

Figure 45: Viewpoint 15: Easterly view from Callistemon Loop within Ocean Farms, Nilgen - existing view

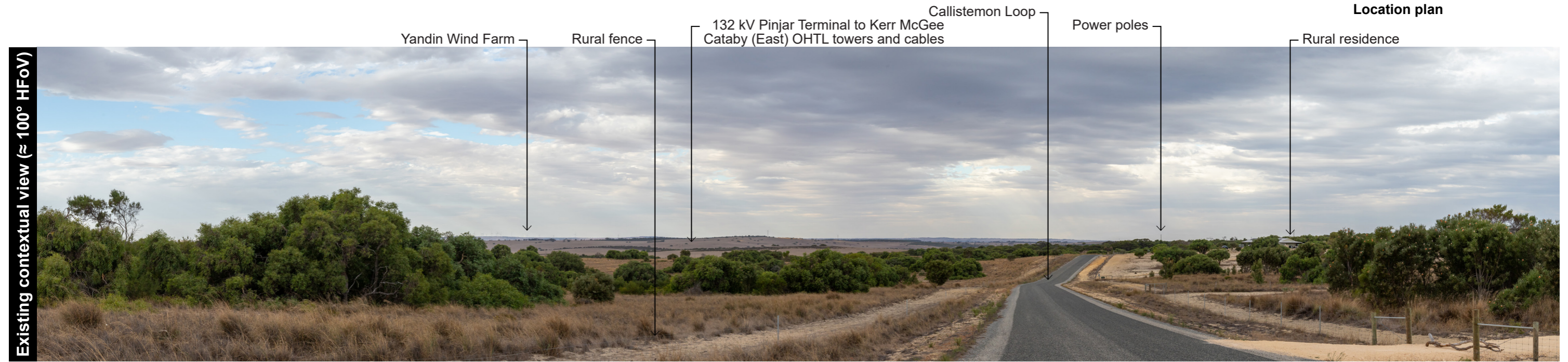
Notes:

Camera: Canon EOS 6D Mark II

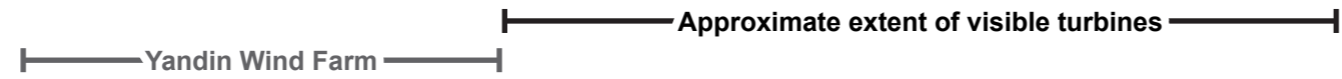
Lens: Sigma 50mm f/1.4 DG JSM lens



Location plan



Existing contextual view ($\approx 100^\circ$ HFoV)



Existing view ($\approx 75^\circ$ HFoV)

Figure 46: Viewpoint 16: Westerly view from Barberton West Road near intersection of Bindoon-Moora Road, Barberton - existing view

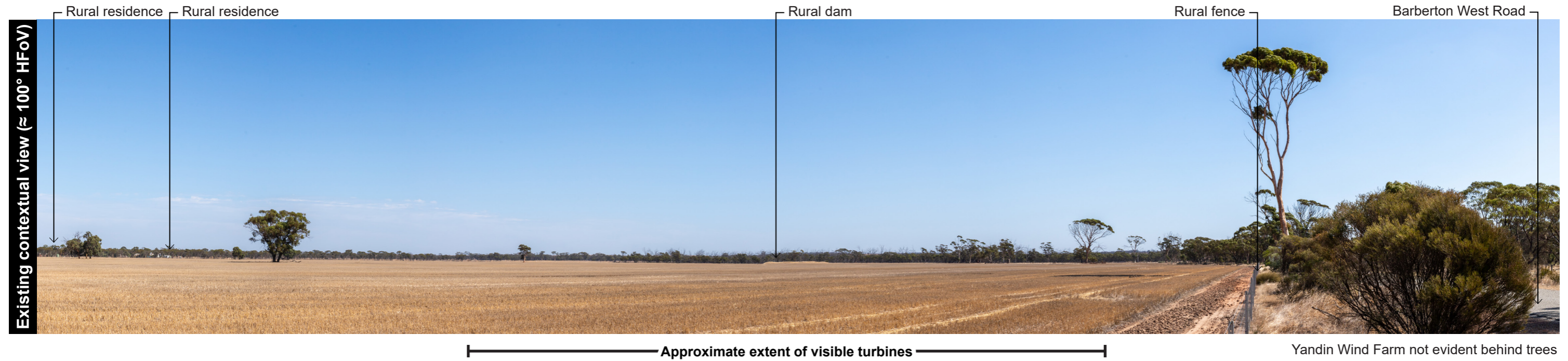
Notes:

Camera: Canon EOS 6D Mark II

Lens: Sigma 50mm f/1.4 DG JSM lens



Key plan



Appendix 3: Policy and guidance review

National

Table A3-1: Review of national guidance relevant to LVIA

Best Practice Guidelines for Implementation of Wind Energy Projects in Australia (Clean Energy Council, 2018)	
<p>The aim of the Guidelines is to describe the environmental, amenity and stakeholder consultation aspects of the planning, approval and operational aspects of wind farms. Consideration of technical/commercial and contractual aspects are also included where the issues are of public interest.</p> <p>The Guidelines do not replace existing energy or environmental planning legislation, policy or regulations at local, state or federal levels but can be used to support these assessments. Project proponents must ensure they are developing their project according to the current legislation, policy and/or regulations relevant to the location of their project.</p>	
Issue/Concern	Purpose/Intent
Attributes of a Best Practice Windfarm	<p>The guidelines identify five key attributes of a Best Practice Wind Farm, the following of which are relevant to the assessment of impacts on landscape and visual values:</p> <p>Socially sustainable</p> <ul style="list-style-type: none"> • The wind farm proponent will actively seek stakeholder participation and support through well-planned, open, inclusive and responsive engagement processes. • The proponent will ensure sound and consistent methodologies are applied to assess and identify the most appropriate siting of the wind farm for landscape, amenity and environmental impacts. <p>Environmentally sustainable</p> <ul style="list-style-type: none"> • The wind farm will be sensitive to the environment. Any significant negative impacts will be avoided or minimised and appropriately managed or offset as required during its development, construction, operation and decommissioning.
Landscape and visual assessment requirements	<p>The existing landscape must be described, and the potential landscape and visual impact of the proposed wind farm assessed and evaluated. A comprehensive landscape assessment:</p> <ul style="list-style-type: none"> • Should describe the landscape and evaluate its capacity for change in relation to the visual impact of the proposed development. • Must always consider visual amenity in the context of the existing environment. • Must consider local community values and the value that the local community puts on landscape character and attributes. <p>The guidelines reference the Wind Farms and Landscape Values National Assessment Framework (Auswind and Australian Council of National Trusts, 2005) - which provides a comprehensive process for assessing, evaluating and managing the visual impacts of wind farms, whilst leaving the actual technical methods, tools and techniques for developers to decide upon.</p>
Future development	As wind farms often have lifespans greater than 20 years, some consideration should also be given to the potential of future dwellings (such

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	as vacant lots upon which a dwelling may be constructed without a planning permit) where required as a result of the planning framework.
Cumulative impacts	Consideration of the cumulative impacts of the wind farm together with other development in the area may also be appropriate although this can be difficult in practice. Cumulative impacts can refer to landscape and visual effect.
Indigenous heritage	Prior to commencement of any project or development that requires ground disturbance or excavation or substantial changes to landscape access and visual amenity, it is important to determine whether the area contains known Aboriginal heritage or has the potential to have heritage values.
Shadow flicker	<p>The proponent will need to assess the predicted duration of shadow flicker (the intermittent shading of the sun by the blades of the wind turbine) at relevant locations.</p> <p>While typically identified as an issue that must be considered at proposed wind farms, only Victoria provides a limit for shadow flicker (30 hours per year – experienced immediately surrounding the area of a dwelling).</p> <p>Consideration of some mitigating effects, such as cloud cover, may also be allowable depending on local guidelines.</p> <p>The common objective of all proponents should be that shadow flicker from wind farms does not detrimentally affect the amenity of nearby landowners.</p>

Draft National Wind Farm Development Guidelines (Environment Protection and Heritage Council, 2010)

Appendix C (“Landscape”) of the ‘Draft National Wind Farm Development Guidelines’ provides guidance to ensure the impacts of wind farms on landscape values are fully understood and clearly reported.

Issue/Concern	Purpose/Intent
Landscape character impacts	Advocates reporting on the anticipated <i>extent</i> to which wind farm development may impact on the existing character of the landscape and its features. In particular, it recommends dividing the study area into “ <i>character units for the purpose of evaluation; and developing strategies to manage and plan for each character unit</i> ”.
Landscape significance impacts	Recommends reporting on the <i>significance</i> of a landscape and clearly outlining which aspects of significance (if any) a wind farm would impact on. The significance of the impact is dependent on the landscape value and sensitivity (i.e., scenic, character, visual and community values) and the anticipated magnitude of change.
Impacts on viewsheds and views	Encourages reporting on the anticipated impact of the wind farm on visual amenity, through representative viewsheds and views (static and dynamic).
Impacts on community values	Advocates “ <i>direct community input</i> ” into the assessment of landscape and visual impacts, through definition of (predominantly subjective) community landscape values. For example, local people often have strong attachment to the outlook from a particular viewpoint, and this knowledge should inform choice of viewpoints for impact assessment.

Cumulative Impacts	Recommends reporting on the cumulative landscape and visual effects resulting from additional changes to the landscape or visual amenity caused by the proposed development in conjunction with other developments (associated with or separate to it). Cumulative impacts may occur where there are no other wind farms in the area, but by virtue of combination with other major infrastructure or large-scale developments (e.g., industrial, urban, large-scale agricultural) and/or direct or indirect landscape changes (e.g., vegetation clearing) which may alter the overall character or values of an area.
Management and mitigation	Management and mitigation refer to recommended actions to reduce anticipated residual impacts. However, the onus should be on the siting, design and layout of the wind farm development, rather than relying on mitigation measures.

State

Table A3-2: Review of state legislation, policy and guidance relevant to LVIA

Environmental Protection Act 1986
Part IV - Environmental Impact Assessment may require the consideration of potential impacts on landscape and visual values in accordance with the relevant Environmental Factor Guidelines (included below).
Environmental Factor Guideline: Landforms (Environmental Protection Authority, 2018)
<ul style="list-style-type: none"> • The environmental objective of the factor Landforms is ‘to maintain the variety and integrity of significant physical landforms so that environmental values are protected’. • Define landforms as ‘the distinctive, recognisable physical features of the earth’s surface having a characteristic shape produced by natural processes. A landform is defined by the combination of its geology (composition) and morphology’. • The guidance is intended for assessment of impacts on potentially significant landforms, which can be determined using the following criteria: <ul style="list-style-type: none"> ○ Variety - The landform is a particularly good or important example of its type. The landform is not well represented over the local, regional or national scale or differs from other examples at these scales, either naturally or as a result of cumulative impacts from existing and reasonably foreseeable activities, developments and land uses. ○ Integrity - The landform is intact, being largely complete or whole and in good condition. ○ Ecological importance - The landform has a distinctive or exclusive role in maintaining existing ecological and physical processes; for example, by providing a unique microclimate, source of water flow, or shade. The landform supports endemic or highly restricted plants or animals. ○ Scientific importance - The landform provides evidence of past ecological processes or is an important geomorphological or geological site. The landform is of recognised scientific interest as a reference site, or an example of where important natural processes are operating. ○ Rarity - The landform is rare or relatively rare, being one of the few of its type at a national, regional or local level. ○ Social importance - The landform supports significant amenity, cultural or heritage values linked to its defining physical features. • The landform does not have to meet all criteria, and may only meet one, to be considered a significant landform.

- Whilst not specifically relevant to the assessment of aesthetic impacts, if significant landforms are identified within the Site, then the assessment of impacts on these specific features should be considered. In addition, the consideration of these attributes within the landscape assessment will be made.

Environmental Factor Guideline: Social Surroundings (Environmental Protection Authority 2023)

- Notes that for the purpose of EIA, amenity values include both visual amenity, and the ability for people to live and recreate within their surroundings without any unreasonable interference with their health, welfare, convenience and comfort.
- Notes that “natural landscapes and views often contribute to visual amenity, such as areas of high heritage, cultural or social significance due to their natural features or scenic quality” and that “amenity values can be highly subjective”.
- The EPA expects proponents to consider and/or design proposals with appropriate distances in mind, informed by recognised published separation distance guidelines to ensure human health and wellbeing, local amenity and aesthetic enjoyment continue.
- Notes that large-scale developments within areas of significant aesthetic value may impact on aesthetic (social) values.

Environmental Factor Guideline: Inland Waters (Environmental Protection Authority, 2018)

- Includes requirement for the consideration of impacts on inland waters with significant cultural and aesthetic values.

State Planning Strategy 2050 (WAPC, 2014)

The State Planning Strategy is the highest order planning document in Western Australia. The State Planning Strategy provides the strategic context for planning and development decisions throughout the State.

The Western Australian Planning Commission’s State Planning Strategy 2050 promotes renewable energy initiatives.

Reference	Relevant planning provisions
Vision – Sustained growth and prosperity	<p>A diverse state; offering a diversity of ecosystems, landscapes, enterprises, people and cultures.</p> <p>In 2050, the diversity of Western Australia’s natural assets and unique landscapes, ecosystems, peoples, enterprises, cultural landscapes and historic heritage places will be celebrated, protected and recognised as an important contributor to sustained prosperity.</p>
Strategic Goal 5 – Conservation	<p>Western Australia’s unique natural environment encompasses pristine and diverse natural areas both onshore and offshore, with world-renowned biodiversity, scenic landscapes, heritage sites, marine and coastal areas and places of cultural significance. The clean and beautiful natural environment is a major contributor to the State’s liveability and attractiveness.</p> <p>South West Australia is a global biodiversity hotspot that includes Mediterranean-type forests, woodlands and scrub eco-regions. The region has highly diverse landscapes and species, and has a wet winter, dry summer Mediterranean climate. It is one of five such regions in the world.</p> <p>Historically, land management practices have led to native vegetation being extensively cleared, with less than 40% remaining in the southwest. It is important that the conservation of this region continues to be achieved.</p> <p>Conservation will increase the resilience of the State’s natural environment by limiting the clearing of native vegetation, maximising natural habitat</p>

	protection and rehabilitation, avoiding development in environmentally sensitive areas, and reducing the fragmentation of vegetation by urban and industrial development
1.3 Tourism	The diverse natural and cultural landscapes of the State offer an array of unique experiences to visitors and communities. Western Australia's environment and landscape character create a unique and attractive holiday destination and ecotourism is one of the State's key tourism markets.
3.1 Spaces and Places	Identifies 'character and amenity' and 'landscape and scenic quality' as factors that contribute to the identity of spaces and places.
3.3 Health and Wellbeing	People are often attracted to spaces and places with iconic landscapes, unique histories, exciting activities or which provide an overall calming influence. These spaces and places offer people inspiration, stress relief, aesthetic values and a sense of spirituality and belonging.
4 Environment	Objective: To conserve biodiversity, achieve resilient ecosystems, protect significant landscapes and manage the State's natural resources in a sustainable manner.

State Planning Framework (WAPC, 2017)

State Planning Policy 1 (SPP 1) is the State Planning Framework, which outlines all the state and regional policies, plans, strategies and guidelines which apply to land use and development in WA.

SPP 1 provides the overall vision and is further articulated and applied by strategies, policies and plans dealing with particular planning issues or regions of the State.

Reference	Relevant planning provisions
General Principles for Land Use Planning and Development	<p>The following principles are derived from the State Planning Strategy 2050 (WAPC, 2014). They form the basis for this Framework and form the underlying principles for all State and regional plans, policies and strategies.</p> <p>Environment Principle: Conserve the State's natural assets through sustainable development.</p> <p>The protection of environmental assets and the wise use and management of resources are essential to encourage more ecologically sustainable land use and development. Planning should contribute to a more sustainable future by:</p> <ul style="list-style-type: none"> • promoting the conservation of ecological systems and the biodiversity they support including ecosystems, habitats, species and genetic diversity. • assisting in the conservation and management of natural resources, including air quality, energy, waterways and water quality, land, agriculture and minerals, to support both environmental quality and sustainable development over the long term. • protecting areas and sites with significant historic, architectural, aesthetic, scientific and cultural values from inappropriate land use and development • adopting a risk-management approach which aims to avoid or minimise environmental degradation and hazards; and preventing environmental problems which might arise as a result of siting incompatible land uses close together.

	Table 5 references the Guidelines for Visual Landscape Planning in Western Australia (discussed further below).
Statement of Planning Policy 2.0 - Environment and natural resources policy (WAPC, 2003)	
SPP 2.0 defines the principles and considerations that represent good and responsible planning in terms of environment and natural resource issues within the framework of the State Planning Strategy.	
Reference	Relevant planning provisions
5.1 General matters	<ul style="list-style-type: none"> • Notes that planning strategies, schemes and decision making should: <ul style="list-style-type: none"> ○ Protect significant natural, Indigenous and cultural features, including sites and features significant as habitats and for their floral, cultural, built, archaeological, ethnographic, geological, geomorphological, visual or wilderness values. ○ Support conservation, protection and management of native remnant vegetation where possible, to enhance soil and land quality, water quality, biodiversity, fauna habitat, landscape, amenity values and ecosystem function.
5.5 Biodiversity	<ul style="list-style-type: none"> • Notes that “Biodiversity is also fundamental to the quality and character of the landscape and in providing recreational opportunities, aesthetic value and cultural identity.”
5.9 Landscape	<ul style="list-style-type: none"> • Notes that “Western Australia has a diversity of high value landscapes and scenic areas, many of which are unique to Australia” and that planning strategies, schemes and decision making should: <ul style="list-style-type: none"> ○ Identify and safeguard landscapes with high geological, geomorphological or ecological values, as well as those of aesthetic, cultural or historical value to the community, and encourage the restoration of those that are degraded. ○ In areas identified in the above, consider the level or capacity of the landscape to absorb new activities and incorporate appropriate planning and building design and siting criteria to ensure that new development is consistent and sensitive to the character and quality of the landscape. ○ Consider the need for a landscape, cultural or visual impact assessment for land use or development proposals that may have a significant impact on sensitive landscapes.
State Planning Policy 2.5 - Rural Planning (WAPC, 2016)	
The purpose of SPP 2.5 is to protect and preserve Western Australia’s rural land assets due to the importance of their economic, natural resource, food production, environmental and landscape values. Ensuring broad compatibility between land uses is essential to delivering this outcome.	
Reference	Relevant planning provisions
Rural landscape values	<ul style="list-style-type: none"> • This policy applies to rural land and rural land uses in Western Australia. • Rural land accommodates significant environmental assets and natural landscape value...which need to be factored into planning for rural areas.
5.10 Managing and improving environmental and	The planning system is well-placed to address environmental and landscape values when land use change is contemplated, to ensure that negative

<p>landscape attributes</p>	<p>impact from development is minimised. Environmental and landscape attributes will be managed and improved by:</p> <ul style="list-style-type: none"> • supporting and promoting private conservation areas within Western Australia in addition to State and local government conservation reserves • supporting the establishment of environmental corridors in strategies and schemes, including connection of State and local reserves and waterways and wetlands within private conservation areas • considering future ownership and management arrangements prior to the zoning of land for conservation purposes • supporting rural living proposals with a conservation theme that result in improved environmental outcomes, where that land is identified as suitable for future rural living subdivision in a strategy or scheme, in accordance with the policy requirements of clauses 5.2 and 5.3. • supporting the inclusion into strategies and schemes of provisions that promote protection of valued landscape and views, as required. • making planning decisions that support the protection of water resources and their dependent environments in order to maintain or improve water quality.
<p>Position Statement: Renewable energy facilities (WAPC, 2020)</p>	
<p>This document outlines the WAPC's requirements to support the consistent consideration and provision of renewable energy facilities within Western Australia. It supersedes <i>Planning Bulletin 67 Guidelines for Wind Farm Development (2004)</i>.</p> <p>The policy identifies assessment measures to facilitate appropriate development of renewable energy facilities. It seeks to ensure these facilities are in areas that minimise potential impact upon the environment, natural landscape and urban areas while maximising energy production returns and operational efficiency.</p>	
<p>Reference</p>	<p>Relevant planning provisions</p>
<p>Policy Objectives</p>	<p>The objectives of this position statement are to:</p> <ul style="list-style-type: none"> • guide the establishment of renewable energy facilities to support the State Energy Transformation Strategy (March 2019). • outline key planning and environmental considerations for the location, siting and design of renewable energy facilities. • promote the consistent consideration and assessment of renewable energy facilities. • facilitate appropriate development of renewable energy facilities while minimising any potential impact upon the environment, natural landscape, and urban areas. • encourage informed public engagement early in the renewable energy facility planning process.
<p>Local planning framework – local planning strategy</p>	<p>The local planning strategy should indicate landscape protection areas that should exclude renewable energy facilities. Where a local government does not have an approved strategy, the subject site may require detailed evaluation as to the landscape qualities as part of the overall planning assessment.</p> <p>For example, areas of high environmental and landscape value may be unsuitable for large scale wind or solar farm development. Visual landscape analysis, including view shed mapping, may be undertaken to enable important views and landscape character to be identified and protected.</p>

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Community consultation	Early consultation with the community and stakeholders by the proponents is encouraged to ensure that the proposal is compatible with existing land uses on and near the site.
Visual and landscape impact (key issue: our emphasis)	<p>The location and siting of a renewable energy facility may require a visual and landscape impact assessment that addresses:</p> <ul style="list-style-type: none"> • landscape significance and sensitivity to change, site earthworks, topography, extent of cut and fill, the extent and type of vegetation, clearing and rehabilitation areas, land use patterns, built form character, public amenity and community values. • likely impact on views including the visibility of the facility using view shed analysis and simulations of views from significant viewing locations including residential areas, major scenic drives and lookouts. • layout of the facility including the number, height, scale, spacing, colour, surface reflectivity and design of components, including any ancillary buildings, signage, access roads, and incidental facilities. • measures proposed to minimise unwanted, unacceptable or adverse visual impacts. • <i>Visual Landscape Planning in Western Australia - A Manual for Evaluation, Assessment, Siting and Design</i> (WAPC, 2007) and the <i>Australian Wind Energy Association and the Australian Council of National Trusts Publication Wind Farms and Landscape Values</i> (2005) provide detailed guidance on visual landscape impact assessments.
Construction Impact	Site disturbance should be minimised during construction through careful siting and measures to address erosion, drainage run-off, flooding, water quality, retention of remnant vegetation, stabilisation of top soil, and weed and disease hygiene vehicle and machinery access and movement.
Decommissioning	A decommissioning program should be separately developed in relation to removal of the facility and any rehabilitation requirements
Planning Bulletin No. 67 - Guidelines for Wind Farm Development (superseded) (WAPC, 2004)	
<p>This Planning Bulletin is intended to provide local government, other relevant approval authorities and wind farm developers with a guide to the planning framework for the balanced assessment of land-based wind farm developments, throughout the State of Western Australia.</p> <p>These guidelines identify the planning issues relevant to wind farm developments and suggests measures to be considered on a case-by-case basis to reduce the impact of wind farm developments.</p> <p>While this document has been superseded by the <i>Position Statement: Renewable energy facilities</i> it includes useful information about key considerations for wind farm development in relation to LVIA so is included here for reference.</p>	
Reference	Relevant planning provisions
Objectives of the Guidelines	<p>The guidelines identify four key objectives, the following of which are relevant to the assessment of impacts on landscape and visual values:</p> <ul style="list-style-type: none"> • Facilitate the development of wind farms in an efficient, cost-effective and <i>environmentally responsible</i> manner that meets community needs; while considering the needs of developers, and State and national imperatives.

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	<ul style="list-style-type: none"> • <i>Minimise disturbance to the environment</i> (including landscape) and loss of public amenity in the establishment, operation, maintenance and decommissioning of wind farms (<i>our emphasis</i>).
Key issues	<p>The following effects are identified as key issues concerning the development of wind farms:</p> <ul style="list-style-type: none"> • Visual impact on landscape. • Other amenity issues, including “shadow flicker”, blade glint and overshadowing.
Site analysis requirements	<p>A site analysis or audit will be required, including plans, photographs and any other material, which describes the site and matters that influence the proposal. Applications for wind farms should include:</p> <ul style="list-style-type: none"> • A context statement for the locality including current planning framework, significant features, sites of cultural significance, characteristics, contours, existing land uses and ownership. • A technical assessment on the suitability of the site...including landscape significance.
Landscape and visual impact assessment requirements	<p>A landscape and visual assessments should be presented using best practice techniques. Visual impact is based on a number of factors which affect the perceived visual quality. The degree to which a wind farm development will impact on the landscape will depend upon:</p> <ul style="list-style-type: none"> • Siting, layout and design of the wind turbines, infrastructure, signage and ancillary facilities, including provision for tourism. • Number, colour, shape, height and surface reflectivity of the towers and blades. • Visibility of the development, having regard to the location, distance from which the development is visible, skyline and view sheds. • Significance and sensitivity of the landscape, having regard to topography, the extent and type of vegetation, natural features, land use patterns, built form character and community values. <p>Where appropriate a landscape and visual impact assessment should be supported by computer visualisation/simulation view shed analysis, static seen area diagram and other modelling data.</p>
Mitigation methods	<p>Methods to ameliorate visual impact include:</p> <ul style="list-style-type: none"> • Ensuring all wind turbines look alike, have a clean, sleek appearance and that the blades rotate in the same direction. • Minimising the number of wind turbines, as appropriate, by using the largest possible model (subject to the visual absorption capabilities and environmental considerations of the site) rather than numerous small ones. • Siting the wind farm, ancillary buildings, access roads and transmission infrastructure to complement the natural landform contours and landform backdrop, including ridgelines. • Ensuring the choice of materials and colour (e.g., off-white and grey for wind turbines, low contrast for roads) for the development complements the skyline and the backdrop of the view sheds. • Minimising removal of vegetation and using advanced planting of vegetation screens as visual buffers where appropriate.

	<ul style="list-style-type: none"> • Ensuring good quality vegetation and landform rehabilitation, on-site and off-site, where appropriate. • Locating wind turbines to reflect landscape and topographical features (e.g., a random pattern may suit a rolling, varied landform and a linear pattern may suit a coastal edge, farm or industrial site). • Avoiding clutter, such as advertisements and apparatus.
Construction impacts	Consideration of impacts on landscape and visual values associated with construction impacts including staging, phasing and freight transportation proposals.
Decommissioning and reinstatement	Consideration of impacts on landscape and visual values associated with decommissioning and reinstatement proposals.
<p>Visual Landscape Planning in Western Australia – A Manual for Evaluation, Assessment, Siting and Design (WAPC, 2007)</p> <p>This manual provides advice to state agencies, local governments, developers and the community on techniques for incorporating visual landscape planning into the planning system.</p> <p>Visual landscape evaluation and visual impact assessment are evolving practices, which are continuing to develop to consider new and emerging issues and techniques. This manual should, therefore, be regarded as a ‘work in progress’. It has been produced as a first step in visual landscape planning and will be used as a guide so that the practices of visual landscape evaluation and visual impact assessment can continue to evolve and mature over time.</p>	
Reference	Relevant planning provisions
State planning framework	<p>The State Planning Strategy states that one of the criteria for plans is to “ensure that significant landscapes are identified and protected” and “that development proposals incorporate measures to retain or enhance landscape elements and vegetation”.</p> <p>State Planning Policy No 2: Environment and Natural Resource Policy elaborates on the importance of protecting and enhancing landscapes by stating that planning strategies, schemes and decision making should:</p> <ul style="list-style-type: none"> • identify and protect landscapes with high natural resource values (such as ecological, aesthetic or geological) and encourage the restoration of degraded landscapes; (<i>our emphasis</i>) • consider the capacity of landscapes to absorb development and the need for careful planning, siting and design of new development in a way which is sensitive to the character of the landscape. • consider the need for a landscape or visual impact assessment for development proposals that may impact upon sensitive landscapes.
Visual impact	This is the tool used to assess the impact of development on the landscape to ensure that development is sympathetic to the landscape character and complies with adopted policies and rules.
Rural landscape character and values	<p>The Manual references the following relevant to the landscape character of the Study Area:</p> <ul style="list-style-type: none"> • Western Australia’s image has been shaped and defined by its rural and remote landscapes. • The Wheatbelt region has a distinct character of broad-acre farming lots with stands of remnant vegetation, as well as shelterbelts of trees to protect the soils from wind and water erosion. • The colours of the agricultural areas over the state vary...from the orange dolerite in the wheat-belt, with the occasional York gums.

	<ul style="list-style-type: none"> • ...rural areas have been somewhat undervalued for their inherent visual, aesthetic character, and landscape quality tends to be overlooked in statutory processes in rural areas, instead the perception of the land has primarily been in terms of economic return. • In recent years there has been some indication that community attitudes toward rural landscapes are changing; with a greater priority being placed on action to address landscape values and changes to rural character...
Visual landscape planning methods	<p>A landscape and visual assessment should be presented using best practice techniques. Visual impact is based on a number of factors which affect the perceived visual quality.</p> <p>The visual landscape management system developed by the Department of Environment and Conservation (DEC) (Appendix 6) has suited the requirements of that agency in broad scale planning and managing its public lands, primarily in natural settings. There has been a call for a visual landscape planning model for private land (consisting of natural, rural and built landscapes) that would complement the DEC system.</p> <p>Western Australia has no single model for visual landscape planning in the context of the current planning system. The Manual provides an effective generic model that is a hybrid amalgam of those that have preceded it.</p> <p>The Manual identifies several broad steps common to most visual landscape planning methodologies and the methods developed for this manual are consistent with these. There are also standard sequential steps for visual impact assessment of development proposals. The process developed for this manual comprises five steps.</p> <ul style="list-style-type: none"> • Step 1: Determine visual management objectives. • Step 2: Describe proposed development. • Step 3: Describe the potential visual impacts. • Step 4: Develop visual management measures. • Step 5: Prepare final recommendations and options for monitoring.

Regional

Table A3-3: Review of key regional policy and guidance relevant to LVIA

Wheatbelt Regional Planning and Infrastructure Framework (WAPC, 2015)	
The <i>Wheatbelt Regional Planning and Infrastructure Framework</i> is a regional strategic planning document that provides an overview of regional planning issues and a basis for ongoing planning and development	
Reference	Purpose / intent
1.6.1 The Wheatbelt's comparative advantage	The framework identifies ' <i>clean air and skies and open space</i> ' as one of the key advantages and positive characteristics of the region.
2.2 Wheatbelt Objectives	The Valued Natural Amenity objective states that 'environmental and landscape values that support the social, cultural and economic development of the region, and are managed for current and future generations'.

<p>5 Valued Natural Amenity</p>	<p>The Valued Natural Amenity objective requires that “environmental and landscape values that support the social, cultural and economic development of the region are managed for current and future generations.”</p> <p>The plan notes that “the region’s diverse natural environment stretches from the species-rich kwongan heathlands along the coast north of Perth, over the forests and woodlands fringing the Perth to Bunbury area, across the expansive broad-acre agricultural land, and to the Great Western Woodlands bordering the Goldfields Esperance region.”</p> <p>Map 6 shows the broad landscape units of the Wheatbelt – as Coastal, Hills, Wheatbelt and Woodlands. There are also several significant rivers in the region, including the Moore River.</p> <p>5.3.1 Landscape notes that Landscape is integral to community perception of the region’s identity, and the Wheatbelt has a variety of compelling landscapes – including its pristine coastal areas, the Darling Scarp, fields of canola or sometimes its clear blue skies. One of the more unusual landscape features of the region is the mobile sand dunes found adjacent to Indian Ocean Drive.</p> <p>The document notes: There is a need to manage the Wheatbelt’s visual landscapes, and the ways in which they are experienced, to protect their valued characteristics. This includes preservation, recognition and promotion of regionally important views through the land use planning system. An initiative to develop and implement a program to identify the region’s valued landscapes and the strategic viewpoints and travel routes associated with them is included in Appendix 1A.</p> <p>5.3.2 Coastal environments acknowledges the coast provides for environmental processes, tourism, recreation and commercial fishing opportunities.</p> <p>Significant to the future of the region’s coastal areas is Indian Ocean Drive. As well as providing a springboard to a range of destinations, including the Jurien Bay Marine Park, the road also offers magnificent views of the Western Australian coast, and untouched hinterlands, most of which is held in conservation estate.</p> <p>5.6 Planning approach for Valued Natural Amenity requires</p> <p>3) Protect and manage the coast for environmental and tourism values</p> <p>5) “Recognise, protect and promote the valued visual characteristics of the Wheatbelt’s urban, rural and natural landscapes”.</p> <p>It is noted that Part B Appendix 1A of the document includes the following planned initiative (noted above):</p> <p>‘Develop and implement a strategy to identify the region’s valued landscapes and the strategic viewpoints and travel routes associated with these.’ However, it is not clear if this has yet been implemented.</p>
<p>RDA Wheatbelt Regional Plan 2013 – 2018 – Version 1 (Regional Development Australia Wheatbelt Inc., 2013)</p>	
<p>The Wheatbelt Regional Plan is a five-year strategic outlook for the Wheatbelt region prepared by Regional Development Australia Wheatbelt Inc. that aims to inform decision makers about appropriate policy for the area and to provide a focus for investment. The plan has been developed through extensive consultation as well as desk top research to ensure that the actions and strategies identified are based on robust evidence.</p>	

This Strategic Regional Plan was and does not necessarily represent the views of the Australian Government, its officers, employees or agents.

Reference	Relevant planning provisions
Regional Priorities and Energy Projects	States that the natural attributes of the region, particularly the coastal strip, make it particularly suitable for renewable energy projects including large scale wind farms.
Landscape Values	<ul style="list-style-type: none"> The natural environment is the main attraction for tourists in the Wheatbelt and includes landscape features such as the Pinnacles and Wave Rock, recreation on the coast, waterways and wildflowers. The natural amenity and heritage of the region is a comparative advantage. There is a growing market for visits to the many wineries, olive groves, orchards, honey producers, etc.

Local

Table A3-4: Review of key local policy and guidance relevant to LVIA

Envision 2029 - Shire of Dandaragan Local Planning Strategy (DPLH, 2020)	
Part 1 – The Strategy	
1. Introduction	
1.3 Planning context	
Shire of Dandaragan Context Plan	Identifies existing wind farm projects in the Shire.
3. Key Issues	
Issue 3: Economy	The Central Coast Sub-region (specifically the Shire of Dandaragan) contains ideal environmental conditions for renewable energy production. The proximity of the Shire to the Perth Metropolitan Region means there may be a captive market for additional energy capacity produced in the Shire.
Issue 6: Physical environment – Landscape protection	The western portion of the Shire is significant at a State level for a combination of reasons, including: its open character, with its low dunes carpeted in low-growing heath, providing extensive views across pristine-appearing landscapes; the occasional elevated flat-topped hills; the great diversity of plant species, which provides an exceptionally colourful display in spring, bringing visitors from around the world; the large, white, mobile dunes near the coast; and ocean vistas that include surf breaking over reefs. The general lack of development visible from major travel routes is unusual, given the Shire's proximity to the Perth Metropolitan area.
4. Planning Direction and Actions	
4.8 Utility	
Energy	8. When assessing proposals for wind farms and other alternative energy infrastructure, the Shire will consider visual landscape issues and other relevant matters set out in the WAPC <i>Position Statement on Renewable Energy Facilities</i> .

4.11 Environment and Natural Resources	
Strategic directions	3. Protect the valued landscape characteristics of the Shire's natural and rural landscapes, as assets to be appreciated by residents and tourists.
Actions	
Landscape	6. Request assistance from the relevant agency to identify significant natural and rural landscape characteristics and views, and measures to protect these, focussing on areas that are prominently visible or accessible from main travel routes including Indian Ocean Drive, Brand Highway and other major roads connecting to coastal settlements.
Part 2 – Background Information & Analysis	
2. State and Regional Planning Context	
WAPC Development Control Policies and Position Statements	
Renewable Energy Facilities Position Statement	Key issues for development of renewable energy projects include land use and planning controls, visual impact on landscapes and other amenity issues, together with a number of environmental considerations including noise. The Shire's rural hinterland provides opportunities for additional wind and solar farm developments, which will be subject to this position statement.
WAPC Planning Bulletins, Manuals, Guidance Documents and Factsheets	
Visual Landscape Planning in Western Australia Manual	The Shire has significant areas of valued landscape character adjacent to the coast and within its rural hinterland. The protection of valued landscape character and views needs to influence land use planning and development. The manual provides guidance on reducing the visual landscape impacts of a number of land uses that occur in the Shire, such as rural living, and on maintaining the character of valued landscapes such as the coast.
5.4 Renewable Energy	
<p>The strategy is generally supportive of renewable energy projects, noting that <i>“Renewable energy production in the Central Coast Sub-region (including the Shire of Dandaragan) continues to be an industry with considerable potential based on conducive environmental characteristics (such as consistent sunlight and coastal winds). The proximity of the Shire to the Perth Metropolitan Region means there is a captive market for additional energy capacity produced in the Shire.”</i> The strategy also outlines several new and major investments in wind and solar facilities, including: Emu Downs Wind Farm (constructed); Emu Downs Solar Photovoltaic site (constructed); Warradarge Wind Farm (constructed); Badgingarra Wind Farm (constructed); Joanna Plains Wind Peaker Project (planned); Dandaragan (Yandin) Wind Farm (constructed); and Solar Farm Moora (underway).</p>	
5.7 Tourism	
<p>Notes that ‘visitor experiences range from enjoying farm scenery, national parks (native flora and fauna, inland and ocean views), bush walks, wildflowers and aquatic activities such as swimming and snorkelling during the summer months, all year-round fishing, scuba diving and windsurfing and specialized activities such as skydiving’.</p>	
6. Land Use	
6.8 Rural Land Zone	
<p>The majority of the Site falls within the Rural Land Zone, which is characterised by... <i>“extensive areas of rural land surrounding the towns and rural living estates. Rural land includes broad area agriculture as well as more intensive horticulture areas, conservation reserves, national parks, Crown land, several basic raw material and exploration sites and other primary production land.”</i></p>	

In addition, it is the intent that the purpose of the Rural zone is to provide for the sustainable use of rural land which...retains the rural character and amenity of the locality within the Shire for future generations. The Shire's objectives and strategies for managing and guiding land use within the Rural Zone include to support other land uses on rural land where it can be adequately demonstrated that the proposed land use will not constrain existing or potential rural land uses

10. Environment and natural resources

10.4 Landscape

10.4.1 Description of character

The Shire occupies three different landscape character areas, the coastal plain, bounded on its inland side by the Gingin Scarp; the higher central area characterised by low ranges and isolated flat-topped hills by the Dandaragan Scarp; and the flatter, elevated terrain of the Dandaragan Plateau.

The prominent features of the low-lying coastal plain include: the coastline, with its long, gently curved beaches punctuated by sandy promontories or low limestone headlands, and the small, estuarine mouth of the Hill River; elevated dune systems parallel to the coastline; large mobile dunes and sand sheets; scattered wetlands in low-lying areas behind the coastal dunes; and gently sloping ridges swathed in the extraordinarily diverse sandplain heath (kwongan) vegetation. Built components in this landscape comprise the small coastal towns, and rural residential uses overlooking Jurien Bay; beyond these there is little development visible, and much of the landscape remains uncleared. As the landscape is devoid of tall trees or shrubs, views are long. Views over the ocean include lines of surf breaking over the reefs that run parallel to the shore.

The Shire's more elevated, central landscape also supports kwongan vegetation, which is an important tourist attraction in the wildflower season, bringing visitors from around the world. Prominent larger plants include banksia trees and scattered, exceptionally tall-trunked zamia palms. The low, flat topped, steep-sided ranges and hills, such as Mount Lesueur, comprise remnants of an earlier plateau. They form distinctive features that abruptly rise from this open, otherwise gently rolling landscape. Unlike the coastal plain, there are some small, surface water courses. Some enter the Hill River, while the remainder drain into wetlands or simply enter underground drainage systems. Extensive portions of this landscape remain uncleared; elsewhere it has been cleared for grazing and grain crops, and there is a large mineral sand mine at the base of the Gingin Scarp near Cataby.

East of the Dandaragan Scarp, a subdued, north-south linear rise in the landscape, lies the Dandaragan Plateau, a landscape that has similarities to the wider wheatbelt of the southwest of WA as most of its original vegetation has been replaced with grain crops and pasture. Unlike landscapes to the west of the scarp, which support very few trees, the roads of the Dandaragan Plateau are frequently lined with tall eucalypts, mainly York gum and marri, while water courses also support trees.

10.4.2 Important features and views

The Shire intends to identify and list those natural and rural landscape characteristics and views that are valued by local residents, the wider community and international tourists, and to develop a strategy to protect these, focussing on areas that are prominently visible from main travel routes, in recognition that the value placed on these landscapes may be the primary reason for people to move to or visit the area.

While this process has not yet been undertaken for the Brand Highway, it has been undertaken for the Indian Ocean Drive in the WAPC's *Indian Ocean Drive Planning Guideline* (WAPC, 2014).

A range of landscapes have been identified based on WAPC's *Visual Landscape Planning in Western Australia – A Manual for Evaluation, Assessment, Siting and Design* (2007) that are likely to occur within the region. While most of these characteristics do not apply to the Site, they may be

found in the wider LVIA Study Area. Landscapes and features that may be relevant due to their likelihood to occur within the Study Area include:

- rock stacks and islands;
- stark, white mobile dunes and sand sheets;
- lakes and wetlands;
- flat-topped peaks and ridges;
- individual or massed plants that stand out from the kwongan or cleared pasture, such as groves of banksias or grass trees;
- the kwongan vegetation in itself, carpeting the rolling landscape.

The Plan also notes the openness of the landscape due to low vegetation heights importance of continuous viewing experiences provided along scenic travel routes of State significance, such as the Indian Ocean Drive and Brand Highway, and their associated roadside rest areas and lookout points. This is particularly relevant during wildflower season and associated with views to the west from the Brand Highway across open Kwongan heath landscapes.

In particular it is noted that the Brand Highway passes through the Site, and there is one minor road stopping area located in close proximity to the Site, which may provide close views toward the Project.

It is noted that no planning guideline or mapping of significant viewing locations is yet available for the Brand Highway.

10.4.3 Protecting valued landscape character

The strategy states that there is a need to address land use changes which may adversely impact on landscape character. The WAPC's *Visual Landscape Planning in Western Australia - A Manual for Evaluation, Assessment, Siting and Design* provides generic guidance in relation to a range of land uses that may adversely impact on valued landscape character, such as for wind farms, power lines and rural residential development. When considering a development application which has the potential to impact on valued landscape character, the Shire will consider:

- the need for roadside development buffers and setbacks;
- roadside revegetation - the extent to which local species are utilised and the potential for vegetation to screen out valued vistas;
- opportunities for landscape features to be located within public open space;
- the sensitive location of building envelopes; and
- the retention of remnant vegetation.

The strategy also states that the Shire will consider specific guidance for each of the three landscape character areas described above, or to portions of the Shire considered most sensitive to land use change. The capacity to absorb land use changes without impacting on valued character needs to be considered in guidance for each type of landscape. Measures to reduce the prominence of development should focus on careful siting and design of new development, with screen planting another option that is less preferred as it can be unreliable in the long term.

10.4.6 Key findings

- The Shire's landscape character is an attraction for tourists, with its unusual flat-topped peaks, limestone pinnacles, and prolific spring wildflowers.
- The low height of vegetation across the Shire's extensive natural areas provides for very long viewing distances, resulting in a landscape that is very sensitive to the impacts of land use changes, due to the visibility of changes.
- There are opportunities to increase public access to the landscape through additional lookouts and trails, for example, and to enhance public enjoyment through improved interpretive information.
- In considering new zoning or development proposals, the Shire can maintain the character of its valued natural landscapes by applying guidance contained in both the WAPC's *Visual*

Landscape Planning in Western Australia - A Manual for Evaluation, Assessment, Siting and Design and the Indian Ocean Drive Planning Guideline.

Shire of Dandaragan Local Planning Scheme No. 7 (DPLH, 2017)

In March 2022, the Shire of Dandaragan resolved to adopt the *Shire of Dandaragan Local Planning Scheme No.7* which has been prepared by the DPLH.

The Site includes areas located within the rural zone and a small area zoned for Public Purposes: Gravel.

3. Zone

3.2. Objectives of the Zones

The objectives of the rural zone are to:

Rural Zone

- (ii) **To provide for a range of rural activities such as broadacre and diversified farming so as to retain the rural character and amenity of the locality, in such a way as to prevent land degradation and further loss of biodiversity.**

Part 3 – Zones and Uses of Land

3.1 Zones

The Site includes areas within the Rural zone.

The objectives of the Rural Zone include to:

- (iii) To protect land from closer development that would detract from the rural character and amenity of the area.
- (iv) To provide for the development of a range of local government approved non-rural uses which accord with the provisions of the Scheme and the local government's policies.

Part 6 – Terms referred to in the scheme

6.2 Land use terms used

Defines a 'wind farm' as: means premises used to generate electricity by wind force and any associated turbine, building or other structure but does not include anemometers or turbines used primarily to supply electricity for a domestic property or for private rural use.

Shire of Dandaragan Council Plan (Shire of Dandaragan, 2024)

The *Shire of Dandaragan Council Plan* notes that the shire “*is characterised by its stunning natural beauty, including pristine beaches along the Indian Ocean coast, fertile agricultural land, and a range of ecosystems from coastal dunes to inland woodlands*” and home to “*some of the most diverse and picturesque landscapes in the state*”.

Envision 2029 – Shire of Dandaragan Economic and Tourism Development Strategy (Shire of Dandaragan, 2020)

The *Envision 2029 – Shire of Dandaragan Economic and Tourism Development Strategy* notes that tourism is important to the shire and that renewable energy projects have more recently contributed to the local economy. Both tourism and renewable energy are identified as key opportunities for the shire.

The tourism market is dominated by drive tourism and leisure visitors, with wildflowers being the biggest attraction in inland parts of the region.

Shire of Dandaragan Local Tourism Planning Strategy (Tourism Western Australia, 2012)

The *Shire of Dandaragan Local Tourism Planning Strategy* identifies the following visitor experiences likely to be experienced within the LVIA Study Area:

- farm scenery
- national parks (native flora and fauna, inland and ocean views)
- bush walks
- wildflowers
- historical buildings.

The strategy also notes that sandy white beaches (which support swimming, snorkelling fishing, scuba diving and windsurfing) and lookout points are abundant within the Shire of Dandaragan.

It also seeks to reinforce Indian Ocean Drive as a tourism corridor linking coastal towns and the Brand Highway as the main transport corridor.

Shire of Gingin Local Planning Strategy (Shire of Gingin, 2012)

The Shire of Gingin Local Planning Strategy acknowledges that the shire contains ‘*an almost pristine rural area and coastline*’ and that the ‘*unique natural attributes of the Shire, including the coastal environment, river environs and diverse and dynamic rural landscapes, are economic assets worthy of management.*’

It also seeks to maintain the visual quality of areas adjacent to townsites and major tourism routes, with particular consideration of the potential visual impact of development of the coastal environs as viewed in particular from Indian Ocean Drive.

Shire of Gingin – Town Planning Scheme No. 9 (DPLH, 2025)

The aims of the *Shire of Gingin –Town Planning Scheme No. 9* (DPLH, 2025) include to:

- enhance and protect Gingin’s unique physical environment as an asset for sustainable and dynamic tourism opportunities
- protect the natural environment and biodiversity while ensuring appropriate development opportunities within the scheme area are realised
- minimise land degradation and vegetation loss through integration of landcare principles within the planning process
- recognise the importance of highways and main roads (Brand Highway and Indian Ocean Drive) as transport corridors ensuring safe and efficient travel with minimised traffic interaction.

Several zone codes also include objectives to maintain and enhance rural character and landscape amenity values.

Shire of Moora Local Planning Scheme No. 4 (DPLH, 2021)

The *Shire of Moora Local Planning Scheme No. 4* seeks to protect and enhance the amenity and rural and natural character of the scheme area, including environmental values, scenic values and natural resources. However, it does not contain any additional relevant specific provisions requiring consideration in the LVIA.

Shire of Moora Local Planning Policy – Renewable Energy Facilities, Associated Transmission and Storage Infrastructure and Future Technologies (Shire of Moora, 2024)

The *Shire of Moora Local Planning Policy – Renewable Energy Facilities, Associated Transmission and Storage Infrastructure and Future Technologies* policy provides a framework for the

assessment, approval, and regulation of renewable energy facilities, transmission and storage networks and future technologies within the Shire of Moora. The policy seeks to ensure that any proposed renewable energy infrastructure projects are developed in a manner that minimises negative impacts on the community and environment, while maximising the long-term benefits to the community and the environment.

The policy objectives include:

- to protect the health, safety, and amenities of the community and the environment
- to provide clear guidelines for the assessment and approval of renewable energy facilities, and related infrastructure projects
- to address and minimise potential impacts, including environmental, visual, landscape, noise and any other relevant factors
- To set out minimum standards and requirements for the development of renewable energy generation projects and their associated influences and impacts on the community and environment.

The policy requires an LVIA to be prepared in accordance with the requirements of the Visual Landscape Planning in Western Australia - A Manual for Evaluation, Assessment, Siting and Design (WAPC, 2007) and the Windfarm and Landscape Values (Australian Wind Energy Association and Australian Council of National Trusts, 2005) noting that the latter is no longer readily available for review.

It also notes regarding transmission line reserves that "it is the developer's responsibility to ensure the order and coordination of infrastructure to avoid loss of visual and situational amenity".

Shire of Victoria Plains Local Planning Strategy (*Planwest, 2012*) and Shire of Victoria Plains Local Planning Strategy Background Report (*Planwest, 2010*)

The *Shire of Victoria Plains Local Planning Strategy* (Planwest, 2012) and associated *Shire of Victoria Plains Local Planning Strategy Background Report* (Planwest, 2010) do not include any relevant requirements relating to the development of renewable energy facilities or the protection and management of landscape and visual amenity values. However, the aims of the *Shire of Victoria Plains Local Planning Scheme No. 5* (DPLH, 2022) include "to safeguard and enhance the character and amenity of the built and natural environment of the local government area." At Section 3.1: Amenity Of Non-Residential Development, it also requires that:

1. The amenity of non-residential development shall be determined in the context of each proposed development and site conditions, but shall generally be in accordance with these principles:
 - (a) the form and scale of the development is to be compatible with surrounding land uses
 - (b) the impacts of the development are to be contained on site and/or suitably managed off-site
 - (e) buildings are to have screening of services and areas for waste management and essential services
 - (f) visual impacts to be minimised by the use of vegetation screening, tree retention and building orientation
 - (g) minimise the use of front fencing, and where required, fencing to be set back to the building line and behind the landscaped area where feasible
 - (h) external lighting designed to minimise light spill and glare on adjoining properties
 - (i) storage of plant and equipment to be screened or remote from public areas, particularly from the street, and provision made on site for a loading bay where the land use requires it

(j) use of 'on building' signage where the building addresses the street, and where 'freestanding' signage is necessary it should either be affixed to a front fence or located adjacent to it at a height that is compatible with the setting.