Chapter 8: Landscape and visual effects

Introduction

- 8.1 Terence O'Rourke was appointed by YEL to update and complete a landscape and visual assessment of the proposed West Wight wind farm by E4environment and Sinclair Knight Merz. The original summer visual assessment was undertaken by E4environment, and was updated with an early spring assessment by Terence O'Rourke. The landscape and seascape assessments were carried out by Terence O'Rourke.
- 8.2 This chapter evaluates the significance of the effects of the wind farm on landscape and visual resources in a 30km study area centred on the site. Full details are set out in the landscape and visual effects technical appendix.

The site and surrounds

- 8.3 The site is in agricultural use, predominately being farmed as arable. The land falls 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. Most hedgerows were removed in the 1960s and 1970s, and today only a few isolated copses remain in the valleys, the largest being Hummet Copse in the centre of the site. The site is not covered by any statutory landscape designations.
- 8.4 The Hamstead Trail long distance footpath, another bridleway and several local footpaths cross the site, in north-south and east-west directions. A 33kV overhead electricity line (wooden pole mounted) cuts across the north-west corner of the site.
- 8.5 The villages of Thorley and Wellow lie to the north of the site, while to the east is open farmland. There is a small quarry to the south, together with the hamlets of Chessell and Shalcombe. There are also several farmsteads and individual properties in the immediate environs, but none within the site boundary.
- 8.6 Further south, and clearly visible from the site, is Compton Down, a prominent and dramatic steep-sided chalk hill that forms part of ridgeline that runs east to 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 designations lie 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, demonstrate the sensitivity of much of the landscape within the study area.

Defining the study area

- 8.7 The study area for the landscape and visual assessment has been defined in accordance with the following:
 - the 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"
 - consultations with the local planning authorities regarding appropriate study area sizes and locations of interest or concern
 - responses from consultees where locations of interest or concern were identified.
- 8.8 A 30km radius study area has been used. Beyond this range it has been determined that potential visual impacts will not be significant. The extent of the study area is shown on figure 8.1.
- 8.9 Table 8.1 lists the references and data sources referred to in this assessment.

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 plan 2004-2009

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

Table 8.1: references and data sources

Consultations and scope of the assessment

- 8.10 The scope of the assessment was defined through consultation with officers from the IoWC, the Isle of Wight Area of Outstanding Natural Beauty Unit, Hampshire Country Council and New Forest District Council. The New Forest National Park and various other stakeholders were also consulted during scoping (see the Scoping and Consultation Technical Appendix). Landscape was scoped as a primary issue. 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)
 - cumulative effects.

Methodology

- 8.11 Wherever possible, the analysis has been objective, the residual effects quantified and any subjective judgements described in clearly defined terms. The nature of landscape and visual assessment means that both objective analysis and subjective professional judgement are required.
- 8.12 The assessment is based on current published guidelines for landscape character assessment and landscape and visual impact assessment. It has considered relevant policies in the Isle of Wight Unitary Development Plan and the IoWC's Supplementary Planning Guidance 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.
- 8.13 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.

Definition and classification of effects on landscape resources

8.14 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

- 8.15 In accordance with the latest guidance on landscape character assessment (Swanwick & LUC 2002), the landscape of the study area has been subdivided into character units. Landscape character comprises 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).
- 8.16 In addition to landscape character, the cultural, historical and intellectual dimensions of landscape influence a broader appreciation. These include our cultural background, awareness of historical and contemporary influences, and personal and professional interests. Appreciation of landscape also varies depending on other factors such as time of day, season, weather conditions and lighting.
- 8.17 This study area has already been characterised in 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. 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 the technical appendix.

Effects on landscape fabric

- 8.18 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.
- 8.19 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.
- 8.20 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.

Landscape designations

- 8.21 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.
- 8.22 The assessment has examined whether the proposed development is likely to significantly affect the ability of designations in the study area to fulfil their purposes, by examining the extent to which the development would affect the special characteristics that underpin the designation. As the development lies outside any designated landscapes, the assessment has examined the extent to which views into and out of the designated areas are a special characteristic or 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.

Determining significance of landscape effects

8.23 An evaluation of landscape importance has been made for each of the character areas in accordance with figure 8.12 appended to the end of this chapter. The guidance set out in figure 8.13 (also appended to the end of this chapter) has been used to determine a measure of magnitude of change in the landscape. The significance of effects on the landscape resource is judged from a combined evaluation of the landscape importance and the magnitude of change. The matrix in figure 5.1 has been used to guide this judgement. The definitions used are listed in table 8.2. They can be applied to potential effects pre-mitigation, and to residual effects post-mitigation.

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.					
Table 8.2: definitions of significance						

Definition and classification of effects on visual amenity

- 8.24 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.
- 8.25 A selection of viewpoints that represent the main landscape units and visual receptor types in the zones of visual influence in the study area has been examined. At each location, the various receptor types were identified, the sensitivity of the location for each receptor type was judged, the magnitude of change in the view that would arise as the result of the proposed development was predicted and the sensitivity and magnitude were combined in order to determine whether the predicted change in the view would be significant for each receptor type.

Visual receptors

- 8.26 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.
- 8.27 A typical range of receptors and the locations and activities that they may be undertaking are provided in table 8.3. There are 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.
- 8.28 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.
- 8.29 Linear route receptors are those travelling along linear routes (eg 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.
- 8.30 Some marine-based receptors are able to move in various directions according to their preferences (eg recreational sea users), whilst others will be confined to routes (eg ferry passengers). Marine-based receptors may remain within a zone (eg inshore waters) or travel along a route (eg 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.

	Receptor type	Typical locations	Activities				
Zone	Residents	Residential properties, farmsteads, settlements and towns	Enjoying views from property curtilage (windows, driveways & gardens)				
	Walkers	Open access areas	For exercise and to enjoy the landscape and views				
	Motorists, walkers, cyclists, horse riders	Scenic vantage points	Stopping a journey to enjoy the view				
	People at leisure (outdoors) eg 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	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	Various speeds, depending on the class of road and driver, with views of surroundings				
	Rail and air travellers	On trains and aeroplanes	Various speeds and with various views				
Marine	Recreational water users (swimmers, surfers, water skiers, sailors, fishermen)	Moving around the inshore waters	Swimming, surfing, skiing, sailing, fishing, with views				
	Passengers, eg ferry and cruise ships	On ferry and shipping routes	Passage-making, with views				
	Commercial shipping and fishing	On shipping routes	Passage-making, limited views				
Table 8.3: visual receptors							

Visual receptor sensitivity

- 8.31 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
 - 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
 - importance of the view/location popularity of location as indicated by designations, inclusion in guidebooks, and the provision of visitor facilities.

8.32 Descriptions of sensitivity are set out in table 8.4.

High	Locations where receptors are stationary (eg occupiers of residential properties or at scenic viewpoints) or moving slowly (eg 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 (eg occupiers of residential properties or at scenic viewpoints) or moving slowly (eg 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 (eg 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 (eg 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 (eg 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.				
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 (eg working or indoor leisure activities).				
Table 8.4: sensitivity of visual receptors					

Magnitude of change

- 8.33 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.
- 8.34 Computer-generated wireframes, 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
 - duration and nature of the effect, eg temporary/permanent, short term/long term, intermittent/continuous, reversible/irreversible.
- 8.35 For each viewpoint location, these factors have been examined, the findings combined and the assessment of magnitude judged as shown in table 8.5.

Very substantial	The proposed development will be a dominant element in the view				
Very substantial/ substantial	The proposed development will be a highly prominent element in the view				
Substantial	The proposed development will be a prominent element in the view				
Substantial/ moderate	The proposed development will be a clearly visible element in the view				
Moderate	The proposed development will be a visible element in the view				
Moderate/ slight	The proposed development will be a clearly noticeable element in the view				
Slight	The proposed development will be a noticeable element in the view				
Slight/ negligible	The proposed development will be a discernible element in the view				
Negligible	The proposed development will be a barely discernible element in the view				
Table 8.5: magnitude of visual change					

Significance of effects on views

- 8.36 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. 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.
- 8.37 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 8.6. 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.
- 8.38 Where overall effects are predicted to be 'major/moderate' or higher, there are likely to be significant changes in the view. Overall effects of 'moderate+' may be significant if experienced over a sustained length of a route or over most of a zone, area or location. Overall effects of 'moderate' 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.

Location	Magnitude of change								
sensitivity	V sub	V sub/	Sub	Sub/	Mod	Mod/	Slight	Slight/	Neg
		sub		mod		slight		neg	
High	Major	Major	Major	Maj/	Maj/	Mod+	Mod	Mod/	Mod/
	++	+		mod+	mod			min+	min
High/ medium	Major	Major	Maj/	Maj/	Mod+	Mod	Mod/	Mod/	Minor
	+		mod+	mod			min+	min	+
Medium	Major	Maj/	Maj/	Mod+	Mod	Mod/	Mod/	Minor	Minor
		mod+	mod			min+	min	+	
Medium/ low	Maj/	Maj/	Mod+	Mod	Mod/	Mod/	Minor	Minor	Min/
	mod+	mod			min+	min	+		neg+
Low	Maj/	Mod+	Mod	Mod/	Mod/	Minor	Minor	Minor/	Min/
	mod			min+	min	+		neg+	neg
Table 8.6: assessment of significance for visual receptors									

Baseline

Introduction

8.39 The purpose of the baseline study is to record the existing landscape so that the effects of the proposals can be assessed. 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.

Topography and hydrology

- 8.40 The topography of the study area is illustrated on figure 8.2.
- The Isle of Wight has a varied topography 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 overlain in places by gravels. The site lies within this area and is characterised by a gently undulating landform with shallow valleys 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.
- 8.42 Several rivers dissect the Island and flow in a generally northerly direction into the Solent. The River Yar flows north from Freshwater and enters the sea at Yarmouth. Newtown River meanders around Newtown, and the River Medina in the centre of the Island rises south of Newport and flows through Newport and Cowes.
- 8.43 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 50m 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.

Vegetation

- 8.45 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. 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 including Swainston and Westover to the east is also significant.
- 8.47 On the mainland, the New Forest is a patchwork of heaths, bogs, pine plantations, 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.

Agriculture

8.48 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 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.

Settlements

- 8.49 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 north-east), Newport (9km east-northeast), Ryde (19km east-north-east), Shanklin (19km east-south-east), and Brighstone (4.5km south-east of the site);
 - *Cities and Towns (mainland)* Southampton (23.5km north), Portsmouth (27km north-east), Bournemouth (24km west), Fareham (23km north-east) Gosport (23.5km north-east) Christchurch (20km west-north-west) and Lymington (9km north-west), Lyndhurst (22.5km north) Totton (19km north):
 - Villages and hamlets (Isle of Wight) those closest to the site include Bouldnor (2.7km north-east), Thorley (1.1km north), Wellow (1km north), Cranmore (2.5km north), Shalfleet (2.6km north-east), Newtown (4.5km north-east), Newbridge (1.7km east-north-east), Calbourne (3km east), Chessell and Shalcombe (1.2km south-south-east);
 - Villages and hamlets (mainland within 20km radius only) Keyhaven (8.5km west-north-west), 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.

Visitor attractions and leisure facilities

- 8.50 Natural attractions on the Island include the sandy beaches, rugged cliffs and warm climate, the coloured sands of Alum Bay and the Needles. Man-made visitor attractions and leisure facilities include boat trips, the coastal paths, water sports, 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.
- 8.51 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 in 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.

Industry and other built development

- 8.52 Industrial activities on the Isle of Wight 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).
- 8.53 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.
- 8.54 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, Christchurch and at Hengistbury Head.

Public rights of way and transport routes

8.55 The study area is well served by a comprehensive network of public rights of way including several long distance trails (the Tennyson Trail, Coastal Path, Hamstead Trail, Freshwater Way, Stenbury Trail, Shepherds Trail, Bembridge Trail, Nunwell Trail, Worsley Trail on the island and on the mainland, the Solent Way and the Itchen Way).

- 8.56 Ferries operate a regular service between the mainland (Lymington, Portsmouth, Southampton and, at certain times of the year, Gosport) and the Isle of Wight (Yarmouth, Cowes and Ryde). These are both foot passenger ferries and car ferries, and catamaran services are also offered from Southampton.
- 8.57 Other major areas of land with public access include 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 sites, the nearest to the site being Newtown Estuary. The study area also has extensive Forestry Commission woodland with public access.

Landscape heritage

8.58 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.

Landscape character

- 8.59 The study area includes the Isle of Wight, south Hampshire (including New Forest District) and the eastern edge of Dorset. The study area landscape has been characterised and described in numerous studies from national to local level. 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 is given in the technical appendix. The assessment of importance is based on the information in the landscape character studies, fieldwork observations carried out for this assessment and professional judgement.
- 8.60 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
 - Area 135: Dorset Heaths.
- 8.61 For the purpose of the assessment more detailed character assessments have been used, although reference has been made to the national character area.

Isle of Wight

- 8.62 The landscape character assessment for the West Wight (West Wight: Landscape Character Assessment, September 2005) divides the area into ten landscape character types:
 - 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.
- 8.63 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 (*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 11 distinct landscape types (settlements are excluded from the assessment), which repeat across the island:
 - 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
 - LCT11: Northern Coastal Cliffs.
- 8.65 It has been determined that no potential impacts will occur to LCT 3, LCT4, LCT8 or LCT9, and therefore no assessment has been made for these areas.
- 8.66 There is synergy between the character types of the two landscape character studies for the island and therefore the assessment for similar character areas has been combined where appropriate.

The Mainland

Christchurch Borough (Dorset)

- 8.67 A landscape character assessment has been undertaken by Macgregor-Smith Landscape Architecture on behalf of Christchurch Borough Council. This is presented in *Christchurch Borough Wide Character Assessment*.
- 8.68 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.
- 8.69 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.
- 8.70 Of the nine rural landscape areas, the ZVI has determined that three could potentially be affected by the proposals: the Avon Flood Plain, Avon River Terrace and Cowards Marsh and Dudmoor Farm. St Catherine Hill-Hurn Forest (although within the ZVI) has not been considered as site analysis determined that there would be no significant impacts.

New Forest District

- 8.71 The part of the study area that is within New Forest District has been characterised in a landscape character assessment undertaken in 1993 by Hampshire County Council, which has since been incorporated into *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, (*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 so the New Forest District Council 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 New Forest District boundary.
- 8.72 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.
- 8.73 Site assessment work has determined that only a limited number of these character areas will potentially be 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.
- 8.74 As a result, there will be few if any views of the turbines from these landscape character areas and the baseline descriptions 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
 - 27: Eastern Forest Heaths.
- 8.75 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 affected, and have therefore been included as part of this assessment.

Landscape designations

- 8.76 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)
 - Isle of Wight Heritage Coast.

New Forest National Park

- 8.77 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 boundary, at its closest at Hurst Castle, it is approximately 6.4km from turbine 1.
- 8.78 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 commoning 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

- a place 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
- a place 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
- a special place, where the wide diversity of communities and organisations work together with care and concern to conserve the Forest for future generations.
- 8.79 For the purposes of this assessment, this vision has been taken as a description of the special characteristics (both current and aspirational) of the New Forest National Park.

Isle of Wight AONB

- 8.80 Approximately 50% (189km²) 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:
 - most of the north-west coast (Hamstead coast and hinterland)
 - parts of the north-east coast (Osborne Coast and the coastline between Fishbourne and Ryde)
 - the south-east coast south of Bembridge and the downland extending westwards towards Newport
 - the south-east coast and hinterland from Shanklin to St Catherine's Point, but excluding Ventnor
 - 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.
- An AONB Partnership has been established by the IoWC 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 renowned, important and treasured landscape, whose special
 qualities are valued, appreciated and understood by the people who live,
 work and visit the area
 - a place where 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
 - where 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"
 - where 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
- where 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
- where 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
- where 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
- where economic benefit has been brought to local communities directly through sustainable tourism and business activities.
- 8.82 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, shutes 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
 - fossilised trees and dinosaur footprints.
- 8.83 The AONB lies approximately 2km west of turbine 1, 1.1km south of turbine 5 and 1.5km southeast of turbine 6.

Isle of Wight Heritage Coast

- Approximately 50% of the coastline of the Isle of Wight is designated as Heritage Coast extending from south of Ventnor along the south-east and south-west coastlines to Freshwater (Tennyson coast) and round to Alum Bay, and along the north-west coast from east of Yarmouth to west of Cowes (Hamstead coast). The land sector of the Heritage Coast is entirely within the AONB.
- 8.85 Heritage Coasts are defined by local authorities in consultation with the Countryside Agency (in England). It is not a statutory designation. 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
- 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.
- 8.86 The Heritage Coast lies approximately 2km west of turbine 1, 1.1km south of turbine 5 and 1.5km southeast of turbine 6.

Visual analysis

Visibility

- 8.87 The 30km and 20km radius zones of visual influence (ZVI) are provided in figures 8.7a and 8.7b.
- 8.88 The ZVIs suggest that the main zones where views may be possible will be:
 - Isle of Wight: in the north-west quarter of the island extending approximately 6km westwards, 4km northwards, 10km eastwards and 2km southwards, plus isolated zones on elevated land to the north-east, east and south-east;
 - 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
 - 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 approximately 20km.

Viewpoint analysis

8.89 Eighteen viewpoint locations were chosen as a representative sample of the main landscape and visual receptors and 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 8.7 and their locations are shown on figure 8.7a and 8.7b. The existing summer and winter/spring views from all 18 viewpoints are shown on figures 8.8 and 8.9.

	Viewpoint	Nearest/ furthest turbine (km)	Receptors	Sensitivity of location		
1	Wellow Millennium Green by B4301	1.0/ 1.3	Residents Public on the green (dog walking and sports)	High High/medium		
2	B3399, west of Shalcombe	1.0/ 1.3	Motorists	Medium		
3	Thorley Church Gate	1.4/ 2.4	Residents Church-goers, cyclists Motorists	High High/medium Medium		
4	Tennyson Trail, Compton Down Golf Course	1.9/ 2.7	Walkers, horse riders, cyclists Golfers	High High/medium		
5	Freshwater Way, near Kings Manor Farm	3.3/ 4.8	Walkers, horse riders, cyclists	High/medium		
6	Bridge over River Yar, Yarmouth	3.5/ 4.8	Motorists	High/medium		
	rai, raimouni	4.6/	Yachtsmen, fishermen Walkers	High/medium		
7	Newtown NNR	5.3	Birdwatchers, sailors	High High/medium		
8	Swainstondown Gate	5.0/ 6.5	Walkers, horse riders, cyclists	High		
9	Tennyson's Monument	5.7/ 6.9	Walkers, horse riders, cyclists	High		
10	Ferry Terminal, Lymington	9.2/ 10.2	Ferry users	Medium		
11	Seafront at Milford on Sea	9.4/ 10.8	Residents Walkers, horse riders, cyclists, visitors Motorists	High High/medium Medium		
12	Northwood,	11.6/	Residents	High/Medium		
	Cowes	12.6	Motorists	Medium		
13	Stone Point, Lepe Country Park	13.0/ 13.5	Visitors to the beach, Country Park, National Park	High		
14	Beaulieu Heath, New Forest	13.2/ 13.8	Walkers, horse riders, cyclists Model aircraft flyers Motorists	High High/medium Medium		
15	Seafront at Barton-on-Sea	15.0/ 16.4	Residents Visitors Motorists	High High/medium Medium		
16	Brading Down	19.2/ 20.6	Walkers, horse riders, cyclists Motorists	High High/medium		
17	Mudeford Quay, Christchurch	19.9/ 21.3	Walkers Visitors Yachtsmen, fishermen	High/medium High/medium High/medium		
18	New Forest near A31(T)	27.5/ 28.5	Walkers	High		
Table 8.7: viewpoints						

Impact assessment

- 8.90 The following elements of the proposals and associated activities have the potential to cause landscape or visual effects.
 - 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 tracks
 - temporary adjustments of existing road network
 - general building infrastructure including noise and dust, and views of large machinery
 - minor loss of agricultural land
 - construction of permanent access roads and crane pads
 - erection of six turbines and 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
 - new landscape planting.

Assessment of effects on landscape resources

Landscape fabric

- 8.91 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.
- 8.92 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.

Landscape character: Isle of Wight

Open Farmland (type 6 West Wight)

- 8.93 The development will be located in this landscape type, assessed as being of medium/high importance.
- 8.94 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 is a significant change in 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.
- 8.95 For landscape units that are outwith 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)
- 8.96 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.
- 8.97 The nearest point 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.
- 8.98 Tennyson Down is located 4 to 9km to the south-west 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.
- 8.99 Further afield, 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.

- 8.100 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)
- 8.101 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)
- 8.102 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, resulting 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)

- 8.103 The ZVI suggests visibility over most of the River Yar and Newtown River Harbours and Creeks landscape units. However, both of these landscapes 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 will not be a defining characteristic but will alter the tranquil and unspoiled character of the estuaries. The magnitude of change is assessed as being medium/small resulting in a moderate adverse impact.
- 8.104 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)

8.105 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 that 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 a moderate adverse impact.

- Rolling Farmland (Type 9 West Wight) and Traditional Enclosed Pasture Land (LCT2 Isle of Wight)
- 8.106 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.
- 8.107 There is also an extensive area of this unit located in the north-east 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.
- 8.108 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)
- 8.109 Several Northern Woodlands landscape units are within zones of visibility according to the ZVI. However, this landscape type is characterised by its densely wooded nature, and there are very few views out. This landscape type is characterised primarily by its component features, and there will be very few views of the wind turbines, so the proposed development will not affect its character.
 - Osborne Coast (LCT10 Isle of Wight)
- 8.110 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)
- 8.111 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.

Landscape character: Mainland - Christchurch District (Dorset)

- Coastal and Inter-tidal Area
- 8.112 Mudeford Quay and Christchurch Bay are characterised by 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).

8.113 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 as small resulting in a moderate/slight impact. From this distance it is considered subjective as to whether the impact is adverse or beneficial.

River Avon Flood Plain Cowards Marsh-Dudmoor and Avon River Terrence 8.114 No impact has been assessed for these character areas.

Landscape character: Mainland - New Forest District (Hampshire)

North West Solent Estates

- 8.115 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.
- 8.116 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 to 18km to the nearest wind turbine. However, the turbines will be noticeable elements in the view only when visibility is good, 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.
- 8.117 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.
- 8.118 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

- 8.119 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.
- 8.120 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 to 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 approximately 9km to the nearest turbine.

- 8.121 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 Isle of Wight means that the proposed development would not become a defining characteristic of the views from this landscape unit.
- 8.122 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

- 8.123 The Barton and Milford Coastal Plain is similar in character to the Christchurch Bay landscape character area. It is characterised by both its component features and the wide, open, low level seaward views from the beaches and the more elevated views from the cliff tops.
- 8.124 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 to 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, particularly when sunlit (mid-afternoon to evening).
- 8.125 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.
- 8.126 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

- 8.127 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.
- 8.128 This landscape type has been assessed as being of high importance. The magnitude of change is assessed as small/negligible resulting in slight impact (subjective).

Eastern Forest Heaths

8.129 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, appears 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 by its component features.

- 8.130 There will be occasional views of the turbines but these will be more than 16km away and partially screened by the intervening vegetation. The turbines will be discernible only in very good visibility and when sunlit (early morning in the summer). 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.
- 8.131 This landscape type has been assessed as being of high importance. The magnitude of change is assessed as small/negligible resulting in slight impact (subjective).

Landscape character: Mainland - Hampshire

Open Coastal plain and Cliff Coastline

8.132 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).

Landscape designations

New Forest National Park

- 8.133 The 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 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.
- 8.134 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).
- 8.135 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 or statutory purposes.

Isle of Wight AONB

- 8.136 The ZVI 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.
- 8.137 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).
- 8.138 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.
- 8.139 In this respect, the development will affect 'Long distance views from ... downlands', one of the special qualities of the AONB listed in the management plan, with implications for one aspect of the 2025 aspirational 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.
- 8.140 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 the AONB, and will not affect the other special qualities or other aspects of the aspirational vision identified in the management plan.
- 8.141 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
- 8.142 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.
- 8.143 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.

Tranquillity

- 8.144 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 is 1km.
- 8.145 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 two to three times (in height and rotor diameter) and over five 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.
- 8.146 Therefore, applying the 1km zone to a modern wind farm may still be a valid approach to identifying zones within which there is the potential for significant effects on tranquillity.
- 8.147 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.
- 8.148 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 wind farm 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.

8.149 Further afield, 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.

Assessment of effects on visual amenity

8.150 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).

Fixed viewpoint receptors

- 8.151 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.
- 8.152 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 south-western coastline, including Brook, Brighstone, Shorwell, Kingston, Chale Green, Chale and Niton
 - settlements along the south-eastern and north-eastern coastlines including Ventnor, Shanklin, Sandown, Bembridge, St Helens, Nettlestone, Ryde and Wootton
 - Newport and most of Cowes
 - 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

- 8.153 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.
- 8.154 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 lower set are unlikely to gain views of the turbines.

- 8.155 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.
- 8.156 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, has 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.
- 8.157 The 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 shown on viewpoint 12. This represents the views of residents in Northwood whose properties face west to south-westwards and who may gain relatively open views towards the site. However, the magnitude of change will be slight which will not result in a significant change in the view.
- 8.158 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 (between approximately 12km and 25km) the turbines will be small and indistinct structures and will not result in a significant change to views for residents in these locations.
- 8.159 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.
- 8.160 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.

- 8.161 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, and provides an open, relatively uninterrupted view towards the site. 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.
- 8.162 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.
- 8.163 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 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.
- 8.164 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

8.165 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.

- 8.166 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 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.
- 8.167 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.
- 8.168 Ningwood, located close to the A3054, is 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, there will be more open views from some properties and the school, 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.
- 8.169 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.
- 8.170 The village of Shalfleet is 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 in properties in the new 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.
- 8.171 Viewpoint 7 is located within the Newtown National Nature Reserve where the magnitude of change is considered to be moderate. 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.
- 8.172 The ZVI suggests that residents in Porchfield will gain views of at least parts of all the turbines. However, high hedgerows along the minor road where most of the properties are located and mature vegetation in the surrounding landscape will screen much of the view from these properties towards the site. Many of the properties are bungalows, so the elevation of the windows will be below the height of the hedgerows. Properties opposite a gap in the hedgerow towards the southern stretch of this road may gain limited views of the turbines, although these will be filtered by woodland and individual trees in the intervening landscape.
- 8.173 These properties are between approximately 6.7km and 6.8km from the nearest turbine. 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.
- 8.174 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.
- 8.175 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 but residents will gain views. 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 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.

- 8.176 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.
- 8.177 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

- 8.178 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.
- 8.179 The ZVI, the viewpoint analysis and field 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

- 8.180 The potential effects on the visual amenity of visitors to indoor attractions within zones of visibility, such as Chessell Pottery and the numerous museums in the study area, will be minimal, due to the mainly indoor nature of these visitor attractions.
- 8.181 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
- 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.
- 8.182 The Compton Down golf course is located on the elevated downs and players can experience 360° views across the Island and out to sea from much of the course. Although the turbines will be prominent in views from the most elevated sections of the golf course, the views will be secondary to the quality of the course for the players. 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.
- 8.183 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.
- 8.184 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.
- 8.185 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 (viewpoint 9), is located at the highest point on Tennyson Down and provides a 360° panorama of the Isle of Wight coastline and hinterland. Due to the distance to the turbines (more than 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.
- 8.186 There is another 360° panoramic view at Limerstone Down, 5.5km south-east of the nearest turbine, which is on the Worsley Trail and on the edge of a zone of visibility. From this local high point, walkers will 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.

- 8.187 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.
- 8.188 A few camping/caravan sites are located within zones of visibility although most are either outwith or on the edge of these zones. The closest of these sites is located within 2km of the nearest turbine on the north-eastern 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.
- 8.189 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.
- 8.190 Hurst Castle is the closest tourist attraction on the mainland. 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.
- 8.191 Calshot Castle is located on Southampton Water, over 18km from the nearest turbine. It is surrounded by the very large ex-hangars 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.
- 8.192 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.
- 8.193 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. View 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 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.

- 8.194 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, the distance to the turbines is such that these visitors would not experience a significant change to their views from this location.
- 8.195 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, they will 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. 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 more than 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.
- 8.196 In conclusion, 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.

Linear route receptors

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

Motorists

- 8.198 The following roads are not located within any zones of visual influence as indicated on the ZVI; A3056, B3328, B3329, B3329, B3323, B3320, B3340, B3329, B3327 and the B3341.
- 8.199 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.
- 8.200 Along sections of this road, potential views will be minimised 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. 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.

- 8.201 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 be no 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, they will not experience significant changes in their views.
- 8.202 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 outwith any zones of visibility. 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 north-westwards and a 2km section for drivers travelling south-eastwards. 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.
- 8.203 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.
- 8.204 The A3020 runs from Cowes southwards to Newport and then south-eastwards through to Shanklin. Most of this A road is outwith 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.
- 8.205 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.

- 8.206 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. Users will not gain any views of the turbines from the wooded areas of the National Park. 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.
- 8.207 The A35 connects with the A337 at Christchurch and travels north-eastwards through Lyndhurst towards Totton. The A326 runs down the length of the Southampton Water, approximately 2km west of the high water mark. Both these roads enter visibility zones as indicated on the ZVI. They both pass through densely vegetated and built up areas which will make views of the turbines few and far between. Where there will be views along these fast 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). This will not result in a significant change in the view for motorists.
- 8.208 Views towards the site along the A31 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 views are currently gained 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 will not result in a significant change in the view for motorists.
- 8.209 The B4301 joins the A3054 east of Yarmouth and runs to Newport with a branch section going towards Chessell from nearby Calbourne. Views 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 or minimise 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 occasional. 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.

- 8.210 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 south-eastwards 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.
- 8.211 There is limited screening along this section as much of the road is lined with low to medium-height 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.
- 8.212 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.
- 8.213 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.
- 8.214 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.
- 8.215 The B3054 runs from Lymington north-eastwards connecting with the Hythe bypass. Most of this road is located within zones of visibility. For road users travelling in a north-easterly direction, the turbines would be behind the drivers' line of sight. For those travelling in a south-westerly direction, the turbines will be generally oblique forward or 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.

- 8.216 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 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.
- 8.217 The B3055 connects with the B3054 at Hatchet Gate, travels westwards into Brockenhurst and links to 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.
- 8.218 The B3056 connects with the B3054 at Beaulieu and travels north-westwards to Lyndhurst. The southern half of this road is outwith 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.
- 8.219 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 suggests, especially as the road passes through built up areas. View 11 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 it would be no greater in views from the B3508. Therefore, the turbines will not result in a significant change to the view for motorists.
- 8.220 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.
- 8.221 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.

- 8.222 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.
- 8.223 Therefore, motorists and passengers may experience significant changes in their views along very short 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.

Rail passengers

- 8.224 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 outwith any zones of visibility as indicated on the ZVI. There are three lines within the mainland study area, one to the oil refinery at Fawley, one from Brockenhurst to Lymington and the main line from London to Christchurch.
- 8.225 The ZVI shows that the railway line to Fawley is outwith any zones of visibility but suggests that there is some potential visibility along the other two lines. The main line to Christchurch has very limited visibility until it approaches Sway and continues south-westwards. 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.
- 8.226 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 south-eastwards 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.

8.227 Therefore, there will be no 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

- 8.228 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 outwith any zones of visibility. The Nunwell Trail and the Bembridge Trail are also largely outwith 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 enters a zone of visibility 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.
- 8.229 The Tennyson Trail runs from Newport to Alum Bay, climbing up the downs and generally following the crest. The ZVI suggests that large sections of this trail are outwith 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.
- 8.230 A long distance coastal path 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 outwith 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.
- 8.231 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, eg 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 runs in a north-south direction from the mouth of the River 8.232 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 to this point and continue to act as a screen once past this point. A more elevated and open view will also be gained where the path rises up over Afton Down. Occasional 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.
- 8.233 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.
- 8.234 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.
- 8.235 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.

- 8.236 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 that primarily follows the roads, except for a bridleway along the River Yar estuary. As a result of screening and the occasional nature of the views from this route, cyclists are unlikely to experience a significant change in their views.
- 8.237 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 on the island but all are outwith 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 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 in the New Forest will experience a significant change in their views.
- 8.238 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.

Ferry users

8.239 Representative views from the Solent have been assessed. Photographs were taken in the early spring 2006 assessment to illustrate a series of sequential views experienced whilst crossing The Solent on the Lymington to Yarmouth ferry. More were taken from the Cowes to Southampton ferry. The wind farm will become a prominent new feature in the views from the Lymington and Yarmouth ferry. 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.

Mitigation measures

- 8.240 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 minimise 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.
- 8.241 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.

8.242 The planting of native tree and shrub species to form a small copse is proposed on the southern edge of the switching station. This is to reduce its visual prominence in the landscape, which is very open and exposed in this location. An alternative location for the switching station was considered next to the existing overhead lines, but this was ruled out due to potential visual impacts to nearby properties.

Residual landscape and visual impacts

8.243 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 earlier as the additional secondary mitigation measures are minor elements within the large-scale proposals. The residual impacts are summarised in tables 8.8 and 8.9.

Significant residual effects	Sensitivity of	Magnitude of	Duration	Significance	Nature	Level of
	receptor	change				certainty
Open Farmland (Type 6)	High	Large	Long Term/ Reversible	Substantial	Adverse	Reasonable
Chalk Downs (Type 1 and LCT1)	High	Medium/ large	Long Term/ Reversible	Substantial	Adverse	Reasonable
Bays (Type3) Soft Cliffs(Type8) Northern	High	Small	Long Term/ Reversible	Moderate	Adverse	Reasonable
Coastal Cliffs(LCT11)						
Estuaries (Type5)	High	Small/ medium	Long Term/ Reversible	Moderate	Adverse	Reasonable
Sattled Formland (Type7)	Medium/	Small	Long Term/ Reversible	Moderate	Adverse	Reasonable
Section 1 difficulty	High					
Rolling Farmland (Type9) Traditional	High	Small/ medium	Long Term/ Reversible	Moderate/Substantial	Adverse	Reasonable
Enclosed Pasture (LCT2)						
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
Regulieu Heath	High	Small/	Long Term/ Reversible	Slight	Subjective	Reasonable
Doubled 110au		negligible				
Eastern Forest Heaths	High	Small/	Long Term/ Reversible	Slight	Subjective	Reasonable
		negligible				
Open Coastal plain and Cliff Coastline	Medium	Medium/ small	Long Term/ Reversible	Slight	Subjective	Reasonable
	Open Farmland (Type 6) Chalk Downs (Type 1 and LCT1) Bays (Type3) Soft Cliffs(Type8) Northern Coastal Cliffs(LCT11) Estuaries (Type5) Settled Farmland (Type7) Rolling Farmland (Type9) Traditional Enclosed Pasture (LCT2) Coastal and Inter-tidal Area North West Solent Estates Lymington and Pennington Coastal Plain Barton and Milford Coastal Plain Beaulieu Heath Eastern Forest Heaths	receptor Open Farmland (Type 6) Chalk Downs (Type 1 and LCT1) Bays (Type3) Soft Cliffs(Type8) Northern Coastal Cliffs(LCT11) Estuaries (Type5) High Settled Farmland (Type7) Rolling Farmland (Type9) Traditional Enclosed Pasture (LCT2) Coastal and Inter-tidal Area Medium North West Solent Estates High Lymington and Pennington Coastal Plain Barton and Milford Coastal Plain Beaulieu Heath High Copen Coastal plain and Cliff Coastline High High High High	Open Farmland (Type 6) High Large Chalk Downs (Type 1 and LCT1) Bays (Type3) Soft Cliffs(Type8) Northern Coastal Cliffs(LCT11) Estuaries (Type5) High Small/ medium/ Bays (Type5) High Small/ medium/ Settled Farmland (Type7) High Small/ medium/ High Rolling Farmland (Type9) Traditional Enclosed Pasture (LCT2) Coastal and Inter-tidal Area Medium Small North West Solent Estates High Small/ medium Lymington and Pennington Coastal Plain High Small/ medium Barton and Milford Coastal Plain Medium Small Beaulieu Heath High Small/ negligible Eastern Forest Heaths Open Coastal plain and Cliff Coastline Medium Medium/ small	Preceptor Change	receptor change Open Farmland (Type 6) High Large Long Term/ Reversible Substantial Chalk Downs (Type 1 and LCT1) High Medium/ large Long Term/ Reversible Substantial Bays (Type3) Soft Cliffs(Type8) Northern High Small Long Term/ Reversible Moderate Coastal Cliffs(LCT11) Medium/ Small/ medium Long Term/ Reversible Moderate Settled Farmland (Type5) High Small Long Term/ Reversible Moderate Rolling Farmland (Type9) Traditional Enclosed Pasture (LCT2) High Small/ medium Long Term/ Reversible Moderate/Substantial North West Solent Estates High Small/ medium Long Term/ Reversible Moderate/Slight Lymington and Pennington Coastal Plain High Small/ medium Long Term/ Reversible Moderate Barton and Milford Coastal Plain Medium Small Long Term/ Reversible Moderate/Slight Beaulieu Heath High Small/ Long Term/ Reversible Slight Eastern Forest Heaths High Small/ Long Term/ Reversible	Preceptor Change Change Change Change Change Chalk Downs (Type I and LCT1) High Medium/ large Long Term/ Reversible Substantial Adverse

Table 8.8: residual effects on landscape resources

	Residual effects	Receptor	Sensitivity of receptor	Magnitude of change	Overall effect	Nature	Level of certainty	Duration
	Viewpoint 1: Wellow	Residents	High	V substantial / substantial	Major+	Significant Adverse	Reasonable	Long term/reversible
	Millennium Green adjacent to B4301	Green users (dog walking and sports)	High / medium	Substantial	Major / moderate+			
ints	Viewpoint 2: B3399 west of Shalcombe	Motorists	Medium	V Substantial	Major/ moderate+	Significant Adverse	Reasonable	Long term/reversible
- viewpoints		Residents	High	Substantial	Major	Significant	Reasonable	Long term/
Visual amenity - <i>vii</i>	Viewpoint 3: Thorley Church Gate	Church goers, cyclists	High / medium		Major/ moderate+	Adverse		reversible
ıl am		Motorists	Medium		Major/ moderate			
Visua	Viewpoint 4: Tennyson Trail on Compton Down Golf	Walkers, Horse riders, cyclists	High	Substantial	Major	Significant Adverse	Reasonable	Long term/reversible
	Course	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 Birdwatchers,	High High/ medium	Moderate	Major/ moderate Moderate+	Significant Adverse	Reasonable	Long term/ reversible
Ivational Ivature Reserve	Sailors	riigii iii didaa					
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 Walkers, Horse riders, cyclists, visitors	High High/ medium	Slight	Moderate Moderate/ minor+	Not Significant	Reasonable	Long term/ reversible
Viewpoint 12: Northwood,	Motorists Residents	Medium High/ medium	Slight	Moderate/ minor+	Not Significant	Reasonable	Long term/
Cowes	Motorists	Medium		Moderate/ minor	Significant		ieversione
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	Walkers, Horse	High	Slight	Moderate	Not	Reasonable	Long term/

	riders, cyclists				Significant		reversible
Heath, New Forest	Model aircraft flyers	High/ medium		Moderate/ minor+			
	Motorists	High/ medium		Moderate/ minor+			
Viewpoint 15: Seafront at	Residents	High	Slight /negligible	Moderate/ minor+	Not Significant	Reasonable	Long term/ reversible
Barton-on-Sea	Visitors	High/ medium		Moderate/ minor			10 versione
	Motorists	Medium		Minor+			
	Walkers, Horse	High	Negligible	Moderate/ minor	Not	Reasonable	Long term/
Viewpoint 16: Brading Down	riders, cyclists				Significant		reversible
	Motorists	High/ medium		Minor+			
	Walkers	High/ medium	Negligible	Minor+	Not	Reasonable	Long term/ reversible
Viewpoint 17: Mudeford Quay, Christchurch	Visitors	High/ medium		Minor+	Significant		Teversiere
	Yachtsmen	High/ medium		Minor+			
	Fishermen						
Viewpoint 18: New Forest near A31(T)	n/a	High	Negligible	no impact	n/a	Reasonable	n/a

Table 8.9: residual effects on visual amenity

Cumulative effects

- 8.244 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 the permitted but not yet built Cheverton Down wind farm, to be located 5.5km to the south-east. It has been based on fieldwork observations and the theoretical (terrain-based) zones of visual influence (ZVIs) for the two wind farms.
- 8.245 The Cheverton Down wind farm 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.
- 8.246 Figure 8.10 shows the theoretical visibility (based on terrain data only) of the three Cheverton Down wind turbines within the study area used for the West Wight wind farm. 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.

Cumulative effects on landscape character

- 8.247 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.
- 8.248 Cumulative effects to other character areas are considered to be limited.

Cumulative effects on views

- 8.249 The three Cheverton Down wind turbines are located on open rolling downland with base heights of between 180m AOD and 195m AOD. Therefore, where the ZVI indicates only two tips visible, this is likely to be only parts of two blades (as opposed to two entire turbines) and where only one 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 north-west where these partial blades will be largely screened by the nearby Brighstone Forest.
- 8.250 Comparing the areas on the ZVI where all three tips may be visible with the ZVI for the West Wight wind turbines, 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.

- 8.251 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 largely obscure views of one or other of the wind farms, and the distances to the two sets of turbines will be 9 to 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 to 15km away so, again, there is unlikely to be a significant cumulative effect on views from these locations.
- 8.252 There will be occasional views of the Cheverton Down wind turbines from the Coastal Path along the south-western coastal cliff tops and of the West Wight wind turbines from a short section of the Coastal Path on the north-western coastline (bridge over the 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.

Summary

- 8.253 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.
- 8.254 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.