

A topographic map of the Apollo Bay area, showing contour lines and a winding river. The map is rendered in a light grey tone. A dark blue horizontal band is positioned across the middle of the page, containing the title text. Below the blue band is a thin yellow horizontal line. The text 'APOLLO BAY SETTLEMENT BOUNDARY & URBAN DESIGN REVIEW' is centered within the blue band in a white, sans-serif font.

APOLLO BAY SETTLEMENT BOUNDARY & URBAN DESIGN REVIEW

FINAL REVIEW REPORT

JUNE 2012

CONTENTS

introduction	1
Background to the Review	2
Investigation Areas	2
Review Process	2
A Landscape of National Significance	2
Supply and Demand Assessment	3
Policy framework.....	3
summary of recommendations.....	6
Investigation Area Analysis & recommendations.....	7
Investigation Area 1	8
Investigation Area 2	12
Investigation Area 3	16
Investigation Area 4	18
Investigation Area 5	20
Urban Design Initiatives	23
Implementation.....	33
Implementation Table	34
Appendix.....	37
Appendix A	38

ACCOMPANYING REPORTS:

Apollo Bay Settlement Boundary & Urban Design Review: Background Report

Apollo Bay Settlement Boundary & Urban Design Review: Consultation Report

Apollo Bay Settlement Boundary & Urban Design Review: Capacity Analysis Methodology & Findings, June 2012

Apollo Bay Settlement Boundary Review: Residential, Retail & Industrial Supply and Demand Assessment (Urban Enterprise), March 2012

Review of Land Stability for Investigation Area 3 (A.S.Miner Geotechnical Consulting Engineers), May 2011

1

INTRODUCTION

BACKGROUND TO THE REVIEW

Apollo Bay is one of the few townships along the south-west Victorian coastline that has been designated for future urban growth by State Planning Policy. Other smaller settlements in the Shire and Region are subject to environmental and physical constraints that limit their growth potential. While Apollo Bay is also subject to significant challenges that limit growth potential, there are a small number of areas that have been identified for further investigation.

The 2007 *Apollo Bay Structure Plan* identified potential growth areas based on three separate growth scenarios. Key variables in each scenario included the provision of a new water treatment facility and the potential approval of the then proposed Great Ocean Green Development being contemplated under Amendment C29.

One of the scenarios flagged possible future development to the west of Apollo Bay if Great Ocean Green did not proceed, however it was acknowledged that additional strategic work would be required to justify the appropriateness of this option.

The Planning Minister's decision to refuse Amendment C29 and approve the Apollo Bay Structure Plan with additional 'urban development investigation areas' has led to the need for Council to reconsider the validity and strategic justification of development in these potential urban growth areas.

Planisphere has been appointed by the Colac Otway Shire Council to undertake a formal strategic assessment of four investigation areas within Apollo Bay/ Marengo to better understand their potential and suitability to accommodate future residential growth over the next 15 years. Furthermore, the review involves consideration of a possible extension to the retail area of Apollo Bay. It should be noted that this is **not** a review of the *entire* settlement boundary of Apollo Bay or Marengo.

In addition to the review of investigation areas, the *Settlement Boundary & Urban Design Review* provides the opportunity to:

- ◆ Review the interface between the current industrial and residential areas.
- ◆ Identify urban design initiatives to better integrate infill and new urban growth areas with the existing settlements.

This report aims to provide strategic recommendations for each of the five investigation areas, based on a thorough analysis of all issues and opportunities raised during the *issues analysis* stage of the project.

INVESTIGATION AREAS

There are five specific investigation areas within the scope of the review. These areas are outlined in red on the map on page 4.

The identified areas for review have been specifically identified by the Minister for Planning; determined in part by the Great Ocean Green decision (Amendment C29) and previous recommendations contained in the Apollo Bay Structure Plan 2007.

REVIEW PROCESS

The Review has been undertaken in the following stages:

STAGE 1: Inception & Issues Overview	Jan 2011
STAGE 2: Supply & Demand Assessment	Jan-Feb
STAGE 3: Consultation on Issues	Mar-April
STAGE 4: Urban Design Initiatives	Apr-May
STAGE 5: Draft Review Report	Jun-Aug
STAGE 6: Consultation on Draft Review Report	Sept-Oct
STAGE 7: Final Review Report	Nov-Dec

Additional land supply and demand reviews and finalisation of material was undertaken early in 2012. Consultation was undertaken during Stages 3 and 6 of the Review process. For more details, refer to the accompanying *Apollo Bay Settlement Boundary & Urban Design Review: Consultation Report*.

A LANDSCAPE OF NATIONAL SIGNIFICANCE

Apollo Bay is surrounded by steep sloping hills and the Barham River valley which have been recognised as a landscape of **national** significance and present significant environmental challenges relating to flooding, landslip and potential coastal acid sulfate soils. Whilst there may be some scope for the township to grow, these constraints limit the extent to which this can occur.

It should be noted that national significance is the highest level of significance attributed to areas in the region, and is also applied to the 12 Apostles area, Cape Otway, the coastal landscape between Lorne and Kennett River, and the Bells Beach coastal landscape. Landscape character objectives for Apollo Bay are provided under Schedules 3 and 5 to the *Significant Landscape Overlay* within the Colac Otway Planning Scheme.

The Great Ocean Road and its scenic environs were recently included on Australia's *National Heritage List*. Places included in the National Heritage List are considered to be of national environmental significance and are protected under the Environment Protection and Biodiversity Conservation (EPBC) Act, 1999. Implications of the heritage listing will mean that certain proposals will require closer scrutiny and assessment in order to avoid or minimise any significant impacts on the national heritage values of the Great Ocean Road.

SUPPLY AND DEMAND ASSESSMENT

As part of the review, *Urban Enterprise* was engaged to undertake a residential, retail and industrial supply and demand assessment for Apollo Bay. The assessment is detailed, and has had regard to all sources of land supply including within the established residential areas and the commercial area. In addition to the assessment by *Urban Enterprise*, *Planisphere* also undertook detailed supply calculations for the established and commercial areas. Findings of the assessment conclude that:

- ◆ There is currently approximately 14-16 years supply of residential zoned land in the townships of Apollo Bay & Marengo combined. However due to lead times for rezoning, planning, designing, obtaining approvals and constructing subdivision works, the supply will have reduced to 12-14 years by the time new land is available for development. Action needs to be taken in the immediate future, therefore, to ensure an adequate supply of residential land is maintained.
- ◆ There is adequate supply of existing business zoned land to accommodate the estimated 2,600m² of retail expansion required to 2025.
- ◆ No additional industrial zoned land is needed in Apollo Bay in the next 10 years. Available and readily developable industrial zoned land in Apollo Bay (8 hectares) exceeds the projected demand (2 hectares) to 2026.

The *Residential, Retail & Industrial Supply and Demand Assessment*, *Urban Enterprise* and the *DDO5 & DDO6 Capacity Analysis Methodology & Findings*, *Planisphere* are accompanying documents to this report.

POLICY FRAMEWORK

The State and Local Planning Policy Framework provide the strategic basis for which the Review needs to be considered. Key objectives included within the Colac Otway Planning Scheme, and relevant to the Review include:

STATE PLANNING POLICY FRAMEWORK (SPPF)

Supply of urban land

- ◆ To ensure a sufficient supply of land is available for residential, commercial, retail, industrial, recreational, institutional and other community uses.

Strategies directed at achieving this include:

- ◆ Ensure the ongoing provision of land and supporting infrastructure to support sustainable urban development.
- ◆ Plan to accommodate projected population growth over at least a 15 year period and provide clear direction on locations where growth should occur. Residential land supply will be considered on a municipal basis, rather than a town-by-town basis.

Coastal settlement

- ◆ To plan for sustainable coastal development.

Protection of habitat

- ◆ To assist the protection and conservation of biodiversity, including native vegetation retention and provision of habitats for native plants and animals and control of pest plants and animals.

Native vegetation management

- ◆ To achieve a net gain in the extent and quality of native vegetation.

Protection of coastal areas

- ◆ To recognise and enhance the value of the coastal areas to the community and ensure sustainable use of natural coastal resources.

Appropriate development of coastal areas

- ◆ To ensure development conserves, protects and seeks to enhance coastal biodiversity and ecological values.

The Great Ocean Road Region

- ◆ To manage the sustainable development of the Great Ocean Road region.

Environmentally sensitive areas

- ◆ To protect and conserve environmentally sensitive areas.

Landscapes

- ◆ To protect landscapes and significant open spaces that contribute to character, identity and sustainable environments.

Coastal inundation and erosion

- ◆ To plan for and manage the potential coastal impacts of climate change.

Strategies directed at achieving this include:

- ◆ Planning for sea level rise of not less than 0.8 metres by 2100.
- ◆ Ensure that land subject to coastal hazards are identified and appropriately managed to ensure that future development is not at risk.
- ◆ Avoid development in identified coastal hazard areas susceptible to inundation (both river and coastal), erosion, landslip/ landslide, acid sulfate soils, bushfire and geotechnical risk.

Erosion and landslip

- ◆ To protect areas prone to erosion, landslip or other land degradation processes.

LOCAL PLANNING POLICY FRAMEWORK (LPPF)

Settlement

- ◆ To facilitate the development of the various settlements in the Shire in accordance with the needs of each local community.
- ◆ To facilitate a range of developments in an environmentally sensitive way to provide greater residential choice.

Apollo Bay and Marengo

- ◆ To develop Apollo Bay as an attractive residential community which provides a high quality environment as a significant tourist centre.
- ◆ To retain Apollo Bay, Marengo and Skenes Creek as distinct coastal settlements with their own local character.
- ◆ To ensure that the natural beauty of the area is reflected in new development.
- ◆ To preserve the seaside village character of Apollo Bay.
- ◆ To ensure that change demonstrates a commitment to sustainability and is responsive to the natural environment.

Water

- ◆ To protect water catchments.
- ◆ To retain and improve water quality and water yield.

Vegetation

- ◆ To protect and manage remnant native vegetation communities.

Erosion

- ◆ To ensure that use and development has regard to the potential for landslip.
- ◆ To ensure that in areas where a risk of landslip is identified, all new buildings and works do not increase the possibility of landslip on the land or surrounding land.
- ◆ To manage landslip risk especially along the coastal areas.

Flooding

- ◆ To minimise environmental hazards.

Climate Change

- ◆ To ensure that coastal planning considers and responds to the forecast impacts of climate change.

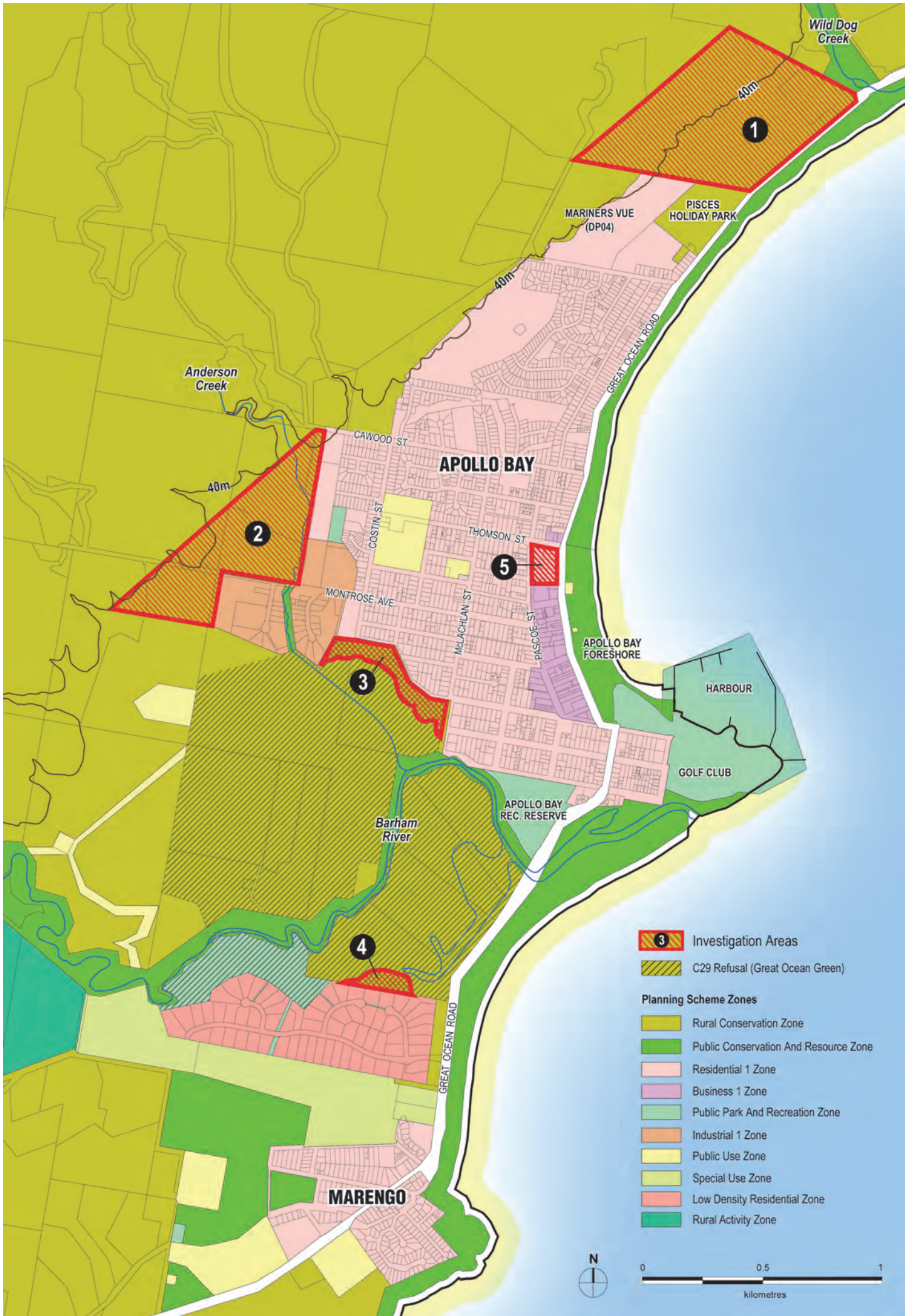
Landscape Character

- ◆ To retain the open and rural character of views and outlooks, particularly from main road corridors.
- ◆ To maintain the dominance of the natural landscape when viewed from main road corridors and tourist routes outside townships.
- ◆ To protect the variety of landscape features and landmarks of the precincts identified in the GORRLAS.
- ◆ To increase indigenous planting in the Landscape precincts to further emphasise natural features such as creeks.
- ◆ To protect ridgelines from inappropriate development and vegetation removal.

Cultural Heritage

- ◆ To protect places and areas of cultural heritage significance and encourage development and adaptation where appropriate that does not detract from their significance.

A number of other policies, strategies and studies have been considered in the strategic assessment of the five investigation areas. These are summarised in the accompanying *Apollo Bay Settlement Boundary & Urban Design Review: Background Report*.



SUMMARY OF RECOMMENDATIONS

The analysis contained in the following chapter provides a detailed strategic assessment of the five identified investigation areas within Apollo Bay/ Marengo to better understand their potential and suitability to accommodate future urban growth over the next 15 years. In undertaking the analysis it is important to recognise the State planning objectives for Apollo Bay as one of only a limited number of areas along the Great Ocean Road that can accommodate any growth, and to balance this with the State and National recognition of the significance of the landscape in which it sits.

The conclusion of the analysis is that of the five investigation areas, only one has the potential to accommodate residential growth of any consequence to the future of the township. This area of land, Area 1, is considered to have potential to accommodate some growth, provided that the subdivision and development is sensitively designed to reflect the area's prominent location within a highly significant landscape. All other areas have significant constraints due to land instability, flooding, size and/or access.

A summary of the recommendations for each of the five investigation areas follows. For more detail, refer to the analysis contained in the following chapter.

Investigation Area 1

Investigation Area 1 is located to the north-east of the Apollo Bay township between the Pisces Holiday Park/ Mariners Vue and Wild Dog Creek. The Review process determined that the area of land situated below the 40m contour line within Investigation Area 1 **should** be favourably considered for rezoning to Residential 1 Zone (R1Z) to accommodate residential growth as needs are determined, and subject to appropriate conditions and design guidelines.

Investigation Area 2

Investigation Area 2 is located to the west of the Apollo Bay Industrial Estate and extends in a westerly direction up to the 40m contour line (approx.). The Review process determined that Investigation Area 2 **should not** be

considered for rezoning to accommodate residential growth, aside from a small area located at the northern end, on the eastern side of Anderson Creek.

This small triangle of land situated between Cawood Street and Anderson Creek (abutting the existing Residential 1 Zone) could be considered for rezoning to Residential 1 Zone in the longer term, subject to further analysis.

In addition, potential options for restructure/ rezoning *surrounding* Area 2 could be explored in order to improve the interface between existing residential and industrial land.

The feasibility of providing a new vehicular/ pedestrian connection between Cawood Street and Montrose Avenue along Anderson Creek (and linking through to Woodlands Avenue and Park Avenue) could also be explored.

Investigation Area 3

Investigation Area 3 is located to the south of the Apollo Bay settlement boundary, immediately adjacent to Seymour Crescent and the Barham River floodplain. The Review process determined that Investigation Area 3 **should not** be considered for rezoning to accommodate residential growth.

Investigation Area 4

Investigation Area 4 is situated to the north of the Marengo settlement boundary, between the low-density residential area and the Barham River. The Review process determined that Investigation Area 4 **should not** be considered for rezoning to accommodate residential growth.

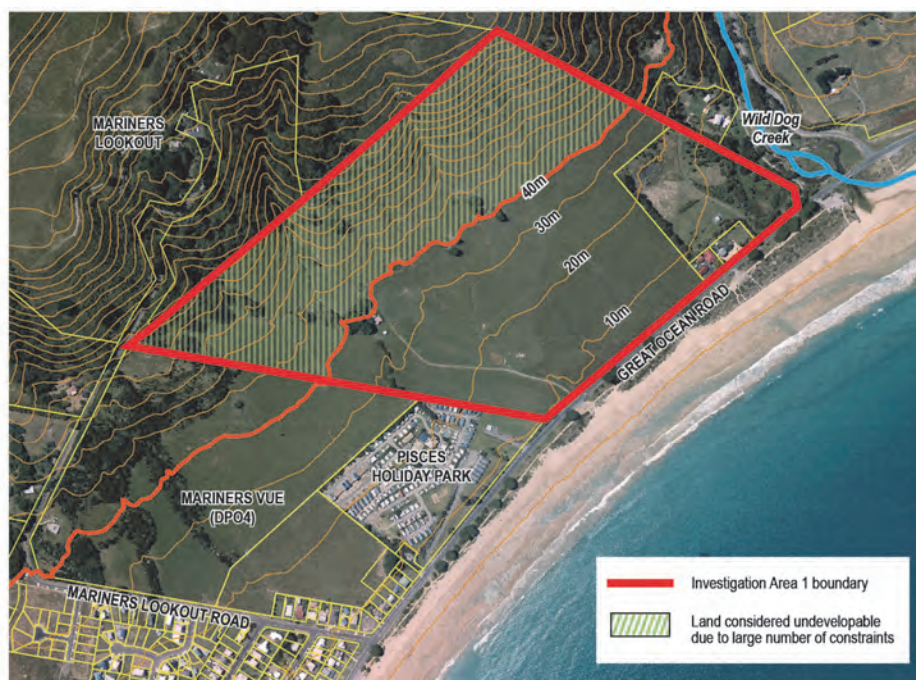
Investigation Area 5

Investigation Area 5 is located within the town centre of Apollo Bay, in the block defined by Pascoe Street to the south, Thomson Street to the north, The Great Ocean Road to the east and Hardy Street to the west. The Review process determined that Investigation Area 5 **should not** be considered for rezoning to accommodate retail/commercial growth over the next 15 years.

2

INVESTIGATION AREA ANALYSIS & RECOMMENDATIONS

INVESTIGATION AREA 1



AREA DESCRIPTION

Investigation Area 1 is located to the north-east of the Apollo Bay township between the Pisces Holiday Park / Mariners Vue and Wild Dog Creek. It should be noted that while the boundary of the investigation area extends up to the 100m contour line (approx.), all land above the 40m contour is considered undevelopable due to the large number of constraints; as discussed in the following analysis.

LAND OWNERSHIP/ SIZE

The investigation area extends across four property titles totalling approximately 418,000m². The area of land situated below the 40m contour is approximately 227,000m² in size.

RATIONALE FOR INVESTIGATION

This area was identified in the 2007 Structure Plan (in growth scenarios 2 & 3) as having the potential for 'future non-urban tourist accommodation development' subject to a specific set of criteria.

A proposal for development of the site is imminent and it is timely to make a re-assessment of the potential for the site to accommodate any other form of residential development having regard to the south-west coastline's limited growth potential, in order to prepare for any development application.

ZONING & OVERLAYS

The area is currently zoned *Rural Conservation*. Three overlays apply to the site including:

SLO3 & 5 – Schedule 3 (*Apollo Bay Coastal Valley and Hills Precinct*) and Schedule 5 (*Apollo Bay Landscape Precinct*) to the Significant Landscape Overlay apply to the area, above and below the 40m contour line respectively. The overlay aims to protect the character and significance of the natural landscape by controlling development in the area. The coastal valleys and hills surrounding the township of Apollo Bay have been recognised as a landscape of national significance.

SLO5 – Schedule 5 to the Significant Landscape Overlay-*Apollo Bay Landscape Precinct* applies to the area below the 40m contour line. The overlay aims to protect the character and significance of the natural landscape by controlling development in the area. The coastal valleys and hills surrounding the township of Apollo Bay have been recognised as a landscape of national significance.

EMO1 – Schedule 1 to the Erosion Management Overlay aims to protect areas prone to erosion, landslip or other land degradation processes by limiting land disturbances.

HO14 – The parcel of land (and associated building) located at 6250 Great Ocean Road is covered by a Heritage Overlay. The aim of the Heritage Overlay is to conserve specifically identified heritage places. Located on the site is the Apollo Bay Submarine Cable Station Museum built in 1936. The Museum is operated by the Apollo Bay and District Historical Society Inc.

EXISTING CONDITIONS

LAND USE	The area is predominantly grassed paddocks which are currently used for grazing. The site has been extensively modified through past activities. A dwelling with associated sheds and outbuildings is located on the southern parcel of land at the base of the foothills. The dwelling is situated on the 40m contour line, below the break of slope. A cluster of other buildings are located on the properties to the north-east, including an old submarine Cable Station (now used as a museum) and a residence.
VEGETATION	Vegetation on the site is limited to a small number of screening trees and wind break planting around an existing dwelling. There are a number of scattered trees and planted, native vegetation in the north-east corner around a large dam.
LAND FORM	The site rises gently from the Great Ocean Road to approximately the 40m contour and then steeply, at a grade of approximately 1 in 4, to the western extremity of the site area. The 40m contour line runs very close to a clear break of slope on the site. Some land slippage has occurred beyond the 40m contour. Several drainage lines traverse the investigation area.
VISIBILITY	The rear more steeply sloping part of the site is highly visible from the Great Ocean Road and beach areas. Topography (existing clay mounds) provides a natural screen of much of the area of land below the 40m contour, when viewed from the Great Ocean Road. This lower area is not highly visible from Mariners Lookout Road or the lookout itself. Long distance views from the Apollo Bay Harbour partially capture the area, in particular the areas above the break of slope.
ACCESS	Car access to the area is provided directly off the Great Ocean Road. A recently completed granitic sand pedestrian pathway connects the

	area to the town centre along the foreshore. The area is approximately 2km from the town centre of Apollo Bay.
INTERFACE	The area is immediately adjacent to Mariners Vue - a site earmarked for future residential development. Wild Dog Creek forms a natural boundary to the north-east.

SITE ANALYSIS

The area of land above the 40m contour is at risk of further land slippage given the steep nature of the site and land instability beyond the break of slope. As a result, development would be inappropriate and yield (number of dwellings that could potentially be accommodated in the area) would be limited. This area is however the largest of the investigation areas (418,000m² or 41.8 ha). In total, an area of approximately 227,000m² is located below the 40m contour.

Additional environmental constraints include the potential presence of acid sulfate soils, risk of flooding (adjacent to Wild Dog Creek) and weed invasion.

A coastal hazard vulnerability assessment may be required to consider factors such as sea level rise, storm tide and surge, coastal processes, river inundation and local topography and geology. It is possible that the north-east corner of the area may be partially inundated by the year 2100 from a 100 year ARI storm tide.

Potential development of Area 1 would add to the elongation of the Apollo Bay township, which was discouraged in the Structure Plan and has been discouraged in recent coastal policy in order to better consolidate urban areas along the coast for protection of visual landscape, environmental sensitivity, accessibility and sustainability reasons. It is recognised, however, that the natural entry into Apollo Bay is largely defined by the avenue of cypress pines and Wild Dog Creek, located adjacent to the investigation area.

A recently completed granitic sand pedestrian pathway connects the area to the town centre; however access across the Great Ocean Road to the foreshore path is not particularly safe.

Despite the above issues, parts of the area have relatively few constraints when compared with other areas around Apollo Bay. Some of the issues require further investigation and others can possibly be managed through the approval process. It is noted that utility services are available to the area along the Great Ocean Road.

The possibility of establishing a pedestrian route around the back of the township was canvassed in the 2007 Apollo Bay Structure Plan, and is being investigated further as part of the *Barwon South West Regional Trails Masterplan*, currently in progress. The development of this area provides the potential to obtain land for this link.

The land supply and demand assessment undertaken as part of the Review identified that there is approximately 14-

16 years of supply of residential zoned land in the townships of Apollo Bay & Marengo combined. Due to the lead time involved in preparing land for redevelopment (rezoning, design, approvals, construction) the estimated supply of zoned land will have reduced to 12-14 years once any land recommended for rezoning now, is available for housing development. The assessment states:

'Action will need to be taken in the immediate future to ensure that an adequate supply of residential land is maintained into the future, given the time involved in obtaining approval for rezoning of land and in subsequently subdividing the land.'

RECOMMENDATION

The area of land situated below the 40m contour line within Investigation Area 1 **should** be favourably considered for rezoning to Residential 1 Zone (R1Z) to accommodate residential growth as needs are determined, and subject to appropriate use and development controls, conditions and guidelines.

Rationale:

- ◆ Apollo Bay is one of the few townships along the south-west Victorian coastline that has been designated for future urban growth by State Planning Policy. The land supply and demand assessment undertaken as part of this review identified that additional land is needed to accommodate the projected housing needs of the township within the 15 year timeframe. Having regard for underlying growth in population and households, and also having regard for the fact that the Great Ocean Green subdivision (planned 537 allotments) did not proceed, it is evident that Investigation Area 1 should be favourably considered for its potential role in providing a share of the required land to meet residential demand over the next 15 years.
- ◆ It has been determined that Area 1 has fewer constraints than all other potential growth areas within Apollo Bay/ Marengo.
- ◆ Topography provides a natural screen of much of the developable land when viewed from the Great Ocean Road and the township. Provided appropriate guidelines are followed, well designed development will not have a detrimental visual impact on the landscape values of the area.
- ◆ The majority of the land is cleared and highly modified, and the land has low agricultural value.
- ◆ Area 1 is located at the natural town entry defined by the avenue of cypress pines and Wild Dog Creek. Development of this area would provide a seamless continuation of the township adjacent to Mariners Vue, with Wild Dog Creek forming a natural boundary to the township.

- ◆ The development of this area provides the opportunity to revegetate the hillslopes to improve the landscape backdrop of the foothills and aid in stabilising the land, particularly above the 40m contour.
- ◆ The majority of the land is not subject to flooding or the impact of sea level rise. Opportunity exists to utilise the low-lying area at the north-east corner for detention and treatment of stormwater, as part of any development of the area.
- ◆ The development of this area provides the opportunity to enhance habitat links and biodiversity.
- ◆ The development of this area provides the potential to obtain land for the establishment of a pedestrian pathway to loop around the back of the township.
- ◆ As part of any development, the area will require a new water supply tank and booster pumping system, to be developer/ owner funded. There is currently sewer upgrade works planned downstream of Area 1 and it is likely that this area can be catered for by this upgrade, however further investigation will need to be conducted closer to the time of development. Any upgrades of the sewer system will be undertaken by Barwon Water as required.

Rezoning **should not** occur on the land located above the 40m contour, on the basis that:

- ◆ Land above the 40m contour is subject to land slippage and erosion, severely limiting development suitability.
- ◆ Land above the 40m contour is highly visible from the Great Ocean Road and from other parts of the Apollo Bay township. It is considered that any development above the 40m contour would detract from the scenic landscape values of the Great Ocean Road environs and Apollo Bay.
- ◆ Patches of remnant wet forest remain on the western edge of the investigation area, above the 40m contour.
- ◆ Land above the 40m contour rises too steeply to be developed using conventional construction techniques.

ADDITIONAL CONTROLS / CONDITIONS

Prior to any development of Area 1, a thorough assessment of the site's characteristics must be undertaken to confirm land capabilities, opportunities and constraints. All assessments must be undertaken in consultation with relevant stakeholders and management groups such as Barwon Water, Corangamite Catchment Water Authority, Department of Sustainability and Environment etc. Relevant assessments should address in detail the following:

- ◆ *Geology, landform and formative geomorphic processes*
- ◆ *Coastal hazard vulnerability/ flooding/ sea level rise*

- ◆ *Traffic, access and infrastructure, including linkages with the adjoining Mariner's Vue subdivision, pedestrian access and linkages*
- ◆ *Public open space provision*
- ◆ *Service availability (water, sewerage, electricity, gas, telecommunications)*
- ◆ *Stormwater management*
- ◆ *Flora and fauna*
- ◆ *Weed invasion*
- ◆ *Archaeology and Cultural Heritage*
- ◆ *Visual impact*
- ◆ *Potential presence of acid sulfate soils*

Referral

The Great Ocean Road and its scenic environs were included on the National Heritage List on the 7th April 2011. Places included in the National Heritage List are considered to be matters of national environmental significance and are protected under the Environment Protection and Biodiversity Conservation (EPBC) Act, 1999. Implications of the heritage listing will mean that certain proposed use and development will require closer scrutiny and assessment in order to avoid or minimise significant impacts on the heritage values of the Great Ocean Road. Specific activities that may require referral to the Commonwealth Environment Minister include new large scale residential subdivision (if within listed boundary or within sight of road and lookouts).

IMPLEMENTATION RECOMMENDATIONS

Planning Scheme

Subject to a satisfactory outcome from the technical assessments provided by the land owner and further details regarding any proposed developments:

- ◆ Rezone Investigation Area 1 (in part, below the 40m contour) from Rural Conservation Zone (RCZ) to Residential 1 Zone (R1Z).
- ◆ Implement a Development Plan Overlay (DPO) preferably with an approved Development Plan to ensure that development of the area is undertaken in a sustainable and sensitive manner and in accordance with the Design Guidelines.
- ◆ Revise Schedule 4 to the Development Plan Overlay (Mariners Vue) to allow revision of the Framework Plan.
- ◆ Consider introduction of a Design and Development Overlay to implement the Design Guidelines.

Design Guidelines

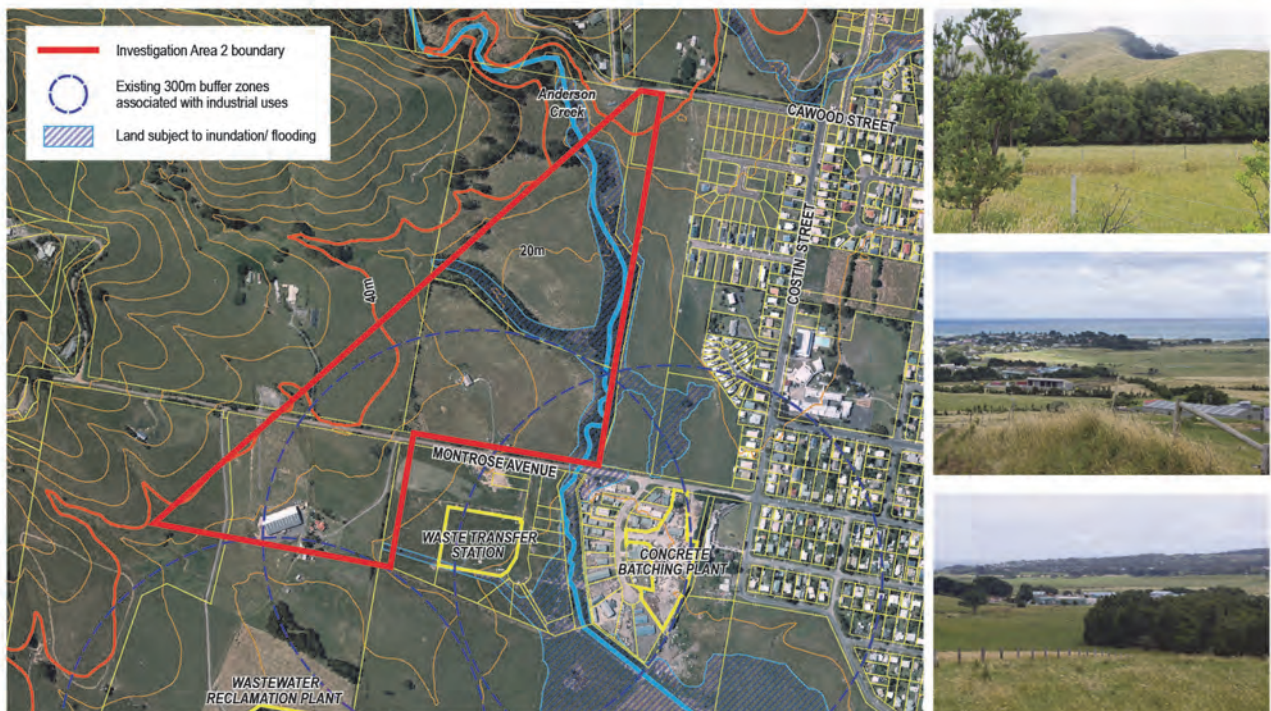
Design Guidelines have been developed to guide appropriate subdivision design and development of built form within Area 1 (Refer to Appendix A: *Design Guidelines for Investigation Area 1*). These guidelines will be utilised to

form requirements in any DPO or assessment of any development proposal. The guidelines cover a number of topics, including:

- ◆ Landscape Setting/ Environment
- ◆ Lots Size & Site Coverage
- ◆ Siting
- ◆ Building Form & Height
- ◆ Materials & Design Detail
- ◆ Private Realm Landscaping & Vegetation
- ◆ Vehicular & Pedestrian Access
- ◆ Public Open Space

The Guidelines are underpinned by the principles of environmental sustainable design (ESD).

INVESTIGATION AREA 2



AREA DESCRIPTION

Investigation Area 2 is located to the west of the Apollo Bay settlement boundary. The western boundary of the investigation area is assumed to have been based roughly on the location of the 40m contour line.

LAND OWNERSHIP/ SIZE

The area extends across eight property titles all in private ownership totalling approximately 276,000m² (27.6 ha) in area.

RATIONALE FOR INVESTIGATION

This general area was identified in the 2007 Structure Plan (in Growth Scenario 2) as a potential growth area 'following a 50% take up of the Mariners Vue site'.

It was subsequently identified by the Minister for Planning as an 'urban development investigation area' as part of the planning scheme amendment process to implement the 2007 Apollo Bay Structure Plan (Amendment C55).

ZONING & OVERLAYS

The area is currently zoned *Rural Conservation*. Three overlays apply to the site including:

SLO3 – Schedule 3 to the Significant Landscape Overlay-*Apollo Bay Coastal Valley and Hills Precinct* applies to the area. The overlay aims to protect the character and significance of the natural landscape by controlling development in the area. The coastal valleys and hills surrounding the township of Apollo Bay have been recognised as a landscape of national significance.

LSIO – The Land Subject to Inundation Overlay aims to identify and protect those areas that are subject to inundation/ flooding.

EMO1 – Schedule 1 to the Erosion Management Overlay aims to protect areas prone to erosion, landslip or other land degradation processes by limiting land disturbances.

EXISTING CONDITIONS

LAND USE	The area is predominantly cleared rural land. Two residential dwellings are located in the area: one to the north of Montrose Avenue and one to the south. A large horse shed is situated on the property to the south.
VEGETATION	Vegetation in the area consists mostly of wind break/ buffer planting along property boundaries. Large stands of vegetation are concentrated alongside the creek line.
LAND FORM	Land form is undulating, generally sloping down from the 40m contour line towards the creek line.
VISIBILITY	The area is not highly visible from the Great Ocean Road. Large sheds located in the industrial area to the east can be seen from Barham Valley Road, particularly where vegetation screening has not been established.
ACCESS	Road access is available via Montrose Avenue, which is unsealed towards the west. Access is also available via Cawood Street to the north. The area is approximately 1km from the town centre of Apollo Bay.
INTERFACE	The area is located adjacent to an existing urban subdivision. The break of slope (along the 40 m contour) generally forms the western extent of the investigation area. The south-eastern edge is bounded by the Apollo Bay industrial estate.

SITE ANALYSIS

Given the undulating nature and steep fall of the land to the west, access opportunities and potential development yield (number of dwellings that could potentially be accommodated in the area) would be limited. The close proximity to Anderson Creek and numerous drainage lines limits residential development opportunities on the area of land subject to inundation. Recent heavy rainfalls have subjected the area around the creek and industrial estate to flooding outside of the predicted flow paths.

Additional environmental constraints include land instability, the potential presence of acid sulfate soils and weed invasion. Pedestrian access to the area is limited to walking alongside the road.

Existing industrial zoned land in Apollo Bay is concentrated in the one area of the township, adjacent to Investigation Area 2. The appropriateness of residential development in the areas abutting the industrial estate is questionable. A 300m buffer zone is required around existing industrial land uses located within the industrial estate, significantly limiting residential development opportunities (see map).

The land supply and demand assessment undertaken as part of the review identifies that *'no additional industrial zoned land is needed in Apollo Bay in the next 10 years'* and that *'available industrial zoned land in Apollo Bay (8*

hectares) exceeds the projected demand (2 hectares) to 2026.'

RECOMMENDATION

Investigation Area 2 **should not** be considered for rezoning to accommodate residential growth (aside from a small area located at the northern end) on the basis that:

- ◆ A high proportion of the investigation area is subject to flooding, substantially limiting the area of land available for development.
- ◆ The slope of the land and apparent land instability issues limits potential development suitability and yield.
- ◆ Vehicular and pedestrian access to the area is limited.
- ◆ Buffer zones associated with adjacent industrial land uses significantly limit the area of land available for residential development.
- ◆ The area cannot be serviced through the existing water supply network due to its high elevation and location.

Consideration of the options for this investigation area has raised the possibility that the small triangle of land situated between Cawood Street and Anderson Creek (abutting the existing Residential 1 Zone) could be considered for rezoning to Residential 1 Zone in the longer term, subject to further analysis.

A small part of this land is subject to inundation, and the land would require geotechnical assessment to ensure stability. Should investigations indicate that the land is stable and developable; the Council may consider a future rezoning of this land for residential purposes. This may facilitate the provision of a vehicular/pedestrian connection between Cawood Street and Montrose Avenue (and linking through to Woodlands Avenue and Park Avenue) to assist in better traffic management within the township, access to the area of open space located off Park Ave and landscaping of the creek environs. The feasibility of providing this link should be further explored.

ADDITIONAL RECOMMENDATIONS

Review of Residential/ Industrial Interface

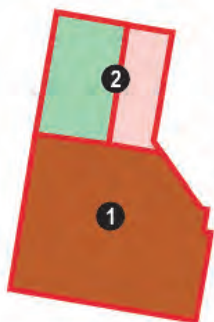
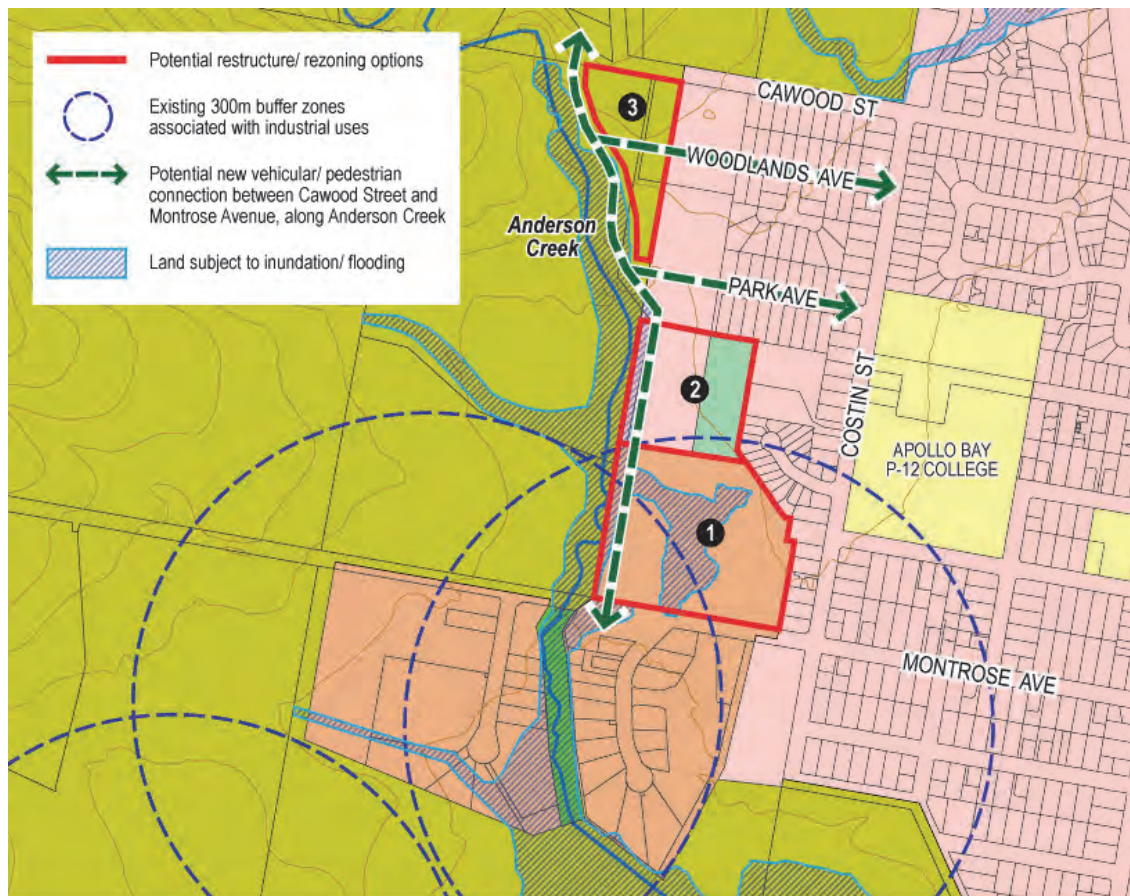
In addition to the review of investigation areas, the *Settlement Boundary & Urban Design Review* provides the opportunity to review the interface between the existing residential and industrial areas surrounding Area 2.

There may be scope to consider a restructure of the current zoning to address existing interface issues, as well as the oversupply of industrial zoned land, and the lack of available access to the existing area of public open space. This could be achieved through potential land swap arrangements, or through back-zoning.

Potential options for restructure/ rezoning (as illustrated and detailed on the map on the following page) include:

- ◆ Potential rezoning of existing Industrial 1 Zoned (IN1Z) land north of Montrose Avenue to Industrial 3 Zone (IN3Z). *Total area of 42,400m² or approx 4.2 hectares.*
- ◆ Potential land swap between the area of land zoned Public Park and Recreation (PPRZ), and the portion of Residential 1 Zoned (R1Z) land to the west.

POTENTIAL RESTRUCTURE/ REZONING OPTIONS FOR LAND SURROUNDING AREA 2



1. Potential rezoning of existing Industrial 1 Zoned land north of Montrose Avenue to Industrial 3 Zone. This will provide a more appropriate buffer between existing industrial activities and residential properties situated to the west of Costin Street. The purpose of the Industrial 3 Zone is to allow for industries and associated uses that are compatible with the nearby community. The Industrial 3 Zone is similar to the Industrial 1 Zone, however it provides the scope to put conditions on the land to limit hours of operation and noise generation etc, in order to protect the amenity of surrounding residential areas.

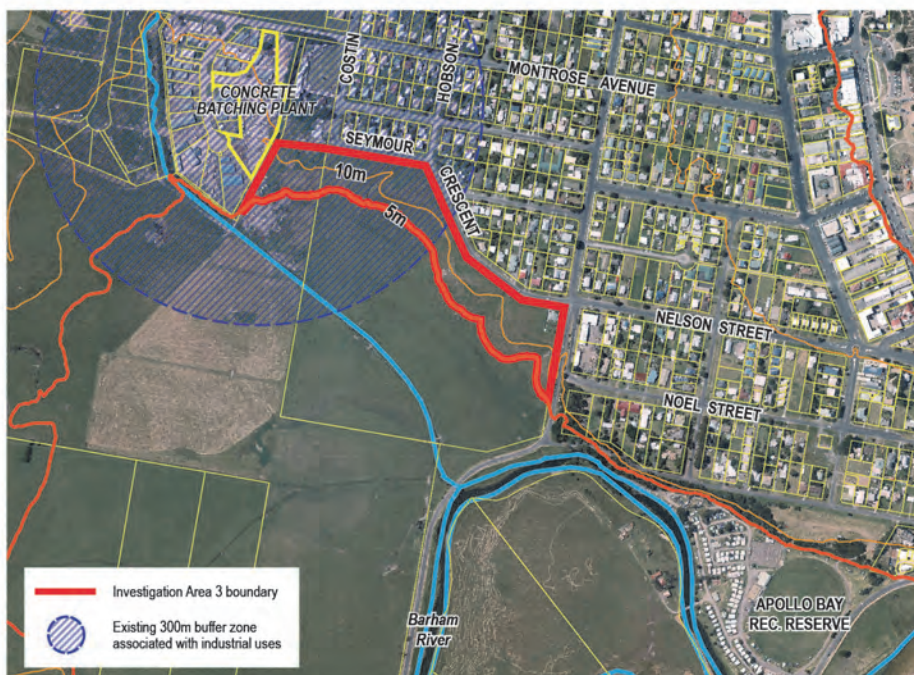
2. This area offers the opportunity for a potential land swap between existing Residential 1 Zoned land and the area of land zoned Public Park and Recreation. The existing area of public open space is underutilised and largely inaccessible (due to the area being landlocked), and access is only provided via a small laneway off Park Avenue.

This potential land swap, in combination with a new vehicular/ pedestrian connection along Anderson Creek (and connecting through to Woodlands and Park Avenue), would provide a more widely accessible area of public open space to cater for the community as a neighbourhood park. Throughout consultation, many concerns were raised by the community over the long-term traffic management of the area surrounding the school. New vehicular links would provide enhanced access to residential areas, diverting residential traffic away from the school and significantly reducing existing congestion. This potential land swap should be investigated subject to meeting the acquisition criteria set out in the *Colac Otway Public Open Space Strategy*, and would need to address any potential inundation and safety issues.



3. The potential vehicular connection through to Cawood Street presents the opportunity to rezone this small triangle of land to Residential 1 Zone in the long term, subject to further analysis. The suitability of this area for residential development would need to be further investigated given the steep rise/fall of the land.

INVESTIGATION AREA 3



AREA DESCRIPTION

Investigation Area 3 is located to the south of the Apollo Bay settlement boundary, immediately adjacent to Seymour Crescent and the Barham River floodplain.

LAND OWNERSHIP/ SIZE

The investigation area extends across two property titles totalling approximately 63,000m² in area.

RATIONALE FOR INVESTIGATION

This general area was identified in the 2007 Structure Plan (in growth scenarios 2 & 3) as a potential growth area 'following a 50% take up of the Mariners Vue site'. It also formed part of the then proposed Great Ocean Green development (Amendment C29).

The area was subsequently identified by the Minister for Planning as a 'potential residential development site' as part of the planning scheme amendment process to implement the 2007 Apollo Bay Structure Plan (Amendment C55).

A proposal to rezone the eastern parcel (in part) to Residential 1 and Low Density Residential to create an additional 41 lots has since been lodged with Council.

ZONING & OVERLAYS

The area is currently zoned *Rural Conservation*. Two overlays apply to the site including:

SLO3 – Schedule 3 to the Significant Landscape Overlay-*Apollo Bay Coastal Valley and Hills Precinct* applies to the area. The overlay aims to protect the character and significance of the natural landscape by controlling development in the area. The coastal valleys and hills surrounding the township of Apollo Bay have been recognised as a landscape of national significance.

EMO1 – Schedule 1 to the Erosion Management Overlay aims to protect areas prone to erosion, landslip or other land degradation processes by limiting land disturbances.

EXISTING CONDITIONS

LAND USE	The land is predominantly vacant. One residential dwelling is located on the north-eastern corner of the area.
VEGETATION	The area is predominantly cleared rural land.
LAND FORM	The land slopes down from Seymour Crescent to the Barham River floodplain. There are only small sections of flatter land along the road frontage. The land is showing signs of scarring through erosion and slippage, and is considered to be unstable.
VISIBILITY	The area is not highly visible from the Great Ocean Road. It is however highly visible from Barham Valley Road and Seymour Crescent.
ACCESS	The area is situated in close proximity (approx. 750m) to the town centre of Apollo Bay.
INTERFACE	The area adjoins the southern extent of the existing Apollo Bay settlement boundary. To the north residential properties are situated along Seymour Crescent. The western edge is bounded by the Apollo Bay industrial estate.

SITE ANALYSIS

Given the sloping and slip prone nature and narrow width of the land, development yield (number of dwellings that could potentially be accommodated in the area) would be limited in this area.

Environmental constraints include the risk of further erosion and the potential presence of acid sulfate soils. The area of land is elevated above the modelled 1-in-10-year flood event level however it may be considered at risk of flooding in the longer term.

The Barham River valley is recognised as a landscape of *national* significance. Development of the area could potentially block expansive and significant publicly accessible views across the Barham River valley to the coast from Seymour Crescent.

GEOTECHNICAL ASSESSMENT

As part of the review process, a geotechnical assessment was undertaken for Investigation Area 3 to evaluate the stability of the land and assess the suitability of the land for development. Based on the available evidence, the desktop assessment concludes that:

'Investigation Area 3 has significant slope instability issues which severely limits its potential for future development. While it is acknowledged that further detailed studies would be needed to fully clarify the geotechnical properties and nature of the instability, it is considered that the stability of the site is only marginal at best and it is recommended that the site is not generally suitable for development.'

A full copy of the *Review of Land Stability for Investigation Area 3* is provided as an accompanying document to this report.

RECOMMENDATION

Investigation Area 3 **should not** be considered for rezoning to accommodate residential growth on the basis that:

- ◆ The area is prone to flooding, erosion and land slippage.
- ◆ A Geotechnical assessment completed as part of the review states that *'the stability of the site is marginal at best and it is not generally suitable for development'*.
- ◆ Development in this area would have a substantial impact on the highly valued character and significance of the Barham River floodplain.
- ◆ Any development in this area could potentially result in the loss of existing publicly available/ private views from Seymour Crescent across the Barham River Valley.
- ◆ The small size of the land significantly limits potential development yield.
- ◆ Buffer zones associated with adjacent industrial land uses further limit the area of land available for potential residential development.

INVESTIGATION AREA 4



AREA DESCRIPTION

Investigation Area 4 is situated to the north of the Marengo settlement boundary, between the low-density residential area and the Barham River.

LAND OWNERSHIP/ SIZE

The investigation area is situated within one property title totalling approximately 18,000m² in area.

RATIONALE FOR INVESTIGATION

This area was not identified in the 2007 Structure Plan in any of the growth scenarios, however it did form part of the then proposed Great Ocean Green development (Amendment C29). The area was subsequently identified by the Minister for Planning as a 'potential residential development site' as part of the planning scheme amendment process to implement the 2007 Apollo Bay Structure Plan (Amendment C55).

Upon the Planning Minister's decision to refuse the Great Ocean Green development (Amendment C29), this area was one of two sites nominated by the Minister as a potential residential development area requiring further strategic assessment.

ZONING & OVERLAYS

The area is currently zoned *Rural Conservation*. Two overlays apply to the site including:

SLO3 – Schedule 3 to the Significant Landscape Overlay-*Apollo Bay Coastal Valley and Hills Precinct* applies to the area. The overlay aims to protect the character and significance of the natural landscape by controlling development in the area. The coastal valleys and hills surrounding the township of Apollo Bay have been recognised as a landscape of national significance.

EMO1 – Schedule 1 to the Erosion Management Overlay aims to protect areas prone to erosion, landslip or other land degradation processes by limiting land disturbances.

EXISTING CONDITIONS

LAND USE	A residential dwelling and a number of other sheds/ outbuildings are located on the site.
VEGETATION	There is a significant amount of coastal vegetation along the northern boundary of the site, forming a landscape buffer to Marengo.
LAND FORM	The area is situated on an embankment above the 5m contour, immediately adjacent to the Barham River floodplain.
VISIBILITY	Given the elevated nature of the site, the area is highly visible from both the Great Ocean Road and Barham Valley Road, particularly on approach from the north.
ACCESS	The area is accessed via an unsealed driveway connecting to the Great Ocean Road. The driveway is subject to flooding.
INTERFACE	The area adjoins the Marengo low-density residential area to the south. The Barham River forms the northern boundary of the investigation area.

RECOMMENDATION

Investigation Area 4 **should not** be considered for rezoning to accommodate residential growth on the basis that:

- ◆ The area is subject to drainage issues, and is at risk of further erosion and flooding.
- ◆ The land would not assist in addressing future housing demand due to its small size (18,000m² or 1.8 ha approx).
- ◆ Development yield would be further restricted due to low-density residential being the only logical option for rezoning.
- ◆ Vehicular access to the site is severely restricted.
- ◆ Opportunities to establish vehicular/ pedestrian access through to the Heathfield Estate open space are limited without the need for significant new infrastructure.

SITE ANALYSIS

This area is the smallest of the identified potential residential development areas. If the area was considered for rezoning, an extension of the existing low-density residential zone would be the only logical option, therefore significantly constraining potential development yield (number of dwellings that could potentially be accommodated in the area) to approximately 4 dwellings.

Access to the area is currently limited to a single driveway from the Great Ocean Road which is steep, low lying and subject to flooding.

Environmental constraints include the risk of further erosion and potential presence of acid sulfate soils. The area of land is elevated above the modelled 1-in-10-year flood event level however it may be considered at risk of flooding in the longer term.

Development of the site could potentially provide the opportunity to establish vehicular/ pedestrian access through to the Heathfield Estate open space, however this would limit the number of dwellings that could be accommodated on the site. Furthermore, without significant new infrastructure (which would potentially need to accommodate horse floats), this potential new access route would still be prone to flooding.

The site may potentially be of aboriginal cultural heritage significance.

INVESTIGATION AREA 5



AREA DESCRIPTION

Investigation Area 5 is located within the town centre of Apollo Bay, in the block defined by Pascoe Street to the south, Thomson Street to the north, The Great Ocean Road to the east and Hardy Street to the west.

LAND OWNERSHIP/ SIZE

The area extends across thirteen property titles totalling approximately 15,000m² (1.5 ha) in area.

RATIONALE FOR INVESTIGATION

The business zoning of Apollo Bay is currently disjointed, where investigation area 5 represents a 'gap' between the Mobil service station on Thomson Street and Foodworks on Hardy Street. This area was identified for review based on its perceived potential to provide a logical extension of the Apollo Bay commercial area in the future.

ZONING & OVERLAYS

The area is currently zoned *Residential 1*. A single overlay applies to the site:

DDO6 – Schedule 6 to the Design and Development Overlay – *Medium Density Residential Area* applies to the area. The overlay aims to achieve a graduated density of residential development between the town centre and the lower density residential areas, whilst protecting the low scale coastal character and identity of Apollo Bay.

Buildings within the *DDO6* area must not exceed 9 metres in height.

EXISTING CONDITIONS

LAND USE	The area consists predominantly of accommodation units/ motor inns/ apartments. There are also a number of residential properties to the north fronting Thomson Street. Two lots in the centre of the investigation area combine to make one large vacant area measuring approximately 4085m ² .
VEGETATION	The area is predominantly cleared of vegetation. A number of small trees are located on the residential properties to the north.
VISIBILITY	The area is highly visible from the adjacent Great Ocean Road, Pascoe Street and Thomson Street.
ACCESS	Access to the area is via any of the three adjacent streets.
LAND FORM	The area rises slightly from east to west.
INTERFACE	Properties adjoining the site immediately to the south are zoned Business 1. To the north is a mixture of Business 1 and Residential 1 zoned land. Properties along Pascoe Street (west) are predominantly residential.

SITE ANALYSIS

A majority of the sites in investigation area 5 contain recently developed and well maintained accommodation and residential buildings. The likelihood for redevelopment of these sites for a commercial or business activity appears very low. Some of the residential properties fronting Thomson Street could be suitable for more intensive residential or accommodation development. The two vacant sites however, provide the opportunity for a commercial development should the land be rezoned.

Many of the existing business zoned lots within the centre are not being fully utilised, with opportunities for further subdivision or development along Pascoe Street. The *2009 Colac & Apollo Bay Retail Analysis* identifies several key development sites within the existing retail/ commercial core of Apollo Bay that could accommodate additional retail/business floor space.

The two vacant sites within Investigation Area 5 were not identified as development sites in this Analysis as an increasing amount of retail development is already occurring in Pascoe Street to the west. Any retail development on the two vacant sites would be isolated from the existing retail/ commercial core and serve to elongate the town centre to the north, reducing its compact, walkable nature.

Given the predominance of visitor accommodation and residential uses within the investigation area, there are potential concerns regarding the compatibility of future land uses if rezoning to a business zone was to occur.

A land supply and demand assessment undertaken as part of this Review identified that the Apollo Bay town centre will require around 2,600m² of additional retail floorspace by

2025. The assessment identifies that *'the estimated 2,600m² of retail expansion required to 2025 could be contained within the existing business zoned land. Market forces will drive a higher utilisation and intensification of existing retail if no new business zoned land is provided. Having retail concentrated in the one area and discouraging expansion will encourage a vibrant, clearly defined and walkable retail precinct in Apollo Bay, which is considered the best outcome for retailers and patrons.'*

RECOMMENDATION

Investigation Area 5 **should not** be considered for rezoning to Business 1 Zone (B1Z) on the basis that:

- ◆ Many Business 1 Zoned lots within Apollo Bay are not being utilised to their full capacity, and opportunity still exists for further subdivision or development in these areas to accommodate future retail/ business needs.
- ◆ The existing Residential 1 Zone currently allows for some commercial development to occur, without the need to rezone.
- ◆ The majority of sites in the Area have been developed for accommodation or residential uses that are likely to remain in the future. Rezoning of the area may result in new development that conflicts with existing land uses, and creates a disjointed retail strip.
- ◆ Development of the Area for retail would serve to elongate the commercial centre to the north along the Great Ocean Road reducing the compact, walkable nature of the existing town centre.
- ◆ The increased retail/ business floor space required within the next 15 years can be more appropriately accommodated within existing business zoned land in the centre.
- ◆ The land supply and demand assessment undertaken as part of this Review identified that *'the estimated 2,600m² of retail expansion required to 2025 could be contained within the existing business zoned land. Market forces will drive a higher utilisation and intensification of existing retail if no new business zoned land is provided. Having retail concentrated in the one area and discouraging expansion will encourage a vibrant, clearly defined and walkable retail precinct in Apollo Bay, which is considered the best outcome for retailers and patrons.'*

3

URBAN DESIGN INITIATIVES

URBAN DESIGN INITIATIVES

In addition to the review of investigation areas, the *Settlement Boundary & Urban Design Review* provides the opportunity to identify urban design opportunities to improve the quality of existing streetscapes and pedestrian links, and to better integrate infill development and new residential growth areas with the existing town centre.

A number of initiatives were identified for the town centre and its immediate surrounds, as detailed in the following chapter. These initiatives aim to represent a best practice approach to urban design, having particular regard to the existing coastal character of Apollo Bay, and the sensitive environment within which the township is located.

Urban design initiatives for the Town Centre include:

- ◆ Improvements to existing car parking areas to the rear of the shops along the Great Ocean Road
- ◆ Enhancement of mid-block pedestrian laneway connections
- ◆ Improvements to Pascoe Street streetscape treatments

In addition, opportunities for improving pedestrian connections to the outer areas were also explored.

TOWN CENTRE

REAR CAR PARKING AREAS

Space at the rear of the main shops in Apollo Bay is mostly used for private car parking, rubbish collection/ storage and rear service access. In some cases, public car parking is provided at the rear, and close-by to laneway connections that link through to the main shops. These public car parking areas are rarely used to their full capacity, despite the perceived lack of car parking in the town centre (particularly in the summer period). This is possibly due to the 'private' and 'hidden' nature of these car parking areas, where most visitors and even some locals, are potentially unaware that these parking areas exist, or that public parking is allowed.



Existing car parking areas situated to the rear of the main shops, between Moore Street and McLaren Place.

Opportunities exist to:

- ◆ Consolidate and formalise car parking areas to the rear of the main shops.
- ◆ Improve pedestrian safety, amenity and connections between the surrounding areas and the car parks.
- ◆ Encourage greater use of the car parks by improved signage.

Potential initiatives include:

- ◆ Removing dividing fences where possible
- ◆ Consolidating car parking areas and sealing surfaces where appropriate
- ◆ Improved paving treatments (markers to assist navigation, and treatments to slow traffic)
- ◆ Providing formal pedestrian priority pathways through car parking areas, leading to the shops via the laneway
- ◆ Installing wayfinding signage to raise awareness of car parking areas and to direct vehicles and pedestrians
- ◆ Improved lighting (low energy fittings with minimal light spill)
- ◆ Introducing elements of colour/ public artworks
- ◆ Encouraging shops to provide entrances and activity (e.g. outdoor seating/ dining) at the rear

TOWN CENTRE

REAR CAR PARKING AREAS

CONCEPT PLAN



PRECEDENTS



A successful shared vehicular/ pedestrian space to the rear of shops in Murray Street, Colac



Providing entrances and activity at the rear of buildings can increase utilisation of rear car parking area and enhance the perception of safety



A pedestrian priority pathway through a car park in Murray Street, Colac



Wayfinding signage could be used to better direct vehicles and pedestrians to off street car parking areas

TOWN CENTRE

MID-BLOCK PEDESTRIAN LANEWAY CONNECTIONS

Existing pedestrian laneways situated in the commercial core between Pascoe Street and the Great Ocean Road are currently underutilised by pedestrians. In most cases, this is simply because people are unaware that they exist.



Existing pedestrian laneway situated between 63 and 65 Great Ocean Road



Existing pedestrian laneway situated between 79 and 81 Great Ocean Road



Existing entrance point into the laneway situated between 63 and 65 Great Ocean Road



The existing laneway situated between 79 and 81 Great Ocean Road is narrow in parts, but could be improved through introducing lighting, consistent treatments and colour.

Opportunities exist to:

- ◆ Improve the appearance and function of the two existing mid-block laneway connections situated between 63-65 and 79-81 Great Ocean Road, linking rear car parking areas to the main shops.
- ◆ Negotiate with land owners to facilitate provision of a new mid-block laneway connection in the block between Hardy and Moore Street.

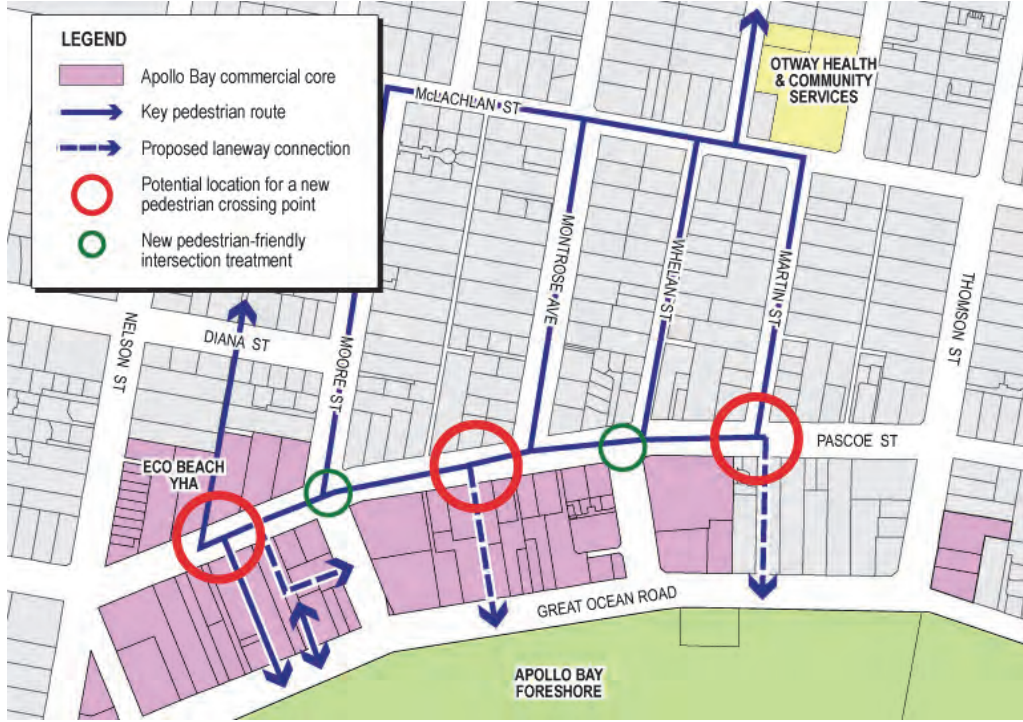
Potential initiatives include:

- ◆ Highlighting the entrance points into the laneways through installation of overhead gateway signage or paving markers along the Great Ocean Road
- ◆ Introducing artwork and subtle areas of colour on the ground plane and/ or walls
- ◆ Improving lighting along the laneways
- ◆ Removing clutter and obstacles (e.g. overhanging branches, bins) along the laneways where possible
- ◆ Introducing wayfinding signage to direct pedestrians
- ◆ Widening laneways as redevelopment occurs, in order to achieve DDA compliancy

TOWN CENTRE

MID-BLOCK PEDESTRIAN LANEWAY CONNECTIONS

CONCEPT PLAN



PRECEDENTS



Overhead gateway signage marking the laneway connection in Colac



Interchangeable signage boards brighten up a pedestrian laneway in Brunswick and create a space for advertising local events



Simple use of colour on the ground plane to create a more lively laneway environment in Melbourne CBD



Overhead lighting enhances the perception of safety in this Melbourne laneway

TOWN CENTRE

PASCOE STREET STREETScape TREATMENT

Many of the streets surrounding the town centre of Apollo Bay have a very wide road reservation. Pascoe Street is a total of 32 metres wide and for the most part this space is underutilised; lacking in trees, footpaths, car parking or bicycle lanes. These large areas of bitumen, combined with a lack of trees and vegetation do not make for a pleasant pedestrian environment, particularly during the hot summer months. This is further exacerbated by large blank walls and a lack of commercial activity fronting Pascoe Street.

Pedestrian friendly crossing points across Pascoe Street are limited. This is particularly an issue during the summer months when the roads are busier.



Existing Pascoe Street road reservation



Existing blank wall fronting Pascoe Street

Opportunities exist to:

- ◆ Improve the pedestrian and visual amenity and function of Pascoe Street as a priority.
- ◆ Improve the amenity and function of adjacent side streets linking to the Great Ocean Road (Thomson, Whelan and Moore Streets, and McLaren Place).

Potential initiatives include:

- ◆ Developing and implementing a native vegetation/ planting theme, including increased street trees and low-scale planting
- ◆ Footpath widening/ resurfacing (using a suitable coastal themed material)
- ◆ Water Sensitive Urban Design (WSUD) treatments
- ◆ Improved pedestrian crossing points (kerb extensions/ raised table crossings/ change in surface treatments)
- ◆ Signage/ wayfinding to increase pedestrian and vehicular navigability
- ◆ Lighting upgrades (low energy fittings with minimal light spill)
- ◆ Introducing 45° or 60° angle parking, particularly along Pascoe Street between Moore and Thomson Streets (in line with recommendations of the *Colac and Apollo Bay Car Parking Strategy, 2011*)
- ◆ Introduction of bicycle lanes



A landscape theme for Pascoe Street should adopt a more informal style of streetscape treatment (similar to the existing foreshore path) in order to emphasise the character of the coastal environment



A landscape theme for Pascoe Street could tie into the look and feel of the YHA Eco Beach Hostel situated on Pascoe Street

TOWN CENTRE

PASCOE STREET STREETScape TREATMENT

CONCEPT PLAN



PRECEDENTS



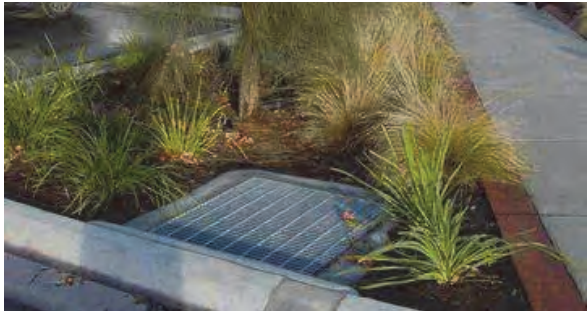
Kerb outstands, parking bays and new street tree planting have improved the amenity and function of Hitchcock Avenue, Barwon Heads



A raised table crossing and widened footpaths in Hastings



Kerb outstands, low-scale planting and angle parking in High Street, Hastings



Water Sensitive Urban Design (WSUD) treatment

OUTER AREAS

PEDESTRIAN CONNECTIONS

The informal nature of streetscapes afforded by lack of hard edges and sealed footpaths contributes to the coastal character of residential streets within Apollo Bay. However, many streets within Apollo Bay do not contain any form of footpath infrastructure. It is now timely to consider key pedestrian routes that may benefit from informal coastal themed (light thermal concrete finish or sand coloured asphalt) pedestrian footpath connections, where they are not currently provided.

The introduction of continuous footpath connections linking key destinations is considered necessary, particularly in locations where enhancing safety and access for all users, including those with limited mobility, is a key priority.

Links to, from and between Apollo Bay P-12 College, Apollo Bay Child Care Centre, Otway Health & Community Services and the town centre were identified as priority routes for improvement.

Pedestrian access across the Great Ocean Road was also identified as a major concern, particularly in the summer months when the roads are busier and increased numbers of holiday makers and residents may their way across the Great Ocean Road to go to the beach. Options to improve the safety of pedestrian movements across the Great Ocean Road need to be explored.

Opportunities exist to:

- ◆ Enhance pedestrian connections along key pedestrian routes to improve access to key destinations.
- ◆ Improve the safety of pedestrian access across the Great Ocean Road at key locations.

Potential initiatives include:

- ◆ Provide continuous informal coastal themed footpath connections (light thermal concrete finish or sand coloured asphalt) along key pedestrian routes where footpath infrastructure is absent (*as identified on the concept plan below*).
- ◆ In consultation with VicRoads, explore the feasibility of providing pedestrian friendly crossing points across the Great Ocean Road:
 - Near the intersection of Cawood Street/ Great Ocean Road
 - Close to the entrance of the Pisces Holiday Park (*not shown on the concept plan below*)

CONCEPT PLAN



4

IMPLEMENTATION

IMPLEMENTATION TABLE

The following table provides an outline of proposed actions to be undertaken as a result of the Review.

COLAC OTWAY PLANNING SCHEME	
LOCATION	ACTION
PLANNING SCHEME	<p>Amend the Colac Otway Planning Scheme Municipal Strategic Statement (MSS) to:</p> <ul style="list-style-type: none"> ◆ Update the <i>Apollo Bay, Marengo and Skenes Creek Framework Plan</i> contained within Clause 21.03. ◆ Update Clause 21.03-3 to include additional objectives and strategies relating to the proposed urban design initiatives for the Apollo Bay township. ◆ Amend the DDO5 to include appropriate reference to the Urban Design Initiatives <p>Include the <i>Design Guidelines for Investigation Area 1</i> as a Reference Document in the Colac Otway Planning Scheme.</p>
INVESTIGATION AREAS	
LOCATION	ACTION
Investigation Area 1	<p>Subject to satisfactory outcome from the technical assessments provided by the land owner and further details regarding any proposed developments:</p> <ul style="list-style-type: none"> ◆ Rezone Investigation Area 1 (in part, below the 40m contour) from Rural Conservation Zone (RCZ) to Residential 1 Zone (R1Z). ◆ Implement a Development Plan Overlay (DPO) preferably with an approved Development Plan to ensure that development of the area is undertaken in a sustainable and sensitive manner and in accordance with the <i>Design Guidelines for Investigation Area 1</i>. ◆ Revise Schedule 4 to the Development Plan Overlay (Mariners Vue) to allow revision of the Framework Plan, as part of the rezoning of Investigation Area 1. ◆ Consider <i>Design Guidelines for Investigation Area 1</i> via Section 173 of the <i>Planning and Environment Act</i> on all new titles created as part of the subdivision of Area 1. ◆ Consider the application of a Design and Development Overlay to control height and make provision for detailed design guidelines.
Investigation Area 2	<ul style="list-style-type: none"> ◆ Rezone the Industrial 1 land surrounding Area 2 to Industrial 3 to improve the interface between existing residential and industrial land (Refer to Page 14 of the <i>Review Report</i>). ◆ Explore the feasibility of providing a new vehicular/ pedestrian connection between Cawood Street and Montrose Avenue along Anderson Creek (and linking through to Woodlands Avenue and Park Avenue). ◆ Explore the potential for the small triangle of land situated between Cawood Street and Anderson Creek (abutting the existing Residential 1 Zone) to accommodate residential development in the longer term.
Investigation Area 3	<ul style="list-style-type: none"> ◆ No action required.
Investigation Area 4	<ul style="list-style-type: none"> ◆ No action required.
Investigation Area 5	<ul style="list-style-type: none"> ◆ No action required.
URBAN DESIGN INITIATIVES	
LOCATION	ACTION
Town Centre	<ul style="list-style-type: none"> ◆ Consolidate, formalise and improve rear car parking areas located to the rear of the main shops. ◆ Enhance the appearance of existing through-block pedestrian laneway connections. ◆ Provide new mid-block laneway connections between the Great Ocean Road and

Pascoe Street.

- ◆ Provide improved signage and wayfinding in the town centre.
- ◆ Improve the pedestrian and visual amenity, and function of the Pascoe Street streetscape.
- ◆ Amend DDO5 to include reference to the Urban Design Initiatives

Outer Areas

- ◆ Provide continuous informal coastal themed footpath connections (light thermal concrete finish or sand coloured asphalt) along key pedestrian routes where footpath infrastructure is absent (as identified on the *Outer Areas Concept Plan* on page 29).
 - ◆ Consult with VicRoads to provide pedestrian friendly crossing points across the Great Ocean Road:
 - Near the intersection of Cawood Street/ Great Ocean Road; and
 - Close to the entrance of the Pisces Holiday Park.
-

5

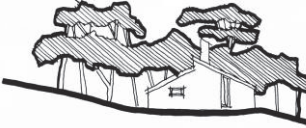
APPENDIX

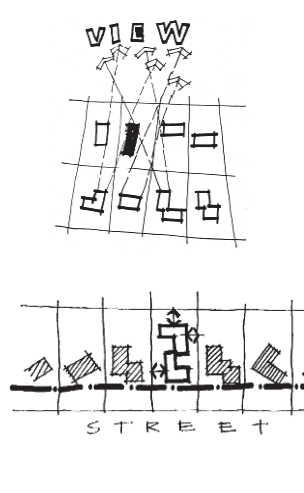
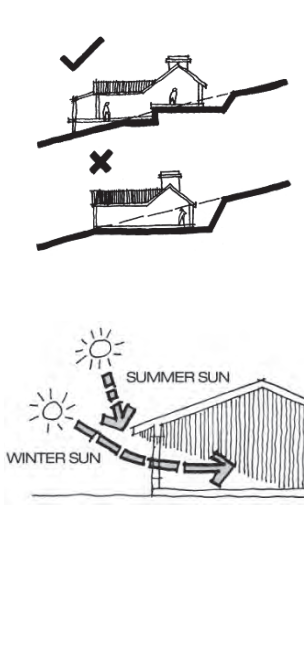
APPENDIX A


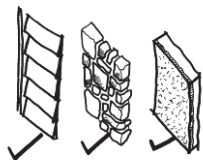
APOLLO BAY SETTLEMENT BOUNDARY REVIEW: DESIGN GUIDELINES FOR INVESTIGATION AREA 1


Planisphere, December 2011

DESIGN GUIDELINES FOR INVESTIGATION AREA 1

Element	Objective	Design response	Avoid	Illustration
Landscape Setting/ Environment	To protect the sensitive landscape, biodiversity, environmental and habitat values of the Apollo Bay coastal valleys and hills, and Wild Dog Creek environs	<ul style="list-style-type: none"> Retain existing trees and provide for the planting of appropriate coastal vegetation wherever possible Provide plantings in informal clumps and clusters as opposed to formal row plantings Encourage the removal of environmental weeds and other exotic vegetation and their replacement with appropriate coastal vegetation 	<p><i>Loss of existing trees/ vegetation</i></p> <p><i>Planting of exotic vegetation/ environmental weeds</i></p> <p><i>Lack of landscaping and substantial vegetation</i></p> <p><i>Detrimental impacts on the environmental significance of the Wild Dog Creek environs and associated wetlands</i></p>	
	To create a vegetated landscape setting congruent with the natural qualities of the coastline	<ul style="list-style-type: none"> Implement extensive planting of indigenous/native vegetation to assist in the rehabilitation of land above the 35-40m contour line 		
	To re-establish the vegetated setting of the area using appropriate coastal vegetation	<ul style="list-style-type: none"> Revegetate the existing clay mounds located along the Great Ocean Road frontage with low scale coastal shrubs/ vegetation 		
	To contribute to erosion control and habitat improvement	<ul style="list-style-type: none"> Link proposed landscaping with existing vegetation and plantings along the Wild Dog Creek environs and primary dune Ensure direct impacts to the Wild Dog Creek environs and wetlands located to the north of the site are avoided Utilise landscaping to screen the impact of roads when viewed from surrounding areas Progressively undertake weed and rabbit control Undertake revegetation as early as possible so that vegetation is established prior to or during dwelling construction Incorporate informal road treatments such as spoon and grassed drains and avoid suburban detailing such as upstanding kerbs and channels Incorporate Water Sensitive Urban Design techniques to improve the water quality of the catchment and maintain appropriate flows Incorporate the planting of indigenous and native species in public open spaces 		

Element	Objective	Design response	Avoid	Illustration
<p>Lot Size & Site Coverage</p>	<p>To provide for a diversity of living opportunities</p> <p>To develop a spacious building setting with substantial space for planting and vegetation</p> <p>To allow for the reasonable sharing of views</p>	<ul style="list-style-type: none"> ▪ Adopt a minimum lot size of 600m², and maximum lot size of 2000m² ▪ Building site coverage should not exceed 30% and total impervious surface coverage (including paving, driveways, swimming pools) should not exceed 40% ▪ Design lot layouts so to maximise views from within allotments and to optimise view sharing opportunities ▪ Lots should be orientated to maximise passive solar access ▪ Minimise storage areas/ outbuildings ▪ Ensure the area between the building and the property boundary is predominantly permeable to water and able to support substantial vegetation ▪ Provide no more than one vehicular crossover per typical site frontage 	<p><i>Large building footprints that prevent views between buildings</i></p> <p><i>Large building masses/ footprints that dominate the landscape</i></p> <p><i>Car parking structures and outbuildings that dominate the façade or view of the dwelling from the streetscape</i></p> <p><i>Large areas of non-permeable surfacing</i></p> <p><i>Dual crossovers</i></p>	
<p>Siting</p>	<p>To ensure buildings and structures are can be substantially absorbed within the natural landscape setting</p> <p>To avoid development in areas at risk from the effects of natural processes such as flooding, erosion, landslip and salinity</p> <p>To maintain the visual dominance of the coastal valley and hills hinterland in relation to the scale and siting of any proposed development</p> <p>To ensure best practice environmentally sustainable design practices</p>	<ul style="list-style-type: none"> ▪ All buildings must be sited below the 40m contour line ▪ No buildings should be located on the existing clay mounds located along the Great Ocean Road frontage ▪ Adopt a minimum benching level to reduce the risk of properties being inundated by sea level rise up to the year 2100 ▪ Buildings should adapt footprints and levels that flow with and emphasise the natural landform/ topography of the area ▪ Design buildings to step down the topography ▪ Buildings should be sited to visually complement and respond to the natural features of the environment and surrounding hinterland ▪ Buildings and structures should be sited and designed to minimise their visual impact on views from publicly accessible areas ▪ Ensure all buildings are orientated to ensure optimal thermal performance, utilise natural light and protect solar access for future development ▪ Locate garages and car parking areas behind the line of the dwelling 	<p><i>Buildings that do not follow the natural contours of the site, and require excessive cut and fill</i></p> <p><i>Development that dominates visually over existing landscape features such as the surrounding foothills, coastal dunes and creek environs</i></p> <p><i>Buildings and structures that are highly visible when viewed from key viewing locations such as the Great Ocean Road and the Apollo Bay township</i></p> <p><i>Buildings with excessive western or southern orientation</i></p> <p><i>Building orientation and siting which reduces solar access opportunities</i></p>	

Element	Objective	Design response	Avoid	Illustration
<p>Building Form & Height</p>	<p>To ensure buildings and structures respond positively to the significant coastal landscape setting</p>	<ul style="list-style-type: none"> ▪ Encourage low scale building forms and if a 2nd storey is provided, it should be smaller than the ground level to minimise visual bulk and allow views between buildings ▪ Development should be kept below the future mature tree canopy height and overall height limited to a maximum of 8m (2 storeys) above natural ground level ▪ Require site responsive building forms that are substantially absorbed by the landscaped setting ▪ Upper level(s) should be recessed and articulated to reduce the visual bulk of development and avoid impacts such as overshadowing and overlooking ▪ Disaggregate the massing of larger buildings and avoid excessive symmetry in plan or elevation 	<p><i>Bulky upper levels</i></p> <p><i>Buildings and structures that protrude above the canopy height of the vegetated (or proposed vegetated) backdrop</i></p> <p><i>Bland, boxy, unarticulated building forms</i></p> <p><i>Sheer, visually dominant elevations</i></p>	
<p>Materials & Design Detail</p>	<p>To ensure buildings demonstrate a high standard of contemporary design and complement the character of the natural coastal environment</p> <p>To ensure best practice environmentally sustainable practices</p>	<ul style="list-style-type: none"> ▪ Utilise colours and finishes that complement the native vegetation of the local area, including dark, natural colours and matte finishes ▪ Utilise muted colours and finishes that best immerse the building within the landscape ▪ Use a mix of contemporary and traditional coastal materials, textures and finishes including timber, render, glazing, stone, brick and iron roofing ▪ Make use of building materials with minimal environmental impact and encourage the use of recycled materials where possible ▪ Use simple design detailing ▪ Use glazing and roofing materials of low reflectivity ▪ Ensure that all structures associated with services, including radio, television and other signal aerial structures are located to minimise their visual prominence ▪ Buildings should achieve at least a 5 star energy rating or an equivalent home energy rating scheme ▪ Encourage properties to install rainwater tanks ▪ Promote the use of a separate water pipe system for the reuse of grey water for toilet flushing and gardens 	<p><i>Excessive decoration and historical reproduction styles</i></p> <p><i>Unarticulated or non-textured, sheer facades and building forms</i></p> <p><i>Excessive use of colours that contrast strongly with vegetation</i></p> <p><i>Highly reflective glazing and roofing materials</i></p> <p><i>Overuse of heavy looking materials such as brick</i></p> <p><i>Visually prominent signal aerial structures</i></p>	

Element	Objective	Design response	Avoid	Illustration
<p>Private Realm Landscaping & Vegetation</p>	<p>To set buildings and works within a landscape of appropriate coastal vegetation</p> <p>To ensure vegetation and landscaping is integrated with the design of the development and complements the surrounding coastal landscape</p> <p>To incorporate the use of Water Sensitive Urban Design (WSUD) principles</p>	<ul style="list-style-type: none"> ▪ Retain existing trees and provide for the planting of appropriate native/indigenous coastal vegetation wherever possible ▪ Provide for the planting of predominantly native coastal and indigenous trees and shrubs in clumps and clusters and avoid formal row planting particularly along property boundaries ▪ Encourage large scale vegetation that is capable of providing a visual screen to development and protection from prevailing coastal winds ▪ Screen buildings, structures and areas of hard surfaces with appropriately scaled informal landscaping ▪ Encourage landscaping, rather than fencing, to create privacy. Where this is not appropriate, provide an open style front fence (post and wire) to a preferred maximum height of 1.2 metres ▪ Encourage the removal of environmental weeds and their replacement with appropriate coastal vegetation ▪ Proposed vegetation should be capable of withstanding sand and salt attack ▪ Ensure landscape design assists in passive solar heating/ cooling 	<p><i>Landscaping that provides little connection to the surrounding context</i></p> <p><i>Building dominated streetscapes (once vegetation is established)</i></p> <p><i>Loss of existing trees/ vegetation</i></p> <p><i>Lack of landscaping and substantial vegetation</i></p> <p><i>Planting of exotic vegetation/ environmental weeds</i></p> <p><i>Formal landscape design (e.g. geometrically aligned landscaping/ large areas of lawn/ formal garden beds)</i></p> <p><i>Hard surfaces and hard edges in landscaping</i></p> <p><i>Large areas of impervious surfaces, particularly in the front setback area and in areas visible from the public domain</i></p> <p><i>Large underutilised paddock areas</i></p> <p><i>Front boundary treatments that include urban or suburban-style fences and landscaping</i></p> <p><i>Fences on the front boundary</i></p> <p><i>High, solid fencing</i></p> <p><i>Large entry features, particularly in brick, stone or concrete</i></p>	

Element	Objective	Design response	Avoid	Illustration
Vehicular & Pedestrian Access	<p>To enhance pedestrian access opportunities in the vicinity of Investigation Area 1</p> <p>To ensure that there is no adverse impacts on the function of the Great Ocean Road as a result of new development</p>	<ul style="list-style-type: none"> Explore the potential to provide a shared pathway looping around the site and linking to the coastal foreshore path and Mariners Vue Ensure that the slope of pedestrian and bicycle paths are minimised where possible Ensure development can be adequately serviced via a single access intersection at the Great Ocean Road Ensure that all internal roads are designed to link to roads within Mariners Vue Ensure that all new streets are designed to accommodate the manoeuvring requirements of service and emergency vehicles Explore the potential to extend the 60km/h speed limit along the Great Ocean Road to the natural boundary of Wild Dog Creek 	<p><i>Lots with direct access to the Great Ocean Road</i></p> <p><i>Pedestrian and bicycle paths with steep gradients</i></p> <p><i>Dead-end access streets within the subdivision pattern</i></p>	
Public Open Space	<p>To provide usable public open space to encourage integration of the area with Apollo Bay, and to contribute to a linked pedestrian path and the open space needs of the town.</p>	<ul style="list-style-type: none"> Provide public open space areas with direct access from the Great Ocean Road Provide linkages to the public open space from any new or proposed public pathway Ensure open space contains flat and accessible land suitable for play equipment, public picnic areas and seating Landscape open space areas with suitable coastal vegetation 	<p><i>Steeply sloping or poorly located open space</i></p> <p><i>Spaces that appear to be privately owned or exclusive to nearby residents</i></p>	