

Appendix E

Additional Information to Support Landscape and Visual Impact Assessment

APPENDIX E
PART A
LANDSCAPE AND VISUAL ASSESSMENT METHODOLOGY

A LANDSCAPE AND VISUAL ASSESSMENT METHODOLOGY

General Approach

- A.1 For the purpose of the Environmental Impact Assessment process, a clear distinction is drawn between landscape and visual impacts:
- **Landscape impacts** relate to the impacts of development upon the physical characteristics or components of the landscape, which together form the character of that landscape, e.g. landform, vegetation and buildings.
 - **Visual impacts** relate to the changes arising from development to individual “receptor’s” views of that landscape, e.g. local residents or motorists passing through the area
- A.2 The method of landscape and visual impact assessment adopted for the proposed development has been devised in order to address the specific issues raised by a development of this scale and nature. Primary guidance in this assessment is based upon the general approach advocated in the revised guidelines for Landscape Institute and Institute of Environmental Management and Assessment (2002). *Guidelines for Landscape and Visual Impact Assessment Second Edition*. Further guidance has been derived from The Countryside Agency (2002) *Landscape character Assessment – Guidance for England and Scotland*.

Impact Assessment

- A.3 For the purposes of comparison and in order to establish a ‘control’ scenario against which impacts may be assessed, the baseline conditions are projected forward to produce a ‘no development’ alternative to the proposed development. The key potential impacts of the proposed development upon the baseline landscape and identified receptor groups’ views of that landscape are then identified and assessed. Potential landscape and visual impacts (both positive and negative) are considered at three points in time:
- During construction; and
 - Operation.
- A.4 Landscape planting is proposed to be incorporated into the development. Trees would normally take at least ten years to mature and have an appreciable effect, which is why the future assessment year to be ten years after the first year of operation.
- A.5 Through the assessment of impacts at these three points in time, distinctions may be drawn between temporary, permanent, short term and long-term impacts.
- A.6 Landscape and visual impacts may be further categorised as being either direct impacts i.e. within the study area as defined by the visual envelope, or indirect impacts, e.g. off site visual impact of construction traffic.

Landscape Impact Assessment Methodology

- A.7 Landscape impacts include the direct and indirect impacts of the proposed development upon the landscape elements and features (the components) as well as the impact upon the general landscape character of the surrounding area.
- A.8 Landscape impacts are assessed at three levels:
- firstly in terms of systematic consideration of impact upon the landscape features;

- secondly in terms of aggregate impact upon a Landscape Character Area (LCA); and
- thirdly in terms of the overall long-term impact within the ZVI.

A.9 Landscape: impacts and effects are predicted primarily on the basis of the change to baseline conditions prevalent in 2008. This prediction is essentially a subjective but systematic and structured assessment process.

Landscape Sensitivity

A.10 The sensitivity of the landscape to change is the degree to which a particular LCA or features can accommodate changes or new features without unacceptable detrimental effects to its essential characteristics. Criteria used in this study to determine the effects of potential landscape impacts include:

- The distinctiveness of character of existing landscape;
- Key features of the existing landscape;
- The nature of predicted impacts;
- Degree of change to key features;
- The ability of the landscape to accommodate change (i.e. sensitivity); and
- The significance of change to the landscape resource in local, regional and national context.

A.11 Table A.1 defines those criteria that determine the degree of impact.

Table A.1: Classification of Sensitivity

Description	Sensitivity
Important components or landscape of particularly distinctive character susceptible to relatively small changes	High
Landscape of moderately valued characteristics reasonably tolerant of changes	Medium
A relatively unimportant landscape, the nature of which is potentially tolerant of substantial change	Low

Magnitude of Landscape Impacts

A.12 The magnitude of landscape impact relates to:

- the size, extent or degree of change to landscape character or individual landscape components;
- whether there is a direct impact resulting in the loss of landscape components, or a change beyond the landtake of the scheme having an impact on the character of the area; and
- whether the impact is permanent or temporary.

A.13 Table A.2 presents the criteria used to define the magnitude of landscape impacts as set out in the Landscape Institute and Institute of Environmental Assessment and Management (2002). *Guidelines for Landscape and Visual Impact Assessment 2nd Edition*.

Table A.2: Classification of Magnitude of Landscape Impact

Description	Magnitude
Notable change in landscape characteristics over an extensive area ranging to an intensive change over a more limited area	High
Moderate changes in a localised area	Medium
Virtually imperceptible change in any components	Low

Significance of Landscape Effects

- A.14 The relationship between sensitivity and magnitude of impact allows a definition of the significance of Landscape Effects. Whilst there is some subjectivity in determining the category of effect, the category can broadly be determined by the interaction of the magnitude of impact and the sensitivity of the receptor as shown in Table A.3.

Table A.3: Significance of Landscape Effects

Sensitivity of Receptor	Magnitude of Impact			
	High	Medium	Low	Negligible
High	Severe	Moderate	Moderate/ Low	Negligible
Medium	Moderate	Moderate/ Low	Low	Negligible
Low	Moderate/ Low	Low	Low/Negligible	Negligible

- A.15 It should be noted that the effects of development, which are considered **Moderate/Low** or **Low/Negligible**, are termed Insignificant whereas **Moderate** and **Severe** effects are termed **Significant**. Effects, which are **Beneficial** in terms of enhancing the quality of the landscape, are termed **Positive**.

Table 14A.4: Significance Criteria for Landscape Effects

Significance	Definition
Severe adverse	The proposed scheme would result in effects that Are at a complete variance with the landform, scale and pattern of the landscape; Would permanently degrade, diminish or destroy the integrity of valued characteristic features, elements and/or their setting; Would cause a very high quality landscape to be permanently changed and its quality diminished
Severe / Moderate adverse	The proposed scheme would result in effects that Cannot be fully mitigated and may cumulatively amount to a severe adverse effect; Are at a considerable variance to the landscape degrading the integrity of the landscape;

	Will be substantially damaging to a high quality landscape
Moderate adverse	The proposed scheme would Be out of scale with the landscape or at odds with the local pattern and landform; Will leave an adverse impact on a landscape of recognised quality.
Moderate / Low adverse	The proposed scheme would Not quite fit into the landform and scale of the landscape; Affect an area of recognised landscape character
Neutral	The proposed scheme would Complement the scale, landform and pattern of the landscape; Maintain existing landscape quality
Minor beneficial	The proposed scheme has the potential to Improve the landscape quality and character; Fit in with the scale, landform and pattern of the landscape; Enable the restoration of valued characteristic features partially lost through other land uses
Moderate beneficial	The proposed scheme would have the potential to Fit very well with the landscape character; Improve the quality of the landscape through removal of damage caused by existing land uses.

Visual Assessment Methodology

- A.16 The assessment of effects likely to result from visual impacts is structured by receptors (residents, users of recreational spaces, users of public footpaths, business users and motorists). The theoretical zone of visual influence (ZTV) was predicted through desk based assessment and the use of topographical maps. This ZTV was then fully tested in the field to record the potential views that receptors would have of the development and a selection of viewpoints within the tested ZVT (known as a Zone of Visual Influence (ZVI)) have been assessed. This took into account local obstructions that restricted views to parts of, or the entire development site. Potential receptors are identified through the definition of the ZVI, within which views of the development are likely to be possible. The sensitivity of each receptor is then evaluated as being high, medium or low.
- A.17 Visual impacts result from change to the appearance of the landscape as a result of the development proposals either intruding into, or obstructing existing views, or by their overall impact on visual amenity and character. Where relevant, seasonal differences in effect are identified. The **sensitivity of receptors** relates principally to three factors as below:
- Receptor's function whilst exposed to view (work, recreational activities, resident)
 - Degree of exposure to view; and
 - Period of exposure to view.
- A.18 Based on these factors, residents are considered as highly sensitive, users of recreational spaces and public rights of way as high-medium sensitive and business users and motorists as low sensitive.
- A.19 The criteria used to assess the **magnitude of visual impacts** are as follows:

- Value of existing views;
- Degree of change to existing views;
- The availability and amenity value of the alternative views; and
- Distance of the receptor.

Table A.5: Classification of Sensitive Visual Receptors

Sensitivity of Receptor	
High period of exposure to view. High degree of exposure to view Receptor Function	High
Medium period of exposure to view. Medium degree of exposure to view Receptor Function	Medium
Small period of exposure to view. Small degree of exposure to view. Receptor Function	Low

Table A.6: Classification of Visual Impact Magnitude

Magnitude of Impact	
The proposals form a significant and immediately apparent part of the scene that affects and changes its overall character.	High
The proposals may form a visible and recognisable new element within the overall scene and may be readily noticed by the observer or receptor.	Medium
The proposal constitutes only a minor component of the wider view, which might be missed by the casual observer or receptor. Awareness of the proposals would not have a marked effect on the overall quality of the scene.	Low
Only a very small part of the proposals is discernable and/or they are at such a distance that they are scarcely appreciated. Consequently they have very little effect on the scene.	Negligible

A.20 The criteria are combined to assess the effects that the development would have on the existing baseline visual conditions for a given receptor and define impact thresholds. For example:

- **Severe** (adverse) effects may be defined as highly sensitive receptors exposed to intrusion, obstruction or change of severe magnitude for prolonged periods;
- **Moderate** (adverse) effects may be defined as the result of medium sensitive receptors exposed to intrusion, obstruction or change of a moderate magnitude;

- **Low** (adverse) effects may be defined as the result of receptors of low sensitivity exposed to intrusion, obstruction or change of a slight magnitude for a short period of time; and
- **Negligible** effects may be defined as the result of receptors of low sensitivity exposed to little or no discernible intrusion, obstruction or change.

A.21 Effects may be considered as beneficial (positive) to the landscape as well as adverse. Positive effects may be defined as impacts that are beneficial in terms of enhancing the quality of the receptor’s views.

For the purposes of assessment, the receptor sensitivity and impact magnitude are combined to assess the effects that development would have on the existing baseline visual conditions for a given receptor as shown in the matrix in Table A.7.

Table A.7: Criteria for significance of Visual Effects

Sensitivity of Receptor	Magnitude of Impact			
	High	Medium	Low	Negligible
High	Severe	Moderate	Moderate/ Low	Negligible
Medium	Moderate	Moderate/ Low	Low	Negligible
Low	Moderate/ Low	Low	Low/Negligible	Negligible

A.22 It should be noted that visual effects that are considered **Moderate/Low** through to **Negligible** are termed **Insignificant** whereas **Moderate** and **Severe** effects are termed **Significant**. As with Landscape effects described above effects, which are **Beneficial** in terms of enhancing the quality of receptors views, are termed **Positive**.

APPENDIX E
PART B
RELEVANT PLANNING POLICIES

1.0 TABLE B.1: RELEVANT PLANNING POLICIES

Regional Planning Guidance for the South West 10	
Policy	Description
EN 1	<p><i>'Local authorities and other agencies in their plans, policies and proposals, should:</i></p> <ul style="list-style-type: none"> • <i>provide for the strong protection and enhancement of the region's internationally and nationally important landscape areas and nature conservation sites;</i> • <i>draw up policies for the protection of nature conservation interests of regional and local significance;</i> • <i>encourage the maintenance and enhancement of the biodiversity resources of the region, having particular regard to the targets set out in tables 3, 4 and 5;</i> • <i>promote the restoration and expansion of depleted and vulnerable biodiversity resources in order to reverse fragmentation and create continuous viable habitats;</i> • <i>indicate that the protection and, where possible, enhancement of the landscape and biodiversity should be planned into new development;</i> • <i>have regard to the significant landscape joint character areas of the region set out in this RPG (Map 4) and aim to conserve and enhance local character;</i> • <i>take measures to protect the character of the countryside and the environmental features that contribute towards that character, including the minimisation of light pollution.'</i>

Bath & North East Somerset, Bristol, North Somerset and South Gloucestershire Joint Replacement Structure Plan	
Policy	Description
3	<p><i>'Local Plans will :</i></p> <p><i>identify areas which exhibit common environmental characteristics or elements following the characterisation approach supported by the Countryside Agency and English Nature, and identify in each area those characteristics and elements which make a significant contribution to local character or are of importance;</i></p> <p><i>contain a strategy for the conservation and enhancement of all environmental assets, including landscapes, nature conservation and the built and historic environment, which make a significant contribution to that character and distinctiveness as well as those which are already recognised as of local, national or international importance through prior designation;</i></p> <p><i>contain an urban renaissance strategy for their urban areas, which sets out an integrated approach towards the application of relevant policies and initiatives.'</i></p>
15	<p><i>'At Royal Portbury Dock, the continued expansion of port operations and associated activities will be supported where there are no unacceptable implications for the environment, traffic congestion, Green Belt objectives and purposes, and meeting other development requirements. This will require provision for:</i></p> <ul style="list-style-type: none"> <i>• the effective and efficient use of the land already identified for development, in particular under-used sites;</i> <i>• linking the port with the rail network, including safeguarding the option of re- opening the Bristol- Portishead railway line for freight and passengers; and</i> <i>• rail freight facilities and consideration of additional capacity for moving goods between Royal Portbury Dock and Avonmouth.'</i>

17	<p><i>'Within Local Plans, emphasis will be placed on ensuring the continued conservation and enhancement of the character and distinctiveness of the landscape, and where necessary the restoration or regeneration of degraded landscapes. Where development or land use change occurs and significant landscape impact cannot be avoided or mitigated, the creation of new landscape features or elements which contribute to the character of the locality may be considered.</i></p> <p><i>Local Plans will identify landscape character areas using a common characterisation approach and planning authorities should seek to coordinate policy approaches for such areas across administrative boundaries. Within individual landscape character areas, those features and elements of the landscape which make a significant contribution to the character and distinctiveness of the locality should be identified and appropriate strategies applied to guide the continued conservation and enhancement of that particular area.</i></p> <p><i>Within the Cotswolds and Mendip Hills Areas of Outstanding Natural Beauty the priority will be the conservation of their particular landscape character and distinctiveness, with due regard to the continued economic and social well-being of the area. Major industrial or commercial development within an AONB or which would adversely affect it by virtue of proximity, will not be permitted unless an exception is justified by proven national need and a lack of alternative sites.'</i></p>
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North Somerset Replacement Local Plan	
Policy	Description
GDP3	<p>‘Poorly designed development proposals will be rejected. In determining proposals, where appropriate and relevant, account will be taken of:</p> <ul style="list-style-type: none"> i. whether the proposal safeguards and integrates important features such as areas of ecological, amenity or heritage value, views of public importance across the site and rights of way; ii. whether the siting, levels, density, form, scale, height, massing, detailing, colour and materials respect the characteristics of the site and its surroundings and avoids adverse effects within the site and upon adjoining areas through overlooking or overshadowing or overbearing impact; iii. whether the external areas form an integral part of the design, provide permeability and are of a scale and character appropriate to the development proposed and the surrounding area; iv. whether hard and soft landscaping forms an integral part of the design and incorporates important existing features; v. whether the proposal includes elements to reduce opportunities for crime through design and ensuring clear distinctions between private and public spaces; vi. whether the proposal enables private and emergency vehicular access having regard to the nature of the site, visibility, loading, turning and parking requirements in accordance with the adopted standards; vii. whether the proposal makes provision for convenient, safe and attractive access for pedestrians (including those with physical and sensory disabilities), cyclists and where appropriate for public transport and linkages to wider networks; viii. whether provision is made for the storage of waste and recyclable materials in locations that would not harm local amenity and that would enable collection from the public highway; ix. whether the proposal makes a positive contribution to a high level of energy saving, over and above that required by building regulations, through siting, orientation, built form, renewable energy technologies, design and materials; x. whether provision is made for the protection of users from inclement weather and excessive sun; xi. whether the proposal would prejudice the comprehensive development of a larger site of which it forms part. <p><i>Mixed use schemes in town and district centres will be permitted where the proposed uses are compatible with each other and with adjacent areas.’</i></p>
ECH7	<p>‘Within the Landscape Character Areas, development will be permitted if it will not adversely affect the particular character of the landscape.’</p>

Bristol City Local Plan	
Policy	Description
ME1	<p><i>'Proposals for the utilisation and development of renewable sources of energy will be permitted providing there is no unacceptable impact on:-</i></p> <p><i>(i) The amenity of local residents due to noise or other disturbance;</i></p> <p><i>(ii) Public health and safety;</i></p> <p><i>(iii) The visual quality of important landscape designations;</i></p> <p><i>(iv) The natural environment.'</i></p>
NE9	<p><i>'Historic parks and gardens and other designed landscapes of national and local importance defined on the Proposals Map and described in the Appendix will be protected. Development which would adversely affect the character or appearance of historic landscapes and, in the case of nationally important sites, their settings, will not be permitted.'</i></p>
B2	<p><i>'Development should be designed with regard to the local context. Proposals which would cause unacceptable harm to the character and/or appearance of an area, or to the visual impact of historic buildings, views or landmarks, will not be permitted. In determining applications account will be taken of the following:-</i></p> <p><i>(i) The existing landforms and natural features.</i></p> <p><i>(ii) The scale and proportion of existing buildings, building lines and heights within the street scene;</i></p> <p><i>(iii) The detailed design of the existing buildings where ancillary buildings, extensions and alterations are proposed;</i></p> <p><i>(iv) The retention and enhancement of existing urban spaces, traditional local materials and townscape or historical features which contribute to the character of an area. The creation of townscape features should be considered in relation to their surroundings.'</i></p>
Strategy for the Severn Estuary	
Policy	Description
L1c	<p><i>'Plan and design all new developments including infrastructure and transport so that they conserve and enhance the character of the Severn Estuary landscape and seascape across authority boundaries.'</i></p>