9km east-northeast), Ryde (19km east-northeast), Shanklin (19km east-southeast), and Brighstone (4.5km southeast of the site);
- Cities and Towns (mainland) – Southampton (23.5km north), Portsmouth (27km north east), Bournemouth (24km west), Fareham (23km northeast) Gosport (23.5km north east) Christchurch (20km west-northwest) and Lymington (9km northwest), Lyndhurst (22.5km north) Totton (19 km north);
- Villages and hamlets (Isle of Wight) – those closest to the site include Bouldnor (2.7km northeast), Thorley (1.1km north), Wellow (1km north), Cranmore (2.5km north), Shalfleet (2.6km northeast), Newtown (4.5km northeast), Newbridge (1.7km east-northeast), Calbourne (3km east), Chessell and Shalcombe (1.2km south-southeast);
- Villages and hamlets (mainland within 20km radius only) – Keyhaven (8.5km west-northwest), Norleywood and East End (10km north), East Boldre (13km), Blackfield (15km), Holbury (16.5km) and Dibden (18.5km); and
- Individual properties (Isle of Wight) – those closest to the site include Tapnell Farm, Dog Kennel Cottage, Dodpits House and Churchhills Farm.

2.3.5 *Visitor attractions and leisure facilities*

Natural visitor attractions on the island include the sandy beaches, rugged cliffs and warm climate, the coloured sands of Alum Bay and the needles, which are stacks formed by chalk and flint and carved out from the island through erosion. Man-made visitor attractions and leisure facilities include boat trips, the coastal paths which wind their way around much of the island, water sports, sun bathing and amusement arcades, horse riding, golf, vineyards, steam trains, pleasure flights, museums, heritage centres and yacht marinas. To accommodate these tourists, there are camp sites, caravan sites, holiday villages, hotels, youth hostels and bed and breakfast accommodation.

On the mainland, the main visitor attraction is the New Forest which attracts walkers, cyclists, horse riders and visitors generally. Visitor attractions and leisure facilities within the New Forest include Hurst Castle, Beaulieu Motor Museum, Palace House and Abbey, the Reptile Trail, Bucklers Hard historic village, Exbury Gardens, Lepe County Park, and Calshot Castle. There are also boat trips (e.g. down the Beaulieu River), facilities for water sports enthusiasts (such as Calshot Activities Centre), yacht marinas (e.g. at Keyhaven and Lymington), landing stages and beaches. The whole area is also important for informal recreation such as walking, cycling and running.

2.3.6 *Industry and other built development*

Industrial activities on the island are limited, with one of the main sources of industrial employment within the Vestas Blades manufacturing facility in Newport. There is some quarrying, the nearest quarry being Stone Quarry, immediately south of the site. Dismantled railways and disused quarries suggest that quarrying may have been more active in the past. Other types of built development on the island include Parkhurst prison on the northern outskirts of Newport, some extensive areas of glass houses between Newport and Shanklin, and several tall telecommunication masts (TV transmitters).

On the mainland, there are some major industrial installations which are visible from the island, such as the Esso oil refinery and Fawley power station beside Southampton water.

Despite the range of development in the study area, there are still extensive stretches of coastline and hinterland on both the island and mainland where development is sparse, parts of which are protected as nature reserves, such as the Newtown Nature Reserve which is located on the creeks

of the Newtown River. On the mainland, there are nature reserves located along the creeks at Lymington and Farnham and at Christchurch and Hengistbury Head .

2.3.7 *Public rights of way and transport routes*

The study area is well served by a comprehensive network of public rights of way. The network is illustrated on figure 8.6a. Roads and public rights of way in the study area include:

- Primary routes – M27, A31, A35, A32, A326, A337, A3054, A3020, A3021, A3056 and the A3055;
- Secondary roads – B3054, B3328, B3329, B3323, B3341, B4301, B3340, B3329, B3322, B3320, B3321, B3347, B3059, B3073, B3036, B3033, B3397, B3055, B3056, B3330, B3395, B3327, B3399, B3325;
- Minor roads – a comprehensive network of minor roads;
- Railway lines – on the mainland linking Portsmouth, Southampton and Bournemouth and, on the island, linking Shanklin to Ryde;
- Long distance trails; Tennyson Trail, Coastal Path, Hamstead Trail, Freshwater Way, Stenbury Trail, Shepherds Trail, Bembridge Trail, Nunwell Trail, Worsley Trail all on the island and on the mainland, the Solent Way and the Itchen Way; and
- Local footpaths, bridleways, off road cycle routes, by-ways open to all traffic and other routes with public access.

Ferries operate a regular service between the mainland (Lymington, Portsmouth, Southampton and, at certain times of the year, Gosport) and the island (Yarmouth, Cowes and Ryde). These are both foot passenger ferries and car ferries, and catamaran services are also offered from Southampton.

Figure 8.6b illustrates other major areas of land with public access. It includes areas of 'open country' over which the public have unlimited access. In the vicinity of the site, the main areas are on the chalk ridges to the south and include Compton Down. There are also large areas of open country in the new forest. On the Isle of Wight there are several National Trust site, the nearest to the site being Newtown estuary that is always open to the public. The study area also

has extensive forestry commission woodland with public access: these are not shown on figure 8.6b but can be seen on the Ordnance Survey Outdoor Leisure maps, series 29 and 22.

2.4 Landscape Heritage

The landscape and visual assessment has been closely co-ordinated with the cultural heritage assessment. Reference has also been made to Historic Landscape Characterisation Report produced by the Isle of Wight Council that describes the components of the historic character.

The site itself has been despoiled by the loss of hedgerows. The extent of hedgerow loss is clearly illustrated by comparing the site today with the 1907 Ordnance Survey Revised Edition map.

There are a large number of listed buildings in the study area: those within a 3.5km radius of the site are identified in a gazetteer of the cultural heritage technical appendix. To the east of the site lie the parks of Swainston and Westover: both are include in on English Heritage's Register of Historic Parks and Gardens. The village of Shalfleet to the northeast and Calbourne to the east have been designated as Conservation Areas.

2.5 Landscape character

The study area includes the Isle of Wight, south Hampshire (including New Forest District) and the eastern edge Dorset. The study area landscape has been characterised and described in numerous studies from national to local level. The fieldwork observations made during the preparation of this assessment generally concur with the extent and descriptions of the landscape units in the studies referred to below, so these have been used as the baseline landscape character for this assessment.

The locations and extent of these landscape units are shown on Figures 8.4a, 8.4b and 8.4c. Their key characteristics are summarized, and an assessment of their importance given, in Appendix B. The assessment of importance is based on the information in the landscape character studies, fieldwork observations and professional judgement.

The study area includes five of the national character areas as defined in the Countryside Agency's *Countryside Character – The character of England's natural and man-made landscape.* These are::

- Area 126: South Coast Plain

- Area 127: Isle of Wight
- Area 128: South Hampshire Lowlands
- Area 131: New Forest; and
- Area 135: Dorset Heaths

For the purpose of the assessment more detailed character assessments have been used, although reference has been made to the above national character area.

1.5.1 *Isle of Wight*

On behalf of The West Wight Partnership, LUC produced a landscape character assessment for the west of the island entitled *West Wight: Landscape Character Assessment, September 2005*. This assessment divides West Wight into 10 Landscape Character Type as illustrated on figure 8.4a and summarized below.

The landscape Types area:

- Type 1: Chalk Down
- Type 2: Greensand Hills
- Type 3: Clay Farmland
- Type 4: Bays
- Type 5: Estuaries
- Type 6: Open Farmland
- Type 7: Settled Farmland
- Type 8: Soft Cliffs
- Type 9: Rolling Farmland

- Type 10: Seascape

It has been determined that no potential impacts will occur to Clay Farmland Landscape Type and therefore no assessment has been made for this area. The Seascape is discussed later as part of the visual assessment.

Where potential impacts have been determined beyond the scope of the West Wight landscape assessment, the landscape character assessment of the Isle of Wight (1994) by the Countryside Commission and titled *The Isle of Wight Landscape: An Assessment of the Area of Outstanding Natural Beauty*, has been used. This assessment has since been incorporated into the *Isle of Wight AONB Management Plan 2004-2009* and characterises the island's landscape into eleven distinct landscape types (settlements are excluded from the assessment), which repeat across the island. This is illustrated on figure 8.4b and listed below:

- LCT1: Chalk Downs;
- LCT2: Traditional Enclosed Pasture Land;
- LCT3: Intensive Agricultural Land;
- LCT4: Southern Coastal Farmland;
- LCT5: Sandstone Hills and Gravel Ridges;
- LCT6: Northern Woodland;
- LCT7: Landscape Improvement Zone;
- LCT8: Harbours & Creeks;
- LCT9: The Undercliff;
- LCT10: Osborne Coast; and
- LCT11: Northern Coastal Cliffs.

It has been determined that, outside the area covered by the West Wight assessment, no potential impacts will occur to LCT 3,LCT4,LCT8 and LCT9, and therefore no assessment has been made for these areas.

As you would expect there is synergy between the character types of the two landscape character studies for the island and therefore ,where appropriate, the assessment for similar character areas has been combined.

1.5.2 The Mainland

The character areas/types for the main land are shown on Figure 8.4c. A summary is provided below along with a more detailed description in Appendix B.

Christchurch Borough (Dorset)

A landscape character assessment has been undertaken by Macgregor-Smith Landscape Architecture on behalf of Christchurch Borough Council. This is presented in a document entitled *Christchurch Borough Wide Character Assessment*.

This assessment characterises the Borough into nine rural landscapes, five urban edges and enclaves, six built up/townscape areas, and three coastal and intertidal areas.

This is a very detailed study undertaken for the purposes of producing guidance on the capacity of each area to accommodate new development. Accordingly, for the purposes of this assessment, the coastal and intertidal character areas have been grouped together. Built up /townscape areas have not been assessed.

Of the nine rural landscape areas, the ZVI has determined that potential three could be effect by the proposals: namely, the Avon Flood Plain, Avon River Terrace and Cowards Marsh and Dudmore Farm. St Catherine Hill-Hurts Forest (although within the ZVI) has not been considered as site analysis determined that there would be no significant impacts.

New Forest District

The part of the study area that is within the New Forest District has been characterised in a landscape character assessment undertaken in 1993 by Hampshire County Council, which has since been incorporated into a more recent document entitled *The Hampshire Landscape: A Strategy for the Future*, and also in a more recent landscape character assessment undertaken on behalf of the New Forest District Council, Hampshire County Council, the Countryside Agency and English Heritage, entitled *New Forest District Landscape Character Assessment*. This was based on a much earlier study undertaken by Land Use Consultants for the New Forest

Committee, entitled *New Forest Heritage Area Proposed Boundary.* The character areas in these two studies are at completely different scales and so the NFDC planning officer was contacted and he agreed that, for the purposes of this assessment, the more detailed district level assessment should be referred to for the landscapes within the NFDC boundary.

The New Forest District landscape assessment characterises the landscape into 21 landscape types which repeat across the district and 27 distinct landscape character areas, each of which are composed of several landscape types.

Site assessment work has determined that only a limited number of these character areas will potentially affected.. This includes some of the nearer character areas. The Hythe and Ashurst Forest Farmlands (12), Waterside Parishes (13), the New Forest Central Woodlands (23), the Lymington River (24) and the Beaulieu River (26) are largely outside the zones of visual influence and/or are densely wooded, the Fawley Refinery Complex (14) is a densely developed industrial complex largely surrounded by dense vegetation, the Sway Pasture and Small Holdings (18) and the Bransgore Woods and Pastures (19) both consist of small open fields within a densely wooded framework which will screen views, and the extensive plantations in the Southern Heath and Forest (20) will also largely screen views towards the Isle of Wight.

As a result, there will be few if any views of the turbines from these landscape character areas and the baseline descriptions (Appendix B) and assessments have considered the following landscape character areas only:

- 15: North West Solent Estates;
- 16: Lymington and Pennington Coastal Plain;
- 17: Barton and Milford Coastal Plain;
- 25: Beaulieu Heath; and
- 27: Eastern Forest Heaths.

For the remainder of the study area*, The Hampshire Landscape: A strategy for the future* document has been used. Of the nine character types, only the Open Coastal Plain and Cliff Coastline character types are considered to be potentially effected, and have therefore been included as part of this assessment.

2.6 Landscape Designations

The locations and extent of the landscape designations in the study area are shown on Figure 8.5. These include three national landscape designations:

- New Forest National Park;
- Isle of Wight Area of Outstanding Natural Beauty (AONB); and
- Isle of Wight Heritage Coast.

These landscape designations are discussed below:

2.6.1 *New Forest National Park*

Much of the New Forest has now been designated as a National Park, following confirmation of the boundary by the Secretary of State in April 2005. The extent of the National Park was based on the previously designated New Forest Heritage Area, and was defined within the *New Forest National Park (Designation) Order 2002* but with subsequent boundary modifications. The boundary, as it has now been confirmed, is shown on Figure 8.5 and, at its closest, it is approximately 6.4km from Turbine 1, at Hurst Castle.

The New Forest National Park is now managed by the New Forest National Park Authority (sNFNPA), set up in April 2005

The purposes of National Parks were originally defined in the *National Parks and Access to the Countryside Act 1949*, and subsequently revised by *The Environment Act 1995*.

These purposes are:

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

The special qualities of National Parks are usually described in the Management Plan for each Park. *The Strategy for the New Forest* has recently been adopted as the Management Plan for the Park. The special qualities of the New Forest are not listed as such, but the Strategy describes the Vision for the New Forest as:

- A unique, naturally beautiful, yet living and changing rural area;
- A place where the rich mosaic of exceptionally important wildlife habitats, the quality and diversity of the landscape, and the wealth of ancient traditions, are sustained by careful management and supported by the actions of the Forest community;
- A thriving and active communing community, whose animals help maintain and shape the distinctive Forest landscape;
- A place where there is a strong and sustainable rural economy, offering Forest generated employment, and where the needs of local communities are accommodated in harmony with the environment;
- A remote and tranquil place, free from pollution, and set apart from the industry and urban development close by;
- Where local people and visitors continue to gain pleasure and inspiration from the Forest while respecting its landscape, wildlife and cultural heritage, and where everyone can learn about and understand its special qualities;
- Where tourism is encouraged in a sustainable way for the benefit of the Forest and its communities, and where alternative means of transport ensure that the motor car does not dominate; and
- A special place, where the wide diversity of communities and organisations work together with care and concern to conserve the Forest for future generations.

For the purposes of this assessment, this Vision has been taken as a description of the special characteristics (both current and inspirational) of the New Forest National Park.

2.6.2 *Isle of Wight AONB*

Approximately 50% (189km^2) of the Isle of Wight is designated as an Area of Outstanding Natural Beauty (AONB). This extends over the following five distinct parcels of land, as shown on Figure 8.5:

- Most of the northwest coast (Hamstead coast and hinterland);
- Parts of the northeast coast (Osborne Coast and the coastline between Fishbourne and Ryde);
- The southeast coast south of Bembridge and the downland extending westwards towards Newport;
- The southeast coast and hinterland from Shanklin to St Catherine's Point, but excluding Ventnor; and
- The entire south-western quarter of the island, from St Catherine's Point to Alum Bay, inland as far as Newport, and the Yar valley from Freshwater Bay northwards to Yarmouth.

The purpose of AONBs was also originally defined in the *National Parks and Access to the Countryside Act 1949*, and subsequently revised by *The Environment Act 1995*. This purpose is:

- To conserve and enhance the natural beauty, wildlife and cultural heritage of the AONB.

The profile and protection of AONBs has been strengthened by *The Countryside and Rights of Way Act 2000* and PPS7 has confirmed that, in planning terms, AONBs should be afforded the same level of consideration and protection as National Parks.

An AONB Partnership has been established by the Isle of Wight Council and the Countryside Agency to manage the Isle of Wight AONB. The *AONB Management Plan 2004-2009* sets out the vision, key strategies and policies relating to its management. The overall vision in the Management Plan is for the Isle of Wight AONB to have become, by 2025:

- A nationally renown, important and treasured landscape, whose special qualities are valued, appreciated and understood by the people who live, work and visit the area;
- Where people are able to experience "dark skies", peace and tranquillity;

- Where seascapes remain an important part of the character of the AONB and Heritage Coasts;
- Information on the natural and historic environment has enabled decisions and policies to conserve and enhance the special characteristics of the Island's finest landscapes, giving the AONB a strong identity and "sense of place";
- Farming and woodland management has remained central to the beauty of the landscape. Local processing and markets provide essential incomes and allow sustainable approaches to farming and land management that conserve and enhance the AONB;
- Continuation of customs, traditions and the use of dialect and local place names have added to the quality of life of local communities and the quality of experience for visitors;
- New technologies have been accommodated through careful consideration and mitigation for their impact upon the AONB, bringing economic and social benefits and retaining the intrinsic special qualities of the environment;
- Public transport, the use of non-motorised routes and the availability of goods and services in local communities have created less dependence on the private car for transport; and
- Economic benefit has been brought to local communities directly through sustainable tourism and business activities.

The special qualities, referred to in several aspects of the Vision above, are outlined in Section 8 of the Management Plan as:

- Majestic sea cliffs and sweeping beaches;
- Quiet solitude of ancient woodlands;
- Ever changing patchwork of worked fields;
- Enduring presence of the downs;
- Intricate inlets of tranquil creeks;
- Long distance views from coastal heaths and downlands;
- Planned and manicured gardens of former Royal Estates and Victorian Villas;
- Irregular undulating hedged fields of pasture;
- Dark starlit skies;

- Bustle and colour of festivals and events;
- Winding paths, chutes and hollow ways in the countryside;
- Chines and steps down to the beach;
- Place names, dialect, poetry, literature and art;
- Isolated houses, hamlets and rural villages, harbour towns, castles and tumuli;
- Plants and animals; and
- Fossilised trees and dinosaur footprints.

As a result, the Management Plan sets out policies concerning landscape character, earth heritage, wildlife, historic environment, living and working, traffic and transport, farming and forestry and visiting and enjoying.

Policy C2 in the Isle of Wight Unitary Development Plan (UDP) states that, "Within the Areas of Outstanding Natural Beauty (AONB) planning applications will only be approved where they do not have a detrimental impact on the landscape …" and meet one of five criteria relating to need, agriculture, horticulture, forestry, local benefits, leisure and recreation, existing development and development envelopes. The AONB lies approximately 2km west of Turbine 1, 1.1km south of Turbine 5 and 1.5km southeast of Turbine 6, so the development is not within this designation.

2.6.3 *Isle of Wight Heritage Coast*

Approximately 50% of the coastline of the Isle of Wight is designated as Heritage Coast (as shown within Figure 8.5) extending from south of Ventnor along the southeast and southwest coastlines to Freshwater (Tennyson coast) and round to Alum Bay, and along the northwest coast from east of Yarmouth to west of Cowes (Hamstead coast). The land sector of the Heritage Coast is entirely within the AONB.

Heritage Coasts are defined by local authorities in consultation with the Countryside Agency (in England). They are not a statutory designation and so do not have any statutory protection. The main objectives of Heritage Coasts are defined in PPG20 as:

- To conserve, protect and enhance the natural beauty of the coasts, including their terrestrial, littoral and marine flora and fauna, and their heritage features of architectural, historical and archaeological interest;
- To facilitate and enhance their enjoyment, understanding and appreciation by the public by improving and extending opportunities for recreational, educational, sporting and tourist activities that draw on, and are consistent with the conservation of their natural beauty and the protection of their heritage features;
- To maintain, and improve where necessary, the environmental health of inshore waters affecting heritage coasts and their beaches through appropriate works and management measures; and
- To take account of the needs of agriculture, forestry and fishing, and of the economic and social needs of small communities on these coasts, through promoting sustainable forms of social and economic development, which in themselves conserve and enhance natural beauty and heritage features.

Policy C4 in the Isle of Wight Unitary Development Plan (UDP) states that, "*Within the defined Heritage Coasts of Hamstead and Tennyson, development will only be permitted where it protects and enhances the unspoilt and undeveloped character of the coast*" and that "*Approvals will be granted for development which facilitates improved public access and enjoyment of the Heritage Coast for informal open air recreation*". The Heritage Coast lies approximately 2km west of Turbine 1, 1.1km south of Turbine 5 and 1.5km southeast of Turbine 6, so the development is not within this designation.

2.7 Visual Analysis

2.7.1 *Visibility*

30km and 20km radius zone of visual influence (ZVI) are provided in Figures 8.7a and 8.7b.

These ZVIs are indicative of the locations where views may be possible, but do not take into account the screening effects of surface features (e.g. local topographic features, buildings and vegetation). In reality, the screening effects of surface features will fragment and reduce the extent of most of these zones of visibility and may also reduce the number of wind turbines visible from any one location. However, the ZVI is a useful tool for establishing the zones where turbines will not be visible, thereby enabling the fieldwork and assessment to concentrate on the locations in the study area where views may be possible.

The ZVIs suggest that the main zones where views may be possible will be:

- Isle of Wight – in the northwest quarter of the island extending approx 6km westwards, 4km northwards, 10km eastwards and 2km southwards, plus isolated zones on elevated land to the northeast, east and southeast;
- Solent – throughout most of the Solent, from Southampton Water to Hurst Castle, except close to shore along the northwest coastline of the Isle of Wight; and
- Mainland – the coastal zone from Christchurch to Hurst Castle and on to Calshot, and also on the far side of Southampton Water. Also extensive zones inland but excluding the main river valleys and becoming patchy beyond approx 18-20km.

2.7.2 *Viewpoint analysis*

18 viewpoint locations were chosen as a representative sample of the main landscape and visual receptors with potential views of the development in the study area and suitable for illustrating the key findings of the assessment. These viewpoint locations are listed in Table 7 below and their locations are shown on Figure 8.7 a and b. The existing summer and winter/spring views from all 18 viewpoints are shown figures 8.8 and 8.9

Table 7: Viewpoint analysis

No.	Viewpoint	NGR	Approx elevation (mAOD)	Direction of view to site	Nearest/ furthest turbine (km)	Landscape unit Landscape designation	Number/ extent of turbines visible	Array width (°)	Background	Landscape/ built context	Receptors	Sensitivity of location
1	Wellow Millennium Green, adjacent to the B4301	438635 088155	23	S	1.0/ 1.3	Boundary of Open Farmland and Rolling Farmland None	5/ 3 almost entire/1 rotor sweep/ 1 blade	79º	Sky	Large/medium scale, rising, textured skyline/ goal posts, houses telegraph poles	Residents	High
											Public on the green (dog walking and sports)	High/ medium
2	B3399, west of Shalcombe	438335 086120	79	N	1.0/ 1.3	Open Farmland On boundary of IoW AONB and Heritage Coast	6/ 5 almost entire/ 1 rotor sweep	70º	Mainly sky	Large/medium scale, undulating, distant skyline/ distant industry	Motorists	Medium
3	Thorley Church Gate	437530 088665	11	SSE	1.4/ 2.4	Boundary of Open Farmland and Rolling Framland. None.	6/ almost entire	36º	Mainly sky	Large/medium scale, rising, elevated horizon/ telegraph poles, trident line, houses	Residents	High
											Church goers Cyclists	High/ medium
											Motorists	Medium

No.	Viewpoint	NGR	Approx elevation (mAOD)	Direction of view to site	Nearest/ furthest turbine (km)	Landscape unit Landscape designation	Number/ extent of turbines visible	Array width (°)	Background	Landscape/ built context	Receptors	Sensitivity of location
4	Tennyson Trail on Compton Down Golf Course	436865 085735	129	NE	1.9/ 2.7	Chalk Downs IoW AONB & Heritage Coast	6/ almost entire	32°	Mainly land	Large/medium scale, low, undulating, distant horizon/ distant industry	Walkers, Horse riders, Cyclists	High
											Golfers	High/ medium
5	Freshwater Way, near Kings Manor Farm	434700 088440	12	ESE	3.3/ 4.8	Settled Farmland On boundary of IoW AONB	6/ 4 almost entire/ 2 rotor sweeps	4°	Half sky/ half land	Medium scale, rolling, elevated horizon/ TV mast	Walkers, Horse riders, Cyclists	High/ medium
6	Bridge over River Yar, Yarmouth	435195 089575	3	SE	3.5/ 4.8	Estuaries IoW ANOB	6/ 3 almost entire/ 3 rotors	9°	Mainly sky	Medium scale, flat expanse of water, elevated horizon/ edge of town, boat masts	Motorists	High/ medium
											Yachtsmen Fishermen	High/ medium
7	Newtown National Nature Reserve	441775 090910	3	SW	4.6/ 5.3	Estuaries IoW AONB & Heritage Coast	6/ 4 almost entire/ 2 partial rotor sweeps	16°	Sky / land /Sea	Medium scale, flat expanse of water, elevated horizon/ boat masts, village	Walkers	High
											Birdwatchers Sailors	High/ medium

No.	Viewpoint	NGR	Approx elevation (mAOD)	Direction of view to site	Nearest/ furthest turbine (km)	Landscape unit Landscape designation	Number/ extent of turbines visible	Array width (°)	Background	Landscape/ built context	Receptors	Sensitivity of location
8	Swainstondown Gate	444170 085975	159	WNW	5.0/ 6.5	Chalk Downs IoW AONB	6/ 4 entire/ 2 almost entire	2°	Half sky/ half land	Large/medium scale, rolling, foreground detail/ no built context	Walkers, Horse riders, Cyclists	High
9	Tennyson's Monument, Tennyson Down	432560 085355	143	NE	5.7/ 6.9	Chalk Downs IoW AONB & Heritage Coast	6/ 1 entire/ 5 almost entire	7°	Sky/ land /Sea	Large/medium scale, smooth foreground, detailed middle ground/ settlement	Walkers, Horse riders, Cyclists	High
10	Ferry Terminal, Lymington	433335 095415	3	SSE	9.2/ 10.2	Lymington and Pennington Coastal Plains Border of New Forest National Park	6/ 4 entire/ 2 almost entire	7°	Mainly Land	Medium scale, horizontal, elevated horizon/ ferry terminal, yacht masts	Ferry users	Medium
11	Seafront at Milford on Sea	429310 091215	1	SE	9.4/ 10.8	Barton & Milford Coastal Plain None	6/ rotor sweeps	2°	Mainly land	Large/medium scale, coastal, exposed/ 20th century white seafront architecture	Residents	High
											Walkers, Horse riders, Cyclists, Visitors	High/ medium
											Motorists	Medium

No.	Viewpoint	NGR	Approx elevation (mAOD)	Direction of view to site	Nearest/ furthest turbine (km)	Landscape unit Landscape designation	Number/ extent of turbines visible	Array width (°)	Background	Landscape/ built context	Receptors	Sensitivity of location
12	Northwood, Cowes	448950 093365	63	SW	11.6/ 12.6	Boundary of settlement and Traditional Enclosed Pasture Land None	6/ 5 almost entire/ 1 partial rotor sweep	<5°	Half sky/ half land	Medium scale, layered, highly vegetated/ main road, fencing, poles	Residents	High/ Medium
											Motorists	Medium
13	Stone Point, Lepe Country Park	445525 098510	3	SSW	13.0/ 13.5	Northwest Solent Estates New Forest National Park	6/ 4 entire/ 2 almost entire	6°	Mainly land	Large/medium scale, horizontal, elevated horizon/ lifeboat house, channel markers	Visitors to the beach, Country Park and National Park	High
14	Beaulieu Heath, New Forest	435755 100405	41	SSE	13.2/ 13.8	Beaulieu Heath New Forest National Park	6/ 4 entire/ 2 almost entire	5°	Mainly land	Medium scale, horizontal, contained by woodland/ chimneys	Walkers Horse riders Cyclists	High
											Model aircraft flyers	High/ Medium
											Motorists	Medium

No.	Viewpoint	NGR	Approx elevation (mAOD)	Direction of view to site	Nearest/ furthest turbine (km)	Landscape unit Landscape designation	Number/ extent of turbines visible	Array width (°)	Background	Landscape/ built context	Receptors	Sensitivity of location
15	Seafront at Barton-on-Sea	423935 092950	31	SE	15.0/ 16.4	Barton & Milford Coastal Plain None	6/ 1 entire/ 5 almost entire	1°	Mainly land	Large/medium scale, horizontal, elevated horizon/ urban area, seating, shelters, lighthouse, Hurst Castle	Residents	High
											Visitors	High/ medium
											Motorists	Medium
16	Brading Down	458470 086970	124	W	19.2/ 20.6	Chalk Downs IoW AONB	6/ blades	1°	Sky	Large/medium scale, undulating downland/ TV transmitter masts	Walkers, Horse riders, Cyclists	High
											Motorists	High/ medium
17	Mudeford Quay, Christchurch	418505 091805	3	ESE	19.9/ 21.3	Coastal and Inter-tidal None	6/ 1 entire/ 5 almost entire	0.5°	Mainly land	Large/medium scale, wide, horizontal/ promenade, huts, urban areas	Walkers	High/ medium
											Visitors	High/ medium
											Yachtsmen Fishermen	High/ medium
18	New Forest near A31(T)	423765 111020	N106	S	27.5/ 28.5	Northern Heath and Forest New Forrest National Park	N6/6	-	Half sky/half land	Flat expansive landscape with no urban elements	Walkers	High

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3.0 DESCRIPTION OF PROPOSALS AND PREDICTED EFFECTS

3.1 Proposals

The wind farm will comprise six wind turbine generators, each with a tubular steel tower, three glass fibre-reinforced epoxy turbine blades, a fibreglass nacelle (which houses the generator, gearbox and yawing mechanisms), and an enclosed, weatherproof electrical transformer. The Vestas V82 turbine is a three-bladed horizontal axis design with an 82 metre diameter (ie each blade is 41 metres long) upwind rotor. The advice of the landscape architect during the environmental impact assessment process was that the tip and hub heights of all six turbines should be a similar height with respect to the general site level (AOD) and important views. To achieve this, four turbines (2, 3, 4 and 6) have a hub height of 59 metres, giving a tip height of 100 metres, while the other two (1 and 6), which are sited in localised hollows, will be taller at 68.5 metre hub height above local ground elevation, giving a tip height of 109.5 metres. Thus the overall height of the wind farm will appear to be level. The finish and colour of the turbines will be agreed with the planning authority but they are likely to be light grey in colour and with a semi-matt finish.

The electrical transformers will be located inside the turbine towers.

An area of hard standing approximately 35 metres by 18 metres will be created adjacent to each wind turbine. These ‘crane pads’ are used as a lay-down area and as a base for cranes and other vehicles during construction, maintenance and decommissioning. The crane pads will remain in place throughout the life of the project.

Approximately 3 kilometres of new, permanent site access tracks will be required for construction and operational access to the wind turbines and infrastructure. These will be approximately 5 metres in width for the duration of the construction period. At the end of construction all of these tracks will be downgraded to a nominal 3 metres running width by reseeding the edges.

The wind farm will need an electrical switching station. This houses the electrical switchgear and metering equipment, and will comprise a single story, pitched roof construction building, approximately 7 metres by 5 metres in plan, and 4 metres in height. A small roadstone car park will be located adjacent to the switching station.

A self-supporting, lattice wind monitoring mast (approximately 59 metres in height) with associated sensors will be erected on site to collect wind speed and direction data during operation.

Approximately 3.5 kilometres of underground electrical and communication cabling will be installed between turbines and the switching station building, routed alongside or under the site access tracks.

No lighting will be required for the turbines, although the electrical switching station will have some low key security lighting switched from inside the building.

3.2 Construction

Construction of the wind farm is likely to take approximately six to nine months. No hedgerows or trees need to be removed from the site for construction, with the exception of a short stretch of hedgerow to facilitate site access. This will be reinstated.

A short section of temporary track will be created in the north-west corner of the site to allow heavy vehicles to bypass the junction of Main Road and Broad Lane in Thorley. This will be completely reinstated when construction is complete.

Additional temporary site access tracks may be required by the construction contractor to allow efficient and direct access of plant and HGVs to the construction sites at each turbine location. The precise details cannot be confirmed until the type of plant and mode of delivery are finalised, but these will be mostly small-scale. Only arable land will be affected, with no effect on trees or hedgerows. If constructed, these temporary tracks would be approximately 5 metres in width. The construction of these temporary additional access roads would necessitate further HGV movements to take the material away from the site at the end of construction, and the traffic assessment has been undertaken on this basis.

In addition, a temporary construction compound (unlikely to exceed 1,200m^2 in size) will be built to accommodate contractors' and site engineers' facilities (offices, toilets, etc), material storage, car parking and plant and material laydown facilities.

3.3 Decommissioning

At the end of the 25 year planned life of the wind farm, it will either be decommissioned and the site reinstated (by agreement with the landowner) or a new planning application may be submitted to retain or modify the existing development. Such an application will need to meet the planning and EIA requirements in force at the time.

The decommissioning period for the wind farm is estimated at 4 months, and would involve the removal of all above ground structures and the reinstatement of ground disturbed by the works to agricultural use.

3.4 Predicted Source of Effects

3.4.1 Predicted Temporary effects during Construction.

- Removal of surface vegetation and topsoil
- Erection of site compound, temporary storage areas and temporary security fencing
- Delivery of plant, equipment and materials including earth workers and excavators
- Construction of temporary paths
- Temporary adjustments of existing road network including the removal of a hedgerow; and
- General building infrastructure including noise and dust, and views of large machinery.

3.4.2 Predicted Permanent Effects.

- Minor loss of agricultural land
- Construction of permanent access roads (approximately 3km in length) and crane pads
- Erection of six turbines (100m and 109.5m high) and 59m high lattice monitoring mast.

- Significant changes to views both on the Isle of Wight and mainland.
- Alterations to landscape resources including the landscape fabric of the site and landscape character of the study area.
- Potential impacts to historic landscape features and character.
- Potential effects to tranquillity of the landscape of the site and surrounding area
- Potential effects to public visual receptors in the landscape and private views from properties; and
- New hedgerow planting to replaced lost sections, and the planting of a small copse adjacent to the switching station.

4.0 PREDICTED POTENTIAL IMPACTS ON LANDSCAPE AND VISUAL RESOURCES.

4.1 Introduction

The existing characteristics and resources of the site and its context have been described in the baseline. The nature and significance of the predicted impacts on landscape resources and visual amenity is described in this section.

4.2 Assessment of effects on Landscape Resources

This section draws on the findings of the review of the development, the key characteristics of the landscape and discusses the significance of the predicted effects on:

- The landscape fabric of the site landscape;
- The landscape character of the study area;
- Landscape designations; and
- Tranquillity.

4.2.1 Effects on Landscape Fabric

Changes to landscape fabric can arise where there would be direct or indirect physical changes to the landscape. In general changes to landscape fabric occur only within the application boundary of a wind farm site, along the associated grid connection route and along the access route in locations where any highway modifications are necessary.

There will be temporary effects on the landscape fabric of the site as the result of ground disturbance and loss of vegetation during the construction phase, in the locations of the temporary office and site compound, along the cable trenches and routes of the temporary site access tracks. However, the majority of the areas to be disturbed are in arable use so the loss of vegetation will be minimal, the disturbance will be short-term and good site management plus reinstatement at the end of the construction phase will minimise the extent and duration of these effects.

There will be long-term effects on the landscape fabric of the site as a result of the proposals, including the loss of ground vegetation along the new site tracks, and at the six proposed wind turbine bases. The current use and management of the land will continue and there will be no loss

of distinctive landscape features, such as hedgerows, walls or mature trees. No significant adverse effects will occur to the existing landscape components and features that currently define the landscape fabric, but the six turbines and monitoring mast will introduce new 'landscape' features that will significantly alter the landscape fabric of the site. Beyond the site, the landscape fabric of the study area will remain unaffected.

4.2.2 Effects on landscape character – Isle of Wight

Reference should be made to the baseline assessment in Appendix B.

Open farmland (Type 6 West Wight)

The development will be located in this landscape type, assessed as being *Medium/High* importance.

The ZVI and fieldwork observations confirm that at least parts of the six wind turbines will be visible from most of this landscape unit, the exception being in the far west of the unit, where intervening woodlands will provide some screening. Elsewhere, as illustrated by Viewpoints 1, 2 and 3, there will be open views of the turbines. The turbines will become one of the defining characteristics of this landscape unit. The magnitude of change is assessed as *Large* resulting in Substantial impact to this character area. This in a significant change to the character of the landscape on and in the vicinity of the site. Due to the dominance of the turbines and potential impact on tranquillity, the impact is assessed as *Adverse.*

For landscape units that are out with the proposed development site, the extent to which views contribute to the character of the landscape is the main factor that determines whether the predicted effects on landscape character are likely to be significant. Where particular views are an essential characteristic of a landscape unit, and the wind farm will become the key characteristic of those views, then a significant effect may result.

Chalk Downs (Type 1 West Wight and LCT1 Isle of Wight)

The Chalk Downs landscape type is characterised by the high, long, narrow and rounded ridgelines with a predominant east-west alignment, and the high chalk cliffs where the downlands meet the sea. This character types has been assessed as *High* importance.

The nearest Chalk Downs to the proposed development is Compton Down and, as illustrated by Viewpoint 4, as a result of the proximity to the nearest turbine (less than 2km), the size and array width of the turbines (32˚) is such that the turbines will become a defining characteristic of the northerly views from this downland and will result in a significant change in the character of the Compton Down landscape unit.

Tennyson Down is located 4-9km to the southwest of the turbines. As illustrated by Viewpoint 9, the turbines will be sufficiently close to result in a significant change to the view. The turbines will become another focal point in views from Tennyson Down but, as a result of the distance to the turbines, their size in the landscape and narrow array width (7˚), they will become one of many features in those views but not the defining characteristic.

Further a field, there are small zones of visibility and views from the more elevated locations in the other Chalk Downs landscape unit but, as illustrated by Viewpoint 16 , the distance to the turbines and the screening effects of intervening topography and vegetation are such that the turbines will be barely discernible.

The open and panoramic views from this landscape type are an important aspect that defines its character. The overall magnitude of change is therefore assessed as *Large/Medium* resulting in a *Substantial* impact. This impact is considered to be *Adverse* because the character of parts of this sensitive landscape will be significantly changed.

Greensand Hills (Type 2 West Wight) and Sandstone Hills and Gravel Ridges (LCT 5 Isle of Wight)

The ZVI and field studies have determined that views of the turbines will be very limited from this area. The landscape type has been assessed as being of *High* importance. The magnitude of change is assessed as *Negligible* result in *No impact.*

Bays (Type 3 West Wight), Soft Cliffs (Type 8 West Wight) and Northern Coastal Cliffs (LCT11 Isle of Wight)

The ZVI and field studies have determined that views of the turbines will be very limited from this area, due to a combination of landform and vegetation. The exception to this is Headon Soft Cliff Character Area (8A), where views of all six turbines will be available from Headon Hill. This landscape character area has been assessed as being of high importance. Views of the turbines are not considered to become a defining characteristic, as the emphasis of the view from this area tends to be towards the sea. The magnitude of change is assessed as small result in a moderate adverse impact. Views from the sensitive Hamstead and Bouldnor coast will be limited by topography and woodland.

Estuaries (Type 5 West Wight)

The ZVI (Figure 8.7) suggests zones of visibility over most of the River Yar and Newtown River Harbours and Creeks landscape units. However, both of these landscape types are characterised

by a low level topography and an abundance of vegetation that tend to limit views in the direction of the turbines. Where views are possible, as illustrated by Viewpoints 6 and 7 the turbines will be partially screened and, in these two particular views, will be seen in the context of boat masts . This landscape type has been assessed as being of *High* importance. Views of the turbines from these two landscape units will not be a defining characteristic but will (in particular from Newtown) alter the tranquil and unspoiled character of the estuary. The magnitude of change is assessed as being *Medium/Small* resulting in a *Moderate Adverse* Impact.

As illustrated by the ZVI, there will not be any views from the other three Harbours and Creeks landscape units in the study area – River Medina, King's Quay and Wootton Creek.

Settled Farmland. (Type 7 West Wight)

This landscape type has been assessed as *Medium/High* importance. The extent of visibility will be much less than that indicated on the ZVI because of woodland and amount of settlements in this area, both of which will screen views. Viewpoint 5 is from a location where a view of the turbines would be available. The magnitude of change to the whole area is assessed as *Small* resulting in an *Moderate adverse* impact.

Rolling Farmland (Type 9 West Wight) and Traditional Enclosed Pasture Land (LCT2 Isle of Wight)

An extensive unit located in the northwest of the island and extends around to the north and east of the site, coming within approximately 1km of the nearest turbine. This landscape type has been assessed as being of *high* importance.

Although the ZVI suggests that there will be views of the turbines from much of this landscape unit, fieldwork observations indicate that views will be intermittent and the zones of visibility will be highly fragmented due to the screening effects of the abundant vegetation. However, due to the proximity of the turbines, there will be a sufficient number of views from the part of the unit that wraps around to the north and east of the site (defined roughly by the A3054 from its junction with Hill Place Lane to Shalfleet, and by Elm Lane from the A3054 at Shalfleet to Calbourne) for the turbines to become a defining characteristic of the landscape and to result in a significant change in the character within approximately 3km of the nearest turbine.

There is also an extensive area of this unit located in the northeast of the island, to the east of the River Medina. The ZVI indicates fragmented zones of visibility in this unit. However, as illustrated by Viewpoint 12, which is several kilometres closer to the turbines than any of the zones of visibility in this unit, the turbines will be small and only just noticeable elements in the view.

An overall magnitude of change is assessed as *Medium/Small* resulting in a *Moderate / Substantial* impact, assessed as adverse.

Northern woodlands (LCT6 Isle of Wight)

Several Northern Woodlands landscape units are within zones of visibility on the ZVI. However, this landscape type is characterised by its densely wooded nature, and there are very few views out. Therefore, this is a landscape type that is characterised primarily by its component features, there will be very few views of the wind turbines from these landscape units and the proposed development will not affect the character of the Northern Woodlands landscape type.

Osborne coast (LCT10 Isle of Wight)

The ZVI suggests a zone of visibility over part of the Osborne Coast landscape type, but the densely wooded nature of the estate means that there will be few if any views of the turbines from this landscape unit. No impact to its character has been assessed.

Landscape Improvement Zone (LCT7 Isle of Wight)

As the ZVI illustrates, there will be few if any views from the Landscape Improvement Areas outside the West Wight area. No impacts have been assessed.

4.2.3 Effects on landscape character – Mainland

Christchurch District (Dorset)

Coastal and Inter-tidal Area.

Mudeford Quay and Christchurch bay is characterised by both its component features and the wide, open, seaward views. It has been assessed as being of Medium Importance. As illustrated by Viewpoint 17, the turbines will be on the distant land mass of the Isle of Wight, and discernible when visibility is very good or better, particularly when sunlit (mid-afternoon to evening).

Due to the distance to and the scale of the turbines and the limited number of occasions when they would be visible, the proposed development would not become a defining characteristic of the views from this location and will not significantly affect the character of the Mudeford Quay landscape unit. The magnitude of change is assessed a Small resulting in a Moderate /Slight impact. From this distance it is considered subjective as to whether the impact is adverse or beneficial.

No impact has been assessed for these character areas.

New Forest District (Hampshire)

North West Solent Estates

The coastal margins of the North West Solent Estates (low sandy cliffs, narrow gravel beaches, extensive marshes and mudflats), and the large arable fields close to the coast are characterised by both their component features and seaward views. In contrast, the inland areas of this landscape character area are characterised almost entirely by their component features as the well-wooded nature of the inland areas limits the seaward views.

There will be views of the turbines from much of the coastal margin and from some of the large fields close to the coast at distances of 8 – 18km to the nearest wind turbine. However, the turbines will be noticeable elements in the view only when visibility is good to very good or better, and when sunlit (early morning or late evening in the summer months). Viewpoint 13 illustrates a view from this landscape unit at around 13km to the nearest turbine.

As a result of the scale of the turbines and the limited number of occasions when they would be visible, the proposed development would not become a defining characteristic of the views from this landscape unit.

This landscape type has been assessed as being of *high* importance. The magnitude of change is assessed as *Small/Medium* resulting in *Moderate impact (subjective).*

Lymington and Pennington Coastal Plain

The Lymington and Pennington Coastal Plain is similar in character to the North West Solent Estates and, as with the latter, the coastal margins of this landscape unit (narrow gravel beaches, extensive marshes and mudflats and shingle banks), and the large arable fields close to the coast are characterised by both their component features and seaward views. In contrast, the inland areas of this landscape character area are characterised almost entirely by their component features as the built development and well-wooded nature of the inland areas limits the seaward views.

There will be views of the turbines from much of the coastal margin and from some of the large fields close to the coast at distances of 6.5 – 10km to the nearest wind turbine. The turbines will be visible elements in the view when visibility is good or better, and more easily noticeable when sunlit (late evening in the summer months). Viewpoint 10 illustrates a view from this landscape unit at around 9km to the nearest turbine.

Although the turbines are likely to be visible more than 50% of the time, the distance to and scale of the turbines, and the clear separation provided by the extensive area of water separating the mainland from the island where the turbines will be located, means that the proposed development would not become a defining characteristic of the views from this landscape unit.

This landscape type has been assessed as being of *high* importance. The magnitude of change is assessed as *Small /Medium* resulting in *Moderate impact (subjective)*.

Barton and Milford Coastal Plain

The Barton and Milford Coastal Plain is similar in character to the Christchurch Bay landscape character area described in the Christchurch landscape character assessment. As with the latter, the Barton and Milford Coastal Plain is characterised by both its component features and the views – the wide, open, low level seaward views from the beaches and the more elevated views from the cliff tops.

There will be views of the turbines from much of the coastal margin (the beaches and public open space along the cliff tops at distances of 9 – 17km to the nearest wind turbine. As illustrated by the views from Milford on Sea and Barton on Sea, Viewpoints 11 and 15, the turbines will be on the distant land mass of the Isle of Wight, and noticeable when visibility is good to very good or better, particularly when sunlit (mid-afternoon to evening).

Due to the distance to and the scale of the turbines, the proposed development would not become a defining characteristic of the views from this location.

This landscape type has been assessed as being of medium importance. The magnitude of change is assessed as *Small* resulting in *Moderate/slight impact (subjective)*.

Beaulieu Heath

The Beaulieu Heath landscape character area is characterised mainly by its component features - the open heathland, the semi-enclosure of the surrounding woodland and the lack of built development. There are long distance views of the Fawley Refinery Complex, Fawley Power Station and Sway tower, and occasional views of the Chalk Downs on the Isle of Wight. A typical view of the Isle of Wight is illustrated by Viewpoint 14,where the turbines will be over 13km away and partially screened by the intervening vegetation.

This landscape type has been assessed as being of *high* importance. The magnitude of change is assessed as *Small/Negligible* resulting in S*light* impact (subjective).

Eastern Forest Heaths

The Eastern Forest Heaths landscape character area is similar to Beaulieu Heath but being closer to the urban and industrialised landscape units along Southampton Water, appeared to be more intensively used, with busier roads and much closer views of the stacks at the Fawley Refinery Complex. However, it is still characterised mainly by its component features - the open heathland, the semi-enclosure of the surrounding woodland and the lack of built development within the unit.

There will be occasional views of the turbines but these will be 16km+ away and partially screened by the intervening vegetation. The turbines will be discernible only in very good or better visibility and when sunlit (early morning in the summer) and due to the distance to and scale of the turbines, and the few locations where such views are possible, the proposed development would not become a defining characteristic of the views from this landscape unit

This landscape type has been assessed as being of *high* importance. The magnitude of change is assessed as *Small/Negligible* resulting in S*light* impact (subjective).

Hampshire

Open Coastal plain and Cliff Coastline

Both of these landscape areas have been assessed as being of medium importance. Views of the turbines will be at a distance of between 20km and 23km. Either side of Gosport, views of the Isle of Wight from this coastal area are an important component of its character. The turbines will be visible, breaking the skyline of the island, which, at this distance, currently appears rural in character. Towards Southampton, views of the island from this area are seen in the context of Fawley oil refinery. The magnitude of change is assessed as small/medium resulting in a moderate impact (subjective).

4.2.3 Landscape Designations

New Forest National Park

The West Wight wind turbines will be located approximately 6.4km from the nearest point on the boundary of the New Forest National Park (at Hurst Castle) and on a separate land mass, separated by The Solent. The ZVI (Figure 8.4b) suggests that there could be large areas of visibility within the National Park, particularly along the coastline, inland of Lymington, across Beaulieu Heath, between the Beaulieu River and Hythe and across the forested areas north of Brockenhurst.

However, the landscape character analysis, the viewpoint analysis and other fieldwork observations have indicated that views of the wind turbines from the National Park will be mainly from the coastline (illustrated by Viewpoints 10 and 13) and from open areas of heathland, such as Beaulieu Heath (illustrated by Viewpoint 14).

In all these locations, the distance to the turbines and, from the inland areas, the limited extent of the views, means that the wind turbines will not result in a significant change in landscape character or views from these locations. As a result, the development will not significantly alter the ability of the New Forest National Park to achieve its Vision, in that it will not affect:

- The unique, naturally beautiful, yet living and changing rural area;
- The rich mosaic of exceptionally important wildlife habitats, the quality and diversity of the landscape, and the wealth of ancient traditions;
- The thriving and active communing community, whose animals help maintain and shape the distinctive Forest landscape;
- The strong and sustainable rural economy, based on Forest generated employment;
- The remoteness and tranquillity of the place, free from pollution, and set apart from the industry and urban development close by;
- The ability of local people and visitors to gain pleasure and inspiration from the Forest while respecting its landscape, wildlife and cultural heritage, and where everyone can learn about and understand its special qualities;
- Tourism, which is encouraged in a sustainable way for the benefit of the Forest and its communities, and where alternative means of transport ensure that the motor car does not dominate; and
- The special nature of the place, where the wide diversity of communities and organisations work together with care and concern to conserve the Forest for future generations.

The development will also not affect the ability of the New Forest National Park to:

- Conserve and enhance the natural beauty, wildlife and cultural heritage of the National Park; and
- Promote opportunities for public enjoyment and understanding of the special qualities of the National Park.

Therefore, the development will not affect the ability of the New Forest National Park to achieve its statutory purposes.

Isle of Wight AONB

Of the five distinct parcels of land that make up the Isle of Wight AONB, the nearest is the AONB that takes up the entire southwestern quarter of the island, from St Catherine's Point to Alum Bay, inland as far as Newport, and the Yar valley from Freshwater Bay northwards to Yarmouth. At its closest, this AONB lies approximately 2km west of Turbine 1, 1.1km south of Turbine 5, 1.5km southeast of Turbine 6, so the development is not within this designation but is located relatively close to the boundary.

The ZVI indicates that the majority of this part of the AONB will be outside zones of visibility but suggests that there may be views of the turbines from the north facing slopes of the downs to the south of the site (Tennyson Down, Compton Down and Brighstone Down) and from the Yar valley. The Yar valley is wooded and Brighstone Down is extensively forested but there are some elevated locations where views of the turbines will be possible.

For example, there will be views of the wind turbines from Tennyson Down (illustrated by Viewpoint 9), Compton Down (illustrated by Viewpoint 4), unforested slopes of Brighstone Down (illustrated by Viewpoint 8), the upper, west facing slopes of the Yar valley (illustrated by Viewpoint 5) and around the lower reaches of the Yar valley (illustrated by Viewpoint 6).

Views are a key characteristic of the downlands and the landscape character and viewpoint analyses have indicated that the turbines will significantly change views from Tennyson Down and Compton Down. However, the distance to the turbines will be such that it is only in the case of the latter (Compton Down) that the turbines will become a defining characteristic of views such that they will significantly change the character of the downland landscape.

In this respect, the development will affect "Long distance views from … downlands" (one of the special qualities of the AONB listed in the AONB Management Plan, see Section 8.4.6.2) with implications for on aspect of the 2025 inspirational Vision, that is, "to conserve and enhance the special characteristics of the Island's finest landscapes". However, the proposed development is not located within the Island's finest landscapes, which have been designated as the AONB and cover approximately 50% of the Isle of Wight.

Also fieldwork observations suggest that, as a result of the extensive and elevated nature of much of the Isle of Wight AONB, it would not be possible to site a small wind farm on the Isle of Wight, sufficiently distant from the AONB for there to be no significant effects on views from and/or the character of the landscapes within at least a small part of this designation.

In the case of this development, whilst the development will significantly affect the character of part of Compton Down, and significantly change some views from Tennyson and Compton Downs, these significant effects are extremely limited. The turbines will not significantly affect the character of the other landscape units in this AONB, and will not affect the other special qualities or other aspects of the inspirational Vision identified in the AONB Management Plan.

Such limited effects will not affect the ability of the AONB to conserve and enhance the natural beauty, wildlife and cultural heritage of the AONB. Therefore, the development will not affect the ability of the Isle of Wight AONB to achieve its statutory purpose.

Isle of Wight Heritage Coast

The land sector of the Heritage Coast is entirely within the AONB. At its closest, the Heritage Coast also lies approximately 2km west of Turbine 1, 1.1km south of Turbine 5, 1.5km southeast of Turbine 6, so the development is not within this designation but is located relatively close to the boundary. The significant effects on landscape character and views, as described for the AONB above, also apply to the Heritage Coast and, similarly, these effects will be limited.

The turbines are located inland and so will not affect the natural beauty of the coasts, nor will they affect opportunities for recreational, educational, sporting and tourist activities along the coast and so they will not affect the ability of the Isle of Wight Heritage Coast to fulfil its purposes.

4.2.4 Tranquillity

Tranquil Areas Maps were produced on behalf of the Campaign for the Protection of Rural England (CPRE) and the Countryside Commission in the mid 1990s. The approach developed for these maps was to define distances from various sources of sound, night lighting and movement, beyond which the level of disturbance was such that tranquillity would not be affected. For wind farms that distance was 1km.

Improvements in gearbox and blade technology have reduced the mechanical and aerodynamic noise generated by modern wind turbines. Onshore wind farms are not normally lit at night, so the night lighting component of tranquillity is not affected. Furthermore, whilst turbine size has increased 2-3 times (in height and rotor diameter) and over 5 times (in installed capacity) since the mid 1990s, the rotor speed has also decreased to around a third (from around 45rpm to around 15rpm). Therefore, the movement of the rotors has become more restful and less frenetic than might have once been considered the case.

Therefore, applying the 1km zone to a modern wind farm, such as the proposed West Wight Technology Park, may still be a valid approach to identifying zones within which there is the potential for significant effects on tranquillity.

A state of calmness or peace does not mean no sound or movement. Gentle or restful sounds and movements can be considered calming and peaceful and many rural environments, including the proposed site, are already characterised by certain sounds and movement arising from, for example, agricultural machinery, vehicles on nearby roads, birds overhead, running water, and waves breaking on distant shores. The moving rotors of the wind turbines will introduce a distinctive sense of movement, but the rotors are likely to be aligned in the same direction (subject to variability in the wind direction over the site), will all rotate in the same direction (clockwise when viewed upwind) and will gradually increase and decrease in speed (will not jerk, or stop and start suddenly), and so this movement will be smooth, gentle and regular, and could be considered to be restful.

The tranquillity mapping exercise undertaken by ASH Consulting on behalf of CPRE also compared areas considered tranquil in the early 1960s to those considered tranquil in the mid 1990s. On the maps for both the 1960s and 1990s, the site is located in an area considered to be tranquil although, by the mid 1990s, this area is small and tightly defined by "non tranquil" areas along the neighbouring roads. Developing the West Wight Technology Park in this location, and using the methodology employed by ASH Consulting, would result in the site and immediate environs being classed as no longer tranquil. However, the restful nature of the rotor movement and the findings of the noise impact assessment suggest that tranquillity is likely to be affected within a tighter zone, essentially within the site boundary.

Further a field, it is unlikely that the turbines would be considered to have a significant effect on tranquillity as a result of the restful movement of the rotors and the lack of audible sound from the wind turbines.

4.3 Assessment of Effects on Visual Amenity

This section discusses the potential effects of the proposed turbines on the visual amenity of:

- Fixed viewpoint receptors – residents in settlements, scattered farmsteads and individual residential properties and visitors to tourist, leisure and recreational facilities; and
- Linear route receptors – motorists on the major and minor roads, rail passengers, cyclists on the cycle paths, walkers on the footpaths, and horse riders on the bridleways.

This text should be read in conjunction with a complete assessment for each viewpoints 1-18 in Appendix C.

For each receptor group, this assessment considers the extent of the predicted and actual visibility, the magnitude of the change in views and whether these changes will be significant. The judgement as to whether a change will be significant for a receptor group will depend on the receptor activities, whether the receptors will be stationary or moving, the orientation of the receptor in relation to the view, whether receptors are likely to be there for the purposes of enjoying the view and the duration of the view for each receptor (in relative terms).

4.3.1 Fixed viewpoint receptors

The fixed viewpoint receptors in the study area include residents in settlements, scattered farmsteads and individual properties and visitors to the tourist, leisure and recreational facilities.

The ZVI suggests that the proposed turbines will not be visible from the following settlements on the Isle of Wight:

- Settlements along and inland of the southwestern coastline, including Brook, Brighstone, Shorwell, Kingston, Chale Green, Chale and Niton;
- Settlements along the southeastern and northeastern coastlines including Ventnor, Shanklin, Sandown, Bembridge, St Helens, Nettlestone, Ryde and Wootton;
- The town of Newport and most of Cowes; and
- Small inland villages to the south and east of Newport – including Blackwater, Gatcombe, Chillerton, Rookley, Godshill, Whitwell, Winford, Newchurch, Alverstone, Brading and Havenstreet.

Towns and larger villages

The ZVI suggests that many properties in Freshwater will be located within a zone of visual influence from where at least parts of all six turbines would be visible. Some residents will gain views of the turbines from their properties and, although in most cases the turbines will be partially screened by intervening land and vegetation, the distance to the turbines (around 3.5km)

is such that residents with relatively open views towards the turbines are likely to experience a significant change in the view from their properties. However, for most residents in Freshwater the turbines will be screened by the intervening built environment, vegetation and minor topographical features.

Those residents with properties in more elevated locations, particularly those along the B3322 in Totland will gain views of the turbines and, at approximately 5km from the nearest turbine at the closest point, those residents with relatively open views towards the turbines are likely to experience a significant change in the view from their properties. However, those residents in properties which are sunken, for example, the minor road which runs parallel to the B road in Totland are unlikely to gain views of the turbines.

The ZVI suggests that all the properties in Yarmouth will be located within zones of visibility. Viewpoint 6 is taken from the pavement, just east of the bridge over the River Yar at Yarmouth where the magnitude of change is predicted to be moderate. There are some properties at Yarmouth from where residents are likely to gain similar views and, in most cases, these properties are located slightly closer (3km) to the turbines than Viewpoint 6 (3.5km) so the turbines will appear slightly larger and these residents are likely to experience a significant change in the view from their properties. However, for most residents in Yarmouth, intervening built development and/or vegetation in the wider environment will partially or totally screen views towards the site.

The ZVI suggests that residents in Norton (west of Yarmouth) may gain views of at least parts of all six turbines from their properties. The A3054, as it passes through the village, is bounded by roadside vegetation which will screen views towards the turbines for some residents. However, the land rises west of the A3054 and there will be views of the turbines for residents in some properties in this western part of the village. At approximately 3.9km to 4.4km from the turbines, those residents with open views of the turbines from their properties are likely to experience a significant change in the view.

Figure 8.7 (ZVI) suggests that there will be very little visibility in Cowes and its suburbs, but suggests a zone of visibility in and around Northwood. In reality, there will be very few views from the Cowes/Northwood area due to the screening effects of the built environment, localised vegetation and vegetation in the wider environment. One of the few views towards the site from a publicly accessible location in Northwood is Viewpoint 12.This represents the views of residents in Northwood whose properties face west-southwestwards and who may gain relatively open views towards the site. However, as indicated by the viewpoint analysis for Viewpoint 12, the

magnitude of change will be slight which will not result in a significant change in the view for residents in Northwood.

Limited visibility is predicted from within towns in the eastern half of the Isle of Wight, such as East Cowes, Ryde, Wootton and Newport. Most potential views will be screened or filtered through elements of the built and natural environment and, where occasional views will be possible, at this distance (approximately 12km and 24.5km) the turbines will be small and indistinct structures and will not result in a significant change to views for residents in these locations.

On the mainland, the ZVI indicates that there will be properties in the towns of Lymington, Milford-on-Sea, Barton-on-Sea, Christchurch, New Milton and Highcliffe, and in the villages of Sway, East Boldre, Hythe/Dibden, Holbury, and Blackfield that will be within zones of visual influence.

However, in reality, very few residents in these towns and villages will gain views of the turbines from their properties due to the screening effects of the built and natural environment and, due to the distances to the turbines, those with views of the turbines will not experience a significant change in their views.

For example, most of the properties in Lymington are located within a zone of visibility. Viewpoint 10 is located at the Isle of Wight Ferry Terminal at Lymington, which provides an open, relatively uninterrupted view towards the site and the viewpoint analysis indicates that the magnitude of change in the view from this distance would be moderate/slight. Open views towards the site from properties within the town will be limited due to the built environment and vegetation in and around the town. Where residents would be able to gain relatively open views of the turbines, they would be approximately 9km to 11.3km from the nearest turbine, and the magnitude of change would be moderate/slight or less. Therefore, the turbines will not result in a significant change in views for residents in Lymington.

Towns to the west of Lymington include Milford-on-Sea (illustrated by Viewpoint 11 magnitude of change - slight), Barton-on-Sea (illustrated by Viewpoint 14 magnitude of change – slight) and Mudeford Quay, Christchurch (illustrated by Viewpoint 16 magnitude of change – negligible). All three viewpoints illustrate the most open (although not necessarily the most elevated) views available from the coastal towns west of Lymington and, at these distances, the magnitude of change will not be greater than slight, diminishing with distance along the coast, so the turbines will not result in a significant change in the view for residents in towns west of Lymington.

To the East side of Lymington, the towns and villages are set back from the coast where the landscape is composed of large swathes of forested land and open areas of heathland that typify the New Forest National Park landscape, together with smaller, but still substantial, copses, plantations, woods and landscaped gardens. As a result, potential views of the turbines from the towns and villages will be minimised by mature vegetation in close proximity, and more distant vegetation on the horizon, together with the built environment. Additionally, the nearest of these villages is East Boldre, which is approximately 12.5km away. As illustrated by Viewpoint 14, any open views of the turbines from this distance would result in a slight magnitude of change which would not be a significant change in the view for residents.

Therefore, there will be residents in some properties in Freshwater, Totland, Yarmouth and Norton who will experience significant changes in some of the views from their properties, but most residents in the towns and the larger villages in the study area will not experience significant changes in the views from their properties.

Small villages

Viewpoint 1 illustrates potential views for residents in the village of Wellow, the closest settlement to the site. This viewpoint is located on the Millennium Green where the blade movement of all the turbines would be seen clearly against the sky and, at a distance of between 0.9km and 1.1km, the magnitude of change in the view would be substantial. This viewpoint is representative of views that some residents in the village will experience from their properties but, for others, the views will be limited by the hedgerows that line the B3401 as it passes through the western side of the village and other localised vegetation and properties. However, for those residents whose properties face directly towards the site, in particular at the eastern side of the village, both along the minor road and the B road, there will be views similar to that illustrated by Viewpoint 1 and these residents will experience a significant change in some views from their properties.

Viewpoint 3 is located on the pavement outside the church gate at Thorley, where the magnitude of change in the view would be substantial. Some residents in Thorley will experience similarly open and largely uninterrupted views from their properties, particularly from those properties in the more elevated locations or closer to the turbines, although the built and natural environment will filter views and/or screen views for residents in other properties in the village. However for those residents with open views towards the site, the magnitude of change will be substantial and they will experience a significant change in the view in some views from their properties.

The ZVI suggests that residents in Newbridge will gain views of at least parts of all six turbines. In reality many residents will not gain views of the turbines from their properties due to screening by other properties in the village and vegetation in and around the village. Many properties are also less elevated than others which will limit the number of potential views. Some residents, however, will gain views of the turbines, in particular, those whose properties are in elevated locations, who face directly towards the site and have open, uninterrupted views. At approximately 2km from the nearest turbine, where uninterrupted views of the turbines will be gained from properties, the magnitude of change is likely to be substantial and residents in these properties will experience a significant change in the view from their properties.

Ningwood, located close to the A3054, is also approximately 2km from the nearest turbine and is within a zone of visibility. Many properties will gain filtered or partially screened views of the turbines due to many mature trees set in the landscape. However, more open views from some properties and the school will be possible and where open views do occur, at such close proximity, the magnitude of change will be substantial which will result in a significant change in the view for residents in these properties.

Few residents in Cranmore, a village slightly further west along the same A road, are likely to gain open views of the turbines from their properties as a result of the screening effects of a belt of woodland along the southern edge of the A3054 and other trees in the landscape. However, if any open views are experienced from properties, at such close proximity (2.2km from the nearest turbine), the magnitude of change would be moderate or higher and there would be a significant change in the view for residents.

The village of Shalfleet will be located within a zone of visibility but not all residents will gain views of the turbines from their properties. Some residents are likely to view the turbines, in particular those whose properties are located in the new housing development to the west of the village. At approximately 2.5km away, where there will be open views towards the turbines, this would result in a substantial/moderate magnitude of change which would be a significant change in the view for residents. However there is an abundance of vegetation in the wider environment which will limit the number of properties where such views will occur so some residents will not gain any or only limited views of the turbines and would not experience a significant change in the views from their properties.

Viewpoint 7 is located within the Newtown National Nature Reserve, on the edge of Newtown, where the magnitude of change is considered to be moderate. To get to this viewpoint, you have to walk along the pathways at the western edge of the village, passed the trees until you get to the open view, approximately 200metres from the village. Views from properties in the village will be

limited by surrounding mature vegetation in the landscape, in particular from the properties east of the church. Residents in a few properties may gain views of the turbines similar to that illustrated in Viewpoint 7, in particular, those properties at the western edge of the town including Old Parsonage, Anchor Cottage and Causeway Cottage. For these residents, the magnitude of change will be moderate which will result in a significant change in the view for residents in these three properties but, for other residents in the village, the magnitude of change will be negligible and they will not experience a significant change in the view from their properties.

The suggests that residents in Porchfield will gain views of at least parts of all the turbines. However, along the minor road where most of the properties are located, high hedgerows line the southwestern side of the road and, together with mature vegetation in the surrounding landscape, views from these properties towards the site are likely to be screened. In particular, quite a few of the properties are bungalows so the elevation of the windows will be below the height of the hedgerows. Where there is a gap in the hedgerow towards the southern stretch of this road, the properties opposite this gap may gain limited views of the turbines although these will be filtered by woodland and individual trees in the intervening landscape.

These properties are between approximately 6.7km and 6.8km from the nearest turbine and, for the few residents who may gain partial views of the turbines, at this distance the magnitude of change will be no greater than moderate/slight which will not result in a significant change in the view for these residents.

The ZVI suggests that most of the residents in properties in Calbourne will gain some views of at least one of the turbines. Residents in properties located north of the junction with the B3401 along Elm Lane will gain elevated views towards the site and residents in some of the properties south of this junction, in particular on the western side of Lynch Lane are likely to gain open views towards the turbines. At between 3km to 3.2km from the nearest turbine, open and/or elevated views of the turbines will result in substantial/moderate to moderate magnitudes of change which will result in a significant change in the view for residents in these properties.

The ZVI indicates that there are a few small villages located within zones of visibility on the mainland, including the villages of Keyhaven, East End and Norleywood. Keyhaven, the closest of these settlements at approximately 8km from the nearest turbine, has a few properties where residents are likely to gain fairly open views towards the site, in particular, those along the minor road which runs parallel to the sea edge. A hedgerow and mature vegetation line the road here but residents will gain views over them. Other properties, away from the coastal edge are likely to have their views screened by vegetation and the built environment. Where open views are gained, the turbines will be seen within the context of the yacht masts in the nearby harbour. Within this

context and at this distance, the magnitude of change will be moderate/slight at the most with most residents experiencing a slight or negligible magnitude of change in views from their properties. Therefore the turbines will not result in a significant change in the view for any residents in Keyhaven.

Open views from East End and Norleywood (both over 10km away from the nearest turbine) are likely to be significantly limited due to the abundance of mature vegetation in the surrounding landscape. However, where open views towards the Isle of Wight are available from properties in these two small villages which are further from the site than Keyhaven, then the magnitude of change will not be greater than moderate/slight and there will not be a significant change in the view for residents in these settlements.

Therefore, there will be residents in some properties in the smaller villages on the Isle of Wight, such as Wellow, Thorley, Newbridge, Ningwood, Cranmore, Shalfleet, Newtown and Calbourne, who will experience significant changes in some of the views from their properties, but most residents in the smaller villages in the study area will not experience significant changes in the views from their properties.

Farmsteads and individual properties

Within the study area, there are also numerous farmsteads and individual properties. The ZVI illustrates that the rolling topography, particularly on the east and south of the Isle of Wight, will limit views from many of these properties. Any potential views will be further limited as a result of the presence of both blocks of woodland and more localised vegetation especially broadleaved trees set in the landscape, which would screen some of the potential views of the turbines.

The ZVI, the viewpoint analysis and other fieldwork observations indicate that residents in individual properties with an open view towards the site, that are within the zone of visibility that extends up to 6km east and west from the nearest turbine, to the Tennyson/Compton/Brighstone Downlands to the south (approximately 2km) and to the coastline to the north (3-4km) may experience a moderate or higher magnitude of change which would result in a significant change in the view for these residents. However this applies to a limited number of properties within this zone, as few residents will have uninterrupted views in the direction of the site from their properties and, from many of the properties in this zone, vegetation in the immediate or wider landscape and/or other properties and built structures will screen the views of the turbines.

Leisure and recreational facilities

Specific leisure and recreational facilities which are not located within zones of visibility as indicated on Figure 8.7a and b include various museums such as those at Brighstone, Cowes, Ventnor and Beaulieu, the Needles and Alum Bay "complex" which have a number of attractions including amusements, glass making, a chairlift, gift shop, tearooms, sand shop etc, the theme park at Blackgang, holiday attractions on the southeast coast of the island, many camping/caravan sites and the model village at Godshill, plus Bucklers Hard historic village, and Beaulieu Motor Museum, Palace House and Abbey on the mainland.

The potential effects upon the visual amenity of visitors to indoor attractions within zones of visibility, such as those at Chessell Pottery and the numerous museums in the study area will be minimal, due to the mainly indoor nature of these visitor attractions.

Outdoor leisure and recreational facilities, within zones of influence, where visitors may experience changes in their views, include:

- Isle of Wight - golf courses on Compton Down, at Farringford Park (Freshwater) and Cowes; scenic vantage points; yacht marina at Yarmouth; and camping/caravan sites; and
- Mainland - Hurst Castle and Calshot Castle; Exbury Gardens; Lepe Country Park; boat trips down the Beaulieu River; Calshot Activities Centre; yacht marinas at Keyhaven and Lymington; and camping/caravan sites.

The Compton Down golf course is located on the elevated downs and players can experience 360º views across the island and out to sea from much of this golf course. Although the turbines will be prominent in views from the most elevated sections of a golf course, the leisure pursuit of playing golf is such that the views will be secondary to the quality of the course. As illustrated by Viewpoint 4 a substantial magnitude of change in the view will be experienced from parts of the course, although from other parts (the south facing slopes of the downs) this change will be less. However, overall, the turbines will result in a significant change in the view for golfers on parts of the course.

There are unlikely to be significant views from the golf course at Farringford Park due to screening from nearby built structures and vegetation present in the grounds of the park. Any views which are gained will be filtered and partial and golfers are unlikely to experience a significant change in their views from the course.

Users of the golf course at Cowes, approximately 13km away, may gain elevated but distant views of the turbines from parts of the course although vegetation present in the immediate landscape

and the vegetation and built structures in the surrounding landscape will limit the locations where views will be possible, with the result that golfers are unlikely to experience a significant change in their views from the course.

There are some specific scenic vantage points located within the study area but only a few are within zones of visibility with views towards the site. Tennyson's Monument (see Viewpoint 9), is located at the highest point on Tennyson Down and provides a 360º panorama of the Isle of Wight coastline and hinterland. Due to the distance to the turbines (5.7km+), the magnitude of change is predicted to be moderate and this will result in a significant change in the view for walkers, horse riders and cyclists on the Tennyson Trail or climbing up to the monument to enjoy the views.

There is another 360º panoramic view at Limerstone Down, 5.5km southeast of the nearest turbine, which is on the Worsley Trail and on the edge of a zone of visibility on the ZVI .From this local high point, walkers would gain partial views of the turbines over the nearby Brighstone Forest, which is on slightly less elevated land in the line of sight towards the turbines. At a similar distance to the scenic vantage point on Tennyson Down, it is likely that walkers would experience a significant change in the view from this scenic vantage point.

There will be views of the turbines from the yacht marina at Yarmouth (illustrated by Viewpoint 6) but this is not expected to result in a significant change in the view for those using the marina and sailing in and out of the Yar estuary.

A few camping/caravan sites are located within zones of visibility although most are either out with these zones or on the edge of these zones. The closest of these sites is located within 2km of the nearest turbine on the northeastern side of Newbridge. In reality it is unlikely that there will be clear views of the turbines from here due to the screening effects of landform combined with the built environment and surrounding vegetation that is at a higher elevation. Other campsites within zones of visibility include one within the wooded area at Western Manor, and one close to Great Thorness, a few hundred metres behind a large block of woodland (Burnt Wood). In both cases, the surrounding vegetation would obscure views directly towards the site.

On the mainland, the closest camping/caravan site is north of Milford-on-Sea, 2km north of Viewpoint 11. Therefore, visitors in camping/caravan sites within the study area are unlikely to experience a significant change in their view from these sites.

Hurst Castle, the closest tourist attraction on the mainland, was a World War II fortification manned with coastal gun batteries and searchlights, to guard the western entrance to the Solent. It is likely to attract those with an interest in World War II history. Only the blade tips of the

turbines will be visible from this site, at least 6.5km away and separated by The Solent. The nature of the attraction and the screening and distance to the turbines are such that visitors are not likely to experience a significant change in their views from this location. Calshot Castle is located on Southampton Water, over 18km from the nearest turbine. It is surrounded by the very large ex-hangers that now house the Calshot Activities Centre and, due to the distance to the turbines, the visitors to the Castle and the Calshot Activities Centre will not experience a significant change in their views from this location.

Although Exbury Gardens are within a zone of visibility on the ZVI , the densely wooded nature of these gardens and the surrounding countryside means that visitors to these gardens will not gain any views of the turbines.

Lepe Country Park is located on the Hampshire coastline near the entrance to the Beaulieu River. The large car park is located immediately behind the beach and provides visitors with low level but open views across The Solent to the Isle of Wight. The Country Park is set back slightly behind an open line of trees, and on the cliff tops, so views across The Solent towards the site from the Country Park itself are more elevated but filtered by the intervening trees. Viewpoint 13 was taken from the car park so illustrates the lower level but more open views from this location, and the viewpoint analysis indicates that, due to the distance to the turbines, visitors would not experience a significant change to their views from this location. The views from the country park itself will be more filtered and/or screened than at this more open view from the car park so users of the Country Park are likely to see even less of the turbines.

Visitors enjoying the boat trips down the Beaulieu River will experience a similar view to that illustrated by Viewpoint 13 as the boat negotiates the lower reaches of the river and travels along the coast towards Lepe. However, as explained above, the distance to the turbines is such that these visitors would not experience a significant change to their views from this location.

There are yacht marinas at Keyhaven and Lymington. Keyhaven is approximately 8km from the nearest turbine and, although open views of the turbines will be gained from this location, the turbines will seen within the context of the yacht masts in the harbour and will be seen on a separate land mass, separated by The Solent. Within this context and at this distance, users of the marina will not experience a significant change in their views from this location. There are two marinas in Lymington and it is from the outer marina, at Waterford, that there are open views across The Solent towards the Isle of Wight. The view is similar to that illustrated by Viewpoint 10 and the nearest turbine would be over 8.5km away. As at Keyhaven marina, the turbines will be seen within the context of the yacht masts in the harbour and on a separate land mass, separated

by The Solent. Within this context and at this distance, users of the marina will not experience a significant change in their views from this location.

Therefore, golfers on Compton Down and walkers, horse riders and cyclists at scenic vantage points on Tennyson Down and Limerstone Down will experience significant changes to their views as a result of the six proposed turbines, but visitors to other leisure and recreational facilities in the study area are unlikely to experience significant changes in their views at these facilities as a result of distance and/or screening.

4.3.2 Linear route receptors

The linear route receptors within the study area include motorists, rail passengers, cyclists, walkers and horse riders.

Motorists

The following roads are not located with any zones of visual influence as indicated on the ZVI ; A3056, B3328, B3329, B3395, B3323, B3320, B3340, B3329, B3327 and the B3341.

The A3054 begins in Freshwater and travels to Yarmouth and then eastwards towards Newport. The road then connects with the A3020 out of Newport and travels eastwards towards Ryde. The ZVI suggests that most of this road between Freshwater and Newport is located within zones of visibility but that there is intermittent visibility between Newport and Ryde. Viewpoint 6, which is approximately 3.5km from the nearest turbine, is representative of a view along the first section of this road where the magnitude of change was considered to be moderate. This road at its closest point comes within 2km of the nearest turbine at the road, for example, at the junction with Hill Place Lane. At this point, trees in an adjacent field will block views towards the site.

Along sections of this road, potential views will be minimized by the presence of hedgerows lining the road, mature trees and vegetation in the wider environment and the built environment as it passes through towns and the turbines will be behind the drivers' line of sight for sections of this road, depending on the direction of travel. This will make views intermittent and partial along certain stretches. In particular, as the road passes closest to the turbines (along a 1.4km section), views into the site are particularly difficult due to vegetation along the roadside and copses adjacent to the road. Where views of the site will be possible along this section, motorists may experience a magnitude of change up to substantial/moderate but along more distant sections, this will decrease to slight and negligible.

Along the stretch of road from Newport to Ryde, views towards the turbines are very limited and if a view is possible, it will be filtered and at over 12km from the nearest turbine, so the magnitude of change will not be greater than slight/negligible. Therefore, although motorists may experience a significant change in their views along very short, intermittent sections of this road (between Yarmouth and Shalfleet), elsewhere on the A3054, motorists will not experience significant changes in their views.

The A3055 connects with the A3054 in Freshwater and travels along the southern Isle of Wight coast to Sandown, before heading north and into Ryde. Most of this road is out with any zones of visibility as illustrated by the ZVI. It is only as the road passes through the built up area of Freshwater that it enters zones of visibility, along a 500m section for drivers travelling northwestwards and a 2km section for drivers travelling southeastwards. As the road passes along Afton Manor, mature vegetation will block any views of the turbines and as the road passes through the more built up areas, lots of trees in the immediate environment and the built structures will screen many potential views.

Therefore, views of the turbines will be intermittent and filtered along this section of the road and will not result in a significant change in the view for users of this road.

The A3020 runs from Cowes southwards to Newport and then southeastwards through to Shanklin. Most of this A road is out with any zones of visibility with a section between Newport and Cowes where it passes intermittently along the edges of zones of visibility. Viewpoint 12 is located in Northwood and is one of the more elevated and open views along this section of the road. However, at over 11.5km to the turbines, the viewpoint analysis predicts the magnitude of change to be slight. Elsewhere, views towards the site are limited due to vegetation and built form obscuring and filtering views. As a result, the turbines will not result in significant changes to views for users of this road.

The A3021 is located on the eastern side of the island, where it runs from East Cowes southwards to its junction with the A3054, west of Wootton. Approximately half of this road is located within zones of visibility. Users will gain some views towards the turbines where the built environment and nearby vegetation does not screen westerly views but these will be partial views of the turbines such as the blade tips or rotor sweeps. At approximately 13km from the site, any potential views will be distant and intermittent and will not result in significant changes to views for users of this road.

The A337, A326, A32 and A35 are located on the mainland. The A337 runs in a north-south direction from Cadnam, north of Lyndhurst through Lymington and then westwards towards

Christchurch. Sections of this road are within zones of visibility, in particular, sections of the road as it passes closer to the Isle of Wight. As the road passes through the forested areas of the National Park, users will not gain any views of the turbines through the forest. Views out will also be screened as the road passes through the built up areas, in particular Lymington, New Milton and Highcliffe. Views of the turbines will be possible but they will be distant and intermittent along this road. The closest section of this road to the site is at Lymington, approximately 9.5km away but views out will probably not occur until over 11.5km from the site near Everton. Views are unlikely to be sustained and at this distance the magnitude of change of an open view is considered to be no greater than slight. Therefore any views of the turbines will not result in a significant change in the view for users of this road.

The A35 connects with the A337 at Christchurch and travels northeastwards through Lyndhurst towards Totton. The A326 runs down the length of the Southampton Water, approximately 2km west of the water mark. Both these roads enter visibility zones as indicated on the ZVI. They both pass through densely vegetated areas and/or built up areas which will make views of the turbines few and far between. Where there will be views along these fast travelling roads, they will be partial, filtered and intermittent and at such distances away (18.5km and 16.5km at their closest point to the nearest turbine respectively) will not result in a significant change in the view for motorists.

The A31 is also positioned on the mainland but is outside of the 25km study area. However a request from Hampshire County Council to include effects along this road has been taken into consideration. Views towards the site along this stretch are extremely limited due to both the topography and vegetation along this road and in the intervening landscape. Indeed there are only two sections, between Cadnam and Ringwood, where you currently gain views of the Isle of Wight and, as users travel along this fast moving road, these views are side on to the direction of travel and momentary. As illustrated by Viewpoint 18 the turbines will be very small and distant objects, visible only in excellent visibility and the turbines will not result in a significant change in the view for motorists on the A31.

The B4301 joins the A3054 east of Yarmouth and runs to Newport with a branch section going towards Chessell from nearby Calbourne. Viewpoints 1 and 3 are taken adjacent to the B4301, one at Wellow and one at Thorley where the magnitude of change at both viewpoints is predicted to be substantial. These are representative of the closest, more open views of the turbines from this road. Other views will not result in such a high magnitude of change as a result of screening and filtering of views through vegetation and built structures. However, as users of this road travel along the closest sections to the site, they will gain a series of views, many open,

particularly over the low hedgerows east of Wellow. High hedgerows will prevent/minimize views of the turbines from this road between Newbridge and west of Calbourne and, along the stretch of road from Newport to Calbourne, roadside vegetation and vegetation in the wider landscape will make views along this stretch intermittent. Therefore along the closer, more open sections of the road the magnitude of change in views will be substantial and significant but, elsewhere along the road, views will be screened or more distant. As a result, motorists will experience significant changes in their views for short sustained sections of the B4301 to the north of the site, in particular as the road passes from west of Thorley and through Wellow, but not elsewhere on this route.

The B3399 runs from its junction with the A3055 at Freshwater eastwards through Shalcombe and Shorwell before heading southwards connecting with the A3055 south of Chale. The ZVI suggests that there could be views along the 4.5km section from Freshwater to Chessell but no views from the 14km section from Brook Hill travelling southeastwards to Chale. Viewpoint 2 is located along this road, approximately 1km west of its junction with the B3401. At only 1km from the nearest turbine, the magnitude of change is predicted to be substantial. This 4.5km section of the road is located very close to the site passing between approximately 1km and 3.3km of the turbines.

There is limited screening along this section as much of the road is lined with low/medium hedgerows which will allow the turbines to remain in view along much of this section. For users travelling westwards, the turbines would be behind the drivers' line of sight after approximately 2km and for those travelling eastwards the turbines would potentially be in view for the full 4.5km. As a result, there will be significant changes in views for motorists along this 4.5km section of the B3399, but the turbines will be not be viewed from the remaining 14.5km of this road.

The B3322 runs from Alum Bay for approximately 2.3km until it connects with the A3054 and the A3055 in Freshwater. The ZVI suggests that there may be intermittent visibility along this section of the route. Medium sized hedgerows line this road limiting views out particularly for car drivers and passengers but those in taller vehicles, such as coach passengers, will see over the hedgerows and may gain relatively elevated, partial views towards the site, with some screening provided by trees in the wider landscape. As the road passes through the built up environment, views will be generally screened or filtered. This road is approximately 5km and 7.5km from the nearest turbine and, as a result of the distance and intermittency of the views, motorists will not experience a significant change in their views from this road.

The B3325 is located in Cowes, running from Northwood to the heart of Cowes town centre. Although much of this road is located within zones of visibility, views towards the site will be extremely limited due to both vegetation and the built environment and users will not experience a significant in their views from this road.

The B3321 and B3330 are two short roads positioned in the centre of the built up areas of East Cowes and Cowes with only a couple of hundred metres within limited visibility zones. There is unlikely to be any views of the turbines from here and, therefore, no significant changes to views are predicted.

The B3054 runs from Lymington northeastwards connecting with the Hythe by-pass. Most of this road is located within zones of visibility indicated on the ZVI. For road users travelling in a northeasterly direction, the turbines would be behind the drivers' line of sight. For those travelling in a southwesterly direction, the turbines will be generally oblique forward/side on to the direction of travel. Views along this road will be more intermittent than the ZVI suggests as a result of the screening effects of vegetation in the surrounding landscape. Between Lymington and Beaulieu there are two 600m sections where a sustained view of the turbines may be available.

These are illustrated by Viewpoint 14 where, as a result of the distance to the turbines (over 13km) the magnitude of change is predicted to be slight and this would not result in a significant change in the view for motorists. Along the rest of this approximate 8km stretch of road there are unlikely to be any views due to the trees and gorse in the landscape. Once north of Beaulieu the road carries on towards the Hythe by-pass where it becomes part of the Solent Way long distance path. Views along this section will be very distant and also intermittent due to the large amounts of vegetation in the landscape.

The B3055 connects with the B3054 at Hatchet Gate, travels westwards into Brockenhurst and links up with the A35, north of Highcliffe. There are intermittent views towards the Isle of Wight from the 2.5km straight section between Hatchet Gate and Stockley Cottage, similar to the view illustrated by Viewpoint 14 but slightly further away (13.5km) so motorists will not experience a significant change in their views from this route, Elsewhere, views from this road towards the site are screened by forest cover, copses and other vegetation and built environment.

The B3056 connects with the B3054 at Beaulieu and travels northwestwards to Lyndhurst. The southern half of this road is out with zones of visibility but the ZVI suggests short zones of visibility further north, at approximately 18km, 20km and 23km from the turbines, where motorists travelling southwards may gain views of the turbines. However, as a result of the

distance and screening by intervening vegetation, motorists will not experience a significant change in their views from this road.

The B3508 follows a loop from Everton, down to Milford on Sea and then along the coast to New Milton and up to the A35. There will be views towards the turbines for motorists travelling eastwards along the "coast road" section but these will be more intermittent than the ZVI (Figure 8.4b) suggests, especially as the road passes through built up areas. Viewpoint 11 (Figure 8.5k) was taken from the seafront at Milford-on-Sea, approximately 700m closer to the site than the road at its closest point. Here the magnitude of change is predicted to be slight, and the magnitude of change would not be any greater in views from the B3508. Therefore, the turbines will not result in a significant change to the view for motorists on the B3508.

The B3347, B3073 and B3059 pass in and around Christchurch where topography, the built environment and vegetation will screen/minimize views so that views of the turbines are unlikely. Therefore users of this road will not experience a significant change in their views.

The ZVI shows much of the minor road network within the westerly corner of the Isle of Wight and up to 9km eastwards of the site to be within zones of visibility. Many of these roads are lined by roadside vegetation but the undulating nature of the local topography allows occasional long distance views from these lanes.

Motorists on the lanes that are closest to the site, such as the upper Wellow road, Dodpits Lane and Broad Lane, will gain open and close views of the turbines and will experience a significant change in their view, whilst views from the more distant and/or screened routes will be intermittent and motorists are unlikely to experience significant changes to their views from the remainder of the minor road network.

Therefore, motorists and their passengers may experience significant changes in their views along very short, intermittent sections of the A3054 to the north of the site (between Yarmouth and Shalfleet), for short sustained sections of the B4301 to the north of the site (in particular as the road passes from west of Thorley and through Wellow), along a 4.5km section of the B3399 to the south of the site, and on the lanes that are closest to the site (such as the upper Wellow road, Dodpits Lane and Broad Lane), but not on the majority of the A, B and minor roads in the study area.

Railway users

The only passenger mainline railway line on the Isle of Wight links Ryde to Shanklin. There is also the steam railway linking Wootton Common to Smallbrook Farm. Both of these are out with any zones of visibility as indicated on the ZVI. A more extensive railway network exists on the mainland and there are three lines within the study area, one to the oil refinery at Fawley, one to Lymington and one to Christchurch.

The ZVI shows that the railway line to Fawley is out with any zones of visibility but suggests that there is some potential visibility along the other two lines. The mainline to Christchurch has very limited visibility until it approaches Sway and continues southwestwards. The line passes through built up areas at Sway and New Milton and on towards Christchurch and, along much of this section, the track is in cutting or travels through woodland (just south of Sway) so there will be few views of the turbines and where there are, these would be short-lived and filtered views which would not result in significant changes to the view for passengers.

The ZVI suggests limited visibility on the third mainland line and, as the line passes south of Brockenhurst to Lymington it passes through wooded copses before entering Lymington. For users travelling southeastwards the train will be travelling directly towards the site, although the nature of a train means that views immediately in front of the train will not be available to passengers. Viewpoint 10 illustrates the views of the turbines from the Isle of Wight Ferry Terminal where the magnitude of change is predicted to be moderate/slight. This is taken a few metres from the final station on the line at Lymington and passengers alighting at this station may gain a similar view, although the ferry terminus buildings will screen more of the turbines than in the view from the café garden illustrated by Viewpoint 10. Train passengers on this line may, therefore, gain some views of the turbines but these will be distant and filtered and the turbines would not result in a significant change in the view for passengers on this line.

Therefore, there will not be views of the turbines from the one mainline and the steam railway on the Isle of Wight and passengers will not experience a significant change in their views from the three mainlines on the mainland.

Cyclists, walkers and horse riders

Within the study area there are a number of long distance routes, some of which are suitable for walkers, horse riders and cyclists. Of these routes, both the Stenbury Trail and the Shepherds Trail are out with any zones of visibility. The Nunwell Trail and the Bembridge Trail are also largely out with any zones of visibility only entering a limited zone for a few metres at Brading

Down close to Viewpoint 16, where the magnitude of change is predicted to be negligible .Similarly the Worsley Trail, which is approximately 24km in length, enters a zone of visibility as illustrated on the ZVI for a few metres at Limerstone Down. At this point there will be partial views of the turbines but this view applies to only a very short section of this long route. Therefore the turbines will not significantly change the views for users of these routes.

The Tennyson Trail which runs from Newport to Alum Bay climbing up the downs and generally following the crest named after Lord Tennyson whose monument, the Tennyson Cross, is on top of the Tennyson Down. The ZVI suggests that large sections of this trail are out with zones of visibility, in particular between Newport and Brighstone Down and across Brighstone Down itself, the trail runs along the southern boundary of Brighstone Forest which will largely screen the views of the turbines. However, west of Brighstone Down, there will be elevated and sustained views towards the turbines as the trail crosses Compton and Tennyson Downs. Viewpoints 4 and 9 are located on this section of the Tennyson Trail, Viewpoint 4 on the elevated crest at the golf course on Compton Down and Viewpoint 9 close to the Tennyson Monument on Tennyson Down. The magnitude of change at these viewpoints is predicted to be substantial and moderate respectively. As a result, there will be significant changes in the view for users of this trail along these two sustained sections where open views of the turbines will occur, particularly for users travelling eastwards.

A long distance coastal path (just labelled “Coastal Path” on the Ordnance Survey Explorer sheets) continues on from the Tennyson Trail and winds its way around the whole island, coming inland only to avoid MOD land and private property. Much of this path is out with zones of visibility as indicated on the ZVI and most of the sections that are within zones of visibility, such as between Fort Albert and Fort Victoria, west of Yarmouth, and between Bouldner and Hamstead to the east of Yarmouth, are in woodland or are where views of the turbines will be screened by intervening woodland. One of the few locations on this route where the turbines will be visible is from the bridge over the River Yar, illustrated by Viewpoint 6, where a moderate magnitude of change is predicted, which would result in a significant change in the view for walkers on this section of the route.

The Hamstead Trail runs in a north/south direction from the coastal path at the eastern end of the Hamstead Cliffs through to the southern coast at Brook Bay and passes through the site, between turbines 4 and 5. Much of this path is within the zone of visibility on and around the site. As the trail passes through the site users will experience a very substantial magnitude of change in their view, which will reduce to substantial by the site boundary (where users are past the turbines but still relatively close to the site, e.g. at Wellow). Such open views of the turbines will not be

sustained throughout the entire section of the trail that is within the zone of visibility due to the screening effects of vegetation as the path travels through or by woodland in the wider landscape. However, the views will be sustained for at least 2km through the site resulting in a significant change in the view for users on this open and very close section of the trail.

The Freshwater Way also runs in a north/south direction from the mouth of the River Yar southwards to the end of the estuary before it splits into two alternative routes, one which rises up over the Afton Down through to the Freshwater Cliff and the other which keeps to lower lying land finishing at Freshwater Bay. Viewpoint 5 is located on Freshwater Way, north of Kings Manor Farm in a location that provides one of the more open and elevated views towards the site. Here the magnitude of change is predicted to be moderate. Travelling from the start of this path at Yarmouth, southwards, this is the first open view towards the site, approximately 1.4km from the start of the path. Woodland and maize crops (in summer) screen views up till this point and continue to act as a screen once past this point. A more elevated view and open will also be gained where the path rises up over Afton Down. Intermittent views towards the site are possible but there are unlikely to be any sustained and open views of the turbines from this mainly low level path. Therefore, the turbines will not result in a significant change in the view for users of this path.

The Solent Way is a long distance trail which runs along the mainland coast from Milford-on-Sea to Lymington, then crosses inland to Bucklers Hard and on towards Hythe and the ferry terminal on Southampton Water. It starts again at the ferry terminal on the eastern side of Southampton Water, meets the Itchen Way and then follows the coastal edge towards Portsmouth. The most open views will be from those sections of the path which are on the coastal edge without any screening in the immediate environment. This includes the section of the path from Milford-on-Sea to Keyhaven, around the Pennington Marshes towards Lymington but not at Hurst Castle where the topography will screen all but the blade tips of the turbines. As the path moves inland east of Lymington, intervening vegetation between the path and the coast will largely screen views of the turbines.

Viewpoint 11 is located in a car park adjacent to the path at Milford-on-Sea, 9.4km from the nearest turbine, and the magnitude of change is predicted to be slight. At its closest, the path comes within 7.5km of the nearest turbines, as it skirts around the Pennington Marshes but, even at this distance, the magnitude of change is unlikely to be more than moderate/slight and there will not be a significant change in the view for users of this path.

There are several local bridleways and footpaths which go through or are close to the site. Users of these routes will gain open and close views of the turbines and will experience significant

changes to their views. However, those receptors on more distant paths, or where views of the turbines will be minimized by vegetation and/or topography will not experience significant changes to their views.

There are other recommended linear routes for cyclists within the study area. On the Isle of Wight, there is an official sign-posted "round island" cycle route which primarily follows the roads, except for a bridleway along the River Yar estuary. As a result of screening and the intermittency of the views from this route, cyclists are unlikely to experience a significant change in their views from this route.

Other unofficial routes which cover a variety of terrain, both on the Isle of Wight and in the New Forest, are publicised in guide books. There are several off-road cycle routes denoted in these guide books on the island but all are out with any zones of visibility. The guide books also show several off-road cycle routes in the New Forest from where there will be extremely limited views out towards the site as they go through forest or because nearby forest screen and/or minimise views towards the Isle of Wight. It is unlikely, therefore, that users of the off-road cycle routes on the Isle of Wight or within the New Forest will experience a significant change in their views.

Therefore, cyclists, horse riders and walkers will experience significant changes in their views as a result of the turbines on sections of the Tennyson Trail as it rises over Compton and Tennyson Downs, a 2km section of the Hamstead Trail where it passes through the site, and on the local bridleways and footpaths on and around the site, but not on the majority of the long distance trails, off-road routes and local footpath and bridleway network in the study area

4.3.3 Ferry Uses

Figures 8.11(a-c) provide representative views from the Solent. Viewpoints 1 - 4 illustrate a series of sequential views experience whilst crossing the Solent on the Lymouth to Yarmouth ferry. Viewpoint 5 is from the Cowes to Southampton ferry. The wind farms will become a prominent new feature in the views from the Lymington and Yarmouth ferry (especially viewpoints 3 and 4). The crossing is approximately half an hour, and many receptors would experience the view for much of this period: a significant change to the view is assessed. The magnitude of change and significance would be less for views from the Southampton ferry, due to the direction of the view and increased distance.

5.0 PROPOSED MITIGATION MEASURES.

5.1 Mitigation Measures

Mitigation has been an integral part of the scheme design. The layout and positioning of the turbines and secondary structures such as the switching station have sought to minimize potential landscape and visual impacts. This 'primary" mitigation is inherent in the scheme design and has therefore been considered as part of the preceding assessment.

Due to the type and scale of the proposals, the potential to incorporate secondary mitigation to offset impacts determined as part of the assessment process is limited.

The planting of native tree and shrub species to form a small copse planting is proposed on the southern edge of the switching station. This is to reduce its visual prominence in the landscape with is very open and exposed in this location. Alternative location for the switching station were considered next to the existing pylons, but where rules out due to potential visual impacts to nearby properties.

6.0 RESIDUAL LANDSCAPE AND VISUAL IMPACTS

6.1 Residual Impacts on Landscape Character and Visual Resources

Residual impacts are those that are predicted to remain after implementation of the mitigation measures described above. It is expected that, due to the nature and scale of the proposals, there will be very little change from the predicted potential impacts described in section 4 as the additional secondary mitigation measures are minor elements within the large-scale proposals.

A summary of the residual impacts for landscape resources and visual amenity is provide in Table 8 and 9 below:

Topic	Significant Residual Effects	Sensitivity of receptor	Magnitude of change	Duration	Significance	Nature	Level of certainty
Landscape Resources	***Character Areas/Types***						
	Open Farmland(Type 6)	High	Large	Long Term/ Reversible	Substantial	Adverse	Reasonable
	Chalk Downs (Type 1 and LCT1)	High	Large/medium	Long Term/ Reversible	Substantial	Adverse	Reasonable
	Bays (Type3) Soft Cliffs(Type8) Northern Coastal Cliffs(LCT11)	High	Small	Long Term/ Reversible	Moderate	Adverse	Reasonable
	Estuaries (Type5)	High	Medium/small	Long Term/ Reversible	Moderate	Adverse	Reasonable
	Settled Farmland	Medium/ High	Small	Long Term/	Moderate	Adverse	Reasonable

	(Type7)			Reversible			
	Rolling Farmland (Type9) Traditional Enclosed Pasture (LCT2)	High	Medium /small	Long Term/ Reversible	Moderate/Substantial	Adverse	Reasonable
	Coastal and Inter-tidal Area	Medium	Small	Long Term/ Reversible	Moderate/Slight	Subjective	Reasonable
	North West Solent Estates	High	Small/Medium	Long Term/ Reversible	Moderate	Subjective	Reasonable
	Lymington and Pennington Coastal Plain	High	Small/ medium	Long Term/ Reversible	Moderate	Subjective	Reasonable
	Barton and Milford Coastal Plain	Medium	Small	Long Term/ Reversible	Moderate/Slight	Subjective	Reasonable
	Beaulieu Heath	High	Small/	Long Term/	Slight	Subjective	Reasonable

			Negligible	Reversible			
	Eastern Forest Heaths	High	Small/ Negligible	Long Term/ Reversible	Slight	Subjective	Reasonable
	Open Coastal plain and Cliff Coastline	Medium	Small/ medium	Long Term/ Reversible	Slight	Subjective	Reasonable

Topic	Residual Effects	Receptor	Sensitivity of receptor	Magnitude of change	Overall Effect	Nature	Level of certainty	Duration
Visual Amenity	***Viewpoints***							
	Viewpoint 1: Wellow Millennium Green adjacent to B4301	Residents	High	V substantial / substantial	Major+	Significant Adverse	Reasonable	Long Term/ Reversible
		Public on the green (dog walking and sports)	High / Medium	Substantial	Major / Moderate+			
	Viewpoint 2: B3399 west of Shalcombe	Motorists	Medium	V Substantial	Major/Moderate+	Significant Adverse	Reasonable	Long Term/ Reversible
	Viewpoint 3: Thorley Church Gate	Residents	High	Substantial	Major	Significant Adverse	Reasonable	Long Term/ Reversible
		Church goers, cyclists	High / medium		Major/moderate+			
		Motorists	Medium		Major/moderate			
	Viewpoint 4:	Walkers, Horse riders,	High		Major	Significant	Reasonable	Long Term/

	Tennyson Trail on Compton Down Golf Course	cyclists		Substantial		Adverse		Reversible
		Golfers	High/medium		Major/moderate+			
	Viewpoint 5: Freshwater Way, near Kings Manor Farm	Walkers, Horse riders, cyclists	High/medium	Moderate	Moderate+	Significant Adverse	Reasonable	Long Term/ Reversible
	Viewpoint 6: Bridge over River Yar, Yarmouth	Motorists	High/medium	Moderate	Moderate+	Significant Adverse	Reasonable	Long Term/ Reversible
		Yachtsmen, Fishermen	High/medium		Moderate+			
	Viewpoint 7: Newtown National Nature Reserve	Walkers	High	Moderate	Major/moderate	Significant Adverse	Reasonable	Long Term/ Reversible
		Birdwatchers, Sailors	High/medium		Moderate+			

	Viewpoint 8: Swainstondown Gate	Walkers, Horse riders, cyclists	High	Moderate/slight	Moderate+	Significant Adverse	Reasonable	Long Term/ Reversible
	Viewpoint 9: Tennyson's Monument, Tennyson's Down	Walkers, Horse riders, cyclists	High	Moderate	Major/moderate	Significant Adverse	Reasonable	Long Term/ Reversible
	Viewpoint 10: Ferry Terminal	Ferry users	Medium	Moderate/slight	Moderate/minor+	Not Significant	Reasonable	Long Term/ Reversible
	Viewpoint 11: Seafront at Milford on Sea	Residents	High	Slight	Moderate	Not Significant	Reasonable	Long Term/ Reversible
		Walkers, Horse riders, cyclists, visitors	High/medium		Moderate/minor+			
		Motorists	Medium		Moderate/minor			
	Viewpoint 12:	Residents	High/medium	Slight	Moderate/minor+	Not	Reasonable	Long Term/

	Northwood, Cowes	Motorists	Medium		Moderate/minor	Significant		Reversible
	Viewpoint 13: Stone Point, Lepe Country Park	Visitors to the beach, Country Park and National Park	High	Slight	Moderate	Not Significant	Reasonable	Long Term/ Reversible
	Viewpoint 14: Beaulieu Heath, New Forest	Walkers, Horse riders, cyclists	High	Slight	Moderate	Not Significant	Reasonable	Long Term/ Reversible
		Model aircraft flyers	High/Medium		Moderate/Minor+			
		Motorists	High/medium		Moderate/Minor+			
	Viewpoint 15: Seafront at Barton-on-Sea	Residents	High	Slight /negligible	Moderate/Minor+	Not Significant	Reasonable	Long Term/ Reversible
		Visitors	High/medium		Moderate/minor			
		Motorists	Medium		Minor+			
	Viewpoint 16:	Walkers,	High	Negligible	Moderate/Minor	Not	Reasonable	Long Term/

	Brading Down	Horse riders, cyclists				Significant		Reversible
		Motorists	High/medium		Minor+			
	Viewpoint 17: Mudeford Quay, Christchurch	Walkers	High/medium	Negligible	Minor+	Not Significant	Reasonable	Long Term/ Reversible
		Visitors	High/medium		Minor+			
		Yachtsmen Fishermen	High/medium		Minor+			
	Viewpoint 18: New Forest near A31(T)	n/a	High	Negligible	no impact	n/a	Reasonable	n/a

Table 9: Residual Effects on Visual Amenity

7.0 CUMULATIVE EFFECTS

7.1 Predicted effects on landscape and visual amenity

This cumulative appraisal has examined the potential cumulative effects on landscape character and views as a result of the West Wight wind turbines in conjunction with permitted but not yet built Cheverton Down Wind farm, to be located 5.5km southeast of the West Wight Technology Park. It has been based on fieldwork observations and the theoretical (terrain-based) zones of visual influence (ZVIs) for the two wind farms (Figures 8.7 and 8.10).

The Cheverton Down Windfarm will consist of three 52m high wind turbines located on Cheverton Down in the Isle of Wight AONB on sloping ground near to Brighstone Forest and the Limerstone Down scenic vantage point

Figure 8.10 shows the theoretical visibility (based on terrain data only) of the three Cheverton Down wind turbines within the 20km study area used for the West Wight Technology Park. It uses the blade tip heights of the three wind turbines as targets and distinguishes between the zones where one tip (blue), two tips (green) and three tips (yellow) may be visible but does not illustrate how much of each turbine might be visible from any one location.

7.1.1 *Cumulative effects on landscape character*

The Cheverton Down wind turbines would be located in the Chalk Downs character Area and, were they to be built, they would significantly change the character of this part of the landscape. The West Wight wind turbines would be located in the Open Farmland Character Area, but would be visible from the Chalk Downs Landscape Type. Although the two would not be seen together in most views from the Chalk Down, the cumulative affect to this character area is considered to be significant.

Cumulative effects to other character areas is considered to be limited.

7.1.2 *Cumulative effects on views*

The three Cheverton Down wind turbines are located on open rolling downland with base (ground) heights of between 180mAOD and 195mAOD. Therefore, where the ZVI indicates only 2 tips visible, this is likely to be only parts of two blades (as opposed to two entire turbines) and where only 1 tip is indicated, this is likely to be part of one blade (as opposed to an entire turbine). It is unlikely that one or two blades will result in a significant change in the view for receptors, particularly in views from the north and northwest where these partial blades will be largely screened by the nearby Brighstone Forest.

Comparing the areas on the ZVI where all three tips may be visible (yellow zones on Figure 8.6) with the zones of visibility on the ZVI for the West Wight wind turbines (Figure 8.4b), there are very few zones that coincide. This suggests that there will be very few locations where both sets of turbines will be visible in the same view, that is, there will be very few locations where simultaneous or successive visibility could occur from fixed viewpoint locations.

There are zones of visibility for both sets of turbines around Northwood, East Cowes, on the eastern side of Newport and the western side of Wootton, but built development will large obscure views of one or other of the wind farms and the distances to the two sets of turbines will be 9 – 16km, so there is unlikely to be a significant cumulative effect on views as a result of sequential visibility from these locations. There are also two very small zones of visibility that coincide on the minor road across Brading Down and Arreton Down but only the tips of the West Wight turbines will be visible in the distance and the Cheverton Down wind turbines will be 10 – 15km away so, again, there is unlikely to be a significant cumulative effect on views from these locations.

There will be intermittent views of the Cheverton Down wind turbines from the Coastal Path along the southwestern coastal cliff tops and of the West Wight wind turbines from a short section of the Coastal Path on the northwestern coastline (Bridge of River Yar), but the distance between these two sets of views and the limited extent of these views means that there is unlikely to be a significant cumulative effect on views from the Coastal Path as a result of sequential visibility.

7.2 Summary

If both the Cheverton Down and West Wight wind turbines were to be built, there would be a significant cumulative effect on the character of the Chalk Downs landscape type but not on the other landscapes in the study area.

Also, as a result of the distance and topography between the two sets of turbines, their zones of visual influence coincide in very few places, there is nowhere where both sets of turbines would be seen in relatively close proximity, or where there would be significant sequential views of the turbines along a linear route, so there is unlikely to be any significant cumulative effects on views as a result of the two wind farms.

APPENDIX A

Technical Data

Fieldwork observations

For landscape character, the observations include the geology, landform, hydrological and coastal features, land use and land cover, landscape elements/features, landscape patterns, historical features, views, aesthetic and perceptual factors, and an evaluation of quality. These observations are recorded on Landscape Character Assessment Field Survey Forms, which are based on the example Field Survey Form provided in the 1st Edition of the GLVIA (p39, LI/IEA 1995), but which have been modified and added to over the last 10 years of landscape surveys. An example Landscape Character Assessment Field Survey Forms is shown in Table S.3 below.

For visual effects, the fieldwork observations include:

- Influence of surface features on the terrain based ZVI – locations of forests, hedgerows, woodlands, built development, etc.;
- The visibility of other structures in the landscape;
- Locations and types of receptors in actual zones of visibility;
- At viewpoint locations - the various types of receptors and the factors affecting the sensitivity of the location - receptor activities, movement/duration, orientation, purpose/expectation, context and the importance of the view/location;
- At viewpoint and other locations - the parameters affecting the magnitude of change in the view - including the distance of the viewpoint from the development, the extent of the development visible from the viewpoint, the field and proportion of view occupied by the development, the degree of contrast with the existing landscape and built development, the influence of latitude and direction of view, time of day and year, different weather, lighting and visibility conditions and different wind directions on the visibility of the turbines, the duration and nature of the effect, and the extent of the location over which the changes would be visible; and
- The way the view changes around a zone or along a route.

- **Landscape Character Field Survey Checklist**

Geology				
Igneous	***Metamorphic***	***Sedimentary***	***Drift geology***	***Soils***
Granite Basalt Dolerite	Slate	Limestone Sandstone Mudstone Siltstone Coal measures	Boulder clay Sand and gravels	Clay Silt Sand Loam
Landform				
Form	***Lowland***	***Upland***	***Valley***	***Features***
Flat Undulating Rolling Steep sloping Vertical	Plain Lowland Drumlin Dip slope Escarpment	Plateau Ridge Knoll Rounded hilltop Peak	Broad U valley Narrow V valley Deep gorge Gully	Rock outcrop
Hydrological and coastal features				
Water bodies	***Watercourses***	***Features***	***Coastal***	***Coastal***
Pond Ox bow lake Lake Reservoir Dam	Stream River Canal Ditches Island	Spring/well Marsh/bog Waterfall Weir Ford/bridge	Beach Dunes Mudflats Salt marsh	Cliffs Headland Estuary Island
Land use/cover				
Agriculture	***Forestry/woodland***	***Industry***	***Open land uses***	***Other***
Arable Ley/improved Semi-improved Permanent pasture Rough grazing Scrub/bracken Rights of Common	Orchard/horticulture Parkland Deciduous woodland Mixed woodland Coniferous plantation Commercial forestry	Mineral extraction Waste disposal Light industrial Heavy industrial Energy generation Oil and/ or gas refinery/storage Gas terminal	Moor/heathland Urban common Horseculture MoD Airfield Airport	Recreation ground Country Park Golf course Fishery Water park Sewage works Water works
Landscape elements/features				
Built elements	***Vertical elements***	***Transport routes***	***Other elements***	***Leisure facilities***
Farm building Church Castle Stately home Hamlet Village Town City Housing estate Industrial estate Hospital Glasshouse	Wind turbine Windmill/wind pump Communication mast Electricity pylons 11/33kV poles and wires Telegraph poles Chimneys Cooling towers Flare stacks Lighthouse/beacon	Motorway Main A/trunk road B roads Minor roads/lanes Tracks Bridleway Cycle way Footpath Railway station /line Airport Ferry terminal/ route Viaduct/aqueduct	Hedgerows Hedgerow tree Tree clump Copse Shelter belt Stone walls Brick walls Post and wire fences Earth banks Cattle grids	Scenic viewpoint Picnic site Camping site Caravan site Riding stable Sports/leisure centre Miniature railway Canal/boat trips Museum Historic building Visitor centre
Landscape patterns				
Settlement	***Field patterns***	***Roads***	***Woodlands***	***Key:***
Dispersed	Unenclosed	Grid	Follow contours	v = vernacular

Nucleated Linear	Small/medium/large Irregular/regular Orientation:	Follow contours In valleys On ridges Random/winding	In valleys Plantation blocks Linear shelterbelts Random/scattered	p = period m = modern

Historical features

Sites/remains	*Agricultural*	*Industrial*	*Routes*	*Earthworks*
Castles (remains of) Motte & Bailey Battle (site of) Moats Roman fort/villa	Field pattern Field boundaries Ridge and furrow Fish pond Marl pit/pond	Quarry (dis) Pits (dis) Dismantled railway De-watered canal	Green lane Droving route Trackway	Hill forts/ settlements Earthworks Tumuli Standing stones Cairns

Views

Distance	*Elevation*	*Width*	*Depth*	*Orientation*
Long distance Medium distance Short distance	Elevated/high level Medium level Low level	Panoramic (360º) Wide (180º) Framed (90º) Confined (45º) Fragmented	Deep Shallow	Downwards Horizontal Upwards

Landscape quality

	Exceptional	*High*	*Medium*	*Low*	*Very low*
Clarity:	Strong	Very clear	Clear	Vague	Muddled
Distinctiveness:	Bold	Distinct	Obvious	Indistinct	Obscure
Intactness:	Highly unified	Unified	Interrupted	Fragmented	Remnant
Balance:	V harmonious	Harmonious	Balanced	Discordant	Chaotic
Condition:	Prime	Very good	Good	Fair	Poor
Detractors:	None	A few	Some	Several	Many
Attractors:	Many	Several	Some	A few	None
Sense of place:	Very strong	Strong	Good	Weak	Very weak
Scenic quality:	Stunning	Beautiful	Pleasant	Bland	Unpleasant

Other aesthetic and perceptual factors

Scale:	Intimate	Small	Medium	Large	Vast
Diversity:	Uniform	Simple	Varied	Diverse	Complex
Enclosure:	Confined	Enclosed	Semi-enclosed	Open	Exposed
Pattern:	Formal	Organised	Regular	Random	Chaotic
Colour	Monochrome	Muted	Pastel	Colourful	Vibrant
Texture:	Smooth	Grainy	Textured	Rough	Very rough
Line:	Straight	Sinuous	Curved	Angular	Tortuous
Movement:	Still	Calm	Gentle	Busy	Very busy
Naturalness:	Very natural	Natural	Semi-natural	Managed	Disturbed
Remoteness:	Inaccessible	Remote	Secluded	Accessible	Close by
Tranquillity:	Silent	Serene/quiet	Peaceful	Active	Noisy
Rarity:	Rare	Unusual	Frequent	Common	V common
Security:	Secure	Safe	Unsettling	Threatening	Hostile
Stimulus:	Awe inspiring	Invigorating	Interesting	Bland	Dull

Computer-based tools

In addition to fieldwork observations and photography, computer-based tools are used for the assessment, including:

- **Digital terrain model (DTM)** - a three dimensional map of the landform of the study area, using the Ordnance Survey Landform Panorama digital terrain height data. This consists of a list of heights derived from the contours on the 1:50,000 Landranger maps, arranged as a grid at 50m centres, with an easting, a northing and an elevation in metres above Ordnance Datum (mAOD). Each grid intersection is accurate to within approximately 3m, but the DTM extrapolates between data points, so is not able to allow for localised topographical features within the 50m cells. The DTM is then manipulated to take account of the curvature of the earth and the effects of light refraction;
- **Digital model of the wind turbines** - the X, Y and Z co-ordinates of each wind turbine are located on the DTM, and a digital model of the proposed wind turbine size and design is located at each turbine location;
- **Zone of visual influence (ZVI)** – a visibility map that illustrates the locations in the study area where landform may permit views of the wind turbines. This is generated using a computer-based intervisibility package, the DTM and the model of the wind turbines. It is created by comparing the line of sight between "observer" points at 1.6m above each grid intersection on the DTM with the "target" on the wind turbines (usually hubs or tips). The results are overlaid onto a base map created from the OS 1:50,000 digital map data. ZVIs can be configured to analyse the data in various ways to show, for example, the number or parts of the turbines that will be visible, or the angle of view occupied by the turbines at the observer point on each grid intersection. However, the DTM does not include buildings or vegetation, so there will be zones on ZVIs where the turbines are mapped as visible but will in fact be screened by surface features; and
- **Wireframes** – computer-generated wireframe perspectives of the landform and wind turbines to illustrate the predicted views from each viewpoint location. They are created in a Computer Aided Design (CAD) program using the OS 50m DTM (as used for the ZVIs). They have the same cylindrical projection and scale as the photographic panoramas, and take into account earth curvature and light refraction but do not show surface features (as for the visibility mapping). They are taken into the field as an aid to identifying the location and scale of the development when viewed from each viewpoint location.

Photomontages - For these panoramic images, several overlapping frames are taken from each viewpoint location, using a 135 format SLR (single lens reflex) camera (a Nikon 801) with a "standard" 50mm lens on a tripod. Great care is taken at this stage to ensure that the tripod and camera are level (using spirit levels) and that the frames are regularly spaced (using the graduated scale, marked in degrees, on the tripod).

When taking the photographs in the field, various parameters are noted, such as the date and time of day, the location of the viewpoint (using an OS 1:25,000 map and a GPS), magnetic bearings to distinctive elements in the view (using a sighting compass), camera settings and weather conditions. These assist with the construction of the photomontages and allow the sun direction and weather conditions to be taken into account when representing the wind turbines in the photomontages.

The photographs taken in the field are developed and, back in the office, the negatives of the photographs for each viewpoint are scanned (to create digital images), cylindrically projected (using a proprietary software product which smoothes out the "corners" in straight lines that occur when frames are spliced together), cropped to eliminate overlap, and butt-jointed/spliced together to create a panoramic image of the existing view. There is also some cropping of the sides of the panorama to obtain the required horizontal angle of view (determined by the required viewing distance and the final page size) and a small amount of cropping at the top and bottom (similar to that which occurs in a standard photographic print).

For the photomontages, the computer-generated images of the wind turbines from each viewpoint (the wireframes) are accurately located and overlaid onto the panoramic image of the existing view. Correct alignment of the wireframes and panoramas is achieved by reference to the features marked on the OS 1:25,000 map, the bearings recorded in the field and topographic features represented in the DTM. At least two of these three reference methods are used for each photomontage. Next, a fully rendered 3-D model of each wind turbine is located in the appropriate place on the panorama. The wind turbines are rendered and represented as if light grey in colour (approximately 50% reflectance), with the sun direction as at the time the panoramic photograph was taken. The size of the wind turbines placed in the panoramas is correct to within 1%.

In all but close up views, structures do not show up as well on photographs as they would appear to an observer in the field, due to atmospheric conditions, the distance to the site, and the reproductive limitations of the photographic film, scanning and printing process (compared with the human eye). To illustrate more closely how wind turbines might appear to an observer standing at a viewpoint in the field, in all but the closer views, the

wind turbines are shown more clearly on the photomontage than they would appear in a photograph of real wind turbines.

The viewpoint figures (with the photographs of the existing view and the wireframes or photomontages of the predicted view) are not used as part of the assessment process but, where included in an assessment, are provided to illustrate a photo-realistic image of the existing and predicted views from a selection of the viewpoint locations. Because of the limitations of photography (with regards, in particular, to the lack of detail and movement), they cannot provide an accurate impression of impact, but can provide decision makers and the public with an indication of the location and relative size of the proposed wind turbines.

This is best done whilst standing at the camera position in the field, holding the viewpoint figure at the correct viewing distance and curved through the appropriate horizontal angle of view, and ideally viewed through one eye (to achieve the correct monocular perspective). The appropriate viewing distance and horizontal angle of view of these images is stated on each viewpoint figure.

Met Office Visibility Data

The following visibility data was supplied by the Met Office and shows frequency and % frequency visibility readings within each of the specified distance bands, as measured at the Met Station at St Catherine's Point on the Isle of Wight. The readings are over a 10 year period from 1994 to 2003 inclusive and are grouped according to month.

The Met Office records visibility readings at roughly hourly intervals (approximately 22 readings in every 24 hours), and most Met stations now measure visibility automatically by a visibility recorder (light of a known output transmitted over prescribed distances and received by a calibrated photocell).

On the basis of this data, the overall percentage of readings falling within each of the visibility bands equating to the descriptors "very poor", "poor", "moderate", "good", "very good" and "excellent" have then been calculated and these are shown in the far bottom rights of the table. These are the figures referred to in the Viewpoint Analysis, Appendix C .

STATION: ST CATHERINE'S POINT Data supplied by the Met Office, October 2004

NGR: 4498E 0753E **ALT:** 16 meters A.M.S.L **PERIOD:** 1994 to 2003

- **FREQUENCY TABLE**

	Month												**ALL**
Visibility (km)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	OBS
0 – 0.99	61	50	164	125	75	45	51	11	0	39	8	44	673
100 - 1.99	27	14	33	44	22	3	8	1	1	11	3	24	191
200 - 3.99	72	76	82	60	41	18	26	8	7	35	10	63	498
400 - 6.99	159	124	194	107	93	29	60	24	24	43	54	118	1029
700 - 10.00	245	171	220	195	145	91	115	83	76	105	128	189	1763
1001 - 20.00	935	756	646	628	581	547	582	315	323	391	508	587	6799
2001 - 30.00	1021	1038	898	918	969	1185	1233	844	856	761	826	671	11220
3001 - 40.00	365	424	615	701	859	830	697	704	643	722	527	445	7532
4001 - 299.99	60	35	107	93	163	119	135	227	220	109	83	75	1426
ALL OBS	2945	2688	2959	2871	2948	2867	2907	2217	2150	2216	2147	2216	31131

- **PERCENTAGE TABLE**

	Month												ALL	Based on Met Office Data		
Visibility (km)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	OBS	%	Visibility (km)	Descriptor
0 - 0.99	2.1	1.9	5.5	4.4	2.5	1.6	1.8	0.5	0.0	1.8	0.4	2.0	2.2	100	At least 0km	
100 - 1.99	0.9	0.5	1.1	1.5	0.7	0.1	0.3	0.0	0.0	0.5	0.1	1.1	0.6	97.8	At least 1km	Very poor
200 - 3.99	2.4	2.8	2.8	2.1	1.4	0.6	0.9	0.4	0.3	1.6	0.5	2.8	1.6	97.2	At least 2km	Poor
400 - 6.99	5.4	4.6	6.6	3.7	3.2	1.0	2.1	1.1	1.1	1.9	2.5	5.3	3.3	95.6	At least 4km	Moderate
700 - 10.00	8.3	6.4	7.4	6.8	4.9	3.2	4.0	3.7	3.5	4.7	6.0	8.5	5.7	92.3	At least 7km	Moderate
1001 - 20.00	31.7	28.1	21.8	21.9	19.7	19.1	20.0	14.2	15.0	17.6	23.7	26.5	21.8	86.6	At least 10km	Good
2001 - 30.00	34.7	38.6	30.3	32.0	32.9	41.3	42.4	38.1	39.8	34.3	38.5	30.3	36.0	64.8	At least 20km	Very good
3001 - 40.00	12.4	15.8	20.8	24.4	29.1	29.0	24.0	31.8	29.9	32.6	24.5	20.1	24.2	28.8	At least 30km	Very good
4001 - 299.99	2.0	1.3	3.6	3.2	5.5	4.2	4.6	10.2	10.2	4.9	3.9	3.4	4.6	4.6	At least 40km	Excellent
ALL OBS	100	100	100	100	100	100	100	100	100	100	100	100	100			

APPENDIX B

Landscape Character Assessment

Isle of Wight

West Wight

- Landscape Character Type 1: Chalk Downs;
- Landscape Character Type 2: Greensand Hills;
- Landscape Character Type 4: Bays;
- Landscape Character Type 5: Estuaries;
- Landscape Character Type 6: Open Farmland;
- Landscape Character Type 7: Settled Farmland;
- Landscape Character Type 8: Soft Cliffs; and
- Landscape Character Type 9: Rolling Farmland.

East Wight

- LCT1: Chalk Downs;
- LCT2: Traditional Enclosed Pasture Land;
- LCT5: Sandstone Hills and Gravel Ridges;
- LCT6: Northern Woodland;
- LCT7: Landscape Improvement Zone;
- LCT10: Osborne Coast; and
- LCT11: Northern Coastal Cliffs.

Christchurch Borough (Dorset)

- RL Area 1 Avon River Terrace;
- RL Area 2Avon Floodplain;
- RL Area 3 Cowards Marsh – Dudmore Farm
- Coastal and Inter-tidal area.

New Forest District (Hampshire)

- 15: North West Solent Estates;
- 16: Lymington and Pennington Coastal Plain;
- 17: Barton and Milford Coastal Plain;
- 25: Beaulieu Heath; and
- 27: Eastern Forest Heaths.

Hampshire County

- Open Coastal Plain; and
- Cliff Coastline.

Isle of Wight
West Wight

LCT1: Chalk Downs

Location:	*Tennyson Down* makes up the most westerly *Chalk Down* in west Wight and stretches from Freshwater Bay to the Needles on the south west coast. It forms the narrowest strip of chalk downland in west Wight, with its boundaries defined by contours at the base of the steep scarp slope down to the Freshwater *Enclosed Farmland* to the north and by Mean Low Water where the area abuts the sea to the south.
Key characteristics:	▪ Rolling elevated downland underlain by Upper Chalk ▪ Steep scarp slopes down to *Greensand Hills* to the south and *Settled* and *Open Farmland* to the north ▪ Open and exposed, windswept landscape with distant panoramic views out to surrounding farmland and sea to the south ▪ Landscape distinct from surrounding clay farmland with large areas of calcareous grassland; species rich downland-turf grazed by cattle and sheep and unploughed over long periods of time ▪ Some scattered trees and areas of hanging woodland along the steeper scarp edges as well as remnants of commons ▪ Woodland largely restricted to northern slopes, such as Brighstone Forest where a more enclosed character prevails ▪ A selection of Bronze Age Barrows and Earthworks ▪ Tennyson National Trail cuts across the Chalk Downs from west to east ▪ The Downs are largely unsettled apart from links with the coast and sea, i.e. coastguard cottages, forts and defences, as well as scattered farmsteads ▪ Disused quarry pits and post medieval marl pits characterise the base of slopes ▪ Cultural links, i.e. with Tennyson and other poets and writers including Keats, Gilpin and Priestley.
Landscape condition:	**Good** – well managed areas of chalk grassland and gorse, monuments and buildings in sound condition and discrete visitor facilities.
Designations:	Almost the entire Chalk Downs landscape type is within the AONB. The coastal strip is Heritage Coast. It contains scheduled monuments and part of a historic park and garden.
Landscape importance:	**High** – due to its AONB status.
Nature of views:	Open, extensive and panoramic views across the farmland, out to sea.

LCT2: Greensand Hills

Location:	The *Greensand Hills* landscape type forms a belt of land in the south of the island, lying between the *Chalk Downs* to the north and *the Chilton Clay Farmland* to the south. The boundaries follow changes in landform marking the transition from the greensand to the chalk and clay lands to the north and south.
Key characteristics:	▪ Open rolling landscape, partially enclosed by downland to the north ▪ Underlain by Upper Greensand ▪ Panoramic views of *Chilton Clay Farmland* and the English Channel to the south ▪ Variable land cover with pasture largely dominant, including horse paddocks but with patches of arable land, scrub, mixed woodland and shelterbelts as well as remnant common and heathland ▪ A network of footpaths and bridleways, as well as sunken lanes encourage recreational use ▪ The northern edge of the ridge is marked by a series of disused quarries ▪ Low density settlement in the form of traditional stone farmsteads as well as linear villages along roads ▪ Influence of grand houses and manors in views to buildings and remnants of historic estates ▪ Important archaeological sites including a Bronze Age earthwork, the Long Stone and several barrows.
Landscape condition:	**Moderate** – removal of hedgerows to make larger and more easily cultivatable land has led to their replacement with non descript fencing creating a less harmonised character. The heathland is however in good condition.
Designations:	Almost the entire Chalk Downs landscape type is within the AONB. The coastal strip is Heritage Coast. It contains scheduled monuments and part of a historic park and garden.
Landscape importance:	**High** – due to its AONB status.
Nature of views:	Panoramic views of the English Channel and the farmland.

LCT4: Bays

Location:	The *Bays* landscape type consists of four areas ranging around the coast of West Wight. Boundaries follow Mean Low Water to the sea side and Mean High water or occasionally the crest of low cliffs to land.
Key characteristics:	▪ Inter-tidal, low lying flat areas of sand, pebbles and mudflats ▪ Semi-enclosed bays often backed by steep cliffs ▪ Dramatic changing character with the tide and seasons ▪ Defined edge against the land with a soft transitional edge to the sea ▪ Wide views across the Solent and the Channel ▪ No settlement within the type but views to buildings onshore give a distinctive seaside character with 19th century hotels and 20th century chalet developments ▪ Strong military heritage of forts and batteries.
Landscape condition:	The two small bays of Freshwater and Alum are in **Good** condition, however the bays of Totland, Colwell and Thorness are considered to be in **moderate** condition.
Designations:	The majority are within the AONB and Heritage Coast designations. Thorness Bay is also lies within a National Nature Reserve.
Landscape importance:	**High** – due to its AONB and Heritage Coast status.
Nature of views:	Wide open views to the sea, including across the Solent to Hurst Castle and the chalk cliffs on the island.

LCT5: Estuaries

Location:	The *Estuaries* landscape type consists of two character areas, centred on the estuaries of the rivers Yar (to the west) and Newtown (to the east), which flow northwards to the Solent. The boundaries of the areas are defined by the 5m contour line, which broadly marks the transition from the clay and silt tidal flats underlying the estuaries to the higher ground of the surrounding farmland.
Key characteristics:	▪ Open expanses of tidal flats and river waters meandering slowly towards the sea ▪ Defined by drifts of tidal flat deposits of clay and silt as well as alluvium deposits of sand and gravel ▪ Wide views and open skies, reflected in the calm waters of the estuaries give a strong sense of tranquillity ▪ Remote and natural landscape of international importance for biodiversity ▪ Partial enclosure created by blocks and copses of dense, mature deciduous woodland at the edges of the areas ▪ Abundance of salt pans, freshwater and grazing marsh plus mudflats, unimproved grassland scrub and woodland ▪ Rich in over wintering wildfowl and wading birds ▪ Largely unsettled but with some historic buildings ▪ Maritime heritage and continuing activity with boatyards and harbour ▪ Archaeological remains include timber trackways and Neolithic axes ▪ Limited access from a few public footpaths plus views from bridges.
Landscape condition:	**Good** – unified and coherent landscape with marshy vegetation, mudflats and an abundance of wildlife.
Designations:	Almost the entire *Estuaries* landscape type is within the AONB. Part is within the Heritage Coast and the Newtown Estuary is a National Nature Reserve. There are also a few scheduled monuments in these estuaries.
Landscape importance:	**High** – due to its AONB and Heritage Coast status.
Nature of views:	Wide open views over the level expanse of the estuaries and out to sea.

LCT6: Open Farmland

Location:	The *Open Farmland* landscape type comprises one character area in the centre of West Wight. The boundaries broadly follow changes in the landform and geology from the limestone underlying the area to the surrounding clay or chalk.
Key characteristics:	▪ Elevated, large scale, gently shelving open landscape ▪ Based on Bembridge limestone with areas of Headon beds and Osborne beds of clay silt and sand ▪ Mix of arable cultivation and pasture ▪ Large irregular fields, bounded by fences and low, gappy hedges ▪ General lack of tree cover and woodland allows wide views and creates an open, exposed landscape although mixed woodland plantations give more enclosure in some areas ▪ Sparse settlement of scattered farmsteads and a few villages ▪ Some traditional stone houses, with large scale industrial style farm buildings and more modern redbrick dwellings ▪ Remnants of quarrying ▪ Presence of prehistoric crop marks indicates early clearance of woodland in the area, Roman and Anglo-Saxon remains are also present.
Landscape condition:	**Moderate** – intensely managed area, some sites of archaeological interest. Significant damage to hedgerows and hedgerow trees due to farming methods.
Designations:	Part is within the AONB and Heritage Coast. There are also a few scheduled monuments and part of a historic park and garden.
Landscape importance:	**Medium/High** – due to its AONB and Heritage Coast status, however it is in moderate condition.
Nature of views:	Distant views to the high ground of the downs to the south.

LCT7: Settled Farmland

Location:	The Settled Farmland landscape type comprises of a single character area, which lies at the western end of West Wight. The boundaries follow the changes in underlying geology, landform and land cover, and are defined by the base of scarp slopes, tops of cliffs, Mean High Water or first contour above flood level. This area is bounded to the east by the River Yar giving the area a historic Isle character reflected in its nature.
Key characteristics:	▪ Gently rolling landscape underlain by clay, silt and sand geology ▪ A complex landscape with undulating topography giving varied views including occasional glimpses of the sea ▪ Highly settled but with areas of pasture and arable cultivation ▪ Intricate network of rural lanes, some sunken ▪ Settlements vary with small hamlets, scattered farmsteads, suburban development and holiday chalets with building styles ranging from traditional stone dwellings, through Victorian red brick villas to more recent chalets, bungalows and large industrial buildings ▪ Largely unwooded landscape with remnants of Medieval open field cultivation still evident ▪ Strong literary associations and distinctive identity as Freshwater Isle.
Landscape condition:	**Moderate** – well maintained pasture and arable farmland bounded by thick hedgerows contrasting with other areas with patchy and overgrown hedgerows.
Designations:	Small areas to the south and east are within the AONB and a small strip to the south and west is within the Heritage Coast. There are also a few scheduled monuments.
Landscape importance:	**Medium/High** – due to its AONB and Heritage Coast status in parts.
Nature of views:	Views within the area, to the downs to the south and to the sea.

LCT8: Soft Cliffs

Location:	The *Soft Cliffs* landscape type consists of three areas around the coast of West Wight. The boundaries of these elevated, sloping areas are defined by Mean Low Water and, to the land side, by the break of slope at the top of the cliffs.
Key characteristics:	▪ Sloping broken cliffs with areas of landslip ▪ Gently domed or sloping land form based on clay, silt and sand or mudstone subject to erosion by the sea ▪ Wide views out to sea from the cliffs ▪ Important in views to West Wight from the sea – giving the appearance of an unsettled, natural coastline ▪ Changing character with the tide and seasons plus progressive change due to cliff falls and slumping ▪ Rich in geological interest with important fossil flora and fauna ▪ Varied land cover with areas of emergent vegetation, grassland, woodland, scrub and lowland heath and all of high biodiversity interest ▪ Chines provide small scale intimate areas ▪ Unsettled landscape with varying intensity of use for leisure depending on the level of access ▪ Evidence of the Mesolithic and Bronze age in the presence of flint implements and round barrows plus fortifications from the 19th and 20th centuries ▪ Peaceful, undisturbed, sometimes remote landscape.
Landscape condition:	The Headon, Bouldnow and Hanover soft cliffs are all considered to be in **good** condition.
Designations:	The *Soft Cliffs* landscape type is within the AONB and Heritage Coast. Part of the *Bouldnow Soft Cliff* is within a National Nature Reserve. There are also a few scheduled monuments in these areas.
Landscape importance:	**High** – due to its AONB and Heritage Coast status.
Nature of views:	Wide open views out to sea.

LCT9: Rolling Farmland

Location:	The Rolling Farmland landscape type comprises of a single character area covering much of the clay land of the centre and north east of West Wight. The boundaries follow the changes in underlying geology, landform and land cover and are defined by the base of scarp slopes, tops of cliffs or first contour above flood level.
Key characteristics:	▪ Gently rolling peaceful landscape underlain by the Hamstead beds formation clay, silt and sand ▪ Undulating topography gives variety of views within the area and to the sea ▪ A rural, pastoral landscape of irregular medium scale fields bounded by thick hedges with many mature hedgerow trees ▪ Frequent copses and woodland belts including ancient woodland, which along with the strong hedgerow network give a semi-enclosed feel to the landscape ▪ Areas of high biodiversity interest include woodland, wood pasture, unimproved grassland and scrub ▪ Presence of variety of water bodies including rivers, streams, ponds and drainage ditches ▪ Settlements vary with scattered farmsteads, nucleated villages and linear suburban settlements with varied building styles ▪ Many historic landscape features survive intact including estate boundaries, medieval woodlands and later parklands.
Landscape condition:	**Good** – well maintained pasture land with largely intact hedgerows and many mature hedgerow trees.
Designations:	Part is within the AONB and Heritage Coast. There are also a few scheduled monuments and historic parks and gardens.
Landscape importance:	**High** – due to its AONB and Heritage Coast status.
Nature of views:	Varied views with glimpses of the sea and the downs.

LCT1: Chalk Downs

Location:	Located almost entirely within the AONB, there are three main locations where this landscape type occurs. The largest extends across the middle of the island from the coast at the Needles in the west to southwest of Newport and south to Chillerton (Tennyson Down, Compton Down, Brighstone Down, Newbarn Down and Cheverton Down). There is a small band emerging from the east coast, south of Whitecliff Bay, extending beyond Brading towards Downend (Bembridge Down, Brading Down, Ashey Down, Mersley Down and Arreton Down). Finally, there is a large area in the south of the study area, north of the Undercliff from St Catherine's Point to the outskirts of Shanklin (St Catherine's Down, Niton Down, Head Down, Week Down, Stenbury Down, Appuldurcombe Down, Lucombe Down and St Martin's Down).
Key characteristics:	▪ High, long, narrow and rounded ridgelines with a predominant east-west alignment. Dominant high chalk cliffs where the downlands meet the sea. ▪ Land use predominantly traditional grazing, with extensive arable cultivation. ▪ Open and exposed with sparse hedgerows and no mature hedgerow trees. Limited, windswept, scrubby vegetation on the higher downs, and broadleaved woodlands predominantly beech and ash on the lower downs, with some mixed plantations planted in the 1930s on the northern slopes. ▪ Sparsely settled with scattered farmsteads and no villages. ▪ Downs are accessible via a network of footpaths and bridleways. Generally few roads. ▪ Numerous small disused pits indicate past, small scale quarrying. ▪ Other development on the tops of the downs include 19th

	century gun batteries, coastguard facilities, a second world war radar station, and modern television, telecommunications and radio masts, radar installations and numerous reservoirs. ▪ Large scale, simple, exposed, muted, grainy, curved, calm, semi-natural, remote, quiet, frequent, unsettling and invigorating.
Landscape condition:	**High** – very clear, distinct, unified, harmonious landscape in good condition with a few detractors and some attractors, a strong sense of place and a beautiful scenic quality.
Designations:	Almost the entire Chalk Downs landscape type is within the AONB.
Landscape importance:	**High** – due to the AONB status
Nature of views:	Open, extensive and panoramic views across the island, out to sea, across to the mainland, and along the mainland coastline.

LCT2: Traditional Enclosed Pasture

Location:	This is located in large swathes across the northern part of the island from Whitwell to south of Godshill, around the Newtown estuary and south of the Osborne coast. There are also smaller areas in the south around St Catherine's Down.
Key characteristics:	▪ Gently undulating, and underlain by Chalk. ▪ Land use is predominantly pasture in irregular small fields, with some arable. ▪ Well preserved dense hedgerows with mature hedgerow oak trees. Well wooded, with numerous small broadleaved woodlands and copses, and some orchards. ▪ Settlement patterns predominantly linear, with small scattered farmsteads and narrow enclosed winding lanes. ▪ No notable development of any size. ▪ Medium to small scale, varied, semi-enclosed, regular, pastel, textured, sinuous, calm, semi-natural, secluded, peaceful, common, safe and interesting.
Landscape condition:	**High/medium** – clear, distinct, unified, harmonious landscape in good condition with few detractors and some attractors, a good sense of place and a pleasant scenic quality.
Designations:	Part of this landscape character type is within the AONB and Heritage Coast.

Landscape importance:	**High** – due to its AONB and Heritage Coast status
Nature of views:	Mainly medium and short distance, confined by the abundant vegetation, with some long distance views framed by the vegetation.

LCT5: Sandstone Hills and Gravel Ridges

Location:	This landscape type appears in several small areas on the island, including between the Chalk Down and Southern Coastal Farmland (from Shorwell to Brook Hill), alongside the Intensive Agricultural Land (from Pyle north to Kingston and from Roud north to Rookley Green), and on the east coast (at Red Cliff, going inland to Yarbridge*). [* This area is incorrectly denoted as Southern Coastal Farmland on the maps in the baseline study (CC 1994) and the AONB Management Plan (IW AONB Partnership 2004)]
Key characteristics:	▪ Two topographic types – high greensand hills (often immediately south of the Chalk Downs) and gravel terraces and ridges, with distinctive, steep slopes and sharp changes in slope. ▪ Some traditional pasture, but steep slopes mostly planted to mixed forestry. Lower gravel ridges support gorse and bracken. ▪ More sheltered lee slopes, facing onto the downs, have an enclosed character with sunken lanes or 'shutes', often with ancient woodland flora, and small gravel pits. ▪ Traditional settlements clustered in the sheltered, steep valleys, with a strong local architectural style (greensand, chalk, block and tile, similar to that of the Sussex Weald and East Hampshire Hangers). ▪ Generally accessed by a few minor roads and a network of local footpaths and bridleways. ▪ Generally devoid of large scale development. ▪ Medium scale, diverse, open and enclosed, textured, angular, calm, semi-natural, secluded, peaceful, frequent, safe and interesting.
Landscape condition:	**High** – very clear, distinct, unified and harmonious landscape, in very good condition, few if any detractors, several attractors, a strong sense of place and a pleasant (in some places beautiful) scenic quality.
Designations:	Most of the areas of this landscape type are within the AONB.
Landscape importance:	**High** – due to its AONB status
Nature of views:	Mix of open and enclosed views depending on elevation and vegetation.

LCT6: Northern Woodland

Location:	This landscape type is located in the north of the island in several large woodland blocks – Bouldnor Copse; Pigeon Coo and Nunneys Woods; Parkhurst Forest; Firestone Copse, Combley Great Wood and Rowlands Wood; and Whitefield Wood. Also Wilmingham Plantation*, Withybed Copse* and Tapnell Furze* to the immediate west of the site [*incorrectly denoted as Traditional Enclosed Pasture Land on the maps in the baseline study (CC 1994) and the AONB Management Plan (IW AONB Partnership 2004)]
Key characteristics:	▪ Large woodland blocks, conifer and broadleaved, form the dominant feature in the landscape. ▪ Small enclosed fields in the spaces between the plantations. ▪ Some are remnants of ancient woodland that once covered much of the island, historically used as royal hunting forest, or for woodland pasture and coppice. ▪ Generally devoid of large-scale development although there is a woodchip waste to energy installation in the southwest corner of Parkhurst Forest. ▪ Coastal path cuts through Bouldner Copse and the Hamstead Trail cuts through Pigeon Coo and Nunneys Woods. Otherwise, few definitive footpaths and bridleways, but lots of tracks and most are Forestry Commission access land. ▪ Medium to large scale, simple, enclosed, regular, muted, textured, angular, still, managed, secluded, quiet, common, safe and bland.
Landscape condition:	**Medium** – clear, obvious, fragmented and balanced landscape, in good condition, with few detractors and few attractors, a good sense of place and a pleasant scenic quality.
Designations:	Bouldnor Copse, Pigeon Coo and Nunneys Woods, Firestone Copse, Combley Great Wood and Rowlands Wood are largely within the AONB; Bouldnor Copse, Pigeon Coo and Nunneys Woods are also in the Heritage Coast.
Landscape importance:	**High** – due to its AONB and Heritage Coast status
Nature of views:	Enclosed by the plantations. Views across adjacent landscape types from around the edges of each plantation.

LCT7: Landscape Improvement Area/Zone

Location:	This landscape type is found primarily at the edge of settlements and is located at various locations around the island.
Key characteristics:	▪ Traditional agricultural landscape changed by the addition of horse paddocks and stables; intensive horticulture; poultry and pig farms; waste disposal sites: extensive residential, industrial or retail developments; holiday camps, mobile homes and caravan sites. ▪ Degraded hedgerows and unmanaged woods. ▪ Overall visual chaos with neglect of the agricultural landscape in a town edge setting. Conveys a general feeling of neglect and blurs the setting and edges of settlements. ▪ Variable aesthetic and perceptual characteristics, but generally medium scale, varied, semi-enclosed, random, colourful, rough, busy, disturbed, accessible, active, common, unsettling and dull.
Landscape condition:	**Low** – muddled, indistinct, fragmented, discordant landscape in fair to poor condition, with many detractors and few attractors, a weak sense of place and a low scenic quality.
Designations:	A few areas of this landscape type are within the AONB (around Alverstone, around Cranmore and the holiday camp at Thorness) and within Heritage Coast (around Cranmore).
Landscape importance:	**Medium/High** – as a few areas are within the AONB and/or Heritage Coast but it is mainly a landscape in poor condition.
Nature of views:	Mix of long, medium and short distance, enclosed and open views.

LCT10: Osborne Coast

Location:	Located in the coastal area around the Osborne estate on the northeast coast, to the north and east of East Cowes.
Key characteristics:	▪ Originally part of the traditional agricultural landscape. ▪ Character determined largely by Prince Albert, post 1845, and mostly within the extensive royal estate. ▪ An enclosed, designed landscape, very private and well

	screened from the town, somewhat degraded compared to its heyday and under restoration by English Heritage. ▪ Wooded coastline, ancient semi-natural woodland, and exotic ornamental planting. Leafy, predominantly evergreen. ▪ Victorian villa architecture. ▪ Very limited public access, with the exception of seasonal opening of Osborne House and occasionally Barton Manor. ▪ Intimate scale, diverse, enclosed, formal, curved and angular, calm, managed, secluded, serene, unusual, safe and interesting.
Landscape condition:	**High/medium** – clear, distinct, unified, harmonious landscape with few detractors and several attractors, a strong sense of place and a pleasant scenic quality (as far as could be ascertained from views in from the boundaries and a photograph in the Isle of Wight landscape character assessment (CC 1994)).
Designations:	Most of this landscape type is located within the AONB.
Landscape importance:	**High** – due to its AONB status
Nature of views:	Mix of long, medium and short distance, enclosed and open views, determined by the abundant planting (as far as could be ascertained from views in from the boundaries and a photograph in the Isle of Wight landscape character assessment (CC 1994)).

LCT11: Northern Coastal Cliffs

Location:	Located in small stretches along the northwest coastline from Alum Bay to Gurnard Ledge.
Key characteristics:	▪ Low, sloping, broken and unstable cliffs of sands, clays and gravels, arising from the combination of geology and relatively gentle maritime conditions. ▪ Mixed ownership/land uses – National Trust open access land (Headon Warren), Fort Victoria Country Park, Forestry Commission access land (Bouldner Copse), MoD (west of Newtown NNR), and private ownership. ▪ Coastal grasslands, scrub and woodlands, the latter characterised by dense Sycamore, Holm oak and Pines. ▪ Generally free of development due to instability of the cliffs, so no settlements or roads and few footpaths. ▪ Small to medium scale, simple, open/exposed, random, pastel, rough, curved, calm, semi-natural, secluded, quiet, unusual, unsettling, and interesting.
Landscape condition:	**Medium** - clear, obvious, interrupted, balanced, landscape in generally good to fair condition (although poor condition in places eg, around Fort Albert), with some detractors and some attractors, a good sense of place and a pleasant scenic quality
Designations:	All except the Fort Albert-Fort Victoria section of this landscape type are located within the AONB and Heritage Coast.
Landscape importance:	**High** – due to its AONB and Heritage Coast status
Nature of views:	Wide, open views out towards the sea, generally limited views inshore due to rising land.

Christchurch Borough (Dorset)

RL1: Avon River Terrace

Location:	Flat tract of land between Burton and the eastern boundary of the district.
Key characteristics:	▪ Wide expanse of flat landscape across deep alluvial soils ▪ Mixed agricultural production of arable and livestock ▪ Medium scale enclosure landscape of low hedged/fenced fields and occasional shelter belt plantations ▪ Overall area enclosed by rising ground to the east and rail embankment to the south. Low horizon and limited views across and out of the landscape ▪ Principal trees are oak and field maple, within hedge lines. Scots Pine within shelterbelts ▪ Farmsteads and settlements sit low, often tightly grouped in the landscape with few visually dominant buildings. Occasional large modern barn constructions are also contained within landscape ▪ The landscape is not heavily populated or developed. With quiet minor roads and footpaths it is possible to feel some isolation (relative to other parts of the Borough) within parts of the area ▪ Glimpsed views of urban development, general noise intrusion and intrusion of the railway result in a degree of connection to the modern townscape. This is not a totally unspoilt landscape. It is however accessible and reasonably well connected as a recreational resource ▪ Historic development pattern remains evident as the boundary to Burton and the footprint of Winkton. Informal linear patterns of agricultural cottages and farm buildings reflect rural setting. Expanded area of Burton has compromised the isolated entirely rural character of the village. The older area provides a valuable contrast to more recent expansion ▪ Character of original village strongly related to general density of buildings and spaces around and between plots.
Landscape importance:	**Medium**.
Designations:	None
Nature of views:	Limited views, visually enclosed landscape.

RL2: River Avon Flood Plain

Location:	Generally below 5m AOD. The B3347 and the village of Burton forms the boundary on the eastern side and to the west the area merges with the low-lying area of Cowards Marsh.
Key characteristics:	▪ Low lying flood plain landscape with meandering natural river course ▪ Tree cover of riverside willow trees and occasional blocks of willow carr woodland ▪ Pastures formed with fencing and small-scale ditches. These include permanent grasslands and water meadows management areas supported by the ESA project ▪ Low key agricultural management and irregular field patterns give the landscape an informal character ▪ Absence of buildings, roadways and other structures help reinforce this as a semi natural landscape ▪ The northern part of the flood plain is inaccessible and remote from a range of urban influences ▪ The southern area is slightly more accessible but at the same time more influenced by the urban area ▪ The high water quality and the natural chemistry of the river supports equally important nature conservation interests.
Landscape importance:	**Medium**.
Designations:	None
Nature of views:	Views are broken by clusters of mature willow trees.

RL3: Cowards Marsh - Dudmoor

Location:	On the eastern edge of the *Avon Flood Plain* at the base of St. Catherine's Hill. Although very low lying the area is enclosed from the general flood plain by a subtle ridge in the valley floor and a fringe of birch scrub woodland.
Key characteristics:	▪ Low lying wet heathland with a mixed degree of management ▪ Enclosed area with fringe of birch scrub woodland ▪ Informal land division with wire fences and few hedgerows ▪ Areas of rough pasture managed for equestrian grazing. Dominance of other equestrian facilities over other activity ▪ Residential plots generally low key, non sub-urban dwellings with modest enclosure and informal settings ▪ Access limited to small scale private roadway and no public rights of way

	▪ Isolated and remote semi rural/natural character.
Landscape importance:	**Medium**.
Designations:	Country Park.
Nature of views:	Limited by the trees and woodland fringe around Cowards Marsh.

Coastal and Inter-tidal Areas

Location:	Christchurch Harbour and 5km of continuous sandy beaches.
Key characteristics:	▪ Small scale natural estuarine harbour. Mudeford Quay is a hard seafront providing public access and views out to sea and into the harbour. The outer edge has a dynamic outlook to the open sea, the inner side a more controlled and sheltered setting looking into the harbour over amenity grassland and dingy storage ▪ Deep water areas limited to meandering river channels and deep water channels through mudflats. Expansive sweeping bay divided into local beach areas by different approaches to coastal protection and beach management ▪ Areas vary between low key sandy beaches and sections of shingle beach divided by heavily engineered 'fish tail' stone groynes ▪ Beach frontage benefits from low 'cliff' backdrop that provides strong natural feature and separates beach from development. Treescape along cliff tops reinforces the separation of beach and hinterland and forms a key feature of the coastline ▪ Where development is seen it is generally low key but well maintained residential development set within or behind tree over ▪ Seafront parking areas of varied attractiveness but generally modest scale and not dominant to beach frontage ▪ Moorings and active frontages limited to deep water areas such as the river frontage around the Town Centre ▪ Water area surrounded by extensive areas of low lying marshes and mudflats at low tide ▪ Marsh areas have retained a low key open character with strong influences of coastal setting and semi-natural vegetation cover ▪ Development generally set back from waterfront with marshland providing the separation. On the Christchurch side of the harbour the Town Centre and Mudeford have a direct relationship with the water frontage. There is a cluster of historic buildings set on the head of Mudeford Quay. On the Bournemouth side the development is set back by low lying marshes, but with a backdrop of

	encroaching suburbs ▪ Overall area supports a mix of activities and environments with a low key understated character. There is a sense that the various aspects of recreation use, nature conservation and landscape setting complement rather than compete with one another ▪ The surrounding area has a mix of visitor attractions and the interest of a small-scale working fishing quay. The remaining area of sea front is dominated by large-scale car parks that wrap around a line of low pine trees. Taller tree cover provides a backdrop and separates the Quay from the development of Mudeford Village ▪ Seafront facilities such as kiosks, toilets and beach huts also thinly spread and subservient to natural setting of the coastline.
Designations:	None
Landscape importance:	**Medium** – as it is a landscape known and appreciated by many local people as well as visitors.
Nature of views:	Wide, open, sea level views and some elevated views from areas such as Hengistbury Head along the coastline of Christchurch Bay, towards the Isle of Wight including the Needles and out to sea.

New Forest District (Hampshire)

15: North West Solent Estates

Location:	The Solent coast between Calshot Spit and Sowley Pond.
Key characteristics:	▪ Gently undulating coastal plain, drained by minor tributaries within marshy valleys into the Solent, where low sandy cliffs, narrow gravel beaches, extensive marshes and mudflats characterise the coastal margin. ▪ Agricultural landscape of large, regular fields formed by parliamentary enclosure in the 18th - 19th centuries. Divided by ditch and bank hedge boundaries with gaps reinforced by post and wire fencing. ▪ Hedgerows with hedgerow and roadside oak trees, blocks of ancient woodland, stands of oak and pine woodland on the coast, and coastal grazing marshes. ▪ Clusters of red brick and tile farmhouses, with weatherboarding on agricultural buildings, country houses with estate cottages and gate houses. Historic settlement of Buckler's Hard. ▪ An estate landscape with historic designed gardens, eg Exbury House and the grounds of Cadland House. Calshot Castle is a prominent landmark at the end of Calshot Spit. ▪ Access limited to an open network of narrow rural lanes inland, and dead-end tracks down to the coast. One B road, the B3053 provides vehicular access to Lepe Country Park. The Solent Way follows the inland lanes, otherwise only a

	few public footpaths and bridleways. ▪ Other development includes Calshot activities centre, housed in very substantial ex-RAF hangars close to Calshot Castle, and much smaller, flat roofed buildings forming the visitor centre, café and facilities besides the car park at Lepe Country Park. ▪ Medium scale, varied, semi-enclosed, regular, pastel, grainy, angular, gentle, managed (semi-natural in places), secluded, peaceful, common, safe, and interesting.
Landscape condition:	**High/medium** - clear, distinct, unified, harmonious landscape in good condition, with a few detractors and several attractors, a good sense of place and a pleasant scenic quality.
Designations:	New Forest National Park
Landscape importance:	**High** – due to its National Park status.
Nature of views:	Views over the Solent to the Isle of Wight from the coastal margin and from the large arable fields close to the coast. Further inland, views limited by the abundant field and roadside vegetation.

16: Lymington and Pennington Coastal Plain

Location:	The Solent coast, either side of the Lymington River.
Key characteristics:	▪ Gently undulating coastal plain, drained by minor tributaries within marshy valleys into the Solent, where narrow gravel beaches, extensive marshes and mudflats, plus the shingle bank of Hurst spit characterise the coastal margin. ▪ Agricultural landscape of large, regular fields formed by parliamentary enclosure in the 18th - 19th centuries. Divided by ditch and bank hedge boundaries with gaps reinforced by post and wire fencing. ▪ Hedgerows with hedgerow and roadside oak trees, blocks of ancient woodland, stands of pine woodland on the coast, and coastal grazing marshes. ▪ Clusters of red brick farm buildings, large estates with estate cottages and gate houses, the town of Lymington and smaller settlement of Keyhaven. ▪ Hurst Castle and lighthouse at the end of Hurst Spit are coastal landmarks. ▪ Access limited to an open network of narrow rural lanes and dead-end tracks down to the coast. The Solent Way follows the coastline to the west of the Lymington River and then the inland lanes to the east of the estuary; otherwise only a few public footpaths and bridleways. ▪ Other development includes marinas along the Lymington

	River estuary and at Keyhaven. ▪ Medium scale, varied, semi-enclosed, regular, pastel, grainy, angular, gentle, managed (semi-natural in places), secluded, peaceful, common, safe, and interesting.
Landscape condition:	**High/medium** - clear, distinct, interrupted, balanced landscape in good condition, with a few detractors and several attractors, a good sense of place and a pleasant scenic quality.
Designations:	All but the urban area of Lymington is within the New Forest National Park.
Landscape importance:	**High** – due to its National Park status
Nature of views:	Views over the Solent to the Isle of Wight from the coastal margin and from the large arable fields close to the coast. Further inland, views limited by built development and abundant field and roadside vegetation.

17: Barton and Milford Coastal Plain

Location:	Around much of Christchurch Bay from Hurst Spit to Chewton Brook.
Key characteristics:	▪ Large scale undulating coastal plain with eroding cliffs and narrow shingle beaches, and wooded valleys draining south into the Solent. ▪ Mixed arable and pastural fields. Informal Medieval enclosure pattern partially overlaid by formal 18th – 19th century parliamentary enclosures, now largely obscured by plantations and 20th century built development. ▪ Fields divided by fragmented hedgerows, with clumps of hedgerow oaks, holly or pine. Small remnants of ancient semi-natural woodland along watercourses. ▪ Large, dense settlements of New Milton, Barton on Sea and Milford on Sea, with massive recent expansion of residential housing in a mixture of styles and materials. Red brick farmhouses, and large country houses with estate cottages and gatehouses. Urban areas are set slightly back from the cliff tops, which are largely undeveloped, creating a narrow strip of public open space. ▪ Dense urban roads and more open network of rural lanes, footpaths and bridleways. Coastal footpath from Milford to Barton, but access to the beaches limited by the coastal erosion. ▪ Other development including golf courses, caravan parks,

	holiday parks, cliff top parking and cafés selling fish and chips and ice cream are typical along the coastal margin. ▪ Large to medium scale, diverse, exposed (sheltered in the urban areas), regular, pastel, textured, angular, busy, managed (semi-natural in places), accessible, active, common, safe, and interesting.
Landscape condition:	**Medium** - clear, obvious, interrupted, slightly discordant landscape in generally good to fair condition, with some detractors (eg urban areas) and some attractors (maritime views), a fairly good sense of place and a pleasant scenic quality.
Designations:	None.
Landscape importance:	**Medium** – as it is a landscape appreciated by many people both locals and visitors
Nature of views:	Wide, open, sea level views from the beach and more elevated views from the cliff tops along the coastline of Christchurch Bay, towards the Isle of Wight and out to sea; generally limited views inshore due to vegetation and built development.

25: Beaulieu Heath

Location:	Inland between the Lymington and Beaulieu Rivers.
Key characteristics:	▪ Gently domed, open heathland drained by wide, shallow valleys. ▪ Open heathland resulting from extensive Bronze Age clearance of woodland. Now an open expanse of heather and gorse scrub with a mixed plantation at Norley Inclosure. ▪ No settlements or individual properties. ▪ Access via the B3055 and the B3054, plus an off road cycle route and a few tracks. ▪ Other development includes several car parks, and a model aircraft flying area. ▪ Medium scale, simple, semi-enclosed (by surrounding plantations), regular, pastel, textured, angular, calm, semi-natural, accessible, peaceful, frequent, safe, and interesting.
Landscape condition:	**High** – very clear, distinct, unified, harmonious landscape, in good condition, with a few detractors, several attractors, a strong sense of place and a beautiful scenic quality.
Designations:	New Forest National Park
Landscape importance:	**High** – due to its National Park status
Nature of views:	Long distance views of the Fawley Refinery Complex, Fawley Power Station and Sway tower, and occasional views of the Chalk Downs on the Isle of Wight.

27: Eastern Forest Heaths

Location:	Inland of the Waterside Parishes and Northern Solent Estates.
Key characteristics:	▪ Gently undulating plateau with meandering rivers in wide, shallow valleys. ▪ Open heathland, bog and woodland, with ancient Ash rich riverine woodland, alder and sallow car along the river courses and conifer plantations, including Fawley, Dibden, Marchwood and Longdown Inclosures separating it from the urbanised and industrialised landscapes to the east. ▪ Red brick farmsteads or Forest Lodges. Settlements of Holbury and West Common. ▪ Crossed by straight, narrow forest roads, plus the Solent Way, off road cycle route, and tracks. ▪ Other development includes numerous car parks. ▪ Medium scale, simple, semi-enclosed (by surrounding plantations), regular, pastel, textured, angular, gentle, semi-natural, accessible, peaceful/active, frequent, safe, and interesting.
Landscape condition:	**High** – very clear, distinct, unified, harmonious landscape, in good condition, with a few detractors, several attractors, a strong sense of place and a beautiful scenic quality.
Designations:	Mainly with the New Forest National Park.
Landscape importance:	**High** – due to its National Park status.
Nature of views:	Close/medium/long distance views of the Fawley Refinery Complex, Fawley Power Station and Sway tower, and occasional views of the Chalk Downs on the Isle of Wight

Open Coastal Plain

Location:	Found along the southern edge of the New Forest National Park, particularly between the Lymington and Beaulieu Rivers.
Key characteristics:	▪ Open large scale intensive arable farmland with broad and extensive views. Some market gardening east of Southampton. ▪ Sense of openness and exposure ▪ Part of a broad plain of gravel extending several miles inland and sloping gently towards the coast. Many streams and rivers interrupt the continuity of the plain. ▪ Fences or open banks and ditches often form field boundaries. Hedgerows occur less frequently ▪ Small isolated woodlands occur on the open plain but are generally confined to the river valleys ▪ East of Southampton Water extensive development of major and minor urban areas ▪ Smaller settlements typically linked by a few minor roads and lanes ▪ To the west of Southampton Water the smaller settlements are more scattered ▪ Mineral extraction, particularly gravel.
Designations:	Includes Scheduled monuments, National Nature Reserve, Area of Special Landscape Character in Fareham Local Plan and coastal zone Policy R/CH1 in Gosport Local Plan.
Landscape importance:	**Medium** – borders National Nature Reserve.
Nature of views:	Broad, extensive views however the urban areas between Southampton and Hayling Island interrupt and occasionally limit the open views.

Cliff Coastline

Location:	The immediate onshore margin and the area between the high and low mean water mark.
Key characteristics:	▪ Eroding, retreating cliffs to the west ▪ At Milford and Barton on Sea, mobile tongues of accumulated slump debris occur at the base of the low eroding cliffs ▪ Bordering the Solent, lower and almost vertical cliffs occur with shingle beaches.
Designations:	Areas east of Lymington within the New Forest National Park.
Landscape importance:	**High** – due to its National Park status.
Nature of views:	Broad, extensive views across the Solent to the Isle of Wight.

APPENDIX C

Representative Viewpoint Assessment

VIEWPOINTS 1-18

The method of assessment for the viewpoint analysis is in accordance with current guidance on landscape and visual assessment (LI/IEMA 2002). In summary, at each viewpoint location, the viewpoint analysis has assessed the existing view, predicted the *magnitude of change* in the view that would arise as a result of the development, the *sensitivity of the location* for each receptor type, the *overall impact* and whether this impact is likely to be *significant* for each receptor type.

The analysis has been based on fieldwork observations, computer analysis, measured parameters and professional judgement. It takes into account screening by intervening topography, vegetation and built form, visual acuity and seasonal change.

Refer to figures 8.8 and 8.9.

Viewpoint 1: Wellow Millennium Green, adjacent to the B4301

Location: Viewpoint 1 is located on the millennium green, a recreational facility in the small village of Wellow. The green lies adjacent to the B4301 and a minor road in the village. It is located on the border between the Open Farmland and Rolling Farmland landscape types but is not within any national landscape designations.

Existing view: The immediate foreground is occupied by the close mown grass of the green, which also has some loose stone paths. Benches, football goalposts and wooden exercise facilities are also located on the green, which is surrounded by low hedgerows and vegetation in the gardens of the properties to the east of the green. From the green, views are short distance and enclosed by the surrounding vegetation and properties. There is a short view westwards into the adjacent field to the right of this view.

Predicted view: The predicted view is illustrated by the photomontage in Figure 8.8. This shows that five of the six turbines will be evenly spaced along the skyline. Turbines 1 - 3 will be visible as almost complete structures, the rotor sweep of turbine 4 will be visible, turbine 5 will be visible from the hub upwards and turbine 6 will be screened by an evergreen tree in the garden of one of the surrounding properties. Parts of turbine 6 are likely to be visible from elsewhere on the green.

Magnitude of change: The nearest turbine will be approximately 1km away and the furthest turbine will be 1.3km from this viewpoint location. The turbines will occupy approximately 50 -79° of the overall view (depending on where an observer stands on the green) with the lower towers obscured by the intervening vegetation and housing. They will appear slightly taller than the nearby telegraph pole. The towers and movement of the rotors will be visible in poor or better visibility, which occurs > 97% of the time in this area (see Appendix A), and against the sky. The turbines will be to the south of the green so will tend to be in shadow for most of the day. This will tend to make them less noticeable against a mid grey sky. They will be more noticeable when side lit against a strong blue or dark stormy sky, which could

occur during early morning or late afternoon/evening in the summer months. However, assuming excellent visibility and that an observer is being exposed to the change in the view for the first time, the proximity and width of the array is such that the turbines will be prominent elements in the view and the magnitude of change will be *substantial*. In views from the properties shown in the view, the turbines will be slightly closer, less screened and more prominent and it is likely that the magnitude of the change will be *very substantial/substantial*.

Visual receptors: will be residents in the nearby properties and users of the green (such as dog walkers and children playing football. The residents will gain views from the windows of their properties and possibly from their gardens (depending on the screening effects of garden vegetation). They are likely to be stationary, with views towards the turbines, in an undesignated landscape of high/medium or medium/low quality and are likely to be looking out of their windows mainly for the view and other purposes. On this basis, this location is likely to have a *high* sensitivity to change for these receptors. The users of the green will gain views of the turbines from this location, are likely to be stationary or moving slowly, and will be on the green both for the view and other purposes. On this basis, this location is likely to have a *high/medium* sensitivity to change for these receptors.

Overall effect and significance: for the residents the high sensitivity combined with the very substantial/substantial magnitude of change would give an overall effect of *major+*, and for the users of the green the high/medium sensitivity combined with the substantial magnitude of change would give an overall effect of *major/moderate+,* which suggests that the proposed development would result in a significant change in the view for both types of receptors at this location. The impact is assessed as adverse.

Viewpoint 2: B3399 near Shalcombe

Location: Viewpoint 2 is located on the grass verge adjacent to the B3399 close to the junction with the minor road leading to Shalcombe. This road is well used and is a fast route. It is within the Open Farmland landscape type and on the boundary of the Isle of Wight AONB and Heritage Coast landscape designations.

Existing view: The pasture land of the adjacent field stretching away towards the quarry and beyond this to the site. A farm building sits in the neighbouring field which is bounded by post and wire fencing and lies next to a small copse of trees. In the middle distance is the slightly elevated land and mature woodlands of the Northern Woodlands landscape type and beyond are the Solent and the mainland which form the far distance views. Fawley power station and the oil refinery are noticeable on the mainland and other vertical elements in view from this location (outwith the photograph) include the tall TV masts on Chillerton Down and west of Bowcombe Down. The Hamstead Trail long distance path and some local footpaths cross through the nearby fields.

Predicted view: The predicted view is illustrated by the photomontage in Figure 8.8. This shows that all six turbines will be visible as complete or almost complete structures, evenly

spaced in the near to middle distance, with the base of turbines 4 and 6 screened by intervening vegetation.

Magnitude of change: The nearest turbine will be approximately 1km away and the furthest turbine will be 1.3km from this viewpoint location. The turbines will occupy approximately 70° of the overall view with the majority of the towers in view. The towers and movement of the rotors will be visible in poor or better visibility, which occurs > 97% of the time in this area. The moving rotors and upper towers will be seen against the sky, whilst the lower parts of the visible towers will be against more distant land. The turbines will be to the north of this location so will tend to be sunlit for most of the day (when the sun is out). This will tend to make them noticeable more often than when viewed from the north. However, assuming excellent visibility and that an observer is being exposed to the change in the view for the first time, the proximity and width of the array is such that the turbines will be very prominent elements in the view and the magnitude of change will be *very substantial/substantial*.

Visual receptors: will be motorists and their passengers on the B3399. They are likely to be moving swiftly, with sideways views towards the turbines, in an undesignated landscape (but bordering a designated landscape of high Importance) and are likely to be travelling for the view and other purposes. On this basis, this location is likely to have a *medium* sensitivity to change for these receptors.

Overall effect and significance: for the motorists and passengers the medium sensitivity combined with the very substantial/substantial magnitude of change would give an overall effect of *major/moderate+,* which suggests that the proposed development would result in a significant change in the view for these receptors at this location. The impact is assessed as adverse.

Viewpoint 3: Thorley Church Gate

Location: Viewpoint 3 is located on the pavement, in front of the church gate at Thorley. It lies next to the B3401, which is on the "Round the Island Cycle Route", a route maintained and developed by the Isle of Wight Council. It is within on the border between Open Farmland and Rolling farmland landscape types but not within any landscape designations.

Existing view: The B3401 and the remnants of the banked hedgerow which borders the neighbouring fields are in the foreground of the view. To the left of the view is the stone wall which surrounds the church and the mature vegetation which overspills this, and the residential properties to the north and south of the road, which enclose the view west of where the viewpoint is located. Arable agricultural land rises southwards away from the village towards the elevated chalk downlands of the AONB. Vertical elements already present within the view include telegraph poles and a trident line, both with wires connecting them.

Predicted view: The predicted view is illustrated by the photomontage in Figure 8.8. This shows that all the turbines will be visible as almost complete structures, evenly spaced in the near to middle distance.

Magnitude of change: The nearest turbine will be approximately 1.4km away and the furthest turbine will be 2.4km from this viewpoint location. The turbines will occupy approximately 36° of the overall view and they will appear slightly taller than the trident line pole in the nearby field. The majority of the towers and movement of the rotors will be visible in moderate (at least 4km) or better visibility, which occurs > 95% of the time in this area . The moving rotors and upper towers will be seen against the sky, whilst the lower parts of the towers will be against more distant land. The turbines will be to the south-southeast of this location so will be most noticeable when sunlit against a strong blue or dark stormy sky, which could occur only in the late afternoon and evening in the mid-summer months. However, assuming excellent visibility and that an observer is being exposed to the change in the view for the first time, the proximity and width of the array is such that the turbines will be prominent elements in the view and the magnitude of change will be *substantial*.

Visual receptors: will be residents in the nearby properties, church goers, cyclists and motorists and their passengers. The residents will gain views from the windows of their properties and possibly from their gardens (depending on the screening effects of garden vegetation). They are likely to be stationary, with views towards the turbines, in an undesignated landscape (but looking towards a landscape of high quality) and are likely to be looking out of their windows mainly for the view and other purposes. On this basis, this location is likely to have a *high* sensitivity to change for these receptors. The church goers will gain views of the turbines from this location as they arrive and leave the church. They are likely to be stationary or moving slowly, and will be at the church gate for the view but mainly for other purposes. On this basis, this location is likely to have a *high/medium* sensitivity to change for these receptors. Cyclists will gain oblique and sideways views of the turbines as they travel along this route. They are likely to be moving slowly, and will be on this route primarily for the views but also for other purposes. On this basis, this location is also likely to have a *high/medium* sensitivity to change for these receptors. Motorists and their passengers are likely to be moving swiftly, with oblique and sideways views towards the turbines and are likely to be travelling for the view and other purposes. On this basis, this location is likely to have a *medium* sensitivity to change for these receptors.

Overall effect and significance: for the residents the high sensitivity combined with the substantial magnitude of change would give an overall effect of *major*, and for the church goers and cyclists the high/medium sensitivity combined with the substantial magnitude of change would give an overall effect of *major/moderate+,* which suggests that the proposed development would result in a significant change in the view for these types of receptors at this location. For the motorists and their passengers, the medium sensitivity combined with the substantial magnitude of change would give an overall effect of *major/moderate*, which suggests that the proposed development would also result in a significant change in the view for these types of receptors at this location. The impact is assessed as adverse

A.1.1 Viewpoint 4: Tennyson Trail on Compton Down Golf Course

Location: Viewpoint 4 is located on the Tennyson Trail on Compton Down, on which a golf course is laid out across the rounded top of the Down. It is located within the Chalk Downs

landscape type and within the Isle of Wight AONB and Heritage Coast landscape designations.

Existing view: This viewpoint provides a panoramic view in all directions over the Isle of Wight, northwards towards the mainland and southwards towards the open sea. In the view northeastwards towards the site, the scrub on the side slopes of the downs is just visible, followed by the patchwork of large, open arable and pastoral fields of the lower lying Open Farmland in the middle distance. This is followed by the smaller scale, more detailed and more vegetated landscape types along the north coast of the island and, beyond these, the Solent and mainland. Fawley power station and Fawley refinery are visible in the far distance.

Predicted view: The predicted view is illustrated by the photomontage in Figure 8.8. This shows that all six turbines will be almost entirely visible and evenly spaced in the near to middle distance.

Magnitude of change: The nearest turbine will be approximately 1.9km away and the furthest turbine will be 2.7km from this viewpoint location. The turbines will occupy approximately 32° of the overall panoramic view. The majority of the towers and movement of the rotors will be visible in moderate (at least 4km) or better visibility, which occurs > 95% of the time in this area. The towers and lower rotor sweep will be seen against the distant land and the Solent, whilst the upper rotor sweep will be against the sky. The turbines will be to the northeast of this location so will be most noticeable when sunlit against a strong blue or dark stormy sky and dark land, which could occur from midday to evening throughout the year. Assuming excellent visibility and that an observer is being exposed to the change in the view for the first time, the proximity and width of the array is such that the turbines will be prominent elements in the view and the magnitude of change will be *substantial*.

Visual receptors: will be walkers, cyclists, horse riders and golfers. The walkers, cyclists and horse riders are likely to be stationary or moving slowly in a Nationally designated landscape of high quality (but looking towards landscapes of mixed quality) and are likely to be on the downs mainly for the view although also for other purposes. On this basis , this location is likely to have a *high* sensitivity to change for this receptors. The golfers will gain views of the turbines from this location as they play the course. They are likely to be stationary or moving slowly, and will be on the golf course for the view but also for other purposes. On this basis, this location is likely to have a *high/medium* sensitivity to change for these receptors.

Overall effect and significance: for the walkers, cyclists and horse riders the high sensitivity combined with the substantial magnitude of change would give an overall effect of *major,* which suggests that the proposed development would result in a significant change in the view for these types of receptors at this location. For the golfers the high/medium sensitivity combined with the substantial magnitude of change would give an overall effect of *major/moderate+*, which suggests that the proposed development would also result in a

significant change in the view for these types of receptors at this location. The impact is assessed as adverse.

Viewpoint 5: Freshwater Way, north of Kings Manor Farm

Location: Viewpoint 5 is located on Freshwater Way, north of Kings Manor Farm. It is just inside the Settled farmland landscape type, close to the Estuaries landscape type and just within the boundary of the Isle of Wight AONB landscape designation where it extends along the River Yar estuary. Freshwater Way is one of nine long distance recreational trails on the Isle of Wight.

Existing view: This view looks east-southeastwards and includes mature deciduous vegetation that marks the edge of the River Yar Harbours and Estuaries landscape type, a mature deciduous woodland in the centre middle distance (Wilmingham Plantation surrounded by the large open arable fields of the Open Farmland and with the Chalk Downs forming the elevated and undulating horizon in the distance. One of the very tall TV masts is visible on the Downs in good weather. During mid summer, the foreground is dominated by the maize crop, in winter/spring 2006 field in the foreground is farmed as pasture . Later in the summer, as the crop matures, the view of the distant downs is likely to be obscured from this location whereas, from late autumn through to spring, views down into the River Yar estuary may be possible. Indeed, even at this time of year, eastward views from this path to the north of this location to its junction with the A3054, are obscured either by woodland or by arable crops.

Predicted view: The predicted view is illustrated by the photomontage. This shows that all six turbines will be visible in the middle distance, in a cluster immediately behind Wilmingham Plantation. Turbines 1 – 4 will be almost complete structures, turbines 5 and 6 will be rotor sweeps, with the lower towers of all the turbines screened by the intervening woodland.

Magnitude of change: The nearest turbine will be approximately 3.3km away and the furthest turbine will be 4.8km from this viewpoint location. The turbines will occupy approximately 4° of the overall view. The majority of the towers and movement of the rotors will be visible in moderate (at least 7km) or better visibility, which occurs > 92% of the time in this area. The towers and lower rotor sweep will be seen against the distant Downs, whilst the upper rotor sweep will be against the sky. The turbines will be to the east-southeast of this location so will be most noticeable when sunlit against a strong blue or dark stormy sky and dark land, which could occur from mid afternoon to evening during the summer. Assuming excellent visibility and that an observer is being exposed to the change in the view for the first time, the distance to and width of the array is such that the turbines will be visible elements in the view and the magnitude of change will be *moderate*.

Visual receptors: will be walkers, cyclists and horse riders, who are likely to be stationary or moving slowly in an landscape of high/medium importance and are likely to be on this trail

for the view and also for other purposes (eg walking the dog). On this basis, this location is likely to have a *high/medium* sensitivity to change for these receptors.

Overall effect and significance: for walkers, cyclists and horse riders the high/medium sensitivity combined with the moderate magnitude of change would give an overall effect of *moderate+,* which suggests that the proposed development would result in a significant change in the view for these types of receptors if similar views are obtained along a sustained section of this route. The impact is assessed as adverse.

Viewpoint 6: Bridge over River Yar, Yarmouth

Location: Viewpoint 6 is located on the bridge over the River Yar on the A3054 at Yarmouth. It is within the Estuaries landscape type and within the Isle of Wight AONB landscape designation.

Existing view: Travelling eastwards over the bridge, there are side views looking northwards downstream towards the sea and Yarmouth harbour, and southwards up the estuary, and forward views eastwards towards the town. Looking southeastwards towards the site, the view includes the estuary in the foreground with the many yachts that are moored there, and the leisure boats and dinghies on the side. There is a car park on the edge of town in summer was occupied by a fun fayre (the proprietors' caravans are parked in the car park on the side of the estuary).In winter/spring the area was open fields In the middle distance, on the far side of the estuary are several dense woodlands including Mill Copse, Wilmington Plantation and Withybed Copse, around which are arable fields and beyond the rising Chalk Downs. The masts of the yachts create dense clusters of tall vertical elements in the foreground of this view..

Predicted view: The predicted view is illustrated by the photomontage. This shows that the six turbines will be in an evenly spaced string, behind and to the left of the woodland, with turbines 1, 2 and 3 visible as rotor sweeps and turbines 4, 5 and 6 as almost complete structures.

Magnitude of change: The nearest turbine will be approximately 3.5km away and the furthest turbine will be 4.8km from this viewpoint location. The turbines will occupy approximately 9° of the overall view. The majority of the towers and movement of the rotors will be visible in moderate (at least 7km) or better visibility, which occurs > 92% of the time in this area . The lower towers of turbines 5 and 6 will be seen against the distant Downs, whilst the rotor sweeps will be against the sky. The turbines will be to the southeast of this location so will tend to be in shadow most of the time, but would be most noticeable when sunlit against a strong blue or dark stormy sky and dark land, which could occur from late afternoon to evening during the summer. Assuming excellent visibility and that an observer is being exposed to the change in the view for the first time, the distance to and width of the array is such that the turbines will be visible elements in the view and the magnitude of change will be *moderate*.

Visual receptors: will be motorists and their passengers on the A3054 travelling eastwards across the bridge and yachtsmen and fishermen using the estuary. The motorists are likely to be moving swiftly, with sideways views towards the turbines, in a nationally designated landscape of high importance and are likely to be travelling for the view and other purposes. On this basis, this location is likely to have a *high/medium* sensitivity to change for these receptors. The yachtsmen and fishermen are likely to be stationary or moving slowly and are likely to be on the estuary for the view and for other purposes. On this basis, this location is also likely to have a *high/medium* sensitivity to change for these receptors.

Overall effect and significance: for motorists and their passengers, yachtsmen and fishermen the high/medium sensitivity combined with the moderate magnitude of change would give an overall effect of *moderate+,* which suggests that the proposed development would result in a significant change in the view for these types of receptors if similar views are obtained along a sustained section of the A3054 or for a sustained section of the yachtsmen's and fishermen's sailing routes, which is unlikely to be the case as there will be limited views from the A3054 and as the yachtsmen and fishermen sail out of the estuary, they will be going progressively further from the turbines, so the magnitude of change is likely to reduce. The impact is assessed as adverse

Viewpoint 7: Newtown National Nature Reserve

Location: Viewpoint 7 is located on the banks of the Newtown River, within the Newtown National Nature Reserve, close to the settlement of Newtown. Newtown National Nature Reserve comprises 680 hectares of estuary and foreshore together with extensive areas of mudflats, salt marsh and adjacent meadows and woodland.. The viewpoint is within the part of the Nature Reserve that is owned by the National Trust. The viewpoint is not on the definitive right of way (which skirts around the National Trust land) but is taken from a sandy path which winds around the edge of the Newtown River and Creeks, providing walkers with access to the mudflats and water's edge. The viewpoint is located within the Estuaries landscape type and within the Isle of Wight AONB and Heritage Coast landscape designations.

Existing view: The view is across the water towards the boating centre on the side of Shalfleet Lake (note the difference between high and low tide in the two baseline photgraphs). The tall vertical masts of moored yachts and the bright red sail of a sailing dinghy are visible in the middle distance. In the middle distance, behind and to the left and right of the boating centre, are extensive woodlands and beyond is the elevated horizon of the Chalk Downs. The village of Shalfleet is visible between the woodlands, slightly west of centre. This view is not available from most parts of the village of Newtown which is surrounded by dense vegetation.

Predicted view: The predicted view is illustrated by the photomontage. This shows that the six turbines will be in an evenly spaced string, behind and to the right of the woodland immediately behind the boating centre, with turbines 1–4 as almost complete structures and turbines 5 and 6 visible as partial rotor sweeps.

Magnitude of change: The nearest turbine will be approximately 4.6km away and the furthest turbine will be 5.3km from this viewpoint location. The turbines will occupy approximately 16° of the overall view. The majority of the towers and movement of the rotors will be visible in moderate (at least 7km) or better visibility, which occurs > 92% of the time in this area. The lower towers of turbines 1-4 will be seen against the distant Downs, whilst the rotor sweeps will be against the sky. The turbines will be to the southwest of this location so will tend to be in shadow most of the time, but would be most noticeable when sunlit against a strong blue or dark stormy sky and dark land, which could occur from early to mid morning during the summer. Assuming excellent visibility and that an observer is being exposed to the change in the view for the first time, the distance to and width of the array is such that the turbines will be visible elements in the view and the magnitude of change will be *moderate*.

Visual receptors: will be walkers, birdwatchers and sailors. The walkers are likely to be stationary or moving slowly in a nationally designated landscape of high importance and are likely to be in the Nature Reserve mainly for the views. On this basis, this location is likely to have a *high* sensitivity to change for these receptors. The birdwatchers will gain views of the turbines from this location, possibly enlarged through binoculars, as they watch birds on the estuary. They are likely to be stationary or moving slowly, and will be in the Nature Reserve for the view but primarily in order to watch birds. On this basis, this location is likely to have a *high/medium* sensitivity to change for these receptors. Sailors in dinghies will gain views of the turbines as they sail around the estuary. They are likely to be moving slowly and will be on the creek for the view but primarily to sail. On this basis, this location is likely to also have a *high/medium* sensitivity to change for these receptors.

Overall effect and significance: for walkers the high sensitivity combined with the moderate magnitude of change would give an overall effect of *major/moderate,* which suggests that the proposed development would result in a significant change in the view for these receptors. For birdwatchers and sailors the high/medium sensitivity combined with the moderate magnitude of change would give an overall effect of *moderate+,* which suggests that the proposed development would result in a significant change in the view for these types of receptors. Elsewhere in Nature Reserve, much of the reserve is wooded and the estuary consists of several narrow fingers of water that extend inland amongst the woodland, so views of the turbines will be not beextensive. The impact for this viewpoint is assessed as adverse.

Viewpoint 8: Swainstondown Gate

Location: Viewpoint 8 is located on part of the bridleway network at Swainstondown Gate, northeast of Newbarn Down. It is within the Chalk Downs landscape type and within the Isle of Wight AONB landscape designation.

Existing view: This is a relatively elevated and panoramic viewpoint on the downs, with the rolling downland landscape stretching out in all directions. The higher downs are visible to the left of the view, with a framed view of the flatter northern coastline, the Solent and the mainland towards the centre and right of the view. In the near and middle distance, the

downlands are a patchwork of angular-shaped arable and pastoral fields, with blocks and lines of coniferous and mixed woodland creating definitive lines, which contrast well with the rolling nature of the landform. These also result in a patchwork of distinct colours, ranging from pale to dark greens, through to various shades of browns, and which vary with the seasons.

Predicted view: The predicted view is illustrated by the photomontage. This shows that all the turbines will be visible as complete structures in a tight cluster in the middle distance.

Magnitude of change: The nearest turbine will be approximately 5km away and the furthest turbine will be 6.5km away. The turbines will occupy approximately 2º of the overall view and the turbines will be seen as complete structures, albeit with some behind others, which will result in a slight "stacking" effect (overlap in the rotor movement). The turbine towers will be backgrounded mainly by land and the rotors will be mainly against the sky. The towers and movement of the rotors will be visible in moderate (at least 7km) or better visibility, which occurs > 92% of the time in this area. The turbines will be to the west-northwest of this location and would be most noticeable when sunlit against a strong blue or dark stormy sky and dark land, which could occur from early morning to early afternoon throughout the year. Assuming excellent visibility and that an observer is being exposed to the change in the view for the first time, the distance to and narrow width of the array is such that the turbines will be clearly noticeable elements in the view and the magnitude of change will be *moderate/slight.*

Visual receptors: will be walkers, horse riders and cyclists. They are likely to be stationary or moving slowly in a nationally designated landscape of high importance and are likely to be on the bridleway mainly for the views. On this basis, this location is likely to have a *high* sensitivity to change for these receptors.

Overall effect and significance: the high sensitivity combined with the moderate/slight magnitude of change would give an overall effect of *moderate+,* which suggests that the proposed development would result in a significant change in the view for these types of receptors if similar views are obtained along sustained sections of the bridleway. However, due to the undulating nature of the downlands and the large blocks of woodland along this bridleway, this will not be the case for users of this bridleway for most of the time. The impact for this viewpoint is assessed as adverse

Viewpoint 9: Tennyson's Monument

Location: Viewpoint 9 is located close to Tennyson's Monument, on the Tennyson Trail above the Highdown Cliffs, on top of one of the coastal downlands in the far southwest of the island. The monument, which is a large stone Celtic cross, was built in memory of the poet Alfred Lord Tennyson. It is accessible via a short, steep walk along a footpath from a car park to the north and also from the east and west via the long distance path, the Tennyson Trail. It is within the Chalk Downs landscape type and within the Isle of Wight AONB and Heritage Coast landscape designations.

Existing view: This is a very elevated location, providing a 360º panoramic view, which includes the dramatic white chalk cliffs of Freshwater Bay and the sweep of the southwest coastline as far as St Catherine's Point approximately 17km away, the downs, the patchwork of lower lying landscape in the centre and north of the island and (to the left and outside the view) across the Solent to the mainland. The smoothness of the closely grazed downland grass in the foreground contrasts with the textured and detailed lower lying landscapes beyond.

Predicted view: The predicted view is illustrated by the wireframe in Figure 8.8. This shows that all the turbines will be visible as complete or almost complete structures in a receding line on the lower land in the middle distance.

Magnitude of change: The nearest turbine will be 5.7km away and the furthest turbine will be 6.9km away. The turbines would occupy 7º of the view, with only marginal screening by intervening land. The towers would be backgrounded by land and the hubs and upper rotors would be against the sky. The towers and movement of the rotors will be visible in moderate (at least 7km) or better visibility, which occurs > 92% of the time in this area. The turbines will be to the northeast of this location and would be most noticeable when sunlit against a strong blue or dark stormy sky and dark land, which could occur from mid morning to late afternoon throughout the year. Assuming excellent visibility and that an observer is being exposed to the change in the view for the first time, the distance to and width of the array is such that the turbines will be visible elements in the view and the magnitude of change will be *moderate.*

Visual receptors: will be walkers, horse riders and cyclists. They are likely to be stationary or moving slowly in a Nationally designated landscape of high importance and are likely to be on the Tennyson Trail mainly for the views. On this basis, this location is likely to have a *high* sensitivity to change for these receptors.

Overall effect and significance: the high sensitivity combined with the moderate magnitude of change would give an overall effect of *major/moderate,* which suggests that the proposed development would result in a significant change in the view for these types of receptors at this location. The impact is assessed as adverse

Viewpoint 10: Isle of Wight Ferry Terminal, Lymington

Location: Viewpoint 10 is located in the café gardens at the ferry terminal at Lymington. It is within the Lymington and Pennington Coastal character area on the border of the New Forest National Park boundary.This landscape area is assessed as being of *high* importance

Existing view: This viewpoint is a low level view looking across the estuary (mudflats at low tide as in summer view and open water in high tide as in winter/spring view) and the Solent towards the Isle of Wight. The built detail of the ferry terminal, including the glassed pedestrian walkway, palisade fencing and picnic benches are in the foreground, and there is a plethora of vertical elements in the middle distance, created by the masts of yachts moored in

the estuaryThe Isle of Wight forms the long, slightly elevated and distant backcloth to this view and, although over 10km away, the various of colours that make up the patchwork field pattern on the island are distinguishable when visibility is good.

Predicted view: The predicted view is illustrated by the photomontage. This shows that all six turbines will be visible as complete and almost complete structures in a fairly evenly spaced line on the distant lower lying land on the Isle of Wight, backgrounded by the higher Chalk Downs beyond.

Magnitude of change: The nearest turbine will be 9.2km away and the furthest turbine will be 10.2km away. The turbines will occupy approximately 7º of the view and, although there is very little intervening screening, they will be viewed in the context of the many vertical yacht masts. The masts are not static features (the yachts will come and go), and do not have the same characteristic movement as the turbine rotors, but they introduce a strong vertical element and are likely to remain a characteristic feature of this view. The towers and rotors would be backgrounded mainly by land and the towers and movement of the rotors will be visible in very good (at least 20km) or better visibility, which occurs > 64% of the time in this area .The turbines will be to the south-southeast of this location and would be most noticeable when sunlit against dark land, which could occur only in the late afternoon and evening in the mid-summer months. Assuming excellent visibility and that an observer is being exposed to the change in the view for the first time, the distance to and width of the array is such that the turbines will be clearly noticeable elements in the view and the magnitude of change will be *moderate/slight.*

Visual receptors: will be ferry passengers, waiting for the next ferry. They are likely to be stationary or moving slowly and are likely to be there primarily for purposes other than for the view. On this basis, this location is likely to have a *medium* sensitivity to change for these receptors.

Overall effect and significance: the medium sensitivity combined with the moderate/slight magnitude of change would give an overall effect of *moderate/minor+,* which suggests that the proposed development would not result in a significant change in the view for this type of receptor at this location.

Viewpoint 11: Milford on Sea

Location: Viewpoint 11 is located in the car park at Milford on Sea on the mainland, looking southeastwards towards the Isle of Wight. The Solent Way long distance path runs along this coastline. It is located within the Barton and Milford Coastal Plain landscape character area but not within any landscape designations.

Existing view: This is a low level, broad, sweeping 180º view of land and sea, encompassing the extensive shingles to the back of the low sea wall, empty beaches, a lighthouse, the masts of the yachts moored at Keyhaven and the distant Isle of Wight. The bright white, 1930's style building that is now boarded up in the left of the view was once a hotel. To the left (out of the photograph) are several large, modern, detached residential properties, facing south-southwestwards to make the most of the sea view. To the right (and beyond the photograph)

are the cliffs of Alum Bay and Totland Bay, and the distinctive formation of the needles. From this location, a casual viewer would not be aware that the distant land was a separate island, as it appears to be an extension of the mainland. Even knowing that the distant land is the Isle of Wight, it is difficult to ascertain from this location where the mainland ends and the island begins. For both casual and informed viewers, the focus of the view would tend to be the Needles, or whatever detail in the view was spotlighted by the sunlight, which would depend on the weather and sunlight conditions and so would be forever changing.

Predicted view: The predicted view is illustrated by the photomontage. This shows that all of the turbines will be visible in a closely spaced receding line, with turbine 2 directly behind turbine 1. The turbines will be visible to varying degrees, with the lower towers screened by intervening land and vegetation on the mainland. A casual observer at this location would have difficulty determining whether the turbines were on the mainland or on the distant island.

Magnitude of change: The nearest turbine will be 9.4km away and the furthest turbine will be 10.8km away. The turbines will occupy approximately 2º of the overall view and will be tightly spaced, with the juxtaposition of turbines 1 and 2 likely to result in a slight "stacking" effect (overlap in the rotor movement). The turbines will be backgrounded mainly by land and the towers and movement of the rotors will be visible in very good (at least 20km) or better visibility, which occurs > 64% of the time in this area. The turbines will be to the southeast of this location and would be most noticeable when sunlit against dark land, which could occur from mid-day to evening throughout the year. Assuming excellent visibility and that an observer is being exposed to the change in the view for the first time, the distance to and narrow width of the array is such that the turbines will be noticeable elements in the view and the magnitude of change will be *slight.*

Visual receptors: will be nearby residents, walkers, cyclists and horse riders on the Solent Way, visitors to the beach, plus motorists on the nearby coast road and in the car park. The residents will gain oblique views from the front windows of their properties and views from their frontage. They are likely to be stationary, with oblique views towards the turbines, in an undesignated landscape of *medium* importance and are likely to be looking out of their windows mainly for the view and other purposes. On this basis, this location is likely to have a *high* sensitivity to change for these receptors. The walkers, cyclists and horse riders travelling eastwards on the Solent Way and visitors to the beaches are likely to be stationary or moving slowly in an undesignated landscape of high/medium quality and are likely to be in this location for the view and also for other purposes (eg walking the dog). On this basis, this location is likely to have a *high/medium* sensitivity to change for these receptors. For motorists and their passengers on the nearby coast road and in the car park, they are likely to be moving swiftly or stationary, with oblique, sideways and forward views towards the turbines, and are likely be travelling for the view and other purposes. On this basis, this location is likely to have a *medium* sensitivity to change for these receptors.

Overall effect and significance: for residents, the high sensitivity combined with the slight magnitude of change would give an overall effect of *moderate*; for walkers, cyclists, horse

riders and visitors the high/medium sensitivity combined with the slight magnitude of change would give an overall effect of *moderate/minor+,* and for motorists and their passengers, the medium sensitivity combined with the slight magnitude of change would give an overall effect of *moderate/minor*, which suggests that the proposed development would not result in a significant change in the view for these types of receptors at this location.

Viewpoint 12: Northwood

Location: Viewpoint 12 is located on the pavement alongside the A3020 in Northwood, on the southern edge of Cowes, looking southwestwards over the post and rail fencing into a field and the countryside beyond. This was the only location identified during the fieldwork that provided a view towards the turbines from a publicly accessible location in Cowes, due to screening effects of vegetation and built development. It is not within any landscape designations.

Existing view: This is a relatively elevated view experienced by road users as they pass this gap in the built up area, and possibly by residents in some of the surrounding properties, although most surrounding properties have mature garden vegetation that would largely screen views in this direction. Within the view, the flat open field in the foreground gives way to abundant field boundary vegetation, Parkhurst Forest, the patchwork of fields and boundary vegetation and the rounded Chalk Downs in the far distance. A trident line and three poles cross the view, and the post and rail fence would be a strong foreground feature in the view for passing motorists.

Predicted view: The predicted view is illustrated by the wireframe in Figure 8.8. This suggests that all six turbines would be visible as almost complete structures in the distance, partly backgrounded by the downs. However, as can be seen in the photograph of the existing view, Parkhurst Forest clothes the rounded land in the middle distance and the plantation is likely to largely obscure turbines 6 and 5, and partially obscure turbines 4 and 3 in this view from this location.

Magnitude of change: The nearest turbine will be 11.6km away and the furthest turbine will be 12.6km away. The visible turbines will occupy less than 5º of the overall view and will be evenly spaced, partly against distant land and partly against the sky. The towers and movement of the rotors will be visible in very good (at least 20km) or better visibility which occurs > 64% of the time in this area. The turbines will be to the southwest of this location and would be most noticeable when sunlit against a strong blue or dark stormy sky and dark land, which could occur from early to mid morning during the summer months. Assuming excellent visibility and that an observer is being exposed to the change in the view for the first time, the distance to and narrow width of the array is such that the turbines will be noticeable elements in the view and the magnitude of change will be *slight.*

Visual receptors: will be some nearby residents and motorists on the A3020. The residents will gain views from the front or rear windows of their properties and views from their frontage or rear gardens. They are likely to be stationary, with views towards the turbines, in

an undesignated urban landscape overlooking a rural landscape and are likely to be looking out of their windows for the view and other purposes. On this basis, this location is likely to have a *high/medium* sensitivity to change for these receptors. For motorists and their passengers on the nearby road, they are likely to be moving swiftly or stationary, with sideways views towards the turbines, and are likely be travelling mainly for purposes other than the view. On this basis, this location is likely to have a *medium* sensitivity to change for these receptors.

Overall effect and significance: for residents, the high/medium sensitivity combined with the slight magnitude of change would give an overall effect of *moderate/minor+*; and for motorists and their passengers, the medium sensitivity combined with the slight magnitude of change would give an overall effect of *moderate/minor*, which suggests that the proposed development would not result in a significant change in the view for these types of receptors at this location.

Viewpoint 13 Stone Point, Lepe Country Park

Location: Viewpoint 13 is located in the car park at Stone Point, in Lepe Country Park on the mainland, looking south-southwestwards towards the Isle of Wight. It is located within the Northwest Solent Estates landscape character area and on the coastal boundary of the New Forest National Park.

Existing view:. This is a low level, wide 180º view of land and sea, encompassing the long shallow beach with the nearly buried timber groins and across the Solent to the thin sliver of land that is the Isle of Wight. To the right (outside the photograph) are the old lifeboat house and cottages. As at several locations along this coastline, from this location, a casual viewer would not be sure whether the distant land was a separate island or the far side of a bay, as it appears to be an extension of the mainland.

Predicted view: The predicted view is illustrated by the wireframe in Figure 8.5m. This shows that all of the turbines will be visible in an evenly spaced line, with the turbine towers against land and the blades against the sky.

Magnitude of change: The nearest turbine will be 13.0km away and the furthest turbine will be 13.5km away. The turbines will occupy approximately 6º of the overall view and will be evenly spaced. The turbines will be backgrounded mainly by land (although the tops will break the skyline) and the towers and movement of the rotors will be visible in very good (at least 20km) or better visibility, which occurs > 64% of the time in this area. The turbines will be to the south-southwest of this location and would be most noticeable when sunlit against dark land, which could occur from early to mid-morning in the summer months. Assuming excellent visibility and that an observer is being exposed to the change in the view for the first time, the distance to and narrow width of the array is such that the turbines will be discernible elements in the view and the magnitude of change will be *slight.*

Visual receptors: will be visitors to the beach, the Country Park and the National Park. The visitors are likely to be stationary or moving slowly, with oblique views towards the turbines, in a nationally designated landscape of high importance and are likely to be there for the view

and other purposes. On this basis, this location is likely to have a *high* sensitivity to change for these receptors.

Overall effect and significance: for visitors the high sensitivity combined with the slight magnitude of change would give an overall effect of *moderate*, which suggests that the proposed development would not result in a significant change in the view for receptors at this location

Viewpoint 14: Beaulieu Heath, New Forest

Location: Viewpoint 15 is located in the car park near the model flying area, in the centre of Beaulieu Heath in the New Forest on the mainland, looking south-southeastwards towards the Isle of Wight. It is close to an off road cycle route and is between the B3054 and the B3055. It is located within the Beaulieu Heath landscape character area and in the New Forest National Park.

Existing view: This is a low level, wide 360º view of heathland and forest, with the rolling downlands of the Isle of Wight in the far distance to the south-southeast and the chimneys of the Fawley oil refinery and power station in the distance to the left (outside the photograph in)

Predicted view: The predicted view is illustrated by the wireframe. This shows that the rotors of all six of the turbines will be visible in a fairly evenly spaced line, with the lower towers screened by intervening land and vegetation on the mainland.

Magnitude of change: The nearest turbine will be 13.2km away and the furthest turbine will be 13.8km away. The turbines will occupy approximately 5º of the overall view and will be in a fairly evenly spaced line. The turbines will be backgrounded mainly by land and the towers and movement of the rotors will be visible in very good (at least 20km) or better visibility, which occurs > 64% of the time in this area. The turbines will be to the south-southeast of this location and would be most noticeable when sunlit against dark land, which could occur only in the late afternoon and evening in the mid-summer months. Assuming excellent visibility and that an observer is being exposed to the change in the view for the first time, the distance to and narrow width of the array is such that the turbines will be noticeable elements in the view and the magnitude of change will be *slight.*

Visual receptors: will be walkers, horse riders and cyclists, motorists on the nearby road and in the car parks, and people who are flying model aeroplanes This location is likely to have a *high* sensitivity to change for walkers, horse riders and cyclists and *high/medium* sensitivity to change for people flying model aeroplanes. For motorists and their passengers on the nearby road they are likely to be moving swiftly or stationary, with oblique, sideways and forward views towards the turbines, and are likely be travelling for the view and other purposes. On this basis, this location is likely to have a *medium* sensitivity to change for these receptors.

Overall effect and significance: for walkers, horse riders and cyclists the high sensitivity combined with the slight magnitude of change would give an overall effect of *moderate*, and for the model aircraft flyers and motorists, the high/medium sensitivity combined with the slight magnitude of change would give an overall effect of *moderate/minor*+, which suggests

that the proposed development would not result in a significant change in the view for receptors at this location.

Viewpoint 15: Barton on Sea

Location: Viewpoint 14 is located on the grassy cliff top above the beach at Barton on Sea looking south eastwards towards the Isle of Wight. It is within the Barton and Milford Coastal Plain landscape character area but not within any landscape designations.

Existing view: This view is typical of views from the cliff tops around Christchurch Bay, where a narrow band of land, consisting of alternating car parks and open grassy areas with benches, separates the urban areas of Highcliffe and Barton-on-Sea from the cliff top and beach below. The promenade that runs along the base of the cliff, to the back of the beach, is visible in this view and provides visitors with a similar but lower level view along the coastline and out to sea. The residential properties (visible in the left of the photograph) face south-southwestwards to make the most of the sea view. In the distance is the Isle of Wight with the cliffs of Totland Bay and Alum Bay, and the distinctive formation of the Needles. From this location, a casual viewer would not be aware that the distant land was a separate island, as it appears to be an extension of the mainland. Even knowing that the distant land is the Isle of Wight, it is difficult to ascertain from this location where the mainland ends and the island begins. For both casual and informed viewers, the focus of the view would tend to be the Needles, or whatever detail in the view was spotlighted by the sunlight, which would depend on the weather and sunlight conditions and so would be forever changing.

Predicted view: The predicted view is illustrated by the wireframe. This shows that all six of the turbines will be visible as almost complete structures with turbines 1, 2 and 3 in a tight cluster, between the lighthouse (white tower) and Hurst Castle.

Magnitude of change: The nearest turbine will be 15.0km away and the furthest turbine will be 16.4km away. The turbines will occupy approximately 1º of the overall view and will be tightly spaced, with the juxtaposition of turbines 1, 2 and likely to result in a slight "stacking" effect (overlap in the rotor movement). The turbines will be backgrounded almost entirely by land and the towers and movement of the rotors will be visible in very good (at least 20km) or better visibility, which occurs > 64% of the time in this area. The turbines will be to the southeast of this location and would be most noticeable when sunlit against dark land, which could occur from mid-day to evening throughout the year. Assuming excellent visibility and that an observer is being exposed to the change in the view for the first time, the distance to and narrow width of the array is such that the turbines will be discernible elements in the view and the magnitude of change will be *slight/negligible.*

Visual receptors: will be nearby residents, visitors to the cliff top parks, beach and promenade, plus motorists on the nearby road and in the car parks. The residents will gain oblique views from the front windows of their properties and views from their frontage. They are likely to be stationary, with oblique views towards the turbines, in an undesignated landscape of high/medium quality and are likely to be looking out of their windows mainly for the view and other purposes. On this basis, this location is likely to have a *high* sensitivity

to change for these receptors. The visitors to the cliff top parks, beach and promenade are likely to be stationary or moving slowly in an undesignated landscape of high/medium quality and are likely to be in this location for the view and also for other purposes (eg walking the dog). On this basis, this location is likely to have a *high/medium* sensitivity to change for these receptors. For motorists and their passengers on the nearby road and in the car park, they are likely to be moving swiftly or stationary, with oblique, sideways and forward views towards the turbines, and are likely be travelling for the view and other purposes. On this basis, this location is likely to have a *medium* sensitivity to change for these receptors.

Overall effect and significance: for residents, the high sensitivity combined with the slight/negligible magnitude of change would give an overall effect of *moderate/minor*+; for visitors the high/medium sensitivity combined with the slight/negligible magnitude of change would give an overall effect of *moderate/minor,* and for motorists and their passengers, the medium sensitivity combined with the slight/negligible magnitude of change would give an overall effect of *minor*+, which suggests that the proposed development would not result in a significant change in the view for these types of receptors at this location.

Viewpoint 16: Brading Down

Location: Viewpoint 16 is located on the grass verge next to the minor road over Brading Down in the far east of the Isle of Wight. The route of the Nunwell Trail long distance footpath follows this road for approximately 500m east and west of this location. It is located within the Chalk Downs landscape type and within the Isle of Wight AONB landscape designation.

Existing view: The road gently winds its way over the undulating, elevated landscape, providing travellers with elevated, intermittent and changing views across the surrounding landscape. The route is bordered on both sides by intermittent hedgerows, ther height depanding upon the time of year which can influence the extent of views from this route. The forested slopes of Knighton East Wood are visible in the centre of the view. Otherwise, the surrounding downland landscape is a patchwork of arable and pastural fields with hedgerow boundaries, and with occasional scrub areas on steeper slopes. In the distance, the more elevated downland is less intensively managed and the very tall TV transmitter masts on Chillerton Down (left of centre) and near Swainstondown Gate (centre of view) are visible on the horizon. The white concrete pillar of the "sea mark" on Ashey Down is visible on the near horizon (right of centre).

Predicted view: The predicted view is illustrated by the wireframe. This shows that only the upper half of the blades of the six turbines will be above the distant horizon, just to the right of the TV transmitter near Swainstondown Gate.

Magnitude of change: The nearest turbine will be 19.2km away and the furthest turbine will be 20.6km away. The turbines will occupy only 1º of the view and will be backgrounded by sky. From here the intermittent sweep of the half blades over the horizon is unlikely to be visible except in excellent visibility, which occurs < 5% of the time in this area and when the

blades are sunlit. As the turbines will be to the west of this location, they could be sunlit from early to late morning at any time of the year. Assuming excellent visibility and that an observer is being exposed to the change in the view for the first time, the distance to and width of the array, plus the limited number of occasions when weather and visibility conditions would permit an observer to catch a glimpse of the blades, is such that the turbines will be barely discernible elements in the view and the magnitude of change will be *negligible.*

Visual receptors: will be walkers, horse riders and cyclists on the Nunwell Trail, and motorists and their passengers on the minor road. The walkers, horse riders and cyclists are likely to be stationary or moving slowly in a nationally designated landscape of high importance and are likely to be on the Nunwell Trail mainly for the views. On this basis, this location is likely to have a *high* sensitivity to change for these receptors. The motorists and their passengers are likely to be moving swiftly, with views towards the turbines but are likely to be on the route for views and for other purposes. On this basis, the location is likely to have a *high/medium* sensitivity to change for these receptors.

Overall effect and significance: for walkers, horse riders and cyclists the high sensitivity combined with the negligible magnitude of change would give an overall effect of *moderate/minor,* and for motorists and their passengers, the high/medium sensitivity combined with the negligible magnitude of change would give an overall effect of *minor+,* which suggests that the proposed development would not result in a significant change in the view for these types of receptors at this location.

Viewpoint 17: Mudeford Quay

Location: Viewpoint 17 is located on the promenade in front of the car park at Mudeford Quay, Christchurch. It is within the Coastal and inter-tidal landscape character area but not within any landscape designations.

Existing view: This is a low level view, typical of views from the promenade and coastal footpath that extends for about 1.5km along the coast from Mudeford Quay to Friars Cliff. The view includes the sweep of Christchurch Bay, with the townships of Christchurch, Highcliffe and Barton on Sea clearly visible on the cliff tops. In the distance is the Isle of Wight, with the cliffs of Totland Bay and Alum Bay, the distinctive formation of the Needles and the white of the cliffs around Compton Bay just visible on the far righthand tip of the island. There is a panoramic information plaque that points to various places and landmarks in the view and coin-operated telescopes to enable visitors to view the distant landmarks. For both casual and informed viewers, the focus of the view would tend to be the Needles, or whatever detail in the view was spotlighted by the sunlight, which would depend on the weather and sunlight conditions and so would be forever changing. To the right of this view (outside the photograph) is a sandy spit that guards the entrance to Christchurch Harbour.

Predicted view: The predicted view is illustrated by the wireframe. This shows that all six turbines will be visible as complete or almost complete structures in a tight cluster on the distant island.

Magnitude of change: The nearest turbine will be 19.9km away and the furthest turbine will be 21.3km away. The turbines will occupy less than 0.5º of the view and will be backgrounded almost entirely by land. The tight clustering of the turbines is likely to result in a "stacking" effect (overlap in the rotor movement). The towers and movement of the rotors will be visible in very good (at least 30km) or better visibility, which occurs > 28% of the time in this area. The turbines will be to the east-southeast of this location and would be most noticeable when sunlit against dark land, which could occur from mid-afternoon to evening throughout the year. Assuming excellent visibility and that an observer is being exposed to the change in the view for the first time, the distance to and narrow width of the array is such that the turbines will be barely discernible elements in the view and the magnitude of change will be *slight/negligible.*

Visual receptors: This is understood to be a popular location with local people and visitors, and this was in evidence during the fieldwork - the car park and coastal footpath were well used, the pub and beach café adjacent to the car park were busy, the Highcliffe sailing club is located in the marina behind the car park, fishing trips for crab and mackerel were being offered, and there is also a static caravan park and beach huts nearby. Accordingly, visual receptors will include walkers on the coast path, visitors to the promenade, beach café and caravan park, plus yachtsmen and fishermen exiting Christchurch Harbour. The walkers and visitors are likely to be stationary or moving slowly, with forward and sideways views towards the turbines, in an undesignated landscape and are likely to be on the coast path and promenade mainly for the view but also for other purposes (eg walking the dog). On this basis, this location is likely to have a *high/medium* sensitivity to change for these receptors. The yachtsmen and fishermen are likely to be stationary (if fishing from the promenade) or moving slowly in an undesignated landscape of medium quality and are likely to be in this location for the view and also for other purposes. On this basis, this location is likely to have a *high/medium* sensitivity to change for these receptors.

Overall effect and significance: for walkers, visitors, yachtsmen and fishermen, the high/medium sensitivity combined with the negligible magnitude of change would give an overall effect of *minor+*, which suggests that the proposed development would not result in a significant change in the view for these types of receptors at this location.

A.1.2 Viewpoint 18: New Forest near A31(T)

Location: Viewpoint 18 is located on a track in the New Forest, just north of the A31(T), between Slufters Inclosure and Ocknell Inclosure. It is similar to the view motorists can obtain from a short section of the nearby A31(T).

Assessment; The wireframe view of the proposals is provided on figure 8.8. It demonstrates clearly that from this location and distance (27.5km to the nearest turbine, 28.4km to the furthest turbine) the turbines will be barely perceptible. No visual impact is assessed.