

Kennett River Tourism Infrastructure Improvement

Landscape and Visual Impact Assessment

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Executive Summary

This Landscape and Visual Impact Assessment (LVIA) has been prepared by SMEC Australia Pty Ltd on behalf of Colac Otway Shire Council. The LVIA will support the Marine and Coastal Act (MACA) Consent application to DELWP and the referral to Commonwealth Department of Agriculture, Water and Environment (DAWE) under the Environment Protection and Biodiversity Act (EPBC) 1999, for the upgrade of Kennett River tourism infrastructure (proposed development), located in Kennett River township, approximately 44 km south-east of the town of Colac, 73 km south-west of Geelong, and approximately 135 km south-west of Melbourne. The Great Ocean Road runs along the eastern edge of the development site.

The purpose of this report is to assess the potential landscape and visual impacts which may arise as a result of the proposed development.

The landscape and visual baseline

This assessment examines the existing landscape and visual conditions of the study area (both physical and statutory) to establish a baseline against which potential impacts of the proposed development can be assessed.

A zone of theoretical visual influence (ZTVI) analysis (Figure 2-2) was undertaken to understand the potential extent of visibility of the GRS and associated infrastructure and to inform the definition of the project study area.

The LVIA study area has been defined as all land within a radius of 1 km from the location of the development area. This area captures the majority of the ZTVI mapping and is considered the zone in which the proposed development would be observable, based upon their physical characteristics.

Relevant planning policies and legislation including Marine and Coastal Policy have been reviewed to understand any specific landscape or visual designations relating to the study area. This has been combined with a desktop study and field assessment to understand the various physical elements that combine to create the landscape and visual character. The Great Ocean Road is listed on the National Heritage List and that a future referral application will be made to Commonwealth Government Department of Agriculture, Water and Environment (DAWE) as per the EPBC Act for heritage impacts.

The baseline assessment identified a total of three distinct landscape character types (LCTs) within the study area, including:

- Coast (LCT 1)
- Town and dwellings (LCT 2)
- Valleys and Hills (LCT 3)

These identified LCTs formed the basis of the landscape impact assessment, with potential landscape impacts arising from the proposed development assessed upon each of these LCTs.

Landscape Impact Assessment Findings

Direct landscape impacts relate to impacts upon landscape character which may occur upon LCTs as a direct result of the presence of the proposed development within an area of a landscape character.

The presence of the proposed elements within LCT3 is not expected to result in a fundamental change in landscape character as the defining characteristics of the landscape (open views to the forested valley and Otway Ranges hillslopes, the coastlines and ocean) will remain intact. The LCT would experience noticeable change due to realignment of road pavement associated to vehicle parking and additional of a turnaround bay. However, these proposed changes would not change the character of the landscape as the proposed change would fit into the current land use of the existing landscape.

Views towards the development area experienced from within LCT1 (coast) and LCT2 (town and dwellings), are typically limited by screening from the existing vegetation, proposed changes situated within existing roads and built elements within the landscape, and screening effect from existing built forms in the township and residences, therefore, minimising the potential impacts upon landscape character within.

Visual Impact Assessment Findings

Anticipated visual impacts, as a result from the development area, have been assessed from 8 representative public viewpoints.

Accordingly, the greatest levels of impact are expected from viewpoints in close proximity to the development area, where the proposed elements such as new amenity block, new kerbs, footpath or increased paved area for car parking will occupy the greatest proportion of the horizontal field of view. These findings are reinforced by the assessment of representative public viewpoints in close proximity to the proposed development, including:

- Viewpoint 2, on the edge of the proposed development (moderate impacts);
- Viewpoint 3, on the edge of the proposed development (moderate impacts); and
- Viewpoint 4, approximately 125m from the development area (minor to moderate or negligible to minor).

The potential for visual impacts lessens with distance from the proposed elements, with the other public viewpoints assessed as only having negligible to minor potential impacts. From these viewpoints, the proposed elements typically appear as smaller elements within the view and therefore exert less influence upon the existing visual character. There is also intervening vegetation screening direct views towards the proposed elements from these locations further away.

Whether or not these impacts are perceived as being adverse, positive, or neutral is considered to be subjective and influenced by the unique perspectives of individual receptors.

Kennett River is a town along the Great Ocean Road experiencing increasing pressures from tourism. Holiday makers are stopping at Kennett River on their journey along the Great Ocean Road. Increased tourism will increase vehicle movement and increased demand of parking space during peak season, therefore, will result in significant visual impact associated to parked vehicles.

However, landscape character and visual impact of additional parked vehicles and increased vehicle movement are not within the scope of the assessment, therefore, will not influence the ratings for visual sensitivity, magnitude and impact on the character of the Kennett River and its scenic quality of landscape.

Overall, the proposed development would create an improved environment for tourism and recreation around the Kennett River for all users, including visitors, temporary holiday residents and local residents. The proposed works would also potentially provide opportunities to enhance the streetscape and public open space quality of the public open space and extending this quality into adjoining streets and public realm.

Terms and Definitions

Abbreviation	Meaning
Development Area / proposed development	The development area is approximately covering 39 square meters areas of the Kennett River Tourism Infrastructure Improvement work
Study Area	Defined as within 1 km of the development area.

Abbreviations and Acronyms

Abbreviation	Meaning
AHD	Australian Height Datum
BMO	Bushfire Management Overlay
COS	Colac Otway Shire Council
DAWE	Department of Agriculture, Water and Environment (Federal)
DELWP	Department of Environment, Land, Water and Planning
DDO	Rural Conservation Zone
EMO	Erosion Management Overlay
EPBC	Environment Protection and Biodiversity Conservation Act 1999
EVC	Ecological Vegetation Classes
GOR	The Great Ocean Road
НО	Heritage Overlay
Km	Kilometre
LCT	Landscape Character Type
LPPF	Local Planning Policy Framework
LSIO	Land Subject to Inundation Overlay
LVIA	Landscape and Visual Impact Assessment
NCO	Neighbourhood Character Overlay
m	Metres
MACA	Marine and Coastal Act
MSS	Municipal Strategic Statement
GRZ1	General Residential Zone – Schedule 1
PCRZ	Public Conservation and Resource Zone
PPRZ	Public Park and Recreation Zone
PUZ7	Public Use Zone
RCZ	Rural Conservation Zone
RDZ1	Road Zone – Category 1
SPPF	State Planning Policy Framework
TZ	Township Zone
VIC	Victoria

ZTVI

Zone of Theoretical Visual Influence

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1 INTRODUCTION

1.1 Project description

The Kennett River Tourism Infrastructure Improvement (the proposed development) is part of the Geelong City Deals Project, funded by the Federal Government. This project is proposed to improve the existing public infrastructure at Kennett River to manage increased tourism associated with the Great Ocean Road. The proposed development comprises the upgrade of the public amenities such as new public toilet, safe pedestrian paths for beach access, new improved public areas, as well as upgrade of car parking areas and road surfacing to manage different types of vehicles in the town. Future opportunity works not part of this assessment include shelters, playgrounds and BBQ facilities for residents and visitors as well as provision of additional vehicle parking and gravel path at Grey River Road. The proposed development will improve the capacity of the town to manage increased tourist numbers, to improve user experience and to improve public safety. The final layout and capacity of the proposed development will be determined during the detailed design stage and be subject to the conditions of the development consent and any other approvals granted.

1.1.1 Site and surrounds

Kennett River township is located within the Colac Otway Shire Council local government area (LGA) and is located approximately 44 km south-east of Colac and 73 km south-west of Geelong, Victoria.

The Kennett River township sits between the forested valley of Otway Ranges, the Great Ocean Road and the coast, in a landscape that is nationally significant. There are two residential areas, one located on the lower hillslope, the other residential area sits hidden on the ridgetop separated by the river and steep vegetated slope and it is not visible from the town.

Foreshore area includes the kiosk/café, river edge, public open space and wetland which provide the focus point of activity for permanent residents, part time holiday residents, sightseers and beachgoers.

Locals streets are characterised by narrow roads extending up the slopes of the valley and do not have shoulders but shared by parked cars and pedestrians. Many of these streets do not have kerbs or footpaths and are unsealed. Traffic volumes are low. Steep topography and winding nature of the street contributes to low speeds environment. Parking is generally informal along grassed verge and there is a vast existing hardstand open space in front of the kiosk extending north towards the river edge.

The majority of the dwellings are located within 350m of the beach. Beach access is via several desire lines for the pedestrian to cross the GOR from various points to meet beach access tracks.

The surrounding land is predominately vegetated forest and the closest National Park is Great Otway National Park, 1km to the west.

Kennett River is located within the Great Ocean Road region. Great Ocean Road divides the beach and the town. The Great Ocean Road runs north-south along the eastern edge of the proposed development area.

1.1.2 Development area

The proposed development site is located in the centre of the Kennett River township. The Kennett River runs along the northern boundary and the southern boundary is bounded by Kennett River Holiday Park and dwellings. Grey River Road travels northeast to reach the development site via Hawdon Avenue before connecting to the Great Ocean Road. (Refer Figure 1-2)

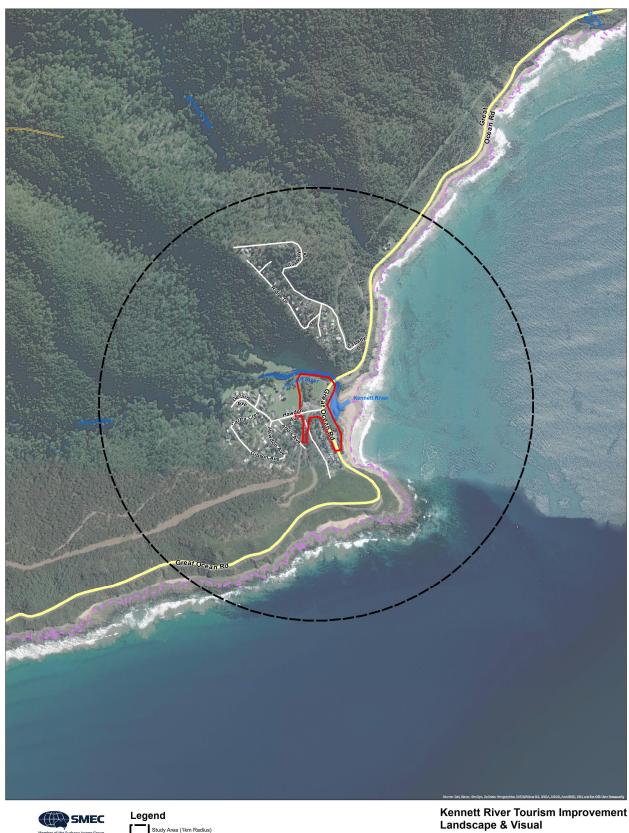
The topography of the development area is generally uniform with an average elevation of 10 m above the Australian Height Datum (AHD). A small wetland is present in the western boundary of the development area.

The location of the project area is shown in Figure 1-2.

An indicative layout of the proposed development has been provided (refer Figure 1-3 & Figure 1-4), in which a "maximum impact" scenario has been assumed at this stage to inform site investigations and studies. Refinement of the layout may occur following the community consultation.



Figure 1-1 Context Plan





Original Scale 1:5,000

Study Area (1km Radius) Project Location LGA

Kennett River Tourism Improvement Landscape & Visual Impact Assessment LVIA Study Area

Drawing No. Sheet 1 of 1

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Figure 1-2 LVIA Study Area

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1.1.3 Indicative Project Layout

The proposed works shall include (refer to Figure 1-3 & Figure 1-4):

- Crushed granite/gravel footpaths
- Concrete path
- Frangible bollards along eastern side of the Great Ocean Road
- Refuge islands at GOR and street lighting at pedestrian crossing
- Paved Parking for private vehicles, mini bus
- Car parking directional signage
- Street lighting
- Linemarking
- Sealed pavement for CFA access to river water
- Bicycle parking and racks
- Timer outdoor furniture (bench seats, bollards)
- Toilet block
- Feature planting
- Revegetation areas

Future opportunity works shall include (not part of the landscape and visual impact assessment):

- Timber shelter
- BBQ facilities
- Playground
- Footpath and additional parking at Grey River Road



Figure 1-3 Indicative Project Layout – Layout Plan 1

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Figure 1-4 Indicative Project Layout – Layout Plan 2

1.1.4 Indicative Project Configuration

Table <u>1</u> below summarises the physical component configurations for the proposed development.

Table 1 Summary of physical description of the proposed project

Туре	Material	Indicative dimension
Amenity Block	Timber, steel and concrete	Approx. 9m (L) x 4.5m (w) x 3.5m (h)
Road	Asphalt	-
Main vehicle parking	Asphalt	-
CFA Vehicle Sealed Access		-
Refuge Islands	Concrete	150mm (h)
Footpath	Exposed Aggregate Concrete/ Granitic Sand	-
Seating & picnic table	Timber /Timber and steel	500mm (h), 1000mm (h)
Bollards	Timber	1000mm (h)
Bike Rack	Stainless Steel	900mm (h)
Linemarking	Thermoplastic white linemarking	-
Raised Pedestrian Crossing	Concrete	745-100mm (h)
Signage	Steel Panel & galv. post	2m (h)

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Street Lighting	Galvanised steel	3.5m (h)
Rainwater Tanks	Steel	2.5m (h)
Tanks (Waste Water Treatment Plant)	Steel	2.2m (h)
Access Track (Waste Water Treatment Plant)	Crushed rocks	-
Wisconsin Mound (Waste Water Treatment)	Grass as ground surface treatment	Up to 1.4m (h)

2 ZONE OF THEORETICAL VISUAL INFLUENCE

2.1 Viewshed Determination and Study Area

The extent of the LVIA study area is determined by the distance at which it is considered that the proposed elements will become either indiscernible to the human eye, or will occupy such a small proportion of the visual field of view that impacts could be considered negligible. This distance is directly related to the size of the objects and the viewing properties of the typical human eye.

Figure 2-1 illustrates the typical vertical field of view properties of the human eye. When standing, the human eye can discern detail within a typical 10° vertical field of view.

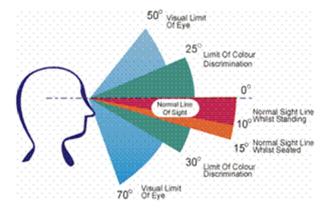


Figure 2-1 Typical vertical field of view of the human eye (Image source: Panero & Zelnik)

A study area is typically defined as the point at which a proposed element occupies <5% of the vertical field of view of the human eye (at a typical 10° detailed vertical field of view when standing, this equates to a viewing angle of 0.5°). For the proposed elements, this equates to a viewing distance of 343.8 m (with a maximum height of 2.0 m for elements such as signage and retaining wall). Beyond this distance, whilst the objects may be visible to the naked eye, it is considered that the magnitude of change within the broader landscape would be imperceptible to the typical viewer (particularly so given the highly modified character of the existing landscape setting).

For the purpose of assessing visual impacts, the Zone of Theoretical Visual Influence (ZTVI) of the proposed development has been used as the basis for the study area (see Figure 1-2) Within the ZTVI mapping, publicly accessible areas have been identified that are near sensitive receptors, representing worst-case viewpoints. Given that the relatively flat topography of the immediate area would not conceal views of the proposal, a broader geographical extent has been included to understand landscape character in a broader sense and to assess potential landscape impacts.

The LVIA study area has therefore been defined as the land within a radius of 1 km from the location of the proposed development (refer to Figure 2-2). This area captures the majority of the ZTVI mapping.

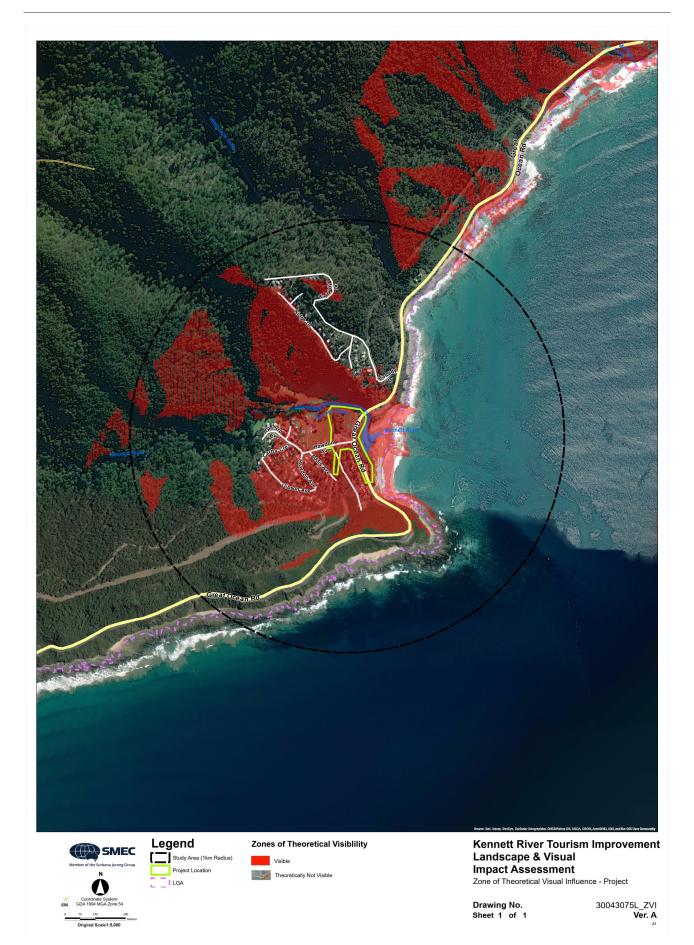


Figure 2-2 ZTVI

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3 LEGISLATION, PLANNING & POLICY CONTEXT

3.1 Legislation, Planning & Policy context

This section summarises the key planning designations, policies and guidance relating to landscape and visual amenity within the LVIA study area at the Federal, State and Local level.

The emphasis of this assessment is to identify elements outlined within legislation, policy and planning documents relevant to the landscape and visual character and identity of the study area. Accordingly, this section describes key designations and issues noted in policy that are *directly* relevant to landscape and visual amenity values as well as those that are considered to be *indirectly* relevant to landscape and visual amenity to a significant degree. Although many of the designations and policies do not strictly relate to maintaining and enhancing landscape character and visual amenity, their intentions potentially influence and affect the landscape and visual resources within the study area. The relevant designations, policies and guidelines are discussed below.

The discussion of relevance to the current assessment considers the following key issues:

- Whether the purpose of the designation is related to the protection/management of landscape and/or visual values
- Whether the proposed development has the potential to directly or indirectly affect the identified landscape/visual values. Depending on the nature of the specific values the extent of this influence may be affected by factors such as proximity, the presence of intervening landform that may restrict visibility, levels of use etc. It is noted that whether a designation falls inside or outside of the project study area is not of primary relevance to the consideration of potential for landscape/visual impacts since the visibility of proposed development components may extend beyond this boundary; hence the establishment of a distinct LVIA study area as described previously.

3.2 Federal Legislation

3.2.1 Environment Protection and Biodiversity Conservation Act 1999

The *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act) provides a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places — defined in the EPBC Act as matters of national environmental significance.

The objectives of the EPBC Act are to:

- Provide for the protection of the environment, especially matters of national environmental significance
- Conserve Australian biodiversity
- Provide a streamlined national environmental assessment and approvals process
- Enhance the protection and management of important natural and cultural places
- Control the international movement of plants and animals (wildlife), wildlife specimens and products made or derived from wildlife
- Promote ecologically sustainable development through the conservation and ecologically sustainable use of natural resources
- Recognise the role of Indigenous people in the conservation and ecologically sustainable use of Australia's biodiversity
- Promote the use of Indigenous peoples' knowledge of biodiversity with the involvement of, and in cooperation with, the owners of the knowledge.

3.2.2 National Heritage List (Place ID-105875)

The Great Ocean Road and its scenic environs road from Torquay to Allansford has been recognised by the Australian Heritage Council as a place of outstanding national heritage significance on 7 April 2011.

The GOR is considered within the subcategory of 'scenic journey' within the broad class of 'routes of human movement'. Particular characteristics typical of this subcategory which are demonstrated by the GOR are as follows:

- A curvilinear route with changing topography and roadside vegetation that allow diverse scenery experiences.
- A structured form to enhance scenic viewing by large numbers of travellers (rather than encourage through traffic) such as a narrow road with numerous scenic view point pullovers.
- Visual access to clearly defined natural and cultural landscapes such as villages, towns, hamlets, rural grazing landscapes, plantations, forests, woodlands, coastal heaths, wetlands, coastal cliffs, rivers and sea.
- Unobtrusive engineered road works such as road cuts, drains and retaining walls permitting a natural aesthetic to dominate.

3.3 State Legislation

3.3.1 Marine and Coastal Policy 2020

In March 2020, the Policy developed by Victorian Marine and Coastal Council, came into operation, therefore superseding parts of *The Victorian Coastal Strategy 2014*.

- 3.1 Protect and seek to enhance the values and characteristics that contribute to natural features and landscapes (including seascapes) in the marine and coastal environment, including by managing cumulative effects.
- 3.2 Maintain important public visual corridors on public land associated with significant landscapes (including seascapes) in the marine and coastal environment (including views from within the landscapes and views of the landscapes).

3.3.2 Victorian Coastal Strategy 2014

Established under the Coastal Management Act 1995, The Victorian Coastal Strategy 2014 set the long-term vision and framework for how to manage the coast, guided by the Hierarchy of Principles, policies and actions

The Principles are:

- Principle 1: Ensure protection of significant environmental and cultural values.
- Principle 2: Undertake integrated planning and provide clear direction for the future
- Principle 3: Ensure the sustainable use of natural coastal resources
- Principle 4: Ensure development on the coast is located within existing, modified and resilient environments where the demand for development is evident and any impacts can be managed sustainably

3.3.3 Siting and Design Guidelines for Structures on the Victorian Coast – 2020

The Siting and Design Guidelines for Structures on the Victorian Coast provide further details and examples for how the policies as set out in Marine and Coastal Policy 2020 apply. They provide a set of fundamental considerations that underpin best practice for future use and development of structures and facilities on the Victorian coast. They outline "Good design is informed by its location and responds to site-specific environmental, social and cultural conditions. Every site has a unique nature and it is important to understand the surrounding environment and character through a thorough site analysis." and these guidelines are structured around 15 fundamentals that the design of every structure. Four of the fundamentals are particularly relevance to landscape and visual values of place and their site and design considerations that apply:

- Views
 - Minimise intrusions into public views of the natural environment.
 - Retain important public views to and from the water or along the coast.
 - Enrich and frame existing public views to and from the coast.
 - Locate structures so that they are visually unobtrusive from public areas of beach, foreshore and the water.
 - Minimise and group vertical elements (poles, signs, communications towers).
- Public Open Space
 - Create a clear sense of arrival, and pedestrian routes that provide a sequence of visual and spatial experiences.
 - Set carparking back as far as possible from the shoreline.
 - Encourage off-site carparking with minimal on-site arrangements for service, emergency and drop-off access.
 - Identify and provide for user groups in inter-related spaces.
 - Optimise compatible activities and inter-activity relationships.
 - Locate furniture, signage and other landscape elements so they complement circulation and interconnectivity patterns.
- Local Character and Sense of Place
 - Consider the distinctive environmental, social and cultural features contributing to the character of place (geology, ecology and architecture).
 - Design structures to fit and blend with the surrounding character and landscape.
 - Avoid extreme contrasts in design, scale and shape.
 - Avoid visual prominence in highly visible locations.
- Heritage
 - Identify and protect heritage places.
 - Reflect local histories and narrative.
 - Consider appropriate, adaptive re-uses where heritage places are no longer required for their original purpose.
 - Avoid dominate structures that are not sympathetic to local heritage or character.

3.3.4 Great Ocean Road Environs Protection Act 2020

Under Part 3 - Great Ocean Road coast and parks protection principles are set out as below:

- General and economic principles
 - (1) The amenity and visitor experience of the Great Ocean Road coast and parks, including its natural features, character and appearance, should be protected and enhanced for the benefit of the whole community.
 - (2) A holistic approach to the management of the Great Ocean Road coast and parks should be adopted with integrated planning, aligned decision-making and coordinated implementation of planning across all responsible entities.

- (3) Decision-making should be based on the effective integration of environmental, cultural, social and economic considerations.
- (4) Protecting the environment and attracting sustainable investment should be a responsibility shared by all levels of government, industry, business and communities.
- (5) Each generation should ensure that the environmental, social, cultural and economic benefits that have been acquired are maintained or enhanced for the benefit of future generations.
- Aboriginal inclusion principles
 - (1) Aboriginal cultural values, practices, heritage and knowledge should be acknowledged, respected, protected and promoted.
 - (2) The intrinsic connection of the traditional owners to Country should be acknowledged through partnership and involvement in policy development, planning, and decision-making for public land management.
 - (3) Traditional owners should be involved in the integration of their ecological knowledge and land management practices into the management of the Great Ocean Road coast and parks.
- Environmental principles
 - (1) Natural, cultural and ecological values should be protected, and cumulative impacts on the environment should be considered in decision-making.
 - (2) Decision makers should take into account evidence about climate change risks to avoid, so far as possible, serious or irreversible damage resulting from climate change.
 - (3) If there are threats of serious or irreversible damage to the environment, a lack of full scientific certainty should not be used as a reason for postponing measures to prevent or minimise those threats.
 - (4) There should be a net gain for the environment arising out of any individual change in land use.
- Social principles
 - (1) The heritage of the Great Ocean Road and post-European settlement communities should be recognised, protected and promoted.
 - (2) Management and development of the Great Ocean Road coast and parks should protect and improve community access, use and enjoyment, and allow for multiple compatible uses of public open spaces that are within the environmental carrying capacity of those spaces.
 - (3) Community consultation and participation should play an essential and effective role in the protection, improvement and promotion of the Great Ocean Road coast and parks.

3.3.5 Great Ocean Road Action Plan

The Great Ocean Road Action Plan is the Victorian Government's response to the GOR Taskforce Co-Chairs Report recommended reforms to management arrangements of the Great Ocean Road, its land and seascapes.

The Action Plan is guided by five objectives:

- Protect the ecological and landscape integrity of coastal and marine environments
- Increase Traditional Owner inclusion
- Protect distinctive areas and landscapes
- Grow the local, state and national visitation economies
- Modernise governance

The Plan does not include any input or strategic advice which relates to the landscape and visual assessment for this project.

3.3.6 Heritage Act 2017

The Great Ocean Road has been listed on the Victorian Heritage Register (Place ID - H2261) on 28 June 2013.

In particular relevance to landscape and visual values, the GOR is considered in:

- Criterion E Importance in exhibiting particular aesthetic characteristics
- Criterion G Strong or special association with a particular community or cultural group for social, cultural or spiritual reasons. This includes the significance of a place to Indigenous peoples as part of their continuing and developing cultural traditions

3.3.7 State Planning Policy Framework

The *State Planning Policy Framework* (SPPF) is a dynamic document that informs planning and responsible authorities about the planning policies that need to be taken into account when planning in their respective areas.

Of particular relevance to the development area are the clauses covering Environment and Landscape Values (VPP 12) and Built Environment and Heritage (VPP 15). A summary of those aspects of the SPPF with direct reference to landscape and visual issues associated with the project are discussed within Table 2

Table 2 State Planning Policy Framework relevant to LVIA

Clause	Relevance to landscape & visual values of the project
12.05-2S 'Landscapes'	Provides guidance to protect landscapes and significant open spaces that contribute to character, identity and sustainable environments by ensuring significant landscape areas are protected and enhanced and recognising the natural landscape for its aesthetic value and as a fully functioning system.
15.01-5S neighbourhood character'	Provides guidance to recognise and protect neighbourhood character and sense of place with specific regard for the built environment and heritage elements by ensuring development responds to its context and reinforces special characteristics of local environment and place.
12.02-2S Coastal Crown Land	Seek to achieve coastal crown land development that provides an environmental, social and economic balance by ensuring development on and adjacent foreshore crown land protect environmental and social value; maintains safe, equitable public access and improve public benefit, demonstrate need and coastal dependency and minimises impact on the coast.
15.01-1S 'Urban Design'	Focuses upon the provision of environments that are safe and functional and which reinforce a sense of place and cultural identity by requiring development to respond to its context in terms of urban character, cultural heritage, natural features, surrounding landscape and climate, and ensuring sensitive landscapes such as bays and coastlines are protected and that new development does not detract from their natural quality.
15.08 Coastal Area	Seek to protect identified visually significant landscapes, views and vistas in coastal areas and to protect non-urban areas for their visual landscape, environmental, agricultural and recreational qualities.

3.4 Local Government

The proposed development area falls entirely within the local government area (LGA) of the Colac Otway Shire Council.

Table 3 through to Table 5 provide a summary of the elements of the Municipal Strategic Statement (MSS), Local Planning Policy, Zones/Overlay, and Particular Provision designations of both of these LGAs specifically relevant to landscape and visual values.

The planning zones covering the study area are shown in Figure 3-1 and overlay are shown in Figure 3-2. The full policies, zoning designations and overlays referred to herein are available within the relevant Planning Scheme.

3.4.1 Municipal Strategic Statement

Table 3 Municipal Strategic Statement policies relevant to LVIA

Clause	Relevance to landscape & visual values of the project
Clause 02.03-1 – Settlement	 Council seeks to manage the development of Skenes Creek, Kennett River, Wye River and Separation Creek by: Retaining the distinct coastal character of the towns that are characterised by low scale buildings below the predominant tree canopy height. Minimising the impact of development on the natural environment. Providing a diverse range of housing for permanent residents and short-term holiday users
Clause 02.03-2 – Environmental and landscape values	 Council seeks to manage environmental and landscape values by: Protecting significant landscapes and features that contribute to the amenity of the Otway Ranges and coast such as declared water supply catchments, the coast, forested public land, rivers and water courses, lakes and major geological features. Retaining the dominance of the landscape between towns. Enhancing views of the landscape from road corridors. Protecting the scenic landscape of ridgelines and landforms from incompatible built form and removal of vegetation.
Clause 02.03-5 – Built Environment and Heritage	 The Shire has buildings, streetscapes, sites and precincts that represent a significant asset and resource for the Western District of Victoria. Protecting heritage assets is important in maintaining the Shire's character and sense of place. Council seeks to improve the built environment by: Conserving significant pre and post contact heritage resources. Encouraging development of heritage places in a manner sympathetic to their significance.

3.4.2 Colac Otway Public Open Space Strategy

Colac Otway Public Open Space Strategy Final Report (2011) is Council's commitment to carefully plan the future provision of open space and examine how the existing open space system can be improved. It was set on these principles that underpin this Strategy emphasise that the public open space network will be:

- Environmentally sustainable and developed to respond to the challenges arising from climate change.
- Accessible to all members of the community whether they live in urban centres, smaller settlements, coastal towns or rural areas.
- Provided and improved to offer a balanced and diverse range of opportunities for passive recreation, children's play, social gatherings, informal active recreation, walking, cycling and organised sport.

- Managed, where appropriate, in partnership with other agencies, service organisations, sports clubs and other groups.
- Managed to protect and enhance areas with significant flora, fauna, geological, heritage, cultural and/or landscape values.
- Planned so that it contributes to the economic, health, social wellbeing and connectivity of the diverse communities in Colac Otway Shire.
- Sufficiently resourced to provide quality development and maintenance at appropriate standards.
- Expanded as opportunities arise such as in new subdivisions and along waterways.
- Preserved for future generations by ensuring that there is 'no net loss' of open space as land use and environments change over time.

Key strategic directions guided by these principles are: Planning the open space network, planning scheme, providing open space in new urban neighbourhoods, partnerships, environment, links and corridors, planning of existing spaces, and planning and managing open spaces.

There are no specific references to the landscape and visual values of the subject site and study area.

3.4.3 Kennett River, Wye River & Separation Creek Structure Plans

Within the Structural Plan (2008), the following objectives which are relevant to the landscape and visual values have been developed to guide the development of the Kennett River.

The objective for Landscape Setting:

• Continue to protect and maintain the landscape setting of the three hamlets

3.4.4 Zones and Overlays

Relevant Zones within 1km study area

Table 4 Relevant Zones

Zones	Relevance to landscape & visual values of the project
36.01 PUZ Public Use Zone	Nothing specific to landscape and visual values however it does encourage associated uses that are consistent with the intent of the public land reservation or purpose and recognise public land use for public utility and community services and facilities.
36.02 PPRZ Public Park and Recreation Zone	It stipulates to recognise areas for public recreation and open space; and the protection and conservation of areas of significance where appropriate.
36.03 PCRZ7 Public Conservation and Resource Zone	It stipulates to protect and conserve the natural environment and natural processes for their historic, scientific, landscape, habitat or cultural values; and to provide facilities which assist in public education and interpretation of the natural environment with minimal degradation of the natural environment or natural processes.
36.04 RDZ1 Road Zone	It is used to implement the Municipal Planning Strategy and the Planning Policy Framework; to identify significant existing roads; and to identify land which has been acquired for a significant proposed road.
35.06 RCZ Rural Conservation Zone	Nothing specific to landscape and visual values however it is used to implement the Municipal Planning Strategy and the Planning Policy Framework;
32.05 TZ Township Zone	Nothing specific to landscape and visual values however it is used to implement the Municipal Planning Strategy and the Planning Policy Framework; to provide for residential development and a range of

commercial, industrial and other uses in small towns; to encourage development that respects the neighbourhood character of the area; and to allow educational, recreational, religious, community and a limited range of other non-residential uses to serve local community needs in appropriate locations.

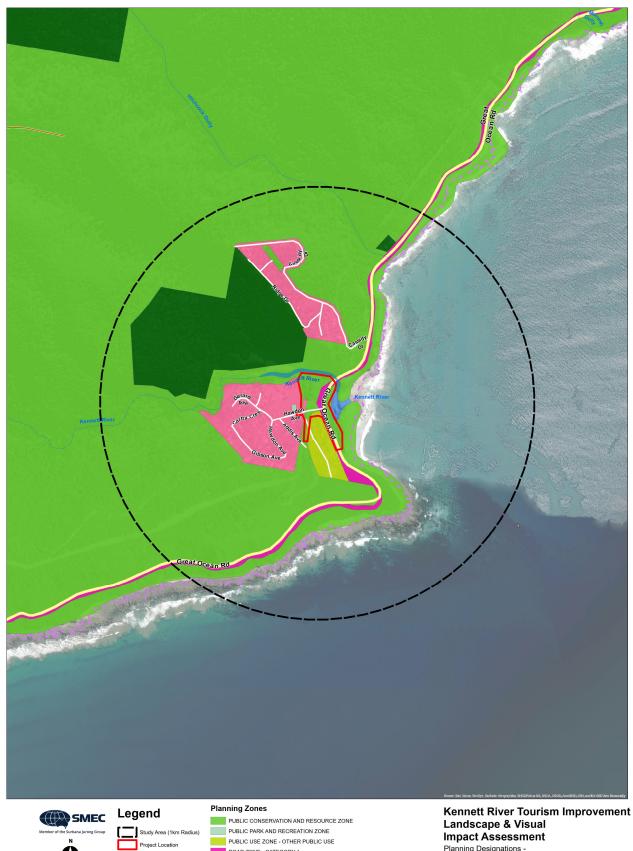
Relevant Overlay within 1km study area

Table 5 Relevant Overlay

Overlay	Relevance to landscape & visual values of the project
ovenay	The purpose of this overlay is to
Clause 43.01 – Heritage Overlay (HO20, HO21, HO300, HO312)	• To conserve and enhance heritage places of natural or cultural significance.
	• To conserve and enhance those elements which contribute to the significance of heritage places.
	To ensure that development does not adversely affect the significance of heritage places.
	• To conserve specified heritage places by allowing a use that would otherwise be prohibited if this will demonstrably assist with the conservation of the significance of the heritage place.
	The purpose of this overlay is to
Clause 43.05 –	• To implement the Municipal Planning Strategy and the Planning Policy Framework.
	• To identify areas of existing or preferred neighbourhood character.
Neighbourhood Character Overlay (NCO)	• To ensure that development respects the neighbourhood character.
	• To prevent, where necessary, the removal of buildings and vegetation before the neighbourhood character features of the site and the new development have been evaluated.
	The purpose of this overlay is to achieve these landscape character objectives:
Clause 42.03 Significant	• To protect and enhance the valued characteristics of the nationally significant Great Ocean Road Region landscape.
	• To ensure that the dominance of vegetation over built form is retained as an element of township character by encouraging retention of existing trees and planting of new indigenous vegetation.
Landscape Overlay (SLO2)	• To increase the use of indigenous vegetation to highlight natural features within the precinct.
	To retain the contrasts between landscape elements within the precinct.
	To ensure that development that occurs on hill faces or in other prominent locations is not highly visible.
	• To minimise the visual impact of signage and other infrastructure, particularly in coastal areas, hill faces and ridges.

	To protect the clear, sweeping views to the ocean available from the precinct.
	• To retain the dominance of an indigenous natural landscape in coastal areas, between townships, particularly from the Great Ocean Road.
	• To ensure that fence styles and heights reflect the predominant and preferred character of the townships.
	The purpose of this overlay is to
Clause 43.02 Design and Development Overlay (DDO4)	• Retain the distinct coastal character for the townships as identified in the Municipal Planning Strategy and the preferred character of each precinct identified in the Skenes Creek, Kennett River, Wye River and Separation Creek Neighbourhood Character Study, Planisphere, 2005.
	 Ensure that lot sizes are sufficient to accommodate adequate vegetation, including substantial trees, dwellings that meet the township's Visions and Preferred Character, and provide space for wildfire management requirements
	The purpose of this overlay is to
Clause 44.01 Erosion Management Overlay (EMO)	• To implement the Municipal Planning Strategy and the Planning Policy Framework.
	 To protect areas prone to erosion, landslip, other land degradation or coastal processes by minimising land disturbance and inappropriate development.
	The purpose of this overlay is to
	• To implement the Municipal Planning Strategy and the Planning Policy Framework.
Clause 44.04 Land Subject to Inundation Overlay (LSIO)	 To identify land in a flood storage or flood fringe area affected by the 1 in 100 year flood or any other area determined by the floodplain management authority.
	• To ensure that development maintains the free passage and temporary storage of floodwaters, minimises flood damage, is compatible with the flood hazard and local drainage conditions and will not cause any significant rise in flood level or flow velocity.
	• To reflect any declaration under Division 4 of Part 10 of the Water Act, 1989 where a declaration has been made.
	 To protect water quality and waterways as natural resources by managing urban stormwater, protecting water supply catchment areas, and managing saline discharges to minimise the risks to the environmental quality of water and groundwater.
	managing urban stormwater, protecting water supply catchment areas, and managing saline discharges to minimise the risks to the
	 managing urban stormwater, protecting water supply catchment areas, and managing saline discharges to minimise the risks to the environmental quality of water and groundwater. To ensure that development maintains or improves river and wetland

- To ensure that the development of land prioritises the protection of human life and strengthens community resilience to bushfire.
 - To identify areas where the bushfire hazard warrants bushfire protection measures to be implemented.
 - To ensure development is only permitted where the risk to life and property from bushfire can be reduced to an acceptable level.



Driginal Scale 1:5,000

PUBLIC USE ZONE - OTHER PUBLIC USE ROAD ZONE - CATEGORY 1 RURAL CONSERVATION ZONE TOWNSHIP ZONE

Planning Designations -Land Use Zoning

Drawing No. Sheet 1 of 1

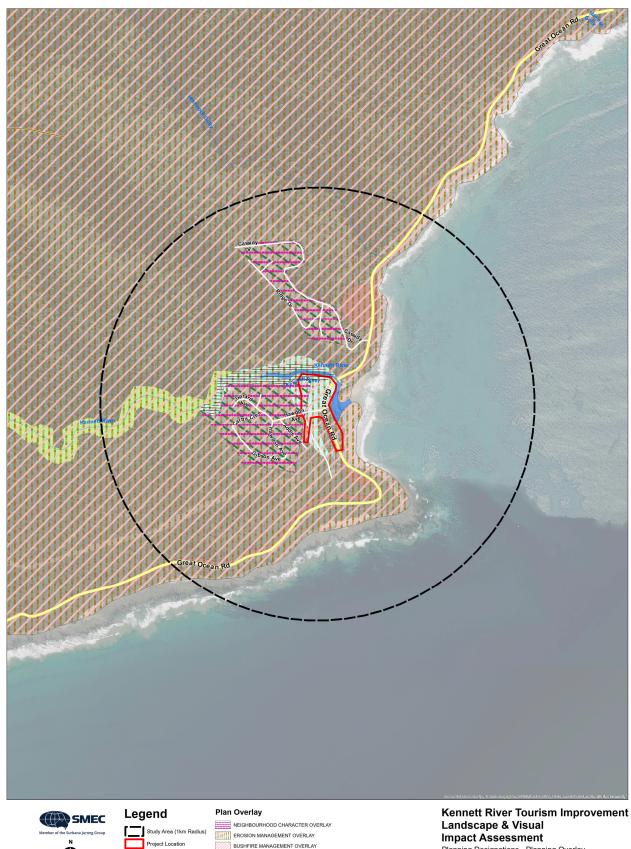
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Figure 3-1 Planning Designations - Land Use Zoning

LGA

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Planning Designations - Planning Overlay

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Figure 3-2 Planning Designations – Planning Overlay

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LGA

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SIGNIFICANT LANDSCAPE OVERLAY DESIGN AND DEVELOPMENT OVERLAY

HERITAGE OVERLAY

ENVIRONMENTAL SIGNIFICANCE OVERLAY

LAND SUBJECT TO INUNDATION OVERLAY

4 EXISTING LANDSCAPE AND VISUAL CHARACTER

4.1 Regional Landscape Context

The study area is located in the Colac Otway LGA within the town of Kennett River. Regionally, Kennett River is situated within Otway Coast Region. The proposed development area for the tourism infrastructure improvement is 73 km south-west of Geelong and 44 km south-east of Colac and approximately 135 km south-west of Melbourne. The area is predominantly native forest on steep hillslopes set against winding coastlines.

Prominent transport corridor of the region is the Great Ocean Road. The Great Ocean Road runs the coastline from Torquay to Kennett River, offering some of the most dramatic coastal scenery. The Great Ocean Road is recognised as a landscape of national significance and it is listed on the National Heritage Register.

4.2 Study Area Landscape Context

4.2.1 Landform (refer to Figure 4-1)

Topography of the study area is steep and hilly with a flat wide floodplain area of approximately 170m long and 170m wide bounded by the river to the north, Hawdon Avenue to the south, the Great Ocean Road to the east and the tennis court to the west. Views from the dwellings are contained by existing vegetation with some views to the coast. Views into the valley are predominantly from the beachfront and from the Great Ocean Road.

4.2.2 Hydrology (refer to Figure 4-1)

The Kennett River is the main river within the study area, with its nearest point along the northern boundary of the development area. The river originated in the Otway Ranges approximately 10km to the west and reaches its river mouth at the locality of Kennett River and flows to a rocky beach before emptying into Addis Bay within Bass Strait.

4.2.3 Land Use (refer to Figure 3-1)

The surrounding land use within the study area is predominately residential zoned within TZ which include a café/general store located on Hawdon Avenue, west of the development area. Otway Forest is situated 500m to the west at an elevation of 340 m AHD. The Kennett River runs along the northern boundary of the development area.

The development site itself is predominantly flat wide-open space currently used for unmarked car parking with a large patch of wetland on the western boundary. The general store and a tennis court are situated just west of the development site. The surrounding land use pattern is distinctively residential with large setback.

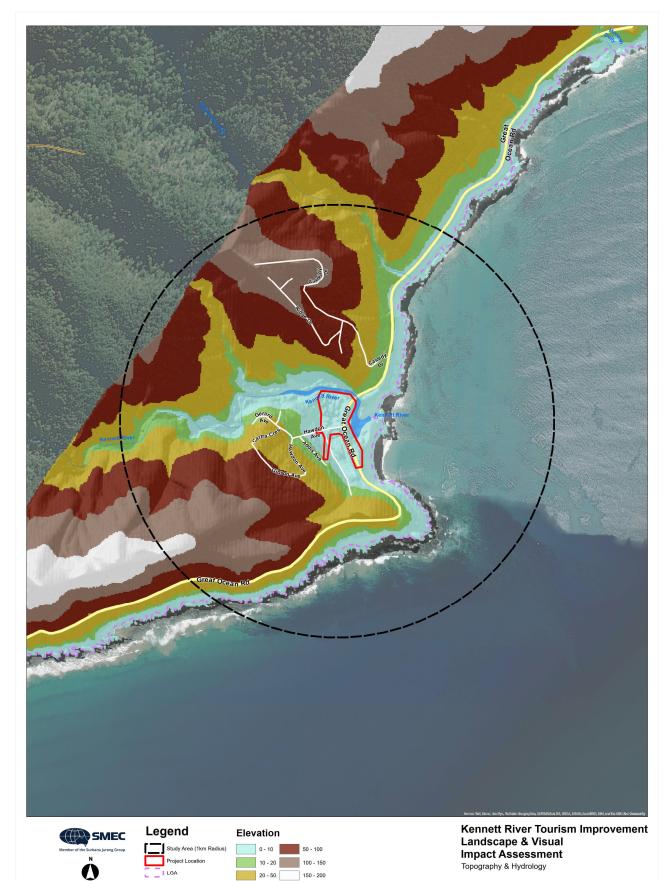
Kennett River Nature walk is a 2.6km all level return two ways trail located along the southern bank of the river. The path begins at the fishing platform which is within the development area and follows the river up through the valley and reaches at elevation 56m. The trail is popular for wildlife spotting and bird watching and is accessible all year round.

The land within the study area is within the following zones and overlays: - Public Conservation and Resource Zone (PCRZ), Road Zone - Schedule 1 (RDZ1), Heritage Overlay - Schedule 312 (HO132), Significant Landscape Overlay - Schedule 2 (SLO2), Design and Development Overlay - Schedule 4 (DDO4), Public Use Zone (PUZ7), Erosion Management Overlay - Schedule 1 (EMO1), Land Subject to Inundation - Schedule 1 (LSIO1), Bushfire Management Overlay (BMO)

4.2.4 Vegetation (refer to Figure 4-2)

The landscape typical of the study area is predominately forested, with a patch of cleared land on the northern slope of the valley with scattered groupings of remnant native trees. Retained vegetation is common along the perimeters of dwelling boundaries. Flat area surrounding the development site has been predominantly cleared, with remnant vegetation adjoining the wetland and rows of screen plantings along the boundary of the camping and cabin accommodation site. Coastal scrub vegetation along the eastern side of the Great Ocean Road creates a visual buffer between the beach and the road.

Vegetation throughout the Study Area is derived from a community of Coastal Scrubs Grassland and Woodlands, Dry Forests and Riparian Scrubs or Swampy Scrubs and Woodlands. Refer Figure 4-2 Ecological Vegetation Classes



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Figure 4-1 Topography & Hydrology

Driginal Scale1:5,000

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160 - Coastal Scrubs Grasslands and Woodlands 937 - Riparian or Swampy Scrubs & Woodlands

Wet or Damp Forests

Impact Assessment Ecological Vegetation Classes

Drawing No. Sheet 1 of 1

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Figure 4-2 Ecological Vegetation Classes

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LGA

SMEC Internal Ref. 30043014L 20 December 2021

5 LANDSCAPE AND VISUAL IMPACT ASSESSMENT METHODOLOGY

The potential landscape and visual impacts associated with the proposed development have been assessed in the following ways:

Landscape impacts are assessed against each of the identified Landscape Character Types (LCTs) (refer Section 6 and 7), and the characteristics considered as being of central importance to the overriding character of each. These characteristics have been identified based upon an assessment of existing legislation and planning policy (refer Section 3), as well as site work.

<u>Visual impacts</u> are assessed from a series of representative public viewpoints. These viewpoints, and the rationale behind their selection, are outlined within Section 8.

Impacts have been assessed during the operational phase of the project only. The impact assessment has been undertaken based upon the anticipated conditions approximately 7-10 years post-construction.

5.1 Sensitivity and magnitude of change

The landscape and visual impact assessment methodology is explained in detail within Appendix A. Broadly summarised, it involves the assessment of two key factors, sensitivity and magnitude of change:

5.1.1 Sensitivity

5.1.1.1 Landscape Sensitivity

The sensitivity of a landscape is judged based on the extent to which it is considered able to accept change of a particular type and scale without adverse effects on its character. Sensitivity varies according to the type of development and the nature of the landscape, including:

- Its inherent landscape value (its condition, perceptual qualities, cultural importance, and any specific values that may apply, such as landscape planning designations)
- The likely congruency of the proposed change (i.e., the extent to which the proposal may fit or be 'visually absorbed' into the scale, landform, land use, pattern, texture of the existing landscape).

5.1.1.2 Visual Sensitivity

The sensitivity of the viewers at the viewpoints is considered to be dependent upon factors including:

- The importance (scenic quality) of the view
- Viewer exposure, typically assessed by measuring the number of viewers exposed to the resource change and the type and duration of viewer activity
- The nature of the visual receptor (type and volume of sensitive receptors or viewers) experiencing the view.

Landscape and visual sensitivity are described as being negligible, low, medium, or high, and are applied as outlined within Table 22 (Landscape Impacts) and Table 23 (Visual Impacts) of Appendix A.

Landscape and visual sensitivity ratings associated with the proposed development are outlined within sections 7 & 8.

5.1.1.3 Magnitude of change

The magnitude of change affecting a landscape or visual receptor depends on the nature, scale and duration of the particular change that is expected to occur. It describes the extent of change and identifies elements which are removed or added, changed in colour or texture, and the compatibility of new elements with the existing landscape. Visual modification can result in an improvement or reduction in visual amenity.

Magnitude of change is described as being barely perceptible, noticeable, considerable or dominant, and is applied as outlined within Table 22 (Landscape Impacts) and Table 23 (Visual Impacts) of Appendix A.

The magnitude of change associated with both landscape and visual changes expected to result from this project are outlined within Sections 6 & 7.

5.2 Determination of impact significance

The impact significance ratings have been determined through a combination of the sensitivity and magnitude of change assessments, in accordance with the scale defined within Table 22 (Landscape Impacts) and Table 23 (Visual Impacts) of Appendix A. Using the rationale outlined within these tables, a judgement is made regarding the significance of the impact.

Both landscape and visual impacts are rated as *major*, *moderate*, *minor* or *negligible*, and can be adverse (negative), beneficial (positive), or neutral (subjective). There is often a gradual transition between levels of significance, and where impacts lie on the borderline they may be described, for example, as *minor to moderate*.

Impacts which are graded as being *moderate* to *major* are those which should be given greatest consideration, relative to other levels of landscape and visual impacts, in decision making. *Minor* to *moderate* levels of impact are of progressively reducing importance, but nonetheless important.

The landscape and visual impact significance ratings associated with the proposed development are outlined within Sections 6 & 7.

5.3 Limitations

The limitations associated with this LVIA are:

• The visual and landscape character assessment is based on desktop study and field study. Information on the design details associated to the proposed development such as lighting, street furniture, materials, tree removal, linemarking, kerb modification and traffic signages and construction phase are limited at this stage of the study.

• Viewpoints from private property have not been assessed within this study. However, representative public viewpoints, considered indicative of the views that may be experienced from the immediate surrounding area, have been assessed in their place.

• The Zone of Theoretical Visual Influence study does not take into account the screening effect that existing vegetation may have. These errors will be rectified on field visits with digital photographs taken at the site.

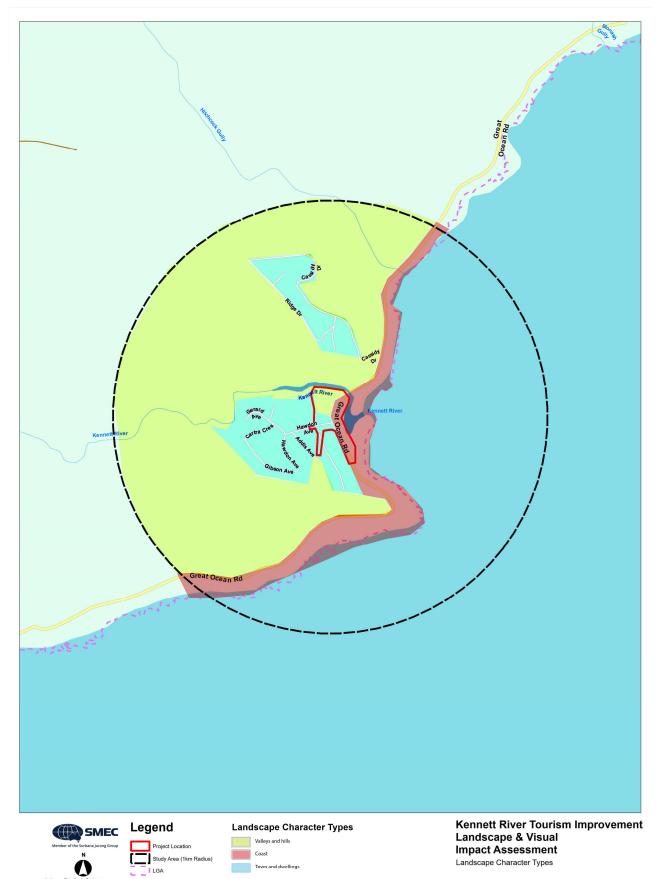
6 LANDSCAPE CHARACTER TYPES

Based upon the assessment of the natural and cultural influences that shape the landscape and visual context of the study area, a number of LCTs have been identified.

Each LCT represents a relatively homogenous character based on the consideration of the following attributes:

- Landscape value (e.g., landscapes designated for their scenic or landscape importance or valued recreational function)
- Landscape elements that contribute to defining character e.g., pasture, crops, drainage channels, river/creek corridors, bushland, mature bushland corridors alongside roads, cultural plantings (e.g., planting along property entrance drives) etc.
- Landscape character attributes (including scale, fine-grained and perceptual characteristics such as the sense of remoteness, tranquillity and/or its perceived rural character).

The LCTs are defined in Figure 6-1 and detailed descriptions and impact assessments follow.



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Figure 6-1 Landscape Character Types

Original Scale 1:5,000

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6.1 LCT 1: Coast

6.1.1 Location

Bounded by Bass Strait on one side and hillslopes on the other side, LCT 1 is the coastal strip consists of beaches, the Great Ocean Road, coastal scrub vegetation, rock platforms and occasional cliffs extended from the road edge to the sea.

6.1.2 Key Characteristics

- Remnant native vegetation aligning the GOR corridor is varied, with occasional breaks offering views to the beach and ocean.
- Roadside facilities include parking bay as vantage points to the dramatic coastline to the north and south.

6.1.3 The Great Ocean Road

- The bends on the northern and southern approaches to Kennett River offers sweeping views of the valley with foreground of open field, beach, the river, wetland and scattered dwellings on the lower slope.
- Other prominent roadside facilities include informal motorist lookout and pullover areas (Figure 6-2, Figure 6-3, Figure 6-4)
- Minimum use of obtrusive road works.
- Clear visual access to natural and cultural landscape. Within the study area are the Kennett River township and settlement, the forested valley, coastal vegetation, the river and sea.



Figure 6-2 View from roadside vantage point to Point Hawdon to the south



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Figure 6-3 First distant view of the Kennett River township and coastline to the left



Figure 6-4 Typical view of coastal landscape and Otway Ranges from the Great Ocean Road

6.1.4 Beach and river entrance

- Kennett River enter the sea across Kennett River Beach.
- The beach is hemmed in by rock platforms.
- Coastal scrub vegetation along the western edge of the beach provides a visual buffer from the road and the town.



Figure 6-5 View overlooking the river mouth and the beach beyond



Figure 6-6 The Kennett River Surf Life Saving Club wedged between the beach and GOR



Figure 6-7 Close range view of coastal landscape typical of scrub vegetation along steep embankment

6.1.5 Coastal vegetation

Remnant vegetation within LCT 1 include:

• Vegetation throughout is characterised by low-lying coastal scrub and grasses



Figure 6-8 Coastal scrub Beach and access track through the dune from GOR

6.2 LCT 2: Town & Dwellings

6.2.1 Location

LCT 2: Towns and Dwellings is situated just west and south of the development area, and land use zoned under TZ (Township Zone), and PUZ7 (Public Use Zone) and a group of dwellings classified under TZ are located above the northern bluff. The lots to the west of the GOR are predominantly part of Kennett River Holiday Park and associated facilities. Dwellings to the west are bounded by vegetated forest under Public conservation and resource zone for PCRZ.

Dominant elements in this LCT are visitor accommodation, large lot dwellings. There is only one café and general store in the town.

6.2.2 Key Characteristics

Key characteristics of LCT 2: Town and Dwellings include:

- Walkable nature of the town centre.
- The town centre at present is fairly undeveloped in its level of public realm amenity.
- Locals streets are characterised by narrow roads extending up the slopes of the valley and do not have shoulders but shared by parked cars and pedestrians.
- Many of local streets do not have kerbs or footpaths and are unsealed.
- Dwellings primarily nestled in the vegetation.

Examples of these are shown in Figure 6-13 Figure 6-14, Figure 6-15 & Figure 6-17

6.2.3 Main street / town centre

Characteristics of Main Street of LCT 2 include:

- Single storey general store and cafe is the only food outlet in the town.
- Parking for the visitors occur on unmarked space in front of the general store.
- Hawdon Avenue is the main corridor through the precinct.



Figure 6-9 Kafe Koala is the only food outlet in the town



Figure 6-10 Public open space at the town entrance

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Figure 6-11 Tennis court is the only community facility in the town

6.2.4 Residential (Valley)

Residential areas characteristic of LCT 2 include:

- The area consists of predominantly private dwellings. One camp ground and cabin style visitor accommodation occupy the south east corner of the LCT.
- Residential and accommodation dwellings are located on the local streets on south western section of the precinct bounded by Great Ocean Road to the east, Kennett River to the north and Grey River Road to the south.
- Dwellings consists predominantly of mixed style single to two storey buildings sitting on the slope.
- Most properties have no boundary fencing.
- Views out from the dwellings are typically towards the bay to the east due to higher elevation of 30-60 AHD but views are limited by existing vegetation within private properties.
- Informal street layout.
- Topography of the area is generally steep.
- Locals streets generally have large grass verge area. There is no formal planting of street tree.



Figure 6-12 Dwellings with views to the ocean through the gaps of vegetation



Figure 6-13 Mixed coastal dwelling styles



Figure 6-14 Typical informal street treatment



Figure 6-15 Grey River Road

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6.2.5 Residential (northern ridge)

Residential areas on the norther ridge include:

- Steep and winding local streets
- Occasional views of the ocean through the gaps between dwellings and vegetation
- Views to the Kennett River township and valley are screened by tall trees on the hillslope
- Vegetation within private property and along boundary are prominently tall trees typical of Otway Forest with some exotic planting around dwellings



Figure 6-16 Dwelling with views to the ocean

LANDSCAPE CHARACTER TYPES



Figure 6-17 Typical winding streets with mixed tall trees, screening plants and low scale vegetation

6.3 LCT 3: Valley and hills

6.3.1 Key Characteristics

LCT 3:

• Typically characterised by open landscape with expensive views to the forested hillslopes and coast

6.3.2 Grassy open space & floodplain

Within LCT 3:

- Landform is open landscape with little variation in topography.
- Wetland located to the west of the open field
- Two grass mounds located between access road and wetland
- A paved access road connected from the town centre to two parking areas adjacent to open field



Figure 6-18 Paved access road along open field and grassed mounds with view to the forested valley



Figure 6-19 River edge open space for walkers and visitors

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Figure 6-20 Wetland

6.3.3 River edge

River edge characteristic of LCT3 includes:

- River edges at the open flat plain area are largely cleared of trees
- Reeds are prominent river edge vegetation along the flat plain of the river
- Transition to canopy native trees and dense understorey further upstream
- No formal nor sealed walking path in this area and that users need to traverse the grass along the river



Figure 6-21 View towards west. Increase in canopy trees further upstream



Figure 6-22 Reeds growing along river edges near the estuary

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6.3.4 River Valley

- Generally forested with native trees with understorey more prominent towards the river edge
- Gradual slope towards the northern edge of the river has some clearing bounded by forest.



Figure 6-23 Reeds growing along river edges near the estuary

7 LANDSCAPE IMPACT ASSESSMENT

This section provides an assessment of anticipated impacts on each of the LCTs identified in Section 6, undertaken in accordance with the methodology outlined within Appendix A.

Given that the purpose of this assessment is to assess the potential impacts associated with the existing baseline conditions, all discussions and judgements made on the magnitude of change and associated impact ratings are made relative to the existing landscape.

7.1 Direct Impacts

Direct landscape impacts relate to impacts upon landscape character which may occur upon LCTs as a direct result of the presence of the proposed development within an area of a particular landscape character.

7.1.1 LCT1: Coast

Table 6 Landscape Impact Assessment - LCT1

Landscape Sensitivity (refer Table 22)	Magnitude of Landscape (refer Table 22)		
The river estuary and the beach are a sensitive environment with a high visual and environmental quality that provides recreational space for local community and visitors. The Great Ocean Road is the prominent transport corridor along the coast. It offers some of the most dramatic coastal scenery. The Great Ocean Road is a landscape of national significance. Overall, this Landscape Character Type is considered to be of up to high sensitivity.	 Viewed from the beachfront, the proposed elements will have largely screened by coastal dune vegetation. The only area where the proposed development falls within LCT1 is the proposed upgrade works occur at the GOR and Hawdon Ave intersection. Works will include new refuge islands at the pedestrian crossing point connected by new gravel paths along the eastern side of GOR to beach access. Road barrier will be reinstated due to realigned shoulder to accommodate a new right turn lane. A street light will be added near the intersection of the pedestrian crossing point. However, these elements are more noticeable at close range views and it is situated within existing roads and built elements within the landscape, as a result, the proposed elements will be a minor feature. Overall, the magnitude of change on the LCT is considered to be noticeable to barely perceptible. 		
Expected Landscape Impact Rating (refer Table 22)			

Expected Landscape Impact Rating (refer Table 22)

MODERATE TO NEGLIGIBLE TO MINOR

7.1.2 LCT2: Town and Dwellings

Table 7 Landscape Impact Assessment – LCT2

Landscape Sensitivity (refer Table 22)	Magnitude of Landscape Change (refer Table 22)
The commercial and residential precincts within the Study Area are situated within modified landscapes, with built form and infrastructure visible within, particularly along the café/general store in the town centre which the current condition consists of large unmarked paved area for parking, a central grassed open space with picnic tables and bench seatings, an enclosed garden area and outdoor courtyard associated to the café. The only community facility is a tennis court at Haydon Avenue. However, none of the built forms and infrastructure contribute to the scenic quality. The town centre is susceptible to certain level of change due to its importance as a recreational hub for tourists and community. Local community likely place high value upon its semi enclosed valley experience dominated by surrounding forest, and a typical view to the ocean to the east. As such, they are considered to have some capacity to absorb the type of change envisaged by this project, particularly given that the proposed works are occurring in the town centre itself. Overall, this Landscape Character Type is considered to be of up to medium sensitivity.	The screening effect of vegetation and built forms such as the cafe within LCT2 means that the proposed elements are expected to be largely screened from within the precinct. Proximity to the proposed works from the residences along Addis Ave and Grey River Road leaves high exposure to the development area but visibility of the proposed works from residences is limited from screening vegetation along the road and residence boundary. Some views from the residences to the proposed works may be available from the periphery of the precinct due to the nature of elevation i.e. views from western end of Hawdon Ave and Joseph Circuit towards the town centre. However, these are expected to be limited as these proposed changes would blend in with the existing elements, therefore will not change the character of LCT2. Overall, the magnitude of change on the LCT is considered to be noticeable to barely perceptible.

7.1.3 LCT3: Valley and hills

MINOR TO MODERATE OR NEGLIGIBLE TO MINOR

Table 8 Landscape Impact Assessment – LCT3

Landscape Sensitivity (refer Table 22)	Magnitude of Landscape Change (refer Table 22)
Kennett River is nestled in the forested hillslopes of Otway Ranges and the river emerges from the dense forest to a small flood plain with a wetland, and reeds line the river edges. It has been assumed that tranquil landscapes are likely to be highly valued. Obvious indications of high value landscapes of Otway forest are recognised at state and local levels.	Viewed from the open field along the southern edge of the river, the proposed elements will have partially screened by vegetation associated with LCT3. However, when viewed in close range, in particular from the fishing platform adjacent to the river, views toward the proposed elements (reconfigured parking area) are expected to occupy a moderate increased proportion in relative to overall proportion of the existing parking infrastructure

The scenic natural environment has high scenic/visual value that is highly susceptible to change. Local community likely place high value upon its semi enclosed valley experience and typically view to the ocean in the background.

The river is a sensitive environment with a high visual and environmental quality that provides recreational space (river walking trail, fishing, wildlife spotting) for local community and visitors.

Overall, this Landscape Character Type is considered to be of up to high sensitivity.

Expected Landscape Impact Rating (refer Table 22)

MODERATE

7.2 Summary

A summary of the landscape impact ratings for LCT1, LCT2 and LCT3 is provided in Table 9.

Table 9 Summary of landscape impact ratings

LCT	Description	Landscape Sensitivity	Magnitude of Landscape Change	Landscape Impact Rating
LCT1	Coast	High	Noticeable to barely perceptible	Moderate or Negligible to minor
LCT2	Town and Dwellings	Medium	Noticeable to barely perceptible	Minor to Moderate or Negligible to minor
LCT3	Valley and hills	High	Noticeable	Moderate

within the town centre precinct, thus has certain level of indirect impact upon the character of LCT3.

New tree planting between river edge and the reconfigured parking area will filtered views towards the proposed development.

Overall, the magnitude of change is considered to be some noticeable change.

8 REPRESENTATIVE PUBLIC VIEWPOINT ASSESSMENT

8.1 Viewpoint selection

Eight representative public viewpoints were identified within the LVIA study area and are shown in Figure 8-1. Photographs, descriptions and impact assessment for each are provided in subsequent sections.

These viewpoints were selected based upon a three-stage process:

8.1.1 Identification of Zone of Theoretical Visual Influence

A ZTVI analysis (based on a maximum height of 3.5 metres) was undertaken to provide a preliminary representation of the likely 'worst case' visual envelope of the project. These ZTVI analyses is illustrated in Figure 2-2.

The methodology for producing these analyses is outlined within Appendix A. It should be noted that the outputs of these plans are limited, and do not consider the screening effect of intervening vegetation or built form, and therefore provide an exaggerated indication of the theoretical extent of visibility of the development area. They were therefore used primarily to guide the desktop studies and site visit work.

8.1.2 Desktop studies

A desktop study was undertaken of the study area in order to identify potential visual receptors likely to be impacted upon by the proposed development. This included an assessment of existing planning designations and background reports, heritage protection, public open spaces, public gathering nodes, and clusters of residential properties. A preliminary list of potential representative public viewpoints was established for subsequent ground proofing on-site.

8.1.3 Site visit

A one-day site visit was undertaken on the 23rd of August 2021 and attended by one landscape architect.

During the site visit the representative viewpoints were confirmed and an assessment was made of each potential representative public viewpoint against the known extent of the proposed development.

The resultant identified viewpoints are considered to be representative of:

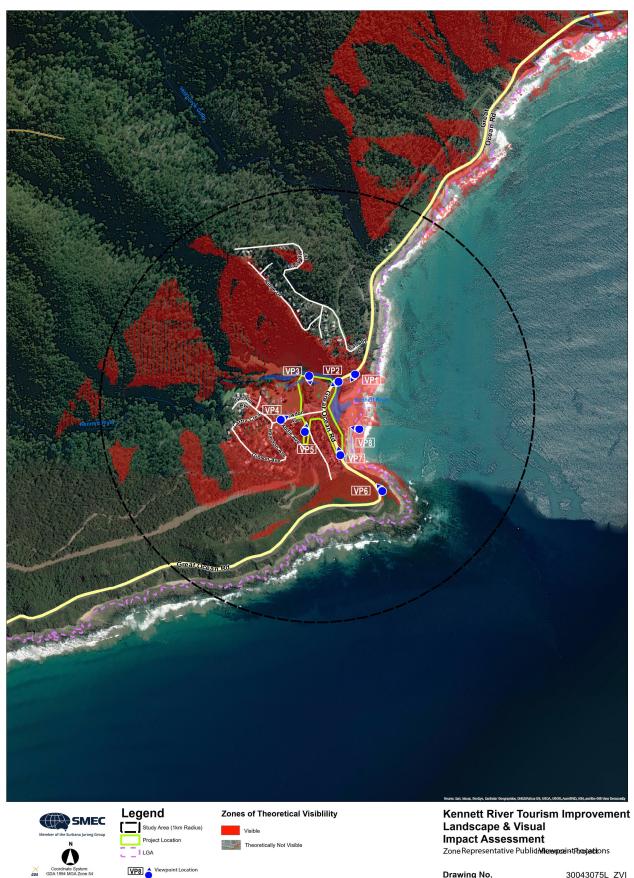
- The variety of landscape types within the study area
- The range of public views and the types of viewers likely to be affected by the project.

It is important to note that viewpoints for this study have been taken only from accessible public land. Once the viewpoint had been selected, panoramic photographs were taken at eye level from the viewpoints towards the site. Photographs were taken with a digital SLR camera through a 50 mm lens to best represent the perspective of the human eye. The visual impact of the viewpoint was then assessed both on site and with the topographic and aerial information to ensure accuracy. Viewpoint photographs and analysis has been included in the following Section 8.2-8.10. The findings of the viewpoint analysis have been quantified and are summarised in Table 18.

8.1.4 Impact assessment components

The ground pavement of the reconfigured car park and amenity block within the proposed site boundary are the primary components that have been assessed for visual impact, based on the proposed layout with known area coverage and height.

The traffic signage, traffic islands, footpath, landscaped verge and mound, amenity block are indicative only demonstrating 'worst-case' scenario and subject to detailed design. As such, viewshed analysis in Figure 2-2 is based on overall heights and sizes of these components as in Table 1. therefore, only demonstrating 'worst-case' scenario. However, we have assessed the impact of these elements in the viewpoints where these are visible.



Drawing No. Sheet 1 of 1 30043075L_ZVI Ver. A

Figure 8-1 Representative Public Viewpoint Locations

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8.2 Viewpoint 1 (VP1) – The Great Ocean Road (southbound)



Figure 8-2 Viewpoint 1: Existing View



Figure 8-3 Viewpoint 1: Proposed project layout Table 10 Visual Impact Assessment - Viewpoint 1

Location	Elevation	Distance to Development Site	Viewing Direction
Coordinates: 38° 39.972'S	10 m	Approximately 120m	Southwest
143° 51.796'E			

Existing viewing conditions

The viewpoint is located north of Kennett River township on the Great Ocean Road, looking southwest towards the proposed development.

Views from this location to the surrounding areas is dominated by the strong presence of coastal landscape and Otway Forests and the view of the valley of Kennett River. This location is where the Kennett River will first appear in the foreground view. It is considered representative of the type of views where southbound traveling road users of the Great Ocean Road would experience passing through this location.

Whist generally the changing direction of views when moving through this location are short duration, some road uses will stop at this roadside vantage point to take in the panoramic scenic views. Duration of views towards Kennett River will be longer from this location.

Visual Sensitivity (refer Table 23)

Magnitude of Visual Change (refer Table 23)

This view is experienced by road users of the Great Ocean Road. As part of the main tourism corridor, the Great Ocean Road would be predominantly used by tourists traveling along the coastal drive. They would be the primary receptors. Their receptors would place high value upon its dramatic cliff and coastal scenery with view of the hilly terrain of Otway Ranges in the background.

Overall, given the expected scenic experience from tourists traveling along the Great Ocean Road, this viewpoint is considered to be of up to high visual sensitivity. Due to intervening vegetation and roadside structures, the proposed development will be barely visible from this viewpoint.

Some the proposed elements such as amenity block will be partially visible, but it will appear as smaller elements within the view and therefore exert less influence upon the existing visual character. Overall, the magnitude of change is considered to be barely noticeable.

Expected Visual Impact Rating (refer Table 23) NEGLIGIBLE TO MINOR

8.3 Viewpoint 2 (VP2) – Northern Approach over the Kennett River



Figure 8-4 Viewpoint 2: Existing View



Figure 8-5 Viewpoint 2: Proposed project layout Table 11 Visual Impact Assessment - Viewpoint 2

Location	Elevation	Distance to Development Site	Viewing Direction
Coordinates: 38° 39.988'S 143° 51.735'E	10m	Approximately 43m	Southwest

Existing viewing conditions

The viewpoint is located on the bridge above the Kennett River, looking southwest towards the proposed development. It is considered representative of the view experienced by southbound road users and occasional pedestrians using the footpath.

Long-distance views when moving across the bridge, there will be reduction of the visibility of the proposed project due to turning radius, and the bridge and road barrier on the southern side.

Visual Sensitivity (refer Table 23)

Magnitude of Visual Change (refer Table 23)

This view is experienced by road users of the Great Ocean Road. As part of the main tourism corridor, the Great Ocean Road would be predominantly used by tourists traveling along the coastal drive. They would be the primary receptors. Their receptors would place high value upon its dramatic cliff and coastal scenery with view of the hilly terrain of Otway Ranges in the background.

Overall, this viewpoint is considered to be of up to high visual sensitivity.

Due to elevated view and bridge and road barriers that partially screen views towards the proposed development, the proposed elements are only partially visible from the majority of the road. Views of the visible elements are available for a short duration by travelling motorists. The view of field will change in response to direction of travel.

Furthermore, some of the visible proposed elements are situated within existing use as parking, roadways and public open space within the landscape, as a result, the proposed elements would be blended in with the existing view.

The only noticeable change is a larger paved area for vehicle turnaround bay and realigned roadway and its associated marked vehicle parking bays. As described in Section 7.2.1, the reconfigured parking is expected to occupy a moderate increased proportion of area in relative to overall proportion of the existing parking infrastructure, thus has certain level of noticeable change.

Overall, the magnitude of change is considered to be noticeable.

MODERATE

Expected Visual Impact Rating (refer Table 23)

8.4 Viewpoint 3 (VP3) – River edge



Figure 8-6 Viewpoint 3: Existing View



Figure 8-7 Viewpoint 3: Proposed project layout

Table 12 Visual Impact Assessment - Viewpoint 3

Location	Elevation	Distance to Development Site	Viewing Direction
Coordinates: 38° 39.987'S 143° 51.648'E	5m	Approximately 65m	East
Existing viewing conditions			

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Looking east across the wetland and open field and located on 50m from the development area, it is considered representative of the view experienced by tourists and local residents walking along the river edge.

Visual Sensitivity (refer Table 23)	Magnitude of Visual Change (refer Table 23)
The river edge open space is a popular destination for tourists, recreational users and local residents. This makes this area sensitive to change. Overall, this viewpoint is considered to be of up to high visual sensitivity.	Views toward the proposed elements (turnaround bay and realigned roadway) are expected to occupy a moderate increased proportion of area in relative to overall proportion of the existing parking infrastructure, thus has certain level of noticeable change. From these viewpoints, the proposed elements typically appear as smaller elements within the view and therefore exert less influence upon the existing visual character. Overall, the magnitude of change is considered to be noticeable.
Expected Visual Impact Rating (refer Table 23) MODERATE	

8.5 Viewpoint 4 (VP4) – Residences



Figure 8-8 Viewpoint 4: Existing View

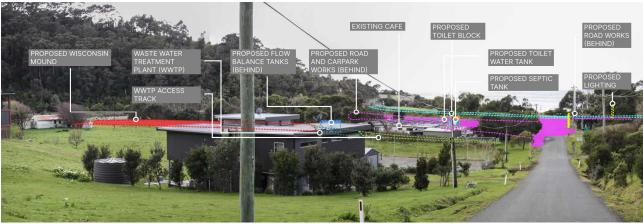


Figure 8-9 Viewpoint 4: Proposed project layout

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Table 13 Visual Impact Assessment - Viewpoint 4

Location	Elevation	Distance to Development Site	Viewing Direction
Coordinates: 38° 40.088'S	20 m	Approximately 105m	East
143° 51.565'E			

Existing viewing conditions

Looking east along Hawdon Avenue from the intersection of Joseph Circuit and Addis Ave. Located on 50m within the study area, it is considered representative of the local residents.

Long-distance views offer the horizon of the Bass Strait. Majority of the proposed project is hidden behind the cafe building and adjoining vegetation.

Visual Sensitivity (refer Table 23)

This view is experienced predominantly by local residents, with occasional experience by curious visitors who would explore the hamlet. Whilst the view is not considered to be of any specific scenic/visual value by visitors traveling the Great Ocean coast, the most sensitive visual receptors are local residents, whom have a strong familiarity with the local area hence would place higher value to the landscape they experience often. Local residents are likely to walk along this section of the street on the way to the café and the beach. Overall, this viewpoint is considered to be of up to medium visual sensitivity. Magnitude of Visual Change (refer Table 23) Although the proposed development will be partially visible from this viewpoint, it is situated within existing roads and built elements within the landscape, as a result, the proposed development will be a minor feature and would be blended in with the existing view. Overall, the magnitude of change is considered to be partially noticeable.

Expected Visual Impact Rating (refer Table 23) MINOR TO MODERATE OR NEGLIGIBLE TO MINOR

8.6 Viewpoint 5 (VP5) – Grey River Road



Figure 8-10 Viewpoint 5: Existing View

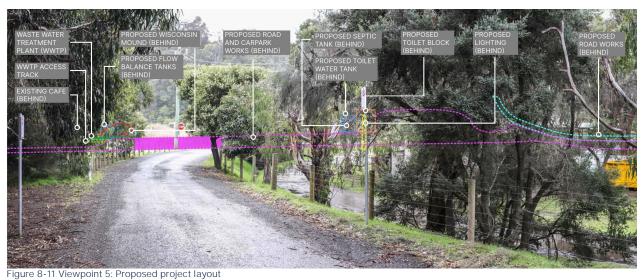


Table 14 Visual Impact Assessment - Viewpoint 5

Location	Elevation	Distance to Development Site	Viewing Direction
Coordinates: 38° 40.110'S 143° 51.642'E	Approx 5m	Approximately 80m	North

Existing viewing conditions

Looking towards the proposed development, this view is taken 96m from Hawdon Avenue. This view is considered representative of typical views from residences along Grey River Road and visitors using the road to access the Grey River Road Picnic Area 4km to the southwest. The foreground view consists of rows of tree planting on both sides that screen the Holiday Park and residences from the road. The visible elements in the gap between vegetation is the open space in front of the general store.

Visual Sensitivity (refer Table 23)

This view is experienced by local residents, and occasional experience by visitors accessing to the Grey River Road Picnic Area, the most sensitive visual receptors are expected to be several local residents, whom have driveway entry access via Grey River Road and therefore would typically experience this view often. Local residents are also likely to walk along this section of the road on the way to the beach and cafe.

Vagnitude of Visual Change (refer Table 23

Although the proposed development will be partially visible from this viewpoint, it is situated within existing roads and built elements within the landscape, as a result, the proposed development will be a minor feature and would be blended in with the existing view. Overall, the magnitude of change is considered to be partially noticeable.

Overall, given the limited number of dwellings in this area, this viewpoint is considered to be of up to low visual sensitivity.

Expected Visual Impact Rating (refer Table 23) MINOR OR NEGLIGIBLE TO MINOR

8.7 Viewpoint 6 (VP6) – The Great Ocean Road (Northbound)



Figure 8-12 Viewpoint 6: Existing View



Table 15 Visual Impact Assessment - Viewpoint 6

Location	Elevation	Distance to Development Site	Viewing Direction
Coordinates: 38° 40.273'S	Approx 10m	Approximately 290m	northwest
143° 51.891'E			

Existing viewing conditions

Views from this location to the surrounding areas is dominated by the strong presence coastal landscape and the forested hillslopes of Otway Ranges in the background.

This view is considered representative of the type of landscape that would be experienced along the Great Ocean Road consisting of low coastal vegetation offers occasional open views of the coastlines on one side with taller vegetation on the steep hillslopes and valleys on the other side of the GOR.

Visual Sensitivity (refer Table 23)	Magnitude of Visual Change (refer Table 23)
This view is experienced by road users of the Great Ocean Road. As part of the main tourism corridor, the Great Ocean Road would be predominantly used by tourists traveling along the coastal drive. They would be the primary receptors. Their receptors would place high value upon its dramatic cliff and coastal scenery with view of the hilly terrain of Otway Ranges in the background. Overall, given the expected scenic experience from tourists traveling along the Great Ocean Road, this viewpoint is considered to be of up to high visual sensitivity.	The proposed development is expected to be barely visible behind the vegetation and topography to people specifically looking from this location. Overall, the magnitude of change is considered to be barely noticeable.
Expected Visual Impact Rating (refer Table 23)	

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NEGLIGIBLE TO MINOR

8.8 Viewpoint 7 (VP7) – Southern Approach



Figure 8-14 Viewpoint 7: Existing View

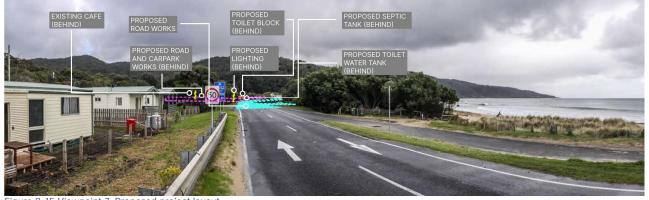


Figure 8-15 Viewpoint 7: Proposed project layout Table 16 Visual Impact Assessment - Viewpoint 7

Location	Elevation	Distance to Development Site	Viewing Direction
Coordinates: 38° 40.184'S	Approx	Approximately 65m	north
143° 51.760'E	1.5m		

Existing viewing conditions

Views from this location to the surrounding areas is dominated by the strong presence coastal landscape of the Great Ocean Road and forested hillslope of Otway Range. This view is considered representative of the type of views that would be experienced within this area.

Visual Sensitivity (refer Table 23)	Magnitude of Visual Change (refer Table 23)
This view is experienced by road users of the Great Ocean Road. As part of the main tourism corridor, the Great Ocean Road would be predominantly used by tourists traveling along the coastal drive. They	Due to the road side vegetation cover that screen views towards the development area, majority of the proposed upgrade are not expected to be visible from this view.
would be the primary receptors. Their receptors	The only proposed elements visible from this viewpoint
would place high value upon its dramatic cliff and	are refuge islands, lighting at pedestrian crossing and
coastal scenery with view of the hilly terrain of	road side bollards and gravel paths. However, it is
Otway Ranges in the background.	situated within existing roads and built elements within
Overall, given the expected scenic experience from tourists traveling along the Great Ocean Road, this	the landscape, as a result, the proposed development will be a minor feature and would be blended in with the existing view.

viewpoint is considered to be of up to high visual sensitivity.

Overall, the magnitude of change is considered to be barely perceptible.

Expected Visual Impact Rating (refer Table 23) NEGLIGIBLE TO MINOR

8.9 Viewpoint 8 (VP8) – Beachfront



Figure 8-16 Viewpoint 8: Existing View

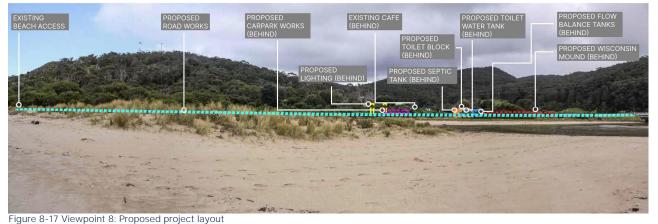


Table 17 Visual Impact Assessment - Viewpoint 8

vation Distance to Development Sit	te Viewing Direction
prox Approximately 55m	west
0	

Existing viewing conditions

Views from this location to the surrounding areas is dominated by the strong presence coastal landscape and the forested hillslopes of Otway Ranges to the west in the background. This view is considered representative of the type of views that would be experienced within this area.

Visual Sensitivity (refer Table 23)	Magnitude of Visual Change (refer Table 23)
The beach is a popular destination for tourists,	Due to the dune vegetation cover that screen views
beachgoers and local residents. The most sensitive	towards the road and the town, the proposed
visual receptors are expected to be local residents,	development is not expected to be visible.
who are the main users as this is the only	

accessible beach in the area within 4km along the coast. This makes this zone sensitive to change. Overall, due to the location and significant of the open space, this viewpoint is considered to be of up to high visual sensitivity.	Overall, the magnitude of change is considered to be barely perceptible.
Expected Visual Impact Rating (refer Table 23) NEGLIGIBLE TO MINOR	

8.10 Summary

Table 18 provides a summary of the ten (10) Representative Public Viewpoint Assessments and associated Impact Ratings.

Viewpoint No.	Location	Distance to Proposed Development	Visual Sensitivity	Magnitude of Visual Change	Visual Impact Rating
1	Great Ocean Road (southbound)	120m	HIGH	BARELY PERCEPTIBLE	NEGLIGIBLE TO MINOR
2	Northern Approach over the Kennett River	43m	HIGH	NOTICEABLE	MODERATE
3	River Edge	65m	HIGH	NOTICEABLE	MODERATE
4	Residences	105m	MEDIUM	PARTIALLY NOTICEABLE	MINOR TO MODERATE OR NEGLIGIBLE TO MINOR
5	Grey River Road	80m	LOW	PARTIALLY PERCEPTIBLE	MINOR OR NEGLIGIBLE TO MINOR
6	Great Ocean Road (northbound)	290m	HIGH	BARELY PERCEPTIBLE	NEGLIGIBLE TO MINOR
7	Southern Approach	65m	HIGH	BARELY PERCEPTIBLE	NEGLIGIBLE TO MINOR
8	Beachfront	55m	HIGH	BARELY PERCEPTIBLE	NEGLIGIBLE TO MINOR

Table 18 Summary of Representative Viewpoint Assessments

9 SUMMARY OF FINDINGS

Following is a summary of the landscape and visual impacts which would potentially arise as a result of the proposed development. Whether or not these impacts are perceived as being adverse, positive, or neutral is considered to be subjective and influenced by the unique perspectives of individual receptors.

9.1 Landscape Impacts

The potential for direct impacts upon landscape character is restricted to LCT 3 (Valley and hills). The expected landscape impacts are outlined within Table 19.

Table 19 Summary of Landscape Impacts

LCT	Description	Landscape Sensitivity	Magnitude of Landscape Change	Landscape Impact Rating
LCT1	Coast	High	Noticeable to barely perceptible	Moderate or Negligible to minor
LCT2	Town and Dwellings	Medium	Noticeable to barely perceptible	Minor to Moderate or Negligible to minor
LCT3	Valley and hills	High	Noticeable	Moderate

The presence of the proposed elements within LCT3 is not expected to result in a fundamental change in landscape character as the defining characteristics of the landscape (open views to the forested valley and Otway Ranges hillslopes, the coastlines and ocean) will remain intact. The LCT would experience noticeable change due to realignment of road pavement associated to vehicle parking and additional of a turnaround bay. However, these proposed changes would not change the character of the landscape as the proposed change would fit into the current land use of the existing landscape.

Views towards the development area experienced from within LCT1 (coast) and LCT2 (town and dwellings), are typically limited by screening from the existing vegetation, proposed changes situated within existing roads and built elements within the landscape, and screening effect from existing built forms in the township and residences, therefore, minimising the potential impacts upon landscape character within.

9.2 Visual Impacts

The anticipated visual impacts, as a result from the proposed development, have been assessed from ten representative public viewpoints. The expected landscape impacts are outlined within Table 20

Viewpoint No.	Location	Distance to Proposed Development	Visual Sensitivity	Magnitude of Visual Change	Visual Impact Rating
1	Great Ocean Road (southbound)	120m	HIGH	BARELY PERCEPTIBLE	NEGLIGIBLE TO MINOR
2	Northern Approach over the Kennett River	43m	HIGH	NOTICEABLE	MODERATE
3	River Edge	65m	HIGH	NOTICEABLE	MODERATE
4	Residences	105m	MEDIUM	PARTIALLY NOTICEABLE	MINOR TO MODERATE OR NEGLIGIBLE TO MINOR

Table 20 Summary of Visual Impacts

5	Grey River Road	80m	LOW	PARTIALLY PERCEPTIBLE	MINOR OR NEGLIGIBLE TO MINOR
6	Great Ocean Road (northbound)	290m	HIGH	BARELY PERCEPTIBLE	NEGLIGIBLE TO MINOR
7	Southern Approach	65m	HIGH	BARELY PERCEPTIBLE	NEGLIGIBLE TO MINOR
8	Beachfront	55m	HIGH	BARELY PERCEPTIBLE	NEGLIGIBLE TO MINOR

The greatest levels of impact are expected from representative public viewpoint 2 and 3 (moderate). These viewpoints are relatively close to the proposed development and therefore form some noticeable change in visual character when compared to the existing conditions.

The potential for visual impacts lessens with distance from the proposed elements, with the other public viewpoints assessed as only having negligible to minor potential impacts. From these viewpoints, the proposed elements typically appear as smaller elements within the view and therefore exert less influence upon the existing visual character. There is also intervening vegetation screening direct views towards the proposed elements from these locations further away.

Whether or not these impacts are perceived as being adverse, positive, or neutral is considered to be subjective and influenced by the unique perspectives of individual receptors.

Kennett River is a town along the Great Ocean Road experiencing increasing pressures from tourism. Holiday makers are stopping at Kennett River on their journey along the Great Ocean Road. Increased tourism will increase vehicle movement and increased demand of parking space during peak season, therefore, will result in significant visual impact associated to parked vehicles.

However, landscape character and visual impact of parked vehicles and increased vehicle movement are not within the scope of the assessment, therefore, will not influence the ratings for visual sensitivity, magnitude and impact on the character of the Kennett River and its scenic quality of landscape.

Overall, the proposed development would create an improved environment for tourism and recreation around the Kennett River for all users, including visitors, temporary holiday residents and local residents. The proposed works would also potentially provide opportunities to enhance the streetscape and public open space quality of the public open space and extending this quality into adjoining streets and public realm.

10 REFERENCES

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The Landscape Institute, UK (2019), Technical Guidance Note 06/19: Visual representation of development proposals.

The United State Department of Agriculture Forestry Service (1995), Landscape Aesthetics: A Handbook of Scenery Management.

Western Australian Planning Commission (2007), Visual Landscape Planning in Western Australia; a manual for evaluation, assessment, siting and design.

Appendix A Detailed Study Methodology

Introduction

There is no accepted national or state level published guidance on landscape and visual amenity impact assessment specific to Australia. Therefore, the industry typically refers to guidance from elsewhere to produce a method for producing landscape and visual assessments. The method for this assessment has been developed with reference to current accepted practice as derived from:

• The Landscape Institute (LI) and the Institute of Environmental Management and Assessment (IEMA), UK (2002) Guidelines for Landscape and Visual Impact Assessment, Second Edition.

Other relevant guidance notes and documentation considered include:

- Western Australian Planning Commission (2007) Visual Landscape Planning in Western Australia; a manual for evaluation, assessment, siting and design.
- The United State Department of Agriculture Forestry Service (1995), Landscape Aesthetics: A Handbook of Scenery Management.
- The Landscape Institute, UK (2009) Landscape Institute Advice Note 01/11: Use of photography and photomontage in landscape and visual assessment.
- Scottish Natural Heritage and the Countryside Agency, UK (2006) Topic Paper Six: Techniques and Criteria for Judging Capacity and Sensitivity.

The resultant landscape and visual impact assessment method recognises the full range of natural and cultural components of the landscape. It is therefore necessary to identify the elements of the project that could negatively or positively affect these landscape and visual values, identify the components of the landscape that would be affected, and then develop visual and landscape strategies to mitigate impacts.

These strategies take into consideration a variety of viewpoints and landscape typologies and how people are likely to visually experience the proposal.

Phase A: Establish existing landscape and visual character baseline

The purpose of this phase is to understand the key parameters against which the proposed project will need to be assessed in relation to landscape and visual amenity issues.

Identify the Study Area

The extent of the LVIA Study Area is determined by the distance at which it is considered that the key proposed project elements will become either indiscernible to the human eye, or will occupy such a small proportion of the visual field of view that impacts could be considered negligible. This distance is directly related to the size of the proposed works and the viewing properties of the typical human eye.

Figure 10-1 illustrates the typical vertical field of view properties of the human eye. When standing, the human eye can discern detail within a typical 10° vertical field of view.

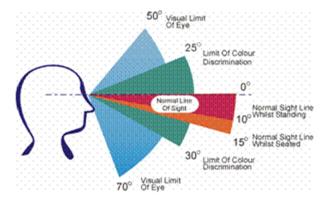


Figure 10-1 Typical vertical field of view of the human eye (Image source: Panero & Zelnik)

Kennett River Tourism Infrastructure Improvement Landscape and Visual Impact Assessment Client Reference: 30043014L Prepared for Colac Otway Shire Council SMEC Internal Ref. 30043014L 20 December 2021 For the purposes of this study, the Study Area has been defined as the point at which proposed works occupies <5% of the vertical field of view of the human eye (at a typical 10 degree detailed vertical field of view when standing, this equates to a viewing angle of 0.5 degrees). Beyond this distance, whilst the proposed works may be visible to the naked eye, it is considered that the magnitude of change within the broader landscape would be imperceptible to the typical viewer (particularly so given the highly modified character of the existing landscape setting).

The LVIA Study Area has therefore been defined as the land within a radius of 10 kilometres from the location of each of the proposed key project element area location. This area captures the majority of the ZTVI mapping.

Review of legislation and planning policy

A review was undertaken of the key planning designations, policies and guidance relating to landscape and visual amenity within the LVIA Study Area at the national, state and local level.

The emphasis of this assessment was to identify elements outlined within legislation, policy and planning documents relevant to landscape and visual character and identity of the Study Area. This identifies and describes key designations and issues noted in policy that are directly relevant to landscape and visual amenity values as well as those that are considered indirectly relevant to landscape and visual amenity to a significant degree. Although many of the designations and policies do not strictly relate to maintaining and enhancing landscape character and visual amenity, their intentions potentially influence and affect the landscape and visual resource within the Study Area. The discussion of relevance to the current assessment considers the following key issues:

- Whether the purpose of the designation is related to the protection/management of landscape and/or visual values;
- If the project has potential to theoretically directly or indirectly affect those landscape/visual values for which it has been designated depending on the nature of the specific values this may be affected by factors such as proximity, the presence of intervening landform that may restrict inter-visibility, probable levels of recreation use etc.

Desktop analysis of the landscape and visual resource

The first task of this phase involved gathering existing data and other information for the landscape located within and adjacent to the Study Area. Key information sources include:

- Legislation and planning schemes from relevant local councils (see above)
- Digital aerial photography
- Cadastral data (showing roads and all major features, built areas, etc.)
- GIS mapping, including hydrology/riparian corridors, land use, geology, vegetation and contour/topographical data
- The Victorian Heritage Database
- Existing landscape character assessment studies
- Background studies, reports and data available from the client and relevant municipal authorities.

Using this data, a preliminary assessment of the landscape and visual resource was undertaken and used to inform the field survey. This included analysis of the underlying landscape (hydrology and landform), land cover (e.g. vegetation, land use, settlement pattern etc.), landscape value (e.g. reflected in scenic routes/trails and landscape designations including national parks and conservation reserves), and desk-based site analysis (e.g. identification of recognised panoramas and views, key landmarks, and local peaks).

Where appropriate, Geographic Information System (GIS) analysis was undertaken to assist the assessment e.g., preparation of Digital Elevation Models (DEM) and landform analysis. Following this, draft landscape character types were created which formed the basis of field verification.

Prepare Zone of Theoretical Visual Influence (ZTVI) Assessment

The desktop assessment process was also informed by production of a 'Zone of Theoretical Visual Influence' (ZTVI) map (also known as a 'Zone of Visual Influence', 'Visual Envelope Map' or 'Viewshed') to indicate what areas are likely to have views of the project.

The ZTVI studies are computer-generated analyses which identify land in the Study Area from which it is theoretically possible to view any part of the proposed development. These have been used primarily to guide the area of field work and representative viewpoint selection and to run comparison studies.

ESRI ArcGIS software was used to model the ZTV of the proposed development. A digital elevation model (essentially a 3D terrain model) was produced using a combination of 1m contour intervals within the immediate vicinity of the project key elements, and 10m contour intervals for the wider LVIA Study Area. An elevation model with a cell size of 5x5m was produced (derived from LiDAR point data), which translates to the model having a uniform elevation for every 5x5m unit on the ground within the Study Area. A viewing height of 1.8m is assumed.

The GIS software used then digitally determines the likely extent over which the feature would be visible or not visible.

In interpreting the ZTVI, the following issues must be considered:

- It only takes account of the topographic constraints on the view and does not include land cover factors such as the presence of buildings and vegetation. As it only uses the landform it is considered a worst-case scenario of potential extents of visibility
- It does not consider the effect of distance. Generally, the greater the distance from the proposed development, the lower the impact, as the development will take up a smaller portion of the view and atmospheric conditions reduce the prominence of the project within the view
- The ZTVI is only accurate to the resolution of the elevation model; in this case this resolution is 5x5m. This translated to every 5x5m cell on the ground giving a binary value of seeing the object or not seeing the object
- It should be noted that the ZTVI assessment does not provide any qualitative assessment of anticipated visual impacts.

Field survey to verify and refine understanding of the landscape and visual resource

A one-day site visit was undertaken on the 23rd of August 2021 and attended by one Landscape Architect experienced in landscape and visual impact assessment. The purpose of the field visits was to:

- Take photographs and ground truth the findings of the desktop assessment
- Assess and portray landscape character
- Refine the viewpoint assessment and selection of viewpoints
- Obtain data for the production of photographic simulations and visualisations.

The field visits focused on those aspects of the landscape with potential to be of the greatest sensitivity to the proposals, and on gaining an appreciation of those aspects of the proposals most likely to affect landscape and/or visual values. Records were made in the form of Global Positioning System (GPS) point data, field notes and photographs.

Viewpoints were selected in a variety of landscape types to represent a range of views and types of viewers likely to be affected by the project. The location of each viewpoint was recorded on site using a hand-held GPS. Photographs were taken with a digital single lens reflex (SLR) camera and 30 mm digital lens set to the equivalent of a 50 mm focal length lens on a 35 mm film camera and were used to feed into the visualisation process. Adobe Photoshop was used to piece together the adjoining images.

Definition, description and illustration of the landscape baseline

A landscape assessment, based on the findings of the desk and field investigation, was undertaken to describe the existing landscape and visual values within the Study Area. Key aspects considered include:

- Landform and topography
- Geological features
- Land use patterns
- Vegetative cover
- Hydrology.

Definition, description and illustration of the visual baseline

A visual assessment, based on the findings of the desktop and field investigation, was undertaken to determine the important views and view sheds within the Study Area. Key aspects considered (with reference to specialist technical studies where available at the time of assessment include:

- Views and view sheds for the Study Area
- The relative importance or significance of the views and view sheds
- The location of the proposed development in relation to these views.

The visual baseline has been assessed and described in terms of views from selected representative viewpoints within the Study Area.

Landscape character assessment

Based on the outputs of the visual and landscape baseline, a landscape character assessment was undertaken. In brief, this assessment considers the way different components of the environment – both natural (the influences of geology, soils, climate, flora and fauna) and cultural (the historical and current impact of land use, settlement, enclosure and other human interventions) – interact together and are perceived to form a distinct pattern.

This approach has been used to establish a baseline audit of the current character of the landscape within the Study Area and to provide a framework for measuring the impact of the proposals. Using this approach, broad 'Landscape Character Types' (LCTs) have been defined and provide a framework for describing the area systematically, ensuring judgements can be made based on knowledge of what is distinctive so that changes can respect local character, where possible. An understanding of landscape character can be particularly helpful in informing the siting of new elements in the landscape and assist with identifying which types of mitigation may assist in integrating the project in the landscape.

Each character type identified represents a relatively homogenous character based on the consideration of the following attributes:

- Landscape value (e.g., landscapes designated for their scenic or landscape importance or valued recreational function)
- Landscape elements that contribute to defining character e.g., pasture, crops, drainage channels, river/creek corridors, bushland, mature bushland corridors alongside roads, cultural plantings (e.g., planting along property entrance drives) etc.
- Landscape character attributes (including scale, grain and perceptual characteristics such as the sense of remoteness, tranquillity and/or its perceived rural character).

The baseline assessment also considers factors which have influenced landscape change in the past and those that are likely to do so in the future e.g. recreational demands, changing agricultural practices, development pressures.

Phase B: Evaluation of the Impacts on the Landscape and Visual Resource

The purpose of this phase was to comparatively evaluate how the landscape and visual baseline (identified in Phase A) is likely to be affected by the proposed development.

Identification of landscape sensitivity

The sensitivity of a landscape is judged based on the extent to which it can accept change of a particular type and scale without adverse effects on its character. Sensitivity varies according to the type of development and the nature of the landscape, including:

- Its inherent landscape value (its condition, perceptual qualities, cultural importance, and any specific values that may apply e.g. landscape planning designations)
- The likely congruency of the proposed change (i.e., the extent to which the proposal may fit or be 'visually absorbed' into the scale, landform, land use, pattern, texture of the existing landscape).

Identification of visual sensitivity

For the purposes of this assessment, the sensitivity of the viewers at the viewpoints is considered to be dependent upon factors including:

- The importance of the view i.e. the scenic qualities of the view, including the presence of other existing manmade elements in the view. Views can be assessed as being of national, state, regional, local or less than local importance as described in Table 21 below
- Viewer exposure, typically assessed by measuring the number of viewers exposed to the resource change, type of viewer activity, the duration of their view, the speed at which the viewer moves, and the position of the viewer
- The nature of the visual receptor (type and volume of sensitive receptors or viewers) experiencing the view. Viewer sensitivity is defined both as the viewer's concern for scenic quality and their response to change in the visual resources that make up the view. Local values may infer visual significance on landscape components and areas that would otherwise appear unexceptional in a visual resource analysis. Residents and visitors to important/valued landscapes are considered to have a higher sensitivity to their visual environment than, say, visitors to non-designated areas or motorists passing through the landscape.

Importance	Indicator
National visual importance	A heavily experienced view to a national icon, for example, views of the Twelve Apostles; the view to Parliament House, Canberra, down Anzac Parade, or views to Uluru.
State visual importance	A heavily experienced view to a feature or landscape that is iconic to the state, for example, views along the Yarra River in Melbourne.
Regional visual importance	A heavily experienced view to a feature or landscape that is iconic to a major portion of a city or non-metropolitan region, an important view from an area of regional open space, or a heavily used viewpoint from which a wide region can be viewed. For example, a view to Melbourne from Mount Dandenong, a view of the Cathedral Ranges from Maroondah Highway
Local visual importance	A view experienced by concentrations of residents and/or local recreational users, and/or road and rail users, for example, views from residential areas to a local golf course.

Table 21 Levels of Visual Importance

Importance	Indicator
Less than local visual	Views experienced by residents, workers, road/rail users, or from recreational areas
importance	where visual amenity is not a primary value.

Both landscape and visual sensitivity is described as being negligible, low, medium, or high, as defined and illustrated in Table 22 (landscape impacts) and Table 23 (visual impacts). It is noted that these tables are intended as a guide to the process only. The classifications are illustrative, as there is no defined boundary between levels of sensitivity.

Identification of magnitude of change

This step involved prediction of the magnitude of change in the landscape or the view that may result from the project.

The magnitude of change affecting a landscape or visual receptor depends on the nature, scale and duration of the particular change that is expected to occur. It describes the extent of change and identifies elements which are removed or added, changed in colour or texture, and compatibility of new elements with the existing landscape. Visual modification can result in an improvement or reduction in visual amenity.

With regard to impact on landscape character types, the magnitude assessment assumes a worst-case scenario and the assessment is based upon the area of LCT which would be impacted to the greatest extent by the proposed development. The effect on a view will depend on the extent of visibility, degree of obstruction of existing features, degree of contrast with the existing view, angle of view, duration of view and distance from the development.

Magnitude of change is described as being barely perceptible (negligible), noticeable (low), considerable (medium) or dominant (high), as defined and illustrated in Table 22 (landscape impacts) and Table 23 (visual impacts). It is noted that these tables are intended as a guide to the process only. The classifications are illustrative, as there is no defined boundary between levels of magnitude.

Given that the purpose of the current assessment is to assess the potential impacts associated with the varied project relative to the current approved permit, all discussions and judgements made on the magnitude of change and associated impact ratings are made *relative to the current approved permit*.

Evaluation of significance of change

This step involved evaluation of the significance of landscape and visual impacts based on the sensitivity of the landscape or viewer to change and the magnitude of change. No established, measurable technical thresholds of significance exist for landscape and visual (The Landscape Institute and Institute of Environmental Management and Assessment, 2002). Significance is therefore determined by considering the sensitivity of the landscape or visual receptor and the magnitude of change expected as a result of the development.

Professional judgement and experience are applied on a case by case basis in order to identify broad levels of significance for each receptor. Each case is assessed on its own merits as factors unique to each circumstance need to be considered. However, there are general principles which can be used as a guide to this process, which provide transparency about how judgements have been made. These are set out in the following diagram (Figure 10-2) and Table 22 (landscape impacts) and Table 23 (visual impacts).

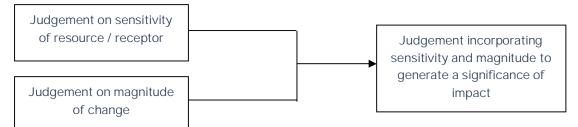


Figure 10-2 Approach to evaluating the significance of change

Kennett River Tourism Infrastructure Improvement Landscape and Visual Impact Assessment Client Reference: 30043014L Prepared for Colac Otway Shire Council SMEC Internal Ref. 30043014L 20 December 2021 The impacts identified can be adverse, beneficial, neutral or, under some circumstances, subjective. The following provides a summary of each scenario:

- Adverse a visual change that is likely to be perceived as unfavourable by most affected viewers e.g., the loss of vegetation and replacement by an industrial plant
- Beneficial a visual change that is likely to be perceived as favourable or advantageous by most affected viewers e.g., installation of screening which improves an existing unfavourable view
- Neutral a visual change that is likely to be perceived as neither favourable nor unfavourable by most affected viewers
- Subjective This applies to situations where there are likely to be mixed opinions, making consultation the only suitable way to define effects e.g., replacement of farmland with forest.

Table 22 Evaluating the significance of Landscape Impacts

			Ma	gnitude of change in land	lscape caused by developm	nent
LANDSCAPE IMPACT ASSESSMENT			Dominant change	Considerable change	Noticeable change	Barely perceptible change #
			A clearly evident and frequent/continuous change in landscape characteristics affecting an extensive area, which is likely to fundamentally change the character of the landscape.	A considerable change in landscape characteristics, frequent or continuous and over a wide area or a clearly evident change, but over a restricted area.	A noticeable change in landscape characteristics over a wide area or a considerable change over a restricted area, but will not fundamentally change the character of the landscape.	An imperceptible, barely or rarely perceptible change in landscape characteristics.
	Indicator					
Sensitivity of landscape to proposal	High	A landscape protected by national designation and/ or widely acknowledged for its quality and value; a landscape with distinctive character and low capacity to accommodate the type of change envisaged.	Major*	Moderate to major*	Moderate	Negligible to Minor
	Medium	A moderately valued landscape, perhaps a regionally important landscape and / or protected by regional/state designation, or where its character, land use, pattern and scale may have some capacity to accommodate a degree of the type of change envisaged.	Moderate to major*	Moderate	Minor to moderate	Negligible to Minor
	Low	A landscape valued to a limited extent, perhaps a locally important landscape or where its character, land use, pattern and scale is likely to have the capacity to accommodate the type of change envisaged.	Moderate	Minor to moderate	Minor	Negligible to Minor
	Negligible	A landscape which is not valued for its scenic quality or where its character, existing land use, pattern and scale are tolerant of the type of change envisaged, and the landscape has capacity to accommodate change.	Minor to moderate	Minor	Negligible to Minor	Negligible

* Denotes the most significant impacts for consideration by decision makers

Note: If no changes would be perceptible a significance of No Impact is recorded.

Table 23 Evaluating the significance of Visual Impacts

			Magnitude of change in views caused by development					
VISUAL IMPACT ASSESSMENT			Dominant change	Considerable change	Noticeable change	Barely perceptible change #		
			Major changes in view, typically at close distances and/or affecting a substantial part of the view, continuously visible for a long duration, or obstructing a substantial part or important elements of view.	Clearly perceptible changes in views, typically at intermediate distances and/or resulting in either a distinct new element in a significant part of the view, or a wider ranging, less concentrated change across a wider area.	Minor changes in views typically at longer distances or visible for a short duration, and/or are expected to blend in with the existing view to a moderate extent.	Change which is barely visible, typically at a very long distance and/or visible for a very short duration, and/or are expected to blend with the existing view.		
		Indicator						
Sensitivity of viewpoints to proposal	High	Large numbers of viewers or those with proprietary interest and prolonged viewing opportunities such as residents and users of attractive and/ or well-used recreational facilities. Views from a regionally important location such as a scenic lookout whose interest is specifically focussed on the landscape	Major	Moderate to major*	Moderate	Negligible to Minor		
	Medium	Medium numbers of residents and moderate numbers of visitors with an interest in their environment e.g. visitors to State Forests, including bush walkers, horse riders, trail bikers. Larger numbers of travellers with an interest in their surroundings.	Moderate to major*	Moderate	Minor to moderate	Negligible to Minor		
	Low	Small numbers of visitors with a passing interest in their surroundings e.g., those travelling along principal roads. Viewers whose interest is not specifically focussed on the landscape e.g., workers, commuters.	Moderate	Minor to moderate	Minor	Negligible to Minor		
	Negligible	Very occasional numbers of viewers with a passing interest in their surroundings e.g., those travelling along minor roads e.g., those travelling along minor routes.	Minor to moderate	Minor	Negligible to Minor	Negligible		

* Denotes most significant impacts for consideration by decision maker's

#: If no changes would be perceptible a significance of No Impact is recorded.

Note: Distances identified in the magnitude of change are Project specific

Prepare Landscape and Visual Impact Assessment report

This stage entailed compilation of the landscape and visual impact assessment report, based on the assessment methodology described above. Using text, figures, tables and illustrations as required, this report sets out the findings and outcomes of the study and presents conclusions regarding the landscape and visual impacts associated with the project.

Appendix B Proposed Project Layout Simple-form Photomontages

SMEC Internal Ref. 30043014L 20 December 2021

KENNETT RIVER TOURISM INFRASTRUCTURE IMPROVEMENTS PROPOSED PROJECT LAYOUT SIMPLE-FORM PHOTOMONTAGES

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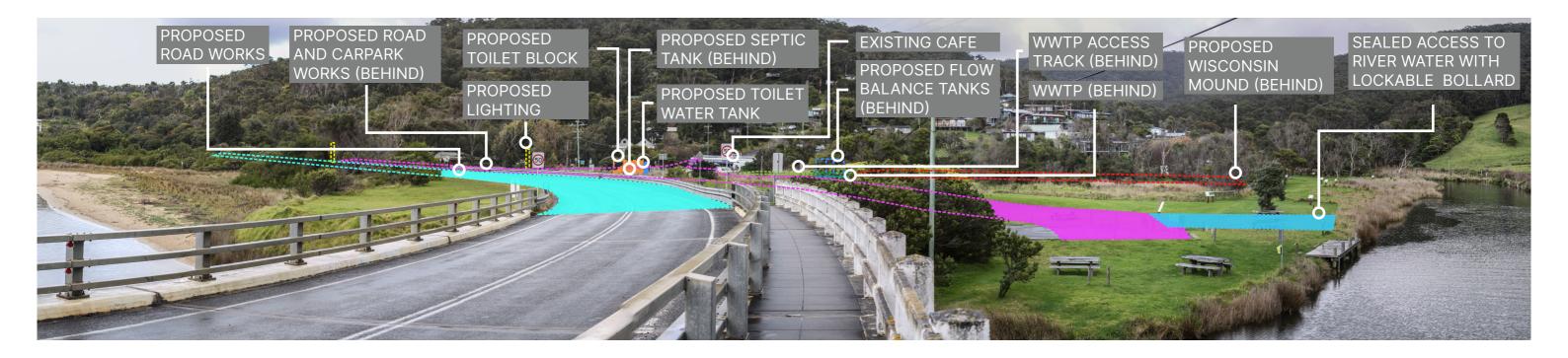
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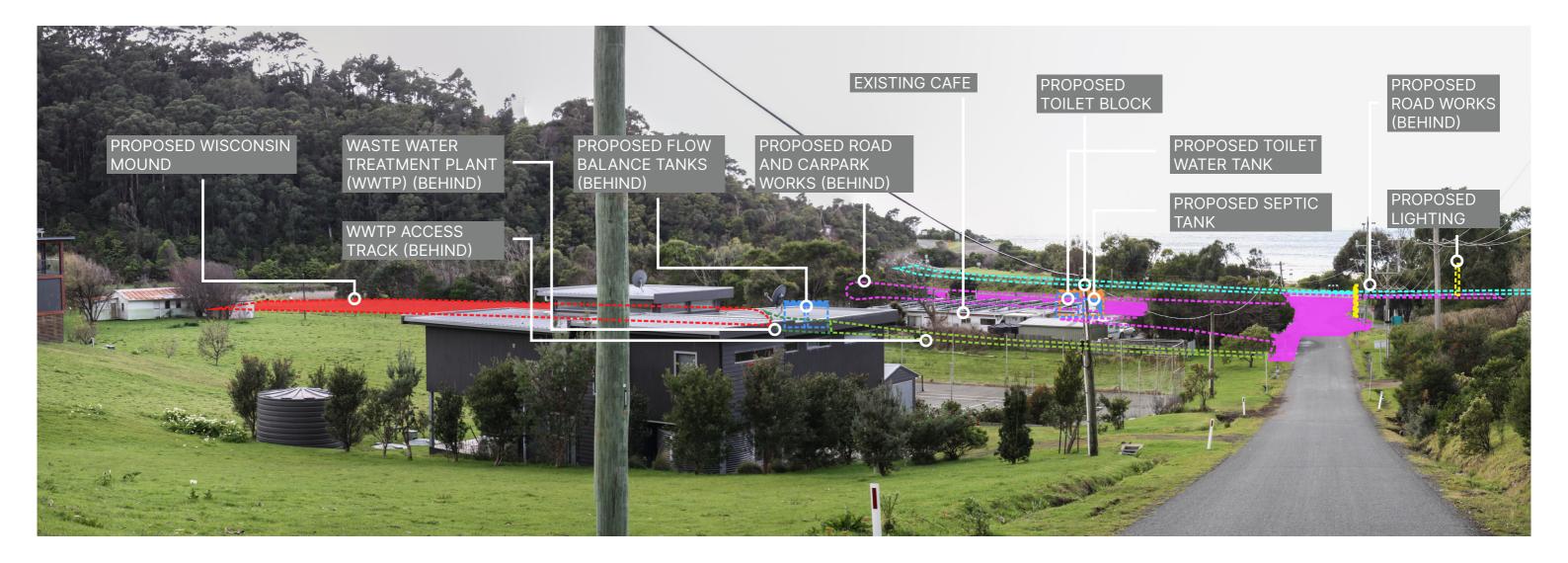
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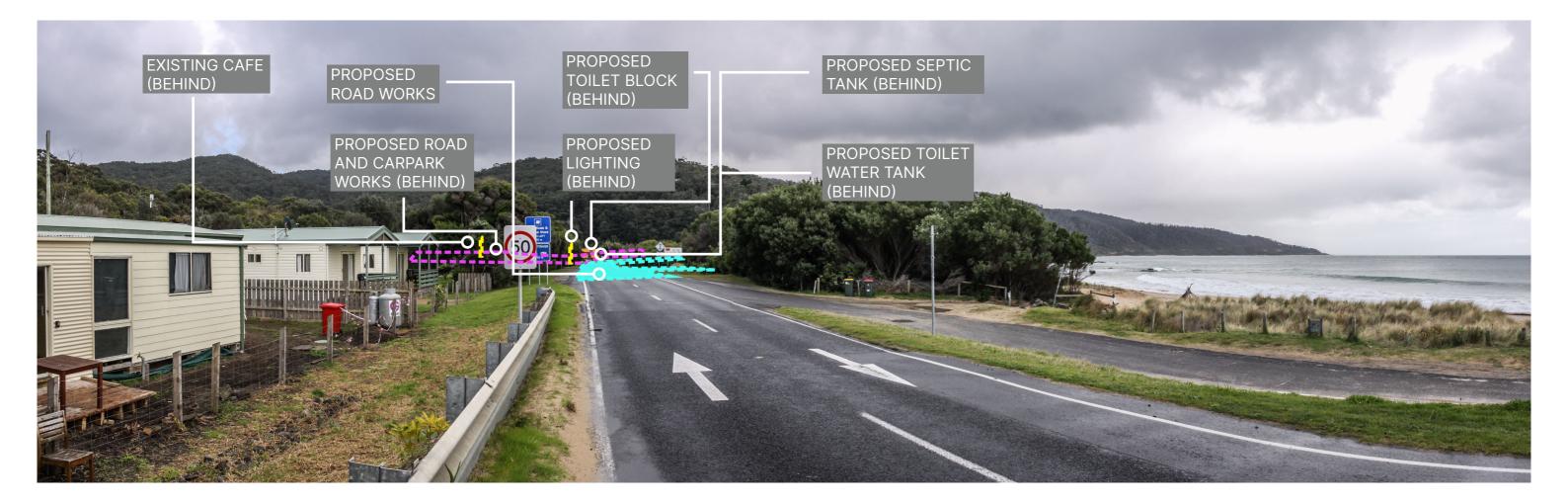
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