



1.0 Introduction

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E	Hatch Design	02.06.2023	А3	Endorsed Master Plan

Disclaimer: This Master Plan is provided as a tool for planning and discussion purposes only, and any decisions or actions taken based on the contents of the plan shall be the sole responsibility of the parties involved. Hatch Design shall not be held responsible or liable for any items listed within the Master Plan. It is important to note that all items listed in the Master Plan report are subject to consultation, approvals, detailed design, and assessments, professional advice or expertise and that any decisions or actions taken based on the contents of the plan should be made with consideration of these factors.

1.2 Acknowledgment of Country

We would like to acknowledge that The Bluff (Kongkengguwarr, Longkewar, Rosetta Head) is on the lands of the Ramindjeri and Ngarrindjeri people, the Traditional Custodians of the land and surrounding waters, where we live and work. We acknowledge their deep connection to Country and pay our respects to Elders past, present and emerging.

1.3 Consultant Team

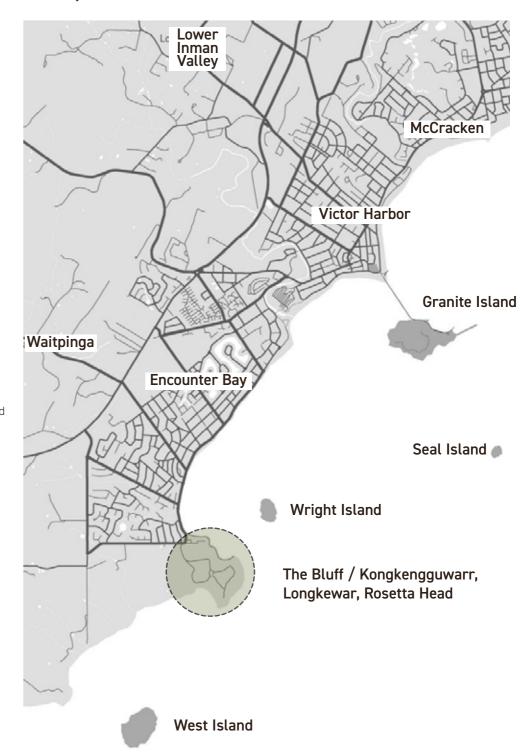
The City of Victor Harbor has engaged Hatch Design to assist in preparing a Master Plan for The Bluff. The Master Plan aims to set out a shared vision to guide future considerations, planning and budget allocations. Hatch Design has been supported by specialist expertise to assist in the preparation of the Master Plan.

- EBS Ecology (Ecology and biodiversity)
- Trento Fuller (Access and inclusion)
- Chris Sale Consulting (Cost reporting and cost planning)

The Bluff Master Plan has been developed following an extensive community and stakeholder engagement process that took place throughout 2022/23. The voices of approximately 700 individuals were heard during this process, including Council Staff, Councillors, local community members, stakeholders, First Nation's representatives and visitors.

We extend our appreciation to all those who provided invaluable input, insight, and local knowledge to help shape the Master Plan. It is important to emphasise that this report is intended to be a living and working document to ensure that future works reflects the community's vision for The Bluff.

1.4 Locality Plan





1.0 Introduction

1.5 Executive Summary

The Bluff, also known as Kongkengguwarr, Longkewar and Rosetta Head, is a much loved iconic Victor Harbor landmark. As a prominent landscape reference within the Fleurieu Peninsula landscape, The Bluff plays an important role in the environmental, recreational, tourism, heritage, community and cultural value of those who share an ongoing connection to The Bluff. In recognition of this, the City of Victor Harbor has engaged Hatch Design, to assist in preparing a Master Plan for The Bluff which sets out a shared vision, guides future considerations and highlight opportunities to enhance, protect and preserve the unique character, qualities and community sentiments, for this important asset.

Without a robust and well considered Master Planning approach for the future, the demands on The Bluff are likely to create conflicting social, community, cultural, environmental and economic impacts. Critical to the development of the Master Plan report has been the importance of early engagement. Consultation has sought to better understand how the Master Plan needs to respond to current needs, what challenges it needs to address now and into the future. The process prioritises open dialogue with all those who care about The Bluff and its future.

Despite some comments suggesting The Bluff should be left alone and nothing done, it is important to recognise that doing nothing is not the same as working towards the preservation and protection of the existing character and site qualities.

The Master Plan provides;

- A strategic document with a clear vision for the future development of an area, spanning over a short, medium, and long-term timeline of up to 20 years. This plan serves as a roadmap to guide future planning and decision-making processes, as well as a framework that outlines key principles and considerations that must be taken into account.
- Recommendations for the management, enhancement, and opportunities for the area, with the goal of guiding budget allocations, investments, and grant funding opportunities towards achieving the shared vision. This allows for a coordinated and cohesive approach to development, ensuring that all efforts are aligned towards achieving the shared vision.
- A valuable resource for the council as it seeks support, direction, and feedback from stakeholders, including residents, businesses, and community groups. This ensures that the plan reflects the needs and aspirations of the community, and that there is a shared understanding of the direction and priorities for the area.

Critical to the long term success of the Master Plan is the inclusion of authentic consultation and engagement. Hatch Design in association with the City of Victor Harbor undertook extensive engagement to seek input to understand what a shared vision for The Bluff would look like and how this could inform the development of a Master Plan. More than 700 stakeholders came together to provide input, identify strategic goals and objectives, express concerns, discuss and test opportunities.

The engagement process focused on a (3) part approach, each of which intertwined to ensure a

circular dialogue and ensure no one voice dominates. Community consultation was undertaken which included a series of community design workshops over two-days, an on-site drop in session and an online survey.

A Community Consultation Key Findings Report was issued to Council in June 2022, which has been released for public access via Council's website.

The engagement process highlighted (8) high-level themes which reflected the sentiment and nature of feedback received. These included;

- 1. Celebrating diverse views, vistas and outlooks
- 2. Improving trails, tracks and links
- 3. Re-wilding The Bluff (revegetation and landscape management)
- 4. Limiting development, commercialism and built form
- 5. Supporting places for contemplation, escape and clarity
- 6. Layering, discovering and uncovering rich narratives, stories and histories
- 7. Strengthen connection to rugged and wild landscape
- 8. Enhancing connection to the marine environment

Parallel with this, numerous meetings, workshops and site walkovers have been undertaken with representatives from key stakeholders groups. These meetings have been pivotal in understanding key issues and opportunities.

- City of Victor Harbor Council
- Ngarrindjeri Aboriginal Corporation (NAC)
- Ramindjeri Heritage Association (RHA)
- Local Ngarrindjeri / Ramindjeri Elders
- Coastcare Victor Harbor
- The Department for Environment and Water (DEW)
- Green Adelaide
- Native Vegetation Branch
- Coastal Protection Board

Background review of the existing supporting and reference documents has been undertaken, with reference to;

- · City of Victor Harbor Community Plan 2030
- State Government's 30 Year Review
- Victor Harbor Open Space and Recreation Strategy
- Victor Harbor Mountain Bike Strategy
- Victor Harbor Environmental Management Plan 2015
- Department of Environment and Water's plans relating to : the Granite Island Visitor Experience Master Plan (in development)

As a result of community and stakeholder input, a draft Master Plan was developed. In order to better understand the support for the draft plan, items that require further development, and

concerns that may not have been addressed, community and stakeholder feedback was sought through a survey for a period of four weeks (09 January - 03 February 2023).

An information stand was set up within the Council foyer including opportunity for comments to be provided via anonymous 'post-it' notes. Additionally, community members were invited to a drop-in session in the council foyer on Wednesday 18 January 2023, which allowed them to ask additional questions and seek clarification.

The formal community consultation period for the draft Bluff Master Plan ran from 9 January 2023 until Friday, 3 February 2023.

Feedback on the draft Master Plan was collected through a number of different methods:

- Survey www.yoursay.victor.sa.gov.au and hard copy (87 responses)
- Written feedback (6 responses)
- Drop-in session at the Civic Centre (attended by around 30 people)
- Interactive display in Civic Centre foyer encouraging people to leave their feedback

The opportunity for residents to have their say on the draft Master Plan were promoted in the following ways:

- Council's corporate website www.victor.sa.gov.au
- Your Say Victor Harbor website www.yoursay.victor.sa.gov.au
- Display in Civic Centre foyer (from 9 January to 3 February 2023)
- Social Media Facebook and Instagram
- Victor Viewpoint
- Public notice and articles in local newspapers (The Times, Fleurieu Sun and The Advertiser)
- Radio advertisements (Happy FM and Fleurieu FM)
- Direct email from Council to a range of different databases
- On-site signage.

After reviewing the draft Master Plan, the survey asked respondents whether they supported its overall direction and intent, with 73% of the responses indicating positive support. A comprehensive summary report was presented to the Council, which outlined the results of the survey and the responses to questions.

The following Master Plan report explores detailed issues and opportunities mapping, sketch plans, illustrative photomontages and a materials style guide has been provided. The Master Plan focuses on (4) key focus zones with the a probable opinion of cost plan reflecting the key moves for each zone.



Kongkengguwarr | Longkewar | Rosetta Head

1.6 From Plan to Place

The Bluff Master Plan is a strategic plan based on extensive community and stakeholder engagement that provides a shared vision for The Bluff's future. It sets out a framework for future decision-making and funding allocation by providing broad goals, objectives, and strategies, as well as identifying key infrastructure and land uses. Conceptual designs are included in the Master Plan to provide a general idea of what specific actions and ideas could look like in the future.

It's important to note that the Master Plan is a high-level strategic framework, and the next steps involve developing detailed designs that align with the specific goals and objectives identified in the Master Plan. Detailed design focuses on the specific design of individual elements, including technical specifications, material selections, and other detailed design documents that provide the necessary information for implementation. The detailed design process considers factors such as functionality, accessibility, sustainability, and aesthetics, and involves stakeholder consultation, testing of design ideas, and cost-benefit analysis to ensure feasibility, practicality, and cost-effectiveness.

The detailed design process builds on the vision and goals set out in the Master Plan and provides greater detail of individual elements. The two processes are interdependent and complementary, with the detailed design process being a critical step in turning the goals and strategies identified in the Master Plan into tangible results.



"The plan looks to be a significant improvement to both the usability of The Bluff by the community and the reclaiming of it as a natural space."

Draft Master Plan survey respondent

"It has been a great process and very much appreciated to have been involved. People have been listened too with feedback taken on board, the people I have spoken to are excited by this plan. The consultants have done a fantastic job to balance the loud voices from the quiet ones and create a user friendly plan. Well done!"

Draft Master Plan survey respondent

It is fantastic to have an overarching document to refer to with the community's view and goal for The Bluff

Draft Master Plan survey respondent

The Master Plan is excellent. It addresses the expectations of very diverse users of the area instead of just the noisiest ones. It will also benefit those who live in places that have views of The Bluff. It also appears to cater to environmental concerns and the desire for the space to be more wild and natural than its currently degraded state. I'm very happy to see that First Nations people's relationship with the area will be represented and included in the plans.

Survey respondent

"Very practical and not too over bearing on the environment."

Survey respondent



Kongkengguwarr | Longkewar | Rosetta Head

1.0 Introduction

1.6 Timeline and Process

The development of this Master Plan has been undertaken in collaboration with our community over many months. The timeline and process for delivery is outlined below.

Project Familiarisation and Background

- Project inception (28 April)
- 2. Council staff site walkover and workshop (04 May)
- 3. Disability and inclusion walkover and workshop (04 May)
- 4. Site analysis, assessment and background review
- 5. Development of engagement survey (Draft)

Listening and Learning

- 1. Stakeholder workshop and Site walkover (ecology and environment) (17 May) (Coastcare, Department of Environment, Green Adelaide, DEW, Native Vegetation Branch, Coastal Protection Board, Council Staff
- 2. Development of consultation framework and approach
- 3. Ongoing discussions through Council staff with NAC and other First Nations
- 4. Elected Member workshop (24 May) update and engagement approach
- 5. Community engagement approach finalised
- 6. Community consultation survey released (05 May 29 May) via City of Victor Harbor 'Your Say' page. Hard copies provided.
- 7. Advertisement of Community Design Workshops (27 May / 28 May)
- Survey closed 29 May with a total of 639 responses .

Community and Stakeholder engagement

- Community design workshops at the Coral Arts Centre. 5pm 8pm (27 May)
- 3. Community design workshops at the Coral Arts Centre. 9am 6pm (28 May)

Draft Master Plan

- Draft Master Plan report
 Draft Master Plan presented to Council meeting (July)
 Draft Master Plan updated (revised)

Finalise draft Master Plan

- Draft Master Plan report endorsed by Council

- Develop consultation feedback report

Final Master Plan

- 1. Further refinement to finalise Master Plan Report
- 2. Present Final Master Plan to Council (July 2023)
- 3. Endorsement and sign off of project (July 2023)



2.0 Project focus

2.1 Focus area



The Bluff (Kongkengguwarr, Longkewar, Rosetta Head) is Crown Land under the care and control of the City of Victor Harbor. The reserve consists of approximately 36.7 hectares of native vegetation, walking trails, sealed roads and car parks, shelters and picnic facilities.

The Bluff offers a multitude of passive recreation opportunities for walkers including trail networks and connections that climb the headland, a heritage trail that connects to the Wild South Coast Way, which is part of the Heysen Trail.

The reserve supports recreation activities including sightseeing, fishing, scuba diving and snorkeling, surfing, swimming, fishing, meditation and yoga, picnicking, bike riding, stargazing, abseiling, hang gliding and use of remote-control aircraft. During winter, frequent whale sightings in and around The Bluff encourage additional visitors to the site. An online community survey identified 67% of respondents visited The Bluff either monthly, weekly or multiple times per week, with only 2% of survey responses indicating that they do not visit The Bluff.

The Bluff has significant heritage and cultural value. Its creation is depicted in the Ngarrindjeri dreaming story of Ngurrunderi. It is also considered one of the first place in South Australia where Aboriginal and European people worked side by side at the Whaling Station that was established there in 1837 (the station ceased operation in 1851). Remnants of the Whaling Station were discovered in 2017, subsequently the area around the site was added to the State Heritage Register.

The Bluff is an important biodiversity asset, over 112 native flora species have been identified on the site, of which, five are listed as Rare under the National Parks and Wildlife Act 1972 with 55 species attracting a regional listing in the Adelaide and Mount Lofty Ranges Natural Resources Management region (AMLR). Local Coastcare volunteers have spent many years controlling weeds and revegetating the site.

Key



Project Focus Area

Significant Environmental Benefit Site (SEB)

Approximately 28.78 hectares (ha) within The Bluff has been set aside as Significant Environmental Benefit (SEB) sites. These areas are established to provide support in limiting vegetation clearance to maintain and protect threatened vegetation communities and species.



2.0 Project focus

2.2 Land Tenure and Ownership

The site is comprised of various types of land ownership and management as shown in detail on the following page.

Main portion under Council control

A7622 - Lot 1000 Council Assessment #

Crown Record 5795/105 DP 52394 Title reference

Ownership The Crown

Dedication City of Victor Harbor - Recreation and Pleasure Resort

Gazette 30/6/1994 and 20/4/2000

Extinguished **Native Title**

Aboriginal Heritage Called 'Kongkengguwarr' by the local Ramindjeri people clan of the

Ngarrindjeri people

38.1 Ha Area

State Heritage listed site # 10353 - former Whaling Station Site Heritage Status

Open Space Land use Undeveloped Reserve

Land Management Plan Open Space Reserve - Land modified for public enjoyment

C type reserve- Minimal developed and non-irrigated

Smaller portion under DEW control

A5489 - Sec393 Council Assessment #

Title reference Crown Record 5760/511 DP 52394

Ownership The Crown

Trig Reserve Station

Dedication The Department for Environment and Water (DEW)

Native Title Exists 0.5515 Area

Is included in the State Heritage listed site # 10353 Heritage Status

Trigg point Metal disc on concrete only – no tripod

Zoned Open Space

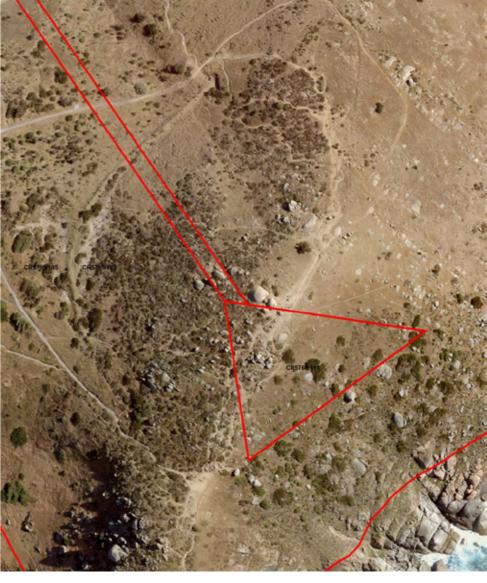
Land use Undeveloped Reserve

Included in the plan for adjoining land - Open Space Reserve - Land Land Management Plan

modified for public enjoyment

C type reserve- Minimal developed and non-irrigated







3.0 Consultation and Engagement

3.1 Engagement Approach and Summary

Each phase of the engagement process aimed to build on 'local' knowledge, to better understand the ongoing efforts, concerns and hopes of the wider community. Hatch Design acknowledges that successful projects are achieved through shared conversations, local knowledge exchange and a willingness to 'unlearn' conventional wisdom. The engagement process has focused on a three part approach, each of which intertwined to ensure a circular dialogue, continual learning and ensuring the project team was asking the right questions.

To begin a conversation with all those who care about The Bluff, a community and stakeholder survey was released via Council's Your Say page. Hard copies were also provided at the Council Office. The survey was released for public consultation for three weeks (05 May - 29 May 2022). A total of 639 submissions were received. As part of the stakeholder engagement process a number of workshops, meetings and conversations occurred with a diverse range of stakeholders not limited to Coastcare, The Department for Environment and Water, Green Adelaide, Native Vegetation Branch, Coastal Protection Board, Council Elected Members and Council Staff. A number of stakeholder site walkovers have been undertaken which have focused on;

- Opportunities for balancing impacts to the environment
- Preservation and protection
- Enhancing existing assets
- Celebrating cultural narratives and histories
- Increasing inclusion and All Abilities access.

By walking the site, the project team has been able to gain intimate knowledge of The Bluff, and begin to better understand some of the issues and opportunities that need to be considered.

The project team has engaged with a number of First Nations representatives. This has included meeting with the Ramindjeri Heritage Association (RHA) which identified further opportunity for on site learning and engagement. An initial meeting with the Ngarrindjeri Aboriginal Corporation (NAC) followed by a collaborative workshop with representatives, that identified a number of considerations and opportunities which continue to be explored, developed and actioned. Council staff have also attempted to make contact with the Ngarrindjeri Regional Authority (NRA) which remains ongoing.

Community Design Workshops were held on Friday 27th of May and Saturday 28th of May, at the Coral Street Art Space, located in Victor Harbor. A 2-hour drop in session was also held at the Petrel Cove shelters on Friday 27th of May. Workshops built on the information gathered as part of the community engagement survey and encouraged locals, stakeholders and visitors to attend a 50-minute workshop with groups of up to 15 people. Over the two-day event, more than 75+ community members were involved as part of the collaborative design process.









Community Design Workshops at the Coral Street Arts Space (27/28 May 2022). Photos by Heidi Wolff Studio

4.0 Planning Priorities

4.1 Consultation Key Themes

Feedback received throughout the engagement and concept development phases highlighted (8) high-level themes. Further site analysis, investigations and stakeholder sessions have continued to progress and refine considerations and objectives for each theme. These are to be used to guide decision making processes to ensure the sentiment and nature of feedback received is integrated as part of the planning process.

To help guide the future development and planning of the site, the following (8) guiding principles have been developed, based on a range of themes, issues and opportunities explored through the project.

The guiding principles respond primarily to the key considerations that have been uncovered through the consultation and engagement process. Design principles have assisted in developing the design responses and recommendations for the Master Plan.

- · Celebrating diverse views, vistas and outlooks
- Improving trails, tracks and Connections
- Re-wilding The Bluff (revegetation and landscape management)
- Discovering, uncovering and learning narratives, stories and histories
- Spaces for contemplation, escape and clarity
- Limiting development and built form
- Strengthen connection to rugged and wild landscape
- Enhance Connection to marine environment

4.2 Issues and Opportunities Mapping

As part of the Community Design Workshops, Hatch Design worked collaboratively with the community to better understand the issues and opportunities associated with The Bluff and how the Master Plan could resolve or enhance these aspects. A total of 122 key considerations, actions and Master Plan objectives were identified.

The following plans, which can be found on Page 12, highlight key opportunities and further considerations, based on additional site analysis, stakeholder engagement and Council feedback. Analysis has been separated into the following (3) categories;

- 1. Destinations, Infrastructure and Facilities
- 2. Access and Movement
- 3. Landscape and Environment



Community Design Workshops at the Coral Street Arts Space (27/28 May 2022). Photos by Heidi Wolff Studio

Kongkengguwarr | Longkewar | Rosetta Head

4.0 Planning Priorities

4.3 Guiding Principles



Celebrating diverse views, vistas and outlooks

Master Plan considerations:

- Reinforcing the importance of view corridors and connections to the wider landscape, including views to The Bluff from Victor Harbor.
- Enhancing the narrative to viewpoints by embedding cultural, social, and environmental learnings as part of viewpoints and
- Improving All Abilities access to view points to ensure that accessibility is increased.
- Considering the impacts of infrastructure, built form, and development on views while taking into account the context and
- Reinforcing the importance of The Bluff as a wayfinding reference within the town and beyond.
- Celebrating diverse visual connections to wider landscapes such as Waitpinga cliffs, West Island, Wright Island, and Granite Island.



Improving trails, tracks and connections

Master Plan considerations:

- Using appropriate surface materials to enhance safety and improve
- Improving walking trails and accessibility by locating and aligning walking trails, paths, and stepped access appropriately.
- Diversifying trails, open space, and recreation opportunities to disperse the focus of activity away from the top of The Bluff.
- Improving access and links to the central zone to balance
- Providing multiple access points to support diverse recreational
- Supporting ongoing use of recreational walking opportunities while limiting ad hoc development of trails.
- Developing a diversity of trail experiences, including a range of difficulty, gradients, and trail types.
- Providing "difficult" trails to support hiking connections.
- Improving the connection between The Bluff and the Town Centre.
- Keeping trails natural to reflect the rugged and wild landscape.
- Strengthening existing trails and creating new trail experiences to increase links and loops within the site.
- Reinforcing The Bluff as a conduit for connecting the Wild South Coast Way, Heysen Trail, and Victor Harbor Heritage Trail with wider trail networks
- Reinforcing The Bluff as the starting/finishing point for multi-day hiking opportunities.
- Implementing trail closures to limit impacts on the environment.
- Limiting unwarranted access by improving the legibility of trails.
- Celebrating narrative, cultural overlay, and learning through future trail developments.
- Developing trail naming to incorporate local places, endemic species, cultural, and community values.



Re-wilding The Bluff (revegetation and landscape management)

Master Plan considerations:

- Increasing the diversity and distribution of endemic plant species.
- Continuously improving the landscape through additional revegetation and the creation of native habitat, as well as appropriate land management practices.
- Protecting and enhancing the unique natural coastal character of
- Identifying key rehabilitation areas through the development of an overarching site restoration/revegetation management plan.
- Improving infrastructure to limit vehicle access in the reserve, which poses a threat to flora and fauna.
- Prioritising ongoing management and future planning of environmental threats, including feral animals and other dangers.
- Monitoring the degradation of the natural environment.
- Strengthening The Bluff's reputation as a coastal and natural
- Aligning future land management plans to respond to the diversity of landscape types and requirements.
- Balancing the impacts of light spill to animal and habitat value.
- Strengthening biodiversity through additional revegetation, native habitat creation and protection, and appropriate land management and maintenance.



Discovering, uncovering and learning narratives, stories and histories

Master Plan considerations:

- Respect and honor the cultural connections to The Bluff, especially those of the Ngarrindjeri / Ramindjeri people.
- Celebrate the opportunities to incorporate cultural significance, values, histories, narratives, and stories into future works, both First Nations and European.
- Encourage learning, inclusion, and engagement to promote cultural awareness and understanding.
- Build respectful relationships with First Nations peoples, recognising their connection to the land. Engage in consultation to identify values, aspirations, and concerns regarding The Bluff and the wider landscape. Share information about proposed changes to the landscape that may affect their cultural heritage or connection to the land. Incorporate traditional knowledge to inform management and conservation practices.
- Acknowledge and respect traditional ownership of the land.
- Reinforce The Bluff as a connected cultural landscape and facilitate ongoing learning and listening opportunities. Develop cultural partnerships that celebrate both tangible and intangible cultural values.
- Strengthen cultural education and opportunities, including on-site learning, demonstrations, and spaces to support community events.
- Future detailed design works should align with Council's destination brand.



Kongkengguwarr | Longkewar | Rosetta Head

4.0 Planning Priorities

4.3 Guiding Principles



Spaces for contemplation, escape and clarity

Master Plan considerations:

- Ensure spaces for reflection and relaxation are provided.
- Recognise the importance of The Bluff in providing a serene environment for contemplation and introspection.
- Preserve the peaceful and tranquil qualities of the site, maintaining a sense of calmness and serenity.
- Designate areas specifically for quiet and solitude, providing opportunities for visitors to unwind and relax in nature.
- Consider the impact of noise and other disturbances on the overall experience of the site, and implement measures to mitigate these
- Encourage visitors to engage with the natural environment and appreciate the beauty of the surrounding landscape, promoting well-being and mental health.



Limiting development and built form

Master Plan considerations:

- · Limit further development and encroachment to preserve the visual character and natural landscape, and prevent erosion and
- Prioritise improvements and upgrades within the existing built form
- Avoid excessive infrastructure, large sculptures, and signage.
- Restrict permanent commercial development and ensure adequate buffer distances from the coast in line with Coast Protection Board Policy Documents, including Coastal Flooding and Erosion Hazard.
- Encourage temporary pop-ups and traders to increase activity and vibrancy in a controlled manner.
- Preserve marine archaeological, cultural, and scientific heritage sites from disturbance or devaluation caused by future works.
- Preserve undeveloped areas of The Bluff in their natural state.
- Avoid development that significantly impacts the coastline areas with significant landscape value.
- Discourage incremental sprawl and development that detracts from the visual appearance and overall appeal of The Bluff.
- Minimise the encroachment of additional parking areas and prioritise improving the economy within the existing footprint.



Strengthen connection to rugged and wild landscape

Master Plan considerations:

- Reinforce the sense of rugged beauty to enhance the natural character of The Bluff.
- Ensure that design outcomes are responsive to the coastal character of The Bluff to maintain its unique identity and natural
- Support opportunities that encourage a continual focus on connection to the natural environment and preservation of the wild coastline to protect its ecological and cultural significance.



Enhance Connection to marine environment

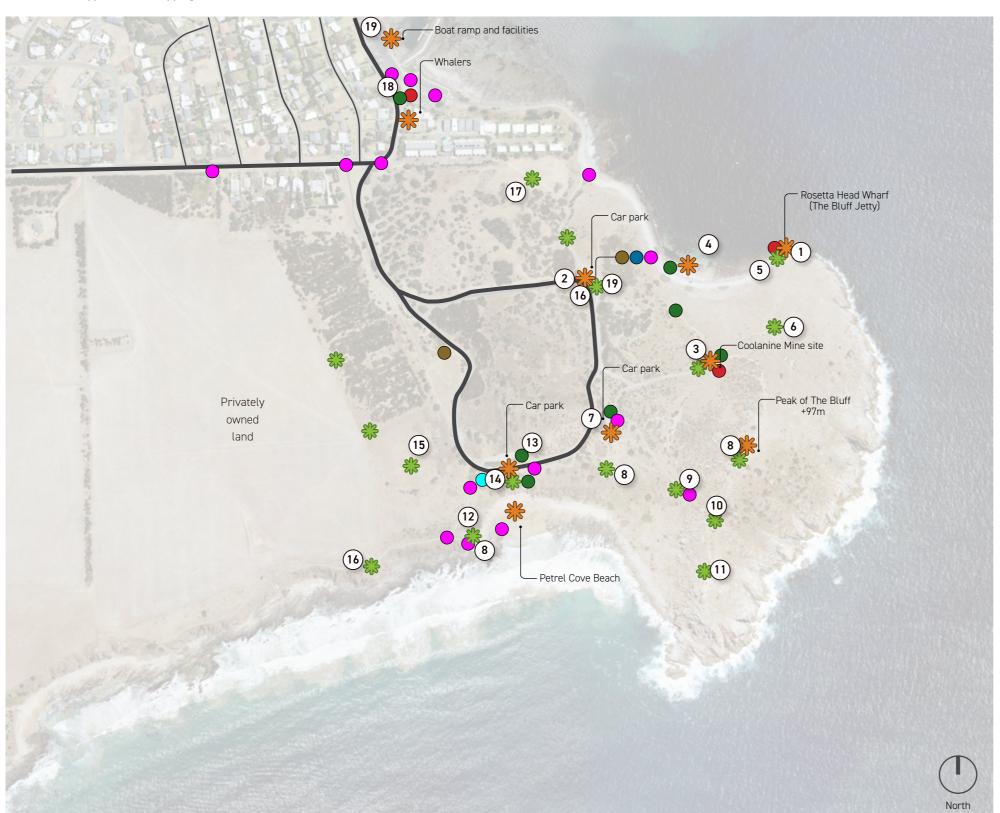
Master Plan considerations:

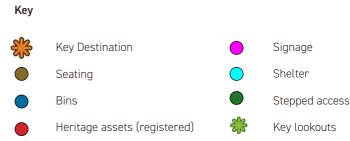
- Balance access to the ocean, beaches and marine environments (surfing, swimming, scuba, snorkeling, kayaking)
- Preservation, protection and promotion of marine environment including education.
- Reinforce connection to Encounter Marine parks and aquatic reserve surrounding West island.
- Improve facilities and opportunities to support diverse water based
- Maintain adequate beach levels, both to prevent storm damage and to provide adequate beach recreation space.



4.0 Planning priorities

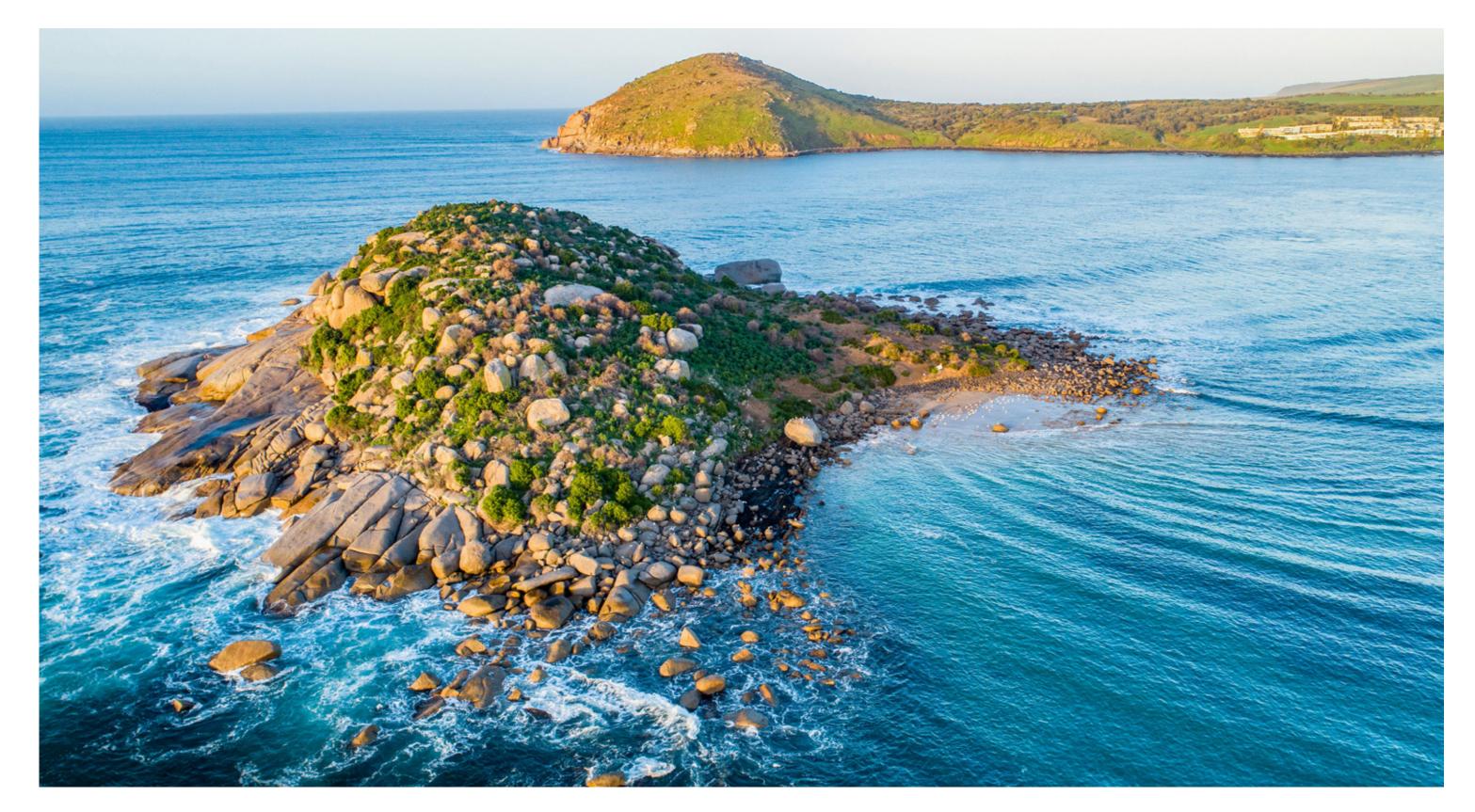
4.4 Issues and Opportunities Mapping: Destinations, Infrastructure and Facilities





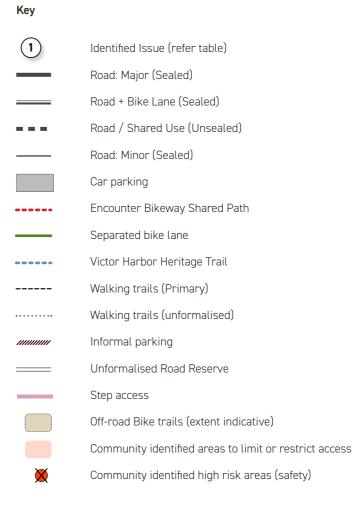
Master Plan Considerations

- 1. Limited access to public toilet facilities within precinct. Ongoing management issues with Jetty users defecating within the rocks. Review location for low impact toilet facilities such as composting to limit service infrastructure and ground disturbance, including solar
- 2. Car park important in vehicle lookout location and destination. Encourage broader connection to wider views (Seal Island, Victor Harbor).
- 3. Improve connections to Coolanine Mine. Strengthen learning opportunities and reinforce
- Popular swimming beach. Upgrade accessibility to improve beach access.
- Limited shade, seating, shelter or amenities to Franklin Parade, improve visitor facilities.
- 6. Strengthen connection to viewpoint. Formalise look out with designated end stop to limit unsanctioned access beyond.
- 7. Car parks provide important in car viewpoints. High turn over rates to car parking (short term parking). Encourage 'park and wander'.
- Well utilised viewpoint. Formalise trails to limit ad-hoc trails developing.
- 9. Elevated viewpoint provides intermediate view point, stepping stone and rest stop.
- 10. Important wayfinding point.
- 11. Formalise access location and provide signage to support abseiling (controlled)
- 12. Important All Abilities viewpoint and broader connection to the Wild South Coast way and Victor Harbor Heritage Trail.
- 13. Car park important in vehicle lookout location. Strengthen connection and opportunities to view corridors including limiting vegetation screening to view point.
- 14. Increase focus on celebrating views. Formalise viewpoint including all weather shelter.
- 15. View corridor to Waitpinga Cliff, Kings Head and West Island.
- 16. Existing rest stop location, strengthen visual context through to Petrel Cove.
- 17. Creation of viewpoint from Bluff accommodation.
- 18. Maintain State Heritage listing strengthen connections to Well and Whaling Station site.
- 19. Strengthen connection to future public toilet to be constructed at The Bluff Boat Ramp.



4.0 Planning priorities





4.0 Planning priorities

4.5 Issues and Opportunities Mapping: Access, Movement and Connections

Master Plan Considerations

- 1. Limited space within existing footprint for car park expansion to support future boat ramp demand. Ongoing issues with boat trailer parking, congestion and poor vehicular movements during peak events. Limited separation of vehicles, pedestrians, cyclists and boat ramp users creates user conflicts due to competing access requirements. Consideration for improving legibility, function and balance future usage demands. Undertake wider car parking strategy and capacity analysis (as separate study to this report) to investigate additional parking requirements for overflow parking (off-site) with improved pedestrian connections to the boat ramp. Future infrastructure improvements to the boat ramp needs to ensure pedestrian and cycling safety, legibility and connections within the precinct are legible.
- 2. Undertake a formal assessment of existing signage (as separate study to this report) to improve signage (regulatory and wayfinding) to boat ramp to limit visual cluttering and strengthen visible connections and access points. Future wayfinding should ensure cohesive signage approach including materiality, locations, function, and development of signage hierarchy.
- Improve connections from Encounter Bikeway to improve safe access. Important 'off-street' bicycle link connecting Victor Harbor. Improve surface treatments to Franklin Parade to strengthen 'shared use' environment.
- Improvements to pedestrian access and footpath connections including improved stair
- Improve vehicular traffic management and movements to Franklin Parade including options to limit access, provide suitable turn around locations and reduce vehicular impacts on coastal edge and safety concerns. Undertake detailed report (as separate study to this report) to confirm road width requirements, alignment and surface treatments to improve access, reduce user conflicts, limit ongoing maintenance and asset management, and options to limit impacts of storm surge events and wave actions. Future infrastructure needs to consider impacts of sea level rise, coastal protection and long-term requirement for vehicular access to Franklin Parade.
- 6. Improve vehicle movements and opportunities for corner correction, traffic calming and footpath crossovers.
- 7. Overflow car parking occurring to residential streets (Investigator Cres, Viking St, Passatt St). Provide dedicated overflow parking to support growing user demand. Increase parking opportunities to Jagger Road with improved pedestrian connections to the boat ramp.
- Identified issues with vehicular speed, proximity to corner and sightline safety concerns. Opportunity for corner correction to intersection and reclassification of land use to formalise road reserve. Improve sense of arrival, legibility and signage to entry to formalise access into the Reserve. Consider requirement for controlled access after dark or in high risk days (if reauired).

- 9. Improve cycling connections (on-road) to support safe cycling links including separated bike path, surface upgrades, alignment and connection to Jagger road.
- 10. Improve vehicle movements to sweeping corner with a focus on limiting vehicle speeds, improving site lines and visibility and improve safety. Dedicated cycling lane not provided. Improve bicycle movements and safety including dedicated and connected cycling lanes.
- 11. Balance peak user demands with opportunities for managed access to limit impacts to vegetation, erosion and development of ad-hoc trails forming.
- 12. Develop trail connection from road reserve car park to back of accommodation. Balance access with capacity for additional vehicles and impacts on accommodation parking.
- 13. Improve walking trails, additional parking and connections.
- 14. Improve pedestrian connection and access from Jagger Road. Explore opportunity for additional parking to Jagger Road to support wider trails and activation.
- 15. Balance existing trails with consideration to formalising trails to limit impacts to Significant Environmental Benefit (SEB) site.
- 16. Develop fence line and site boundary trail.
- 17. Strengthen connections and loops to informal east- west track.
- 18. Improved site access and trail opportunities.
- 19. Improve trailhead and wayfinding signage opportunities. Reinforce as important waypoint for multi-day hiking experiences. Support ongoing enhancements to elevate profile of walking opportunities within the region.
- 20. Strengthen visitor experience to Victor Harbor Heritage Trail
- 21. Improve beach trail connection. Consider improvements and alternative route to limit requirement for beach access to connect to the Heysen trail.
- 22. Develop alternative trail connection to fence line (western boundary).
- 23. Strengthen connection to Heysen/ Wild South Coast Way. Improve wayfinding to connect to
- 24. Limit access to rocks. Ongoing safety concerns with access. Limited mobile phone reception in event of emergency.
- 25. Underwhelming access connection when completing hiking trails. Improve sense of arrival/ departure to support focus on elevating hiking profile including focus on multi-day hiking.
- 26. Improve beach access and opportunities for upgraded beach facilities.
- 27. Upgrade Petrel Cove stairs to improve pedestrian access including emergency services.
- 28. Formalise informal car parking to road shoulder to hill to limit impacts to vegetation and stormwater management issues.
- 29. Improve trail connection including improved stormwater management to limit impacts of

- 30. Improve landscape amenity to trail.
- 31. Improve connections and legibility to car park to encourage 'park and wander'.
- 32. Formalise trail connection, surface improvements and increase trail legibility.
- 33. Improve east-west connections utilise existing informal trail connections. Limit impacts to existing native vegetation and seek approvals from Native Vegetation Council (The Native Vegetation Assessment Panel NVAP).
- 34. Develop hiking and walking way point. Strengthen as gateway to Victor Harbor and beyond.
- 35. Intersection improvements including road alignment correction, improved signage and vehicular restrictions to minimise conflicts with vehicle management and access.
- 36. Develop separated cycle path connection, including improved surface and alignment.
- 37. Formalise existing goat tracks to provide trail upgrade and improve site links and loops.
- 38. Opportunity to provide pedestrian crossover and links to trails through vegetation clearance.
- 39. Undertake assessment of informal car parking capacity to road shoulder with a view to formalising parking opportunities within existing road corridor.
- 40. Erosion to trail. Improve surface, stormwater management and improve trail access.
- 41. Improve trail connection to Coolanine Mine site
- 42. Improve trail including stepped access (where appropriate).
- 43. Limited-poor legibility to existing trail. High level of erosion to track. Ad hoc development of trail. Provide clear trail access, formalising and rationalising existing trails and providing a dedicated group congregation zone for abseiling (controlled). Conditions of site usage to be formalised as part of licensing agreement with abseiling groups to limit impacts to
- 44. Develop 'difficult' trail to contour. Balance access, impacts to vegetation, safety and community concerns with trail opportunities.
- 45. Increase provision of stepped access to steep gradient.
- 46. Limit access to edge of cliff.
- 47. Consider trail alignment and legibility to limit ad hoc trails and unwanted site access.
- 48. Strengthen existing contour trail to provide improved access and limit requirement for navigating steep gradients to adjacent trails.
- 49. Improve step access including opportunities for replacement of irregular step treads and
- 50. Improve existing trail and wayfinding opportunities to limit ad-hoc trail access and impacts to vegetation.
- 51. Improve access to steep trail
- 52. Improvements to trail including formalise surface, upgrades to wayfinding signage.
- 53. Rationalise un-defined trails.
- 54. Improve connection and access from road.

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4.0 Planning priorities

4.5 Issues and opportunities mapping: Access, Movement and Connections

- 55. Improve parking, cycling lane and pedestrian links. Increase connectivity to Encounter Bikeway and car park one lookout.
- 56. Balance unsanctioned bike trails with site capacity for relocation.
- 57. Improve footpath links, provide additional rest stops and seating nodes to support usage.
- 58. Improve stepped access. Improve legibility of access location. Improve car parking to Franklin Parade and conflicts with vehicles to support improved walking opportunities. Improve non-uniform stepped access including appropriate material selections and opportunities for intermittent rest points. Upgrade viewing platforms and lookouts including a focus on improving access and safety to encourage use.
- 59. Improve car park including Disability Discrimination Act (DDA) compliant car parking and shared zones. Increase access to lookout and seating areas. Important 'sit in car' lookout destination. Improve connection to adjacent bitumen path. Increase vegetation cover to limit informal access to embankment. Increase legibility of trails from car park and connection to bitumen path. Provide stepped access (where appropriate).
- 60. Improve traffic management to Franklin Parade. Limited turn around area and parking opportunities to Jetty/ Wharf. Limit vehicular access and encourage foot traffic. Improve parking opportunities including turn around areas. Further studies required to understand engineering, traffic management and signage requirements.
- 61. Limit access to rocks. Provide improved facilities for fishing to jetty/ wharf to limit requirement for rock access.
- 62. Improve beach access for scuba diving, snorkeling, and swimming including stepped access. Provide dedicated parking to support usage.
- 63. Improve vehicular movements. Identified issues, conflicts, and safety concerns with ad hoc parking. Formalise car parking. Future consideration for restricted, limited, or controlled access to Franklin Parade. Improve links to beach access. Reduce conflicts with cyclists, walkers, vehicles, including managed access and connections. Surface improvements to junction and signage upgrades. Improve parking facilities to limit ad hoc parking and conflicts including vehicular turn around options.
- 64. Increase opportunity for parking pull in bays including designated bus, large vehicle, caravan parking to limit ad hoc parking and improve legibility of parking to support capacity to car park to manage peak periods. Formalise path connections to support improved connections from car park and wider links. Improve cycling connections (on-road). Increase separation from road to improve pedestrian links. Opportunity for trail head and development of increased walking trails to northern slope
- 65. Improve pathway including path gradient and rest stops. Balance access to limit conflicts with bikes/ walkers.

- 66. Improve junction to reduce conflicts with cyclists, walkers, vehicles including surface improvements and signage upgrades.
- 67. Identified opportunity for dedicated mountain bike trails. Balance provision of dedicated mountain bike trails with impacts to vegetation and vegetation management plan. Balance access requirements. Strengthen parking opportunities to support usage. Provide access locations and return loops to balance conflicts with pedestrians and vehicles.
- 68. Improve parking facilities to limit ad hoc parking and conflicts.
- 69. Strengthen trails and connections through trail closures of ad hoc trails. Improve signage and site wayfinding. Increase interpretive signage opportunities to encourage connection to local stories, narratives, and cultural values. Increase viewpoint and rest stop opportunities. Balance impacts to existing native vegetation and seek approvals from Native Vegetation Council (The Native Vegetation Assessment Panel NVAP).
- 70. Improve walkable connections to Town Centre. Improve on-road cycling connections and reinforce cycling and walking connections between the Encounter Bikeway, Franklin Parade, and the Victor Harbor township. Place a greater emphasis on improving bicycle lanes to promote and encourage safe cycling connections.
- 71. A variety of parking areas should be considered in order to maintain a balance between boat trailers, RVs, and large vehicles.



4.0 Planning priorities

4.6 Issues and opportunities mapping: Landscape and Environment

4.6.1 Landscape Background

Approximately 28.78 hectares (ha) within The Bluff has been set aside as Significant Environmental Benefit (SEB) sites. These areas are established to provide support in limiting vegetation clearance to maintain and protect threatened vegetation communities and species. The area also falls under the Native Vegetation (NV) Act of 1991 which is principally in place to provide incentives and assistance for the preservation and enhancement of native vegetation and to control the clearance of native vegetation.

Significant Environmental Benefit (SEB) sites were established to offset vegetation clearance for the development of the Victor Harbor Inner Ring Road and Henderson Road widening projects. Significant Environmental Benefit (SEB) sites are dedicated for the growth of native vegetation, therefore the use and development is limited to activities that do not impact native vegetation or development that will provide ecological benefit to these areas. Prior to undertaking activities or development that may impact native vegetation within these areas, approval from the Native Vegetation Branch would be required.

Biodiversity asset surveys undertaken by the City of Victor Harbor in 2020, recorded 112 native flora species, of which, five are listed as Rare under the National Parks and Wildlife Act 1972 with 55 species attracting a regional listing in the Adelaide and Mount Lofty Ranges Natural Resources

Figure: Significant Environmental Benefit sites (SEB)

Management region (AMLR NRM region). The five species that are listed as Rare under the National Parks and Wildlife Act 1972 include:

- 1. Acacia dodonaeifolia (Hop-bush Wattle)
- 2. Correa alba var. pannosa (White Correa)
- 3. Dianella longifolia var. grandis (Pale Flax-lily
- Eucalyptus fasciculosa (Pink Gum)
- 5. Rumex dumosus (Wiry Dock)

4.6.2 Areas of Importance and High Biodiversity Value

These areas occur on the eastern and south eastern side of the reserve incorporating BLU07, BLU08, BLU09 and BLU12. These areas remain largely intact and whilst some invasive flora and fauna are present, these areas retain a high biodiversity value. The vegetation present in BLU09 and BLU12 are examples of coastal heath and shrub land in which a variety of native fauna rely upon. These areas provide wildlife corridors for many species to move between dense and higher biodiversity areas like Newland Head Conservation Park and the Waitpinga Cliffs. Many threatened species, including those listed under both the EPBC and the National Parks and Wildlife Act 1972, occur along the Southern Fleurieu Peninsula; these wildlife corridors connect better quality habitat that are integral to the preservation of these species.

4.6.3 Revegetation

Revegetation has been undertaken in a number of areas using many methods but is mainly confined to direct seeding and tubestock planting using mattocks, augers and 'Hamilton' planters. Tree guards have been utilised in the past and should continue to be used for future revegetation, although alternative options to corflute, should be explored. Consider cardboard compostable guards or reusable mesh guards in high wind locations. Guarding juvenile plants provides protection against grazing by rabbits and kangaroos as well as protecting plants from the weather and helps to distinguish them amongst weeds, during weed control. Since The Bluff Reserve Vegetation Management Plan in 2015, revegetation has been undertaken in a number of the areas recommended in the plan with largely successful results. The City of Victor Harbor Open Space Team has undertaken roughly 500 tubestock plantings per year since 2015 with great success, on top of plantings by the Green Adelaide and Victor Harbor Coastcare Members. Future revegetation should focus on those areas that undergo weed control (where bare ground will become more apparent), in order to help native flora establish in these areas. Native flora that is used, should be grown from local provenance and appropriate for the area. Furthermore, photo points remain a great tool to be able to visually compare the success of revegetation and should be set up before plantings are undertaken. Current existing photo points should be retained and continue to be utilised.

4.6.4 Weed Management and Control

A variety of weed control methods have been utilised at The Bluff to control invasive species. Asparagus asparagoides (Bridal Creeper) has been managed in the past through biological control including Bridal Creeper Rust and Bridal Creeper Leafhopper, however due to the difficulty in controlling this species, individuals and plant tubers remain. In addition, a variety of other control methods including hand pulling, cutting and swabbing and foliar spraying have been utilised by the City of Victor Harbor, Green Adelaide and Victor Harbor CoastCare Members. Future weed control should focus on those weeds which are either Declared Weeds, WoNS, or those that are particularly invasive or a threat to areas of high biodiversity value.

For example, across the northeast corner of The Bluff, Chrysanthemoides monilifera (Boneseed) has been previously recorded in large numbers. Ongoing control of this species is required and is most successful when individual plants are immature and have not yet flowered. In most cases, individual plants need to be at least 18 months old and sometimes three years old, to flower and set seed. Locally invasive species such as Acacia cyclops (Western Coastal Wattle) should also be included in future weed control.





Correa alba var. pannosa (White Correa) observed on site by Ned Piscioneri, EBS Ecology, May



4.0 Planning priorities

4.6 Issues and opportunities mapping: Landscape and Environment

4.6.5 Native Fauna

There are a variety of native fauna species that occur at The Bluff. Both terrestrial and marine fauna have been observed opportunistically including shorebirds, birds of prey, bush birds as well as marine mammals, reptiles and insects.

The Southern Fleurieu Coastal Action Plan 2007 indicates 10 threatened fauna species recorded in the area. A number of state rare bird species have been recorded including Egretta sacra (Easter Reef Egret), Falco peregrinus (Peregrine Falcon), Actitus hypoleucos (Common Sandpiper), Haematopus fuliginosus (Sooty Oystercatcher), and Neophema elegans (Elegant parrot).

Terrestrial mammal species such as the Short-beaked Echidna (Tachyglossus aculeatus), Bush Rats (Rattus fuscipes) and Kangaroos (Macropodidae) have been opportunistically recorded at The Bluff. Marine mammals also occur within the coastal fringe of The Bluff including the Common Dolphin (Delphinus delphis), Bottlenose Dolphin (Tursiops truncatus) and Australian Sea Lion (Neophoca cinerea). Many of these marine mammals, in conjunction with the Southern Right Whale (Eubalaena australis), make the area popular for whale-watching.

Given the diverse landscape found in the area including rocky outcrops, sandy beaches, dunes and headlands, many terrestrial and migratory birds, including waders and seabirds, are observed around The Bluff. This includes species such as the White-bellied Sea-eagle (Haliaeetus leucogaster), Gulls (Larus spp.) and Terns (Sterna spp.), which utilise the surrounding Bluff area for foraging, resting and roosting. Amphibians and reptiles have also been observed in and around The Bluff and surrounding areas, although limited survey data and limitations such as the mobility of these species and their preference to seek shelter or protection, makes surveying difficult. Species such as Heath Goanna (Varanus rosenbergi) and other more common species like the Common Froglet (Crinia signifera) and Marbled Gecko (Christinus marmoratus), have all been recorded within The Bluff or surrounding areas. Insects, particularly butterflies thrive in some areas of The Bluff.

A survey undertaken by Roger Grund in 1997 of the Southern Fleurieu Peninsula, identified a variety of native flora species, particularly Gahnia spp. (Saw-sedge) and Lepidosperma (Sawsedge) amongst other native grass species that provide larval food resources for many species. Some of these species include the Black and White Skipper (Antipodia atralba) and Trimaculata Skipper (Motasingha trimaculata trimaculata). A NatureMaps search of records within 5 km of The Bluff (filtered to those since 1995) and within <1km accuracy, revealed that over 50 regionally listed species occur within the area. Of these species, 12 are listed under the National Parks and Wildlife (NPW) Act, of which four are also listed under The Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act). While some of these species have been recorded at The Bluff, particularly at Yilki Beach and Petrel Cove, the greater majority have been recorded nearby at Newland Head Conservation Park, Granite Island and Wright Island or in Victor Harbor at the Inman River or Effluent Ponds.

4.6.6 Invasive Fauna Species

A number of invasive fauna species have been recorded at The Bluff. Many of these species have a substantial impact to native flora and fauna via competition for food resources, nesting and breeding areas, as well as through predation

- Black Rat: Rattus rattus
- Brown Rat: Rattus norvegicus
- 3. European Brown Hare: Lepus europaeus
- European Rabbit: Oryctolagus cuniculus
- 5. Feral Goat: Capra hircus
- 6. House Mouse: Mus musculus
- Red Fox: Vulpes vulpes

European rabbits have historically had the largest impact on native flora and fauna at The Bluff, particularly through feeding on native flora, which significantly reduces the recruitment of juvenile plants. Previously, Pindone has been used for rabbit control and continues to be used in late summer to early autumn of every year. A trial has also been conducted using ferrets to flush rabbits from warrens and under harbourage.

Fox control should be undertaken on a regular basis with den searches undertaken and fumigation or destruction of dens through manual collapse to protect native fauna species as well as nesting seabirds (Caspian Terns and Crested Terns) and Hooded Plover's that nest on adjoining beaches. Control should be coordinated with adjoin land managers to ensure integrated pest management approach.





Short-beaked Echidna (Tachyglossus aculeatus Australian Sea Lion (Neophoca cinerea)

Vegetation within associations such as BLU08 have seen substantial recovery since rabbit control has been undertaken with regrowth of native flora species including Themeda triandra (Kangaroo Grass) and Dianella brevicaulis (Short-stem Flax-lily). Future pest fauna management should focus on rabbits as a priority but additional works on controlling the numbers of foxes, hare and goats within the area surrounding The Bluff, should also be considered.

4.6.7 Climate Change

In recent years, increased focus and awareness of the potential impacts and implications of climate change have become apparent such as impacts to coastal areas, predictions of sea level rise, storm surge impacts and rain event severity and effects to flora and fauna.

Consideration and priorities should to focus on managing, planning for and measuring impacts of extensive erosion, storm surge damage, balancing access requirements with closures and developing measures that support the ongoing enhancement and preservation of sensitive and vulnerable ecosystems. Future projects should address managing stormwater and limiting erosion caused by run-off. Future development along Bluff Jetty Road should take into consideration the Victor Harbor Coastal Adaptation Study and Strategy (2021) and the Coast Protection Board Coastal Hazard Risk Policies and will require engagement with Coast and Marine Branch and The Department for Environment and Water.

4.6.8 Fire Management

Management and protection of fire risk including separation and buffers remains an important ongoing maintenance item. Future landscape management plans need to address slashing vegetation to lessen risk and landscape clearance requirements within the reserve in compliance with Council's obligations under the Fire and Emergency Services Act SA (2005).



White-bellied Sea-eagle (Haliaeetus leucogaster) Southern Right Whale (Eubalaena australis)





4.0 Planning priorities



4.0 Planning priorities

4.6 Issues and opportunities mapping: Landscape and Environment



Key

BLU01

Landscape type (refer below for description)



Significant Environmental Benefit Sites (SEB) (indicative)



Fire clearance (indicative)

The following descriptions provide summary of the generalised landscape types within the identified zones as shown alongside.

- BLU01: Very open low Eucalyptus diversifolia/E. incrassata woodland Tall open *Casuarina glauca/*Melaleuca spp. shrubland with Themeda triandra/Rytidosperma spp./Austrostipa spp./Setaria constricta grassland.
- BLU02: Tall dense Dodonaea viscosa ssp. spatulata/Acacia spp. shrubland, with low open Enchylaena tomentosa shrubland and open exotic grassland.
- BLU03: Tall dense Acacia pycnantha/A. paradoxa shrubland with a low open Rhagodia candolleana/Enchylaena tomentosa shrubland understorey.
- **BLU04:** Open Leucopogon parviflorus +/- Acacia longifolia ssp. sophorae +/- Myoporum insulare shrubland over open Rhagodia candolleana +/- Olearia ramulosa shrubland over low Lepidosperma curtisae sedgeland and Themeda triandra grassland.
- **BLU05**: Themeda triandra +/- Austrostipa setacea +/- Setaria constricta grassland with small isolated patches of Allocasuarina verticillata and Acacia paradoxa.
- BLU06: Casuarina glauca +/- Eucalyptus diversifolia woodland, tall Leptospermum laevigatum shrubland, over low Rhagodia candolleana shrubland and Themeda triandra +/-Setaria constricta grassland.
- **BLU07:** Low Lomandra effusa tussock iron-grass grassland.
- **BLU08:** Themeda triandra grassland with emergent low Acacia paradoxa/Goodenia
- BLU09: Acacia paradoxa +/- A. sophorae shrubland over low Rhagodia candolleana +/-Pomaderris paniculosa +/- Goodenia amplexans shrubland.
- **BLU10:** Dense *Ehrharta calycina +/- *Dactylis glomerata grassland;
- BLU11: Very open Allocasuarina verticillata woodland over very open *Casuarina glauca +/- Myoporum insulare +/- Acacia longifolia ssp. sophorae shrubland over *Cenchrus clandestinus +/- Themeda triandra grassland.
- **BLU12:** Low open Rhagodia candolleana +/- Myoporum insulare +/- Acacia longifolia ssp. sophorae shrubland over open Ficinia nodosa sedgeland and diverse native herbland; and
- BLU13: Very open Allocasuarina verticillata woodland over low open Rhagodia candolleana shrubland over Themeda triandra +/- *Avena sp. Grassland.



4.0 Planning priorities

4.6 Issues and opportunities mapping: Landscape and Environment

Master Plan Considerations

- · Undertake official fauna surveys to address limited survey data.
- Support on-going observation and studies of native flora through key Bio asset surveys with specific focus on the (5) rare native flora species listed under the National Parks and Wildlife Act 1972 and the (55) regional listed native flora species. Consideration to appropriate protection of delicate and high risk biodiversity areas.
- On-going monitoring of impacts to defined areas of high biodiversity value to the eastern and southeastern side of the reserve incorporating BLU07, BLU08, BLU09 and BLU12, with specific management of invasive flora and fauna.
- Future pest fauna management should focus on rabbits as a priority.
- Future pest fauna management to control the numbers of foxes and hares within The Bluff.
- Targeted weed management with specific focus on Weeds of National Significance (WoNS) (African Boxthorn, Boneseed, Bridal Creeper and Bridal Veil).
- Focused revegetation using native flora that is grown from local provenance and appropriate for the area.
- Identification and planning of location and extent of revegetation works to limit potential fire
- Ongoing support and engagement with community volunteers and groups such as Coastcare.
- Improved site stormwater management and increased biodiversity to Oyster Terrace Reserve.
- Develop separate to this report a detailed landscape management plan with a greater emphasis on developing a targeted weed management plan to provide guidance for ongoing weed management, provide clear direction on landscape maintenance to help with Council's annual work plan and budgeting processes.
- Develop site specific feral animal management plan.
- Realignment, removal or surface upgrades to identified walking paths to limit impacts of
- · Undertake coastal hazard assessment and develop adaptation plans in response to both current and projected climate change impacts.
- Greater focus should be placed on the importance for future projects to include erosion control, stormwater management, and drainage as part of design development and planning.



5.0 Master Plan

5.1 Master Plan Zones

The Master Plan has been broken down into (4) zones to provide key directions and focus. The following provides summary of the identified key issues and opportunities developed through consultation, Council involvement, stakeholder engagement and site analysis as well as the focus for each zone.

Zone 1

- Activation of Oyster Reserve.
- Improved trail network including All Abilities trails and diverse trail experiences.
- Improved facilities including toilets, car parking and boat trailer overflow.
- Modifications to The Bluff/ Jagger Road intersection to improve safety, connectivity and access.
- Improved cycling connections, safety and legibility.
- Opportunities for management and support of mountain biking.
- Developing linking loops and diverse trail opportunities.
- Managing site access to Significant Environmental Benefit (SEB) areas and reinforcing opportunities for walking and movement.
- Landscape improvements, vegetation and 're-wilding' the site.
- Improved traffic management and vehicle movements.

- Improvements to Franklin Parade/ Bluff Jetty Road to respond to improving vehicular access
- Management of unsanctioned mountain bike trails.
- Improvements to car park 1 including opportunities for cultural narratives, community values and reinforcing views.
- Improved access to facilities including toilets, scuba facilities and parking.
- Development of lookouts, rest stops and contemplation areas.
- Improved traffic management and vehicle movements including upgrades of existing
- Future considerations to respond to storm surge and sea level rise.

Zone 3

- Improved trail access, formalising trails, closing trails and creating new trails to support improved walking to ensure an immersive and authentic experience.
- Improved All Abilities opportunities including key viewpoint locations, car parking and paths.
- Improvements to car parking and stormwater management.
- Balancing access and wayfinding.

Zone 4

- Increased walking trail experiences and connections
- Improvements to viewpoints.
- Access and improvements to pedestrian movements.
- Cultural and community event space.





5.0 Master Plan



5.0 Master Plan



Kongkengguwarr | Longkewar | Rosetta Head

5.0 Master Plan

5.2 Master Plan Zone 1

Key Master Plan response Footpath connection Walking trail (unsealed, typ. 1500mm min.) Bike trail Off-road (unsealed, typ. 1200mm min.) 0 Trail head **Signage** (wayfinding, cultural narrative + interpretive) Seating nodes + rest stops Lookout points All abilities focused lookout points **Gravel surface** (car parking) Feature landscape: High quality landscape improvements with a focus on increasing site biodiversity, endemic species and habitat creation. Buffer landscape: Densely planted to support existing landscape areas. Provides separation to paths and definition to trails and tracks to limit unwarranted access and formalise trail/access areas. Wind breaks and visual screening. **Revegetation zones:** Broad acre re vegetation based on trail removals, identified 4. key areas and areas that undergo weed control (where bare ground will become 5. more apparent) Open grassland areas Tree planting Opportunities for stormwater improvements: including passive drainage options and WSUD (Water Sensitive Urban Design)

The Master Plan proposes the reclassification of an Oyster Reserve to provide new public access connections from Jagger Road, increase biodiversity, and create new walking paths, rest stops, and seating areas, with a focus on cultural learning landscapes. The plan also includes developing new trailheads and walking entrances, providing car parking, improved stormwater management, and a viewing platform and rest stop. The plan suggests developing dedicated mountain bike trails, increasing trailheads, and creating new immersive walking trails to support a wider walking 12. strategy. The plan proposes modifications to the road alignment as part of an intersection upgrade and developing a 'quick turn around' to limit the requirement for vehicles to use the entire loop

- 1. Reclassification of Oyster Reserve (currently Council managed drainage reserve) to provide new public access connection from Jagger Road to improve connectivity of north-western corner of the Bluff. Develop new walking paths including accessible walking trails, rest stops and seating areas. Identify locations to support cultural learning landscapes including 'oncountry' spaces. Improve existing landscape areas with focus on increasing biodiversity and habitat creation, including endemic and native species.
- Provide footpath connection from residential edge to increase north-west connectivity. Develop new trailhead and walking entrances from Jagger Road to support increased visitation, enhance connection of entire reserve site and limit user demand to the Bluff ring road by allowing disbursement of visitors and users. Trailheads should focus on providing a welcoming sense of arrival, clear access to walking trails, small scale signage including opportunities for cultural narratives, dual naming, and stories to be authentically integrated into visitor experience. Consideration should be given to new digital tools including virtual reality (VR), soundscapes and emerging technologies to be integrated as part of future signage. Underground overhead powerlines to Jagger Road, to allow for improved landscape areas including tree planting.
- 3. Provide car parking to support activation of Oyster Terrace, including large vehicle parking and boat trailer parking (overflow) to support peak days. Improved stormwater management from Jagger Road including increased passive treatment opportunities through natural filtration systems to connect to existing stormwater drainage reserve.
- Increase buffer planting and separation of public access to site boundary. Improve site biodiversity including habitat creation using locally sourced endemic and native species.
- Undertake feasibility study to confirm capacity, safety, management requirements and opportunities for public access to existing drainage reserve.
- Viewing platform and rest stop. Provide opportunities for cultural inlays to be incorporated as part of minor infrastructure works.
- Seating area, signage, opportunities for cultural narratives, stories and learning.
- Maintain and manage access to unformalised road reserve including ongoing fire management and mowing.
- 9. New crossing point to formalise east west connection and link The Bluff Reserve with Oyster Avenue. Potential requirement for gate access to Oyster Avenue including removable bollards to manage vehicular access.

- 10. Provide service maintenance access track and include as part of wider walking trail network. fire break requirements and separation, as part of landscape management plan.
- 11. Provide new trail head to link new fence line trail to Significant Environmental Benefit (SEB) site. Balance impacts to existing vegetation, increase vegetation buffers to existing goat trails, improve wayfinding signage and revegetation to strengthen existing asset.
- Develop fence line trail to edge of Significant Environmental Benefit (SEB) site. Increase buffer landscaping to boundary, upgrade surface treatments/ low impact trail options to limit impacts to existing vegetation areas.
- 13. Develop seating node and rest stop to strengthen views to with Waitpinga Cliffs and Kings
- 14. Provide open grassland rest area including all weather shelter including windbreaks, seating including picnic table. Strengthen connection to new parking opportunities including signage and path connections.
- 15. Reclassify existing land to road reserve to support road realignment, with greater priority on correction of intersection to the west to reduce vehicular impacts to adjacent corner. Intersection improvements to provide dedicated bike lane from Jagger Road, formalised car parking (sealed), improved signage including entry signage with opportunity for highlighting naming of The Bluff (Kongkengguwarr / Longkewar), speed restrictions (signage) and entry signage to improve sense of arrival and legibility.
- 16. Re-wild road corridor as part of land swap required to formalise new intersection. Improve footpath connections and links. Increase landscape areas to edge of Jagger road to reinforce character of The Bluff and provide visual separation from adjacent houses. Develop new trailhead opportunities to increase legibility and access.
- 17. Provide new footpath connection including pram ramps and crossing points to better connect pedestrians to the boat ramp and Whalers.
- 18. Strengthen crossover point to road reserve / accommodation parking. Improve legibility of signage including opportunities to improve vehicular sightlines.
- 19. Provide high-quality public toilet facilities including managed lighting (Phosphor converted amber lighting to limit impacts to nocturnal fauna and insects). Provide landscape screening and amenity to limit visual impacts from adjacent residential edge. Increase path connections and access from adjacent car parking areas. Location identified with consideration of engagement with First Nations representatives and Coastal Protection Board.
- 20. Provide improved parking facilities and pull in bays to support large vehicle and trailer parking. Provide slow speed environment including traffic calming, signage and surface treatments to limit vehicular speed and support improved pedestrian and bicycle
- 21. New trailhead and walking connections to strengthen opportunities for increased access from Jagger Road and Boat ramp.
- 22. Modifications to road alignment as part of intersection upgrade. Maintain one-way road network with improvements to increase road legibility and movement, to limit vehicle
- 23. Development of 'quick turn around' to limit requirement for vehicles to use entire loop road.



Policy (Mobile Food Vendors Policy- October 2021).

Photomontage location: refer following pages for image

Permitted location of mobile food vendors in alignment to current Council

Trail closure

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- 24. Formalise existing road shoulder to provide dedicated parking bays. Strengthen connection to open space to develop as new picnic area.
- 25. Provide dedicated trail head and crossing location to connect east-west.
- 26. Develop immersive walking trails to support wider walking strategy.
- 27. Develop dedicated mountain bike trails with closure of existing unsanctioned tracks. Trail design to utilise increased tree planting, buffer landscape areas and define edge to contain and limit unsanctioned trails forming. Provide clear signage to delineate dedicated bike trail to limit pedestrian/ bike conflicts. Future trail design to balance revegetation program outlined within the 2015 vegetation management plan and ensure separation from walking trails. Separately conduct a feasibility study to determine the appropriate location and suitability of mountain biking trails based on demographics, skills, and impacts. Separately conduct an environmental assessment and feasibility study to identify potential risks and opportunities to integrate with existing plantings and revegetation works.
- 28. Walking trail and connection acts as fire break and provides access for maintenance vehicles
- 29. Develop new trailhead to connect car park to new walking connection.
- 30. End of bike trail and collector including seating and shade areas.
- 31. Provide return bike link (one way: north-south) to connect to car park.
- 32. Formalise existing road shoulder to provide dedicated pull in bays for large vehicles, RV's, caravans and buses. Provide path connection to lookout (car park one)
- 33. Develop new trailhead and walking opportunities to link north south and provide diverse walking experience to central open space. Trail location to be developed with consideration of impacts to sensitive native vegetation.
- 34. Improve stepped access and connection to boat ramp.
- 35. Provide removable bollards to Franklin Parade to allow for road closure during storm surge
- 36. Improve on-road cycling connections and reinforce cycling and walking connections between the Encounter Bikeway, Franklin Parade, and the Victor Harbor township. Place a greater emphasis on improving bicycle lanes to promote and encourage safe cycling connections.
- 37. A variety of parking areas should be considered in order to maintain a balance between boat trailers, RVs, and large vehicles.



5.0 Master Plan

5.4 Master Plan Zone 1: Jagger Road Intersection Photomontage



Illustrative only*



Existing site condition

- 1. Road realignment, new entrance and correction of intersection to provide improved sightlines and separation from corner.
- 2. Dedicated cycling lane connecting Jagger Road to improve safe cycling connections.
- 3. Large vehicle pull in bays to support boat trailer overflow parking, RV's and caravans.
- 4. Additional Car park and development of trail head to connect to new walking trails.
- 5. High-quality public toilet facilities including managed lighting, landscape setting and controlled access.
- 6. Re-wild existing road corridor with a focus on endemic and local plant species.

5.0 Master Plan





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5.0 Master Plan

5.5 Master Plan Zone 2:

	Key
1	Master Plan response
	Footpath connection
	Walking trail (unsealed, typ. 1500mm min.)
$\overline{}$	Bike trail Off-road (unsealed, typ. 1200mm min.)
0	Trail head
£13	Signage (wayfinding, cultural narrative + interpretive)
	Seating nodes + rest stops
	Lookout points
	All abilities focused lookout points
-	Gravel surface (car parking)
45	Feature landscape: High quality landscape improvements with a focus on
	increasing site biodiversity, endemic species and habitat creation.
$ \sim $	Buffer landscape: Densely planted to support existing landscape areas.
	Provides separation to paths and definition to trails and tracks to limit
	unwarranted access and formalise trail/ access areas. Wind breaks and visual
	screening.
	Revegetation zones: Broad acre re vegetation based on trail removals, identified
_	key areas and areas that undergo weed control (where bare ground will become
	more apparent)
9	Open grassland areas
777	Tree planting
- &-	Opportunities for stormwater improvements: including passive drainage
	options and WSUD (Water Sensitive Urban Design)
	Trail closure

The Master Plan proposes to improve the coastal access and trail networks by creating new walking connections, formalising car parking areas, improving beach access and providing upgraded stepped access to Rosetta Track. The project also includes improvements to the Jetty/ Wharf precinct, closures of unsanctioned bike trails, and developing a cultural narrative trail to existing paths. The project seeks to balance the impacts of storm surge and erosion with passive landscape areas to limit major infrastructure works while supporting biodiversity and habitat creation

- 1. Provide new walking connection to increase links from road to Encounter Bikeway and
- 2. Improve road surface to Franklin Parade to reduce impacts of storm surge and erosion.
- 3. Develop formalised car parking opportunities (where appropriate) to limit ad-hoc parking and
- 4. Improve connection point to Encounter Bikeway including, improved signage, surface treatments and realignment of entry to Franklin Parade to improve legibility and user sightlines. Design options to reduce bike speeds to existing gradient.
- 5. Develop informal turnaround location to support new parking areas and limit uncontrolled vehicular movements and impacts to coastal edge.
- 6. Develop formalised car parking opportunities (where appropriate) to limit ad-hoc parking and reduce user conflicts. Increase DDA parking (shown blue. Further studies required to understand potential impacts to existing cliff edge, spatial requirements and engineering
- Provide upgraded stepped access to Rosetta Track and trail upgrades. Strengthen connection to Franklin Parade. Improve wayfinding signage and connections to encourage wider site
- 8. Improve beach access including dedicated scuba diving and snorkeling launch point.
- 9. Dedicated turnaround area to Franklin Parade to limit vehicular issues to Jetty/Wharf. Provide controlled vehicle access point for emergency services vehicles/ maintenance vehicles. Provide suitable All Abilities access walking trail (sealed) to jetty (approximately
- 10. Indicative location of public toilet facility. Undertake feasibility study to understand service impacts with consideration for composting/eco toilet (if appropriate) to support Jetty and
- 11. Improve scuba and snorkeling access and reduce conflicts with jetty users by providing designated points for divers and snorkelers to enter and exit the water. Provide separate facilities for scuba divers and snorkelers, such as access to changing areas, outdoor showers, and equipment storage, located within proximity of the designated access points. Increase awareness through providing information about local regulations and safe diving and snorkeling practices.
- 12. Improvements to Jetty/ Wharf precinct including seating, signage and lighting to improve safety. Limit access to rocks to east with a greater focus on enhancements to improve fishing facilities from the Jetty.

- 13. Trail closures to unsanctioned bike trails. Revegetation focus to area, ongoing management of weed species. Any removal of trees or shrubs should be staged and consider soil erosion and fauna habitat. Non-local Melaleuca, Eucalyptus and Callistemon species should be retained until revegetation is established.
- 14. Develop cultural narrative trail to existing path including in ground stories, inlays, rest stops, viewpoints and explore opportunities for digital artworks (QR code, soundscapes, digital representation, flyovers).
- 15. Upgrades to existing car park, including formalised compliant DDA parking, new lookout, seating and surface treatments and landscape upgrades. Encourage opportunities for layering of cultural narratives, stories and reinforce importance of lookout location.
- 16. Formalise existing road shoulder to support large vehicle parking area including bitumen footpath connection to lookout. Improve surface treatments to road surface to encourage slow speed environment, opportunity to increase narrative through surface treatments. Provide clear separation zone for bike path.
- 17. Develop new trail connection and trailhead to activate central reserve to support wider trail loops and connections. Trail location to be developed with consideration of impacts to sensitive native vegetation. Strengthen user experience by providing diversity of trail connections that incorporate and celebrate diverse views, ecology and biodiversity.
- 18. Opportunity to develop cultural learning landscapes, congregation zone for hiking groups and informal picnic areas. Location to be developed with consideration of impacts to sensitive
- 19. Provide pedestrian crossing point to strengthen walking links east-west. Improve surface treatments to encourage slow speed environment. Provide wayfinding signage and trail maps to increase legibility of site trail opportunities and experiences.
- 20. Formalise existing road shoulder to create parking area including bitumen footpath connection to lookout. Balance impacts of stormwater runoff with consideration of passive landscape areas to support reduce erosion to limit major infrastructure works.
- 21. Closures of ad-hoc trails with revegetation and buffer landscape areas to provide regenerative areas and support biodiversity and habitat creation.
- 22. Improvements to existing trails including surface upgrades, wayfinding signage and trail markers. Provide buffer landscape to track edge to limit off track impacts and limit the need for excessive trail signage.
- 23. Develop trailhead, and upgrade lookout, including improved signage, seating opportunities and improvements to Coolanine mine site.
- 24. Develop new contour trail above mine site including improved signage and trail markers.
- 25. Develop lookout and contemplative zone. Formalise end stop including buffer planting to limit further access, reduce erosion and impacts to rare plant species to south-east of location.
- 26. Provide 'difficult' track. Ensure appropriate signage.



Policy (Mobile Food Vendors Policy- October 2021).

Photomontage location: refer following pages for image

Permitted location of mobile food vendors in alignment to current Council

5.0 Master Plan

5.7 Master Plan Zone 2: Car Par One Photomontage



Illustrative only*



Existing site condition

- Hard standing to edge of car park to improve access and connections.
- 2. Ongoing weed management and revegetation including staged tree removal.
- 3. Seating opportunities with opportunities for local narratives, stories and cultural interpretation to be included with furniture.
- Provide surface treatment to formalise viewpoint, improve waypoints, inlays and objects to layer narrative and story telling opportunities. Limit signboards and vertical elements to strengthen focus of viewpoint.
- Provide cohesive trail markers and wayfinding signage.
- 6. Increase landscape areas with a focus on endemic and locally sourced species.

5.0 Master Plan

5.7 Master Plan Zone 2: Car Par One Photomontage



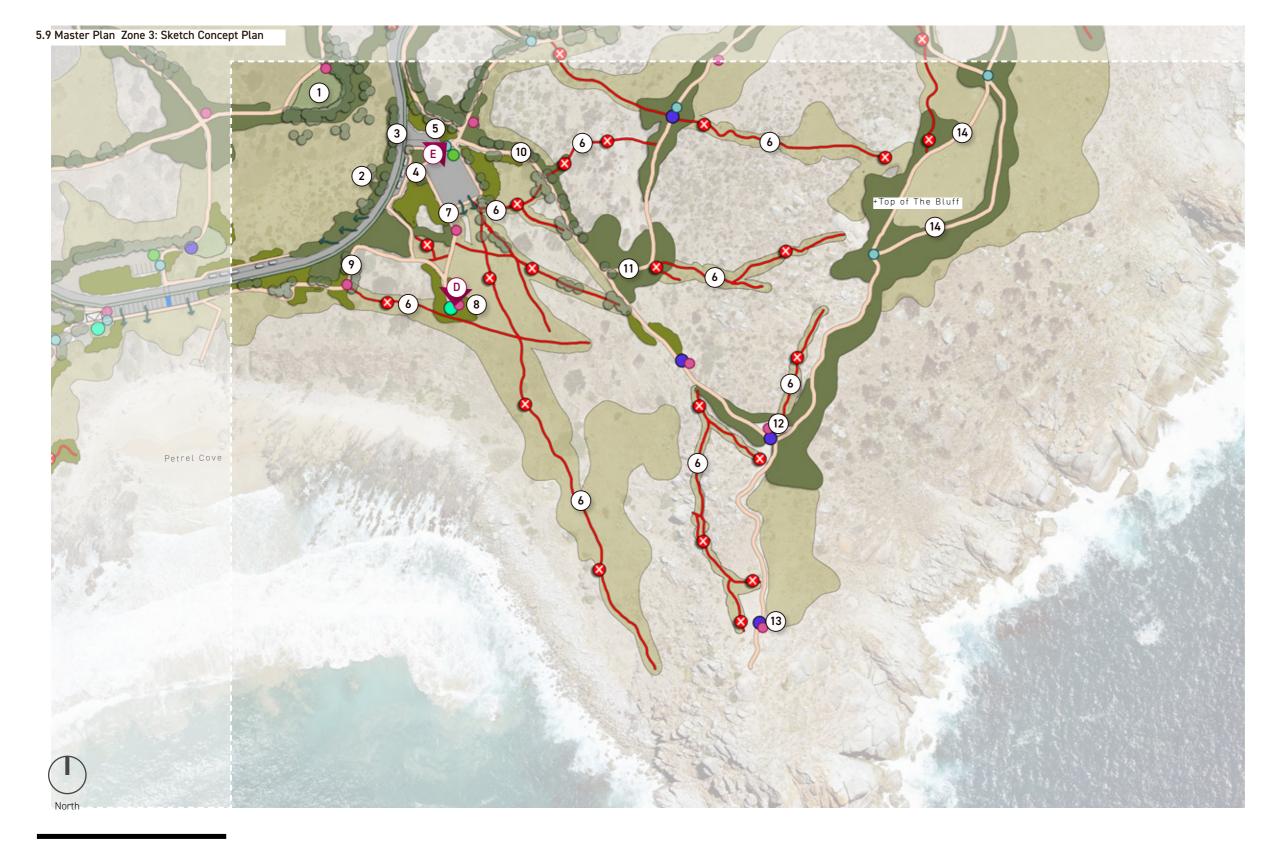
Illustrative only*



Existing site condition

- 1. Shared use path to improve access, walk ability and connection to Jetty including All Abilities access. Emergency access provided. Provide surface treatment to formalise viewpoint, review opportunity for waypoints, inlays and objects to layer narrative and story telling opportunities. Limit signboards and vertical elements to strengthen focus of viewpoint.
- Small toilet facility.
- Increase landscape areas with a focus on endemic and locally sourced species.
- Revetment improvements and opportunity to plan for potential sea-level rise.
- 5. Improvements to scuba diving and snorkeling access,

5.0 Master Plan



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5.0 Master Plan

5.8 Master Plan Zone 3

Key

	•
1	Master Plan response
	Footpath connection
	Walking trail (unsealed, typ. 1500mm min.)
	Bike trail Off-road (unsealed, typ. 1200mm min.)
	Trail head
505 505	Signage (wayfinding, cultural narrative + interpretive)
	Seating nodes + rest stops
	Lookout points
-	All abilities focused lookout points
	Gravel surface (car parking)
45	Feature landscape: High quality landscape improvements with a focus on
	increasing site biodiversity, endemic species and habitat creation.
$ \sim $	Buffer landscape: Densely planted to support existing landscape areas.
	Provides separation to paths and definition to trails and tracks to limit
	unwarranted access and formalise trail/ access areas. Wind breaks and visual
	screening.
	Revegetation zones: Broad acre re vegetation based on trail removals, identified
	key areas and areas that undergo weed control (where bare ground will become
	more apparent)
~	Open grassland areas
777	Tree planting
- &-	Opportunities for stormwater improvements: including passive drainage
	options and WSUD (Water Sensitive Urban Design)
	Trail closure
	Permitted location of mobile food vendors in alignment to current Council
	Policy (Mobile Food Vendors Policy- October 2021).
(xx)	Photomontage location: refer following pages for image

The Master Plan proposes to develop dedicated cultural learning landscapes, congregation zones for hiking groups and informal picnic areas while assessing impacts on existing native vegetation and balancing appropriate locations. The plan includes revetment and buffer landscapes, improving infrastructure to limit the impacts of stormwater runoff, modifying and correcting the car park entry to improve vehicle movements, formalising pull-in parking, improving connections and signage, developing new trailheads and contour trails, closing ad-hoc trails with revegetation and buffer landscape areas, and developing lookouts and formalized meeting points to support abseiling while limiting access to cliff edges. The design seeks to balance recreational activities with the protection of sensitive native vegetation, biodiversity, and habitat creation.

- 1. Identify sites to develop dedicated cultural learning landscapes, congregation zone for hiking groups and informal picnic areas. Future detailed design to assess impacts to existing native vegetation and balance appropriate locations.
- 2. Revegetation and buffer landscape. Improve infrastructure to limit impacts of stormwater run off including opportunities for passive infiltration.
- 3. Modification and correction to car park entry to improve vehicle movements, reinforce bike lane and cycling movements. Increase traffic calming measures including surface treatments.
- 4. Formalise pull in parking to shoulder. Provide improved connections, landscape treatments
- 5. Develop new trailhead including improved access, provide stepped access and improved accessibility, upgrade signage and provide opportunities for cultural interpretation, trail maps and increased user experience.
- 6. Closures of ad-hoc trails with revegetation and buffer landscape areas to support existing sensitive native vegetation, provide regenerative areas and support biodiversity and habitat
- Improved connections from car parking including opportunity to develop DDA compliant path to connect to lookout.
- 8. Upgrade informal lookout area to provide waypoint, user experience and explore opportunities to increase Disability Discrimination Act (DDA) access. Limit major infrastructure, public art or bulky items that impact on views and detract from the coastal
- Improvements to existing trail to improve connection to Petrel Cove car park.
- 10. Formalise trail as major link trail. Provide stepped access (where required), improve trail surface and provide upgrades to stormwater runoff and management to limit erosion and trail wash-out.
- 11. Develop new contour trail above mine site including improved signage and trail markers. Balance impacts to existing native vegetation and seek approvals from Native Vegetation Council (The Native Vegetation Assessment Panel NVAP)
- 12. Trailhead to junction. Increase landscape treatments and revegetation to limit ad-hoc trail developments and limit access to cliff edge.
- 13. Develop lookout and formalised meeting point to support abseiling (controlled activity). Provide signage to limit access to cliff edge.
- 14. Formalise trail to top of The Bluff to limit ad hoc trails. Increase landscape treatments and revegetation to limit ad-hoc trail developments and limit access to cliff edge.



5.0 Master Plan

5.10 Master Plan Zone 3: Lookout Photomontage



Illustrative only*



Existing site condition

- 1. Improved walking surface including opportunities to connect to car park including surface upgrades, rest stops and improvements to gradient to improve access from car park.
- 2. New paved surface to formalise lookout point and limit trail access beyond, opportunities for cultural narratives, stories and artifacts to be laid within surface treatments.
- 3. Improved wayfinding signage to enhance visitor experience. Materiality to respond to site conditions and appropriate scales.
- 4. Revegetation and development of landscape buffers to support on track access.
- 5. Seating to allow for users to respond to climatic conditions, sun, wind, sea spray whilst supporting user experience and enhancing scenic viewpoints.
- Improvements to existing trail.
- Vegetation buffers to limit access to ad hoc trail.
- 8. Revegetation and planting to improve biodiversity and formalise trails.
- 9. Relocated lookout and landscape improvements to cliff edge.

5.0 Master Plan

5.11 Master Plan Zone 3: Car Park Two Trailhead Photomontage



Existing site condition

- 1. Surface treatment to formalise trailhead, provide waypoints, inlays and objects to layer narrative and story telling opportunities.
- 3. Remove retaining sleepers and develop landscape batter to edge.
- 4. Seating opportunities with opportunities for local narratives, stories and cultural interpretation to be included with furniture.
- Improvements to car parking including drainage improvements.
- 6. Wayfinding and trail signage.
- 7. Formalise trails including trail surface upgrades.

5.0 Master Plan



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5.0 Master Plan

5.12 Master Plan Zone 4

Key Master Plan response Footpath connection Walking trail (unsealed, typ. 1500mm min.) Bike trail Off-road (unsealed, typ. 1200mm min.) 0 Trail head **Signage** (wayfinding, cultural narrative + interpretive) Seating nodes + rest stops Lookout points All abilities focused lookout points **Gravel surface** (car parking) Feature landscape: High quality landscape improvements with a focus on increasing site biodiversity, endemic species and habitat creation. Buffer landscape: Densely planted to support existing landscape areas. Provides separation to paths and definition to trails and tracks to limit unwarranted access and formalise trail/access areas. Wind breaks and visual screening. **Revegetation zones:** Broad acre re vegetation based on trail removals, identified key areas and areas that undergo weed control (where bare ground will become 7. more apparent) Open grassland areas Tree planting Opportunities for stormwater improvements: including passive drainage options and WSUD (Water Sensitive Urban Design) Trail closure

The Master Plan proposes to develop a fence line track to improve trail experiences, connect north-south, and limit ad-hoc trails to protect Significant Environmental Benefit (SEB) vegetation. Formalize existing goat trails and consider above-ground trails to reduce impacts on vegetation. Create rest stops, seating areas, and picnic facilities while balancing open grassland with a revegetation program. Provide pedestrian crossing points, wayfinding signage, and trail maps. Develop buffer landscape for biodiversity link and cultural meeting points. Connect fence line track to Heritage trail and consider bike access. Provide new shelter and lookout and improve access to Petrel Cove car park. Maintain regulatory signage and increase warnings and signage at Petrel Cove beach. Develop fence line track to support improved trail experiences, connect northsouth and limit ad-hoc trails developing with associated impacts to Significant Environmental Benefit (SEB) vegetation.

- 1. Formalise existing goat trails to provide defined access to Significant Environmental Benefit (SEB) site. Examine suitability of above ground/ platform trails to limit impacts to vegetation.
- 2. Rest stops and seating areas. Support improved connection to wider landscape and access to views.
- 3. Opportunities to formalise road shoulder to provide disbursed parking opportunities to support increased activation of open space, allow large vehicle and caravan parking and limit 19. ad-hoc parking and access.
- 4. New picnic facilities including upgraded shelter to support group activities, shade planting, seating and path connections. Balance open grassland with revegetation program 2025, as identified within the Vegetation Management Plan 2015.
- 5. Provide pedestrian crossing point to strengthen walking links east-west. Provide surface treatments to encourage slow speed environment. Provide wayfinding signage and trail maps to increase legibility of site trail opportunities and experiences.
- Develop buffer landscape to provide biodiversity link with Significant Environmental Benefit (SEB) and build capacity of landscape corridor as an important habitat for fauna including connection to wider landscapes.
- Explore opportunities through ongoing consultation for cultural meeting point and yarning circle. Opportunities for cultural ceremonies such as the Welcoming of the Whales. Continue to reinforce, celebrate and provide opportunity for ongoing learning, support and acknowledgment of First Nations connection to country, both tangible and intangible. Provide spaces that facilitate after-dark stargazing areas.
- Connect developed fence line track to Heritage trail and provide opportunities for wider linking including multi-hiking opportunities via the Wild South Coast Way. Consideration of bike access as part of wider tourism opportunities.
- 9. Closures of trail with revegetation and buffer landscape areas to provide regenerative areas and support biodiversity and habitat creation.

- 10. Provide new shelter and lookout (all weather including windbreaks) to Petrel Cove car park, opportunity to be utilised for community events (such as surf contest). Support increased focus on whale watching and improve access from car park.
- 11. Removal of existing shelters.
- 12. Improvements to car park including formalising path connections to improve access, stormwater upgrades and dedicated DDA parking.
- 13. Modification to car park including formalised car parking (un-sealed).
- 14. Trail connection and lookout.
- 15. Formalise existing road shoulder to create parking area including footpath connection.
- 16. Improved step access to Petrel Cove including beach platform to base, improved signage to reinforce dangerous beach conditions. Provide vegetation to extent of works to mitigate erosion either side of steps.
- 17. Improved links to existing trail including surface improvements.
- Redevelop existing lookout including set back from adjacent cliff edge to improve safety and limit erosion. Reinforce as important destination. Provide closures of ad-hoc trails to hillside with revegetation and buffer landscape areas to provide regenerative areas and support biodiversity and habitat creation.
- Maintain regulatory signage to warn of dangers. Increase warnings and signage to Petrel Cove beach to identify beach dangers (locations shown inductively with placement of safety signage carefully considered and in understanding requirements, risk assessment and advice). Conduct ongoing risk assessments to determine the main hazards at Petrel Cove beach, such as strong currents, steep drops, and unstable cliffs, in order to determine the type of warnings and signage necessary. Signage should be designed and placed in a prominent and clear manner so that visitors to Petrel Cove beach will be aware of the hazards. Signs should be strategically placed at entry points, along trails, and near water's edge in order to be seen by as many visitors as possible. Communication should be clear and simple: Use simple language and clear graphics to convey warnings effectively. Avoid using technical jargon or complex wording that may be difficult for some visitors to understand. If possible, provide additional information on the signs, including the level of danger and any specific precautions to be taken. Ensure signage remains clear and visible by regularly inspecting it and updating it based on feedback from visitors and changes in the environment.



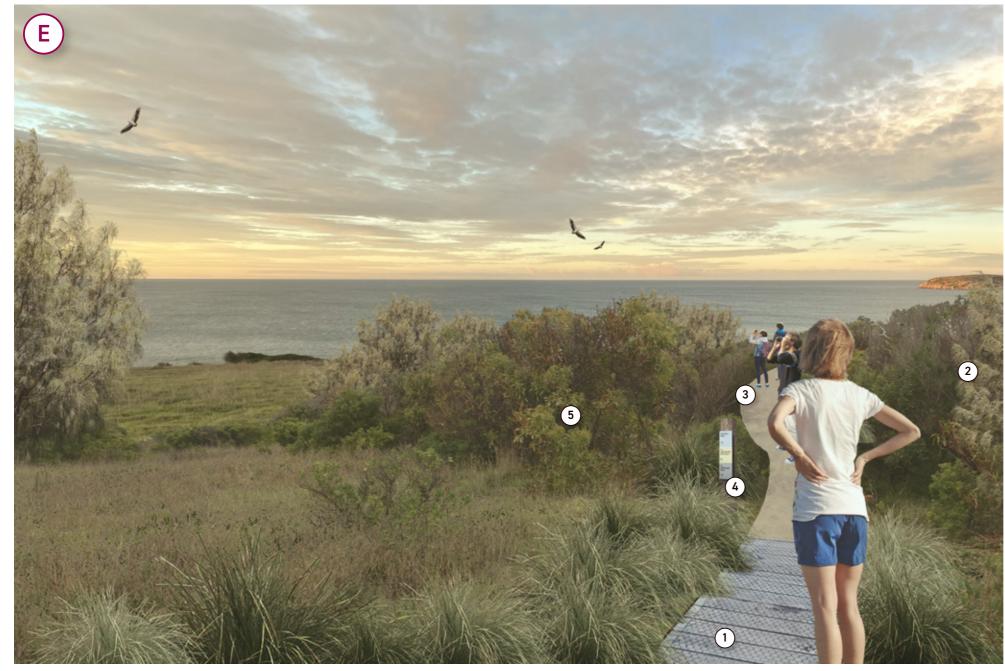
Policy (Mobile Food Vendors Policy- October 2021).

Photomontage location: refer following pages for image

Permitted location of mobile food vendors in alignment to current Council

5.0 Master Plan

5.14 Master Plan Zone 2: Fence Line Trail Photomontage



Illustrative only*

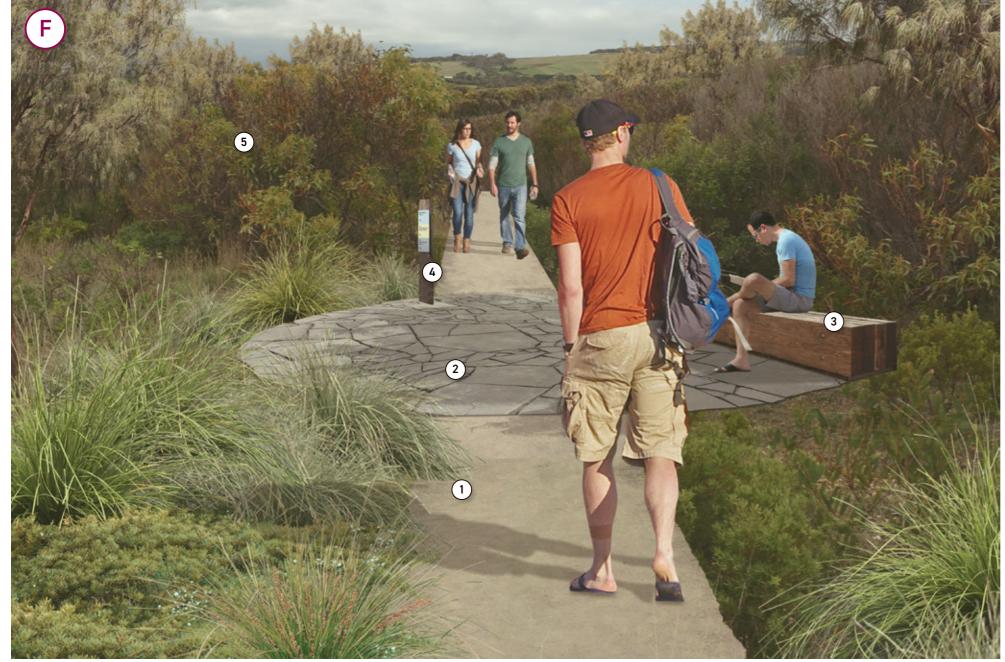


Existing site condition

- 1. Fence line track to enhance trail experiences
- 2. Increased vegetation and planting to fence line to support increased biodiversity and habitat creation including biodiversity corridors.
- 3. Compacted surface walking trail for ease of access
- 4. Trail and wayfinding signage for navigation
- 5. Revegetation and buffer landscape areas to promote regenerative areas and support biodiversity and habitat creation.

5.0 Master Plan

5.15 Master Plan Zone 2: Central Reserve Rest Stop Photomontage







Existing site condition

- 1. Compacted surface walking trail.
- 2. New paved surface to formalise rest stop and define trail access, opportunities for cultural narratives, stories and artifacts to be laid within surface treatments. Assess impacts to existing native vegetation and seek approvals from Native Vegetation Council (The Native Vegetation Assessment Panel NVAP).
- Informal seating area and rest stop to support contemplation and quiet zones.
- Trail and wayfinding signage.
- 5. Revegetation and buffer landscape areas to provide regenerative areas and support biodiversity and habitat creation.

5.16 Master Plan Zone 2: Petrel Cove Car Park



Illustrative only*



Existing site condition

- 1. Increased landscape coverage to embankment to limit erosion and mitigate impacts of
- 2. Reconfiguration of car park to improve parking efficiency, including accessible parking areas.
- 3. Provision of dedicated cycling lane.
- 4. Improvement of footpath connection and opportunity to increase viewing to Petrel Cove.
- 5. Provision of shelter to provide all-weather protection for whale watching, surf carnivals or group gatherings.
- Implementation of stormwater improvements, including rain gardens to reduce erosion.
- 7. Increased landscape areas to formalise entry/finish to trail.
- 8. Closure of ad hoc trail to embankment and improve safety.
- 9. Relocation of existing lookout point to set back from embankment and increase surrounding landscape and revegetation.
- 10. Closure of trail to provide greater emphasis on coastal edge walk

5.17 Master Plan Zone 2: Victor Harbor Heritage Trail



Illustrative only*



Existing site condition

- 1. Improving the surface of the walking trail and realigning it to provide separation from the
- 2. Creating a lookout that is set back from the cliff edge, with a paved surface that includes opportunities for cultural narratives, stories, and artifacts to be laid within surface
- 3. Installing trail and wayfinding signage to improve navigation.
- 4. Establishing revegetation and buffer landscape areas to provide regenerative areas, support biodiversity, and create habitats for local fauna.

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5.0 Master Plan

5.18 Walking and Trails

The Master Plan reiterates the importance of improving walking trails and access based on feedback from the community and stakeholders. Improving trail safety and legibility, developing new trails, and closing trails to enhance walking experience are key objectives. The plan also prioritises the development of All Abilities access paths to ensure that a range of trails are available to visitors. Other priorities include improving walking surfaces, installing stepped access to steep terrain, constructing lookouts and rest stops, improving trail and wayfinding signage, and providing boardwalk access and paths. Additionally, some trails will be kept challenging to cater to more experienced hikers.

5.17 Master Plan Considerations and Opportunities

- Develop The Bluff as an important multi-trail walking destination.
- Provide a diverse range of trail opportunities and experiences.
- Increase connection to multi-day hiking experiences and strengthen connection to Victor
- Incorporate First Nations language, local stories, cultural or historical references or a connection to flora and fauna as part of trail naming.

The following plan highlights as an example the opportunities for developing a diverse range of trail loops and interconnected trail experiences. A key focus of the Master Plan has been the identification of additional walking trails that alleviate the pressure and focus of walking to the steeper gradients and provide additional accessible and lower impact opportunities. It is important to recognise that detailed design, future planning, approvals and assessment is required.

5.18 Trail Classification (Australian walking track grading system)

1 Grade 1

No bushwalking experience required. Flat even surface with no steps or steep sections. Suitable for wheelchair users who have someone to assist them. Walks no greater than 5 km.

No bushwalking experience required. The track is a hardened or compacted surface and may have a gentle hill section or sections and occasional steps.

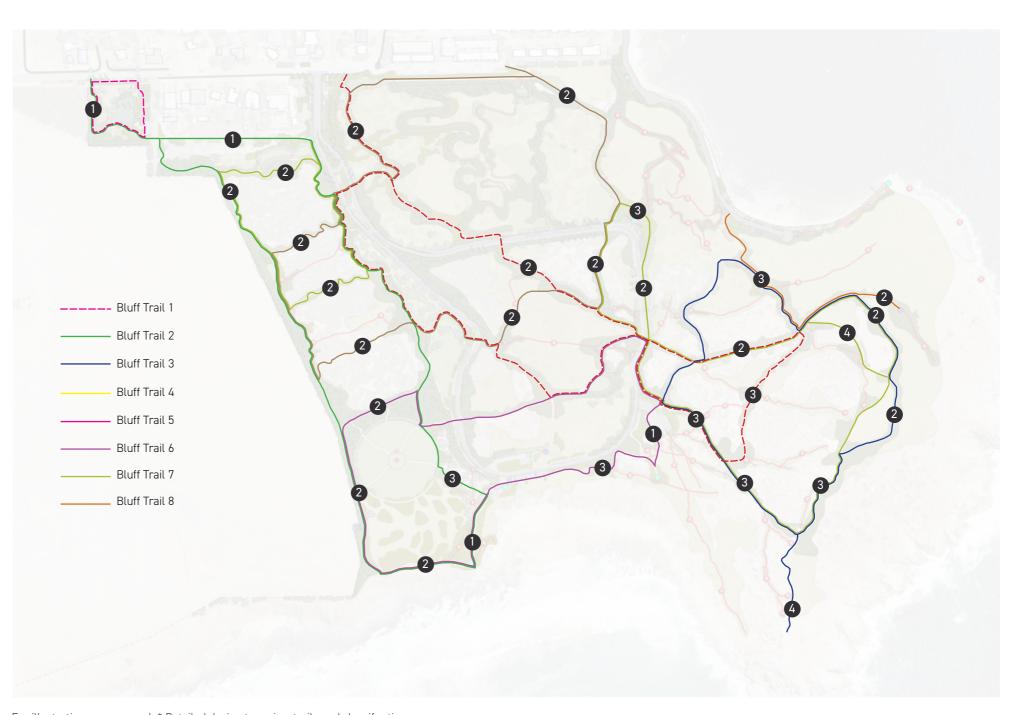
3 Grade 3

Suitable for most ages and fitness levels. Tracks may have short steep hill sections, a rough surface and many steps.

4 Grade 4

Bushwalking experience recommended. Tracks may be long, rough and very steep. Directional signage may be limited.

5.19 Trail map



For illustrative purposes only* Detailed design to review trails and classifications.



5.20 Trails actions

The feedback received highlighted the importance of maintaining a balance between upgrading and improving existing trails, formalising ad hoc trails, developing new trails, and removing trails. To provide clarity on the plan's intent, the trails have been categorised into the following four categories:

Existing trail upgraded and improved Ad-hoc/ Informal trail formalised New trail opportunity Trail removed

By categorising the trails in this way, the plan aims to ensure that a balanced approach is taken to trail development and management.

5.21 Trail map

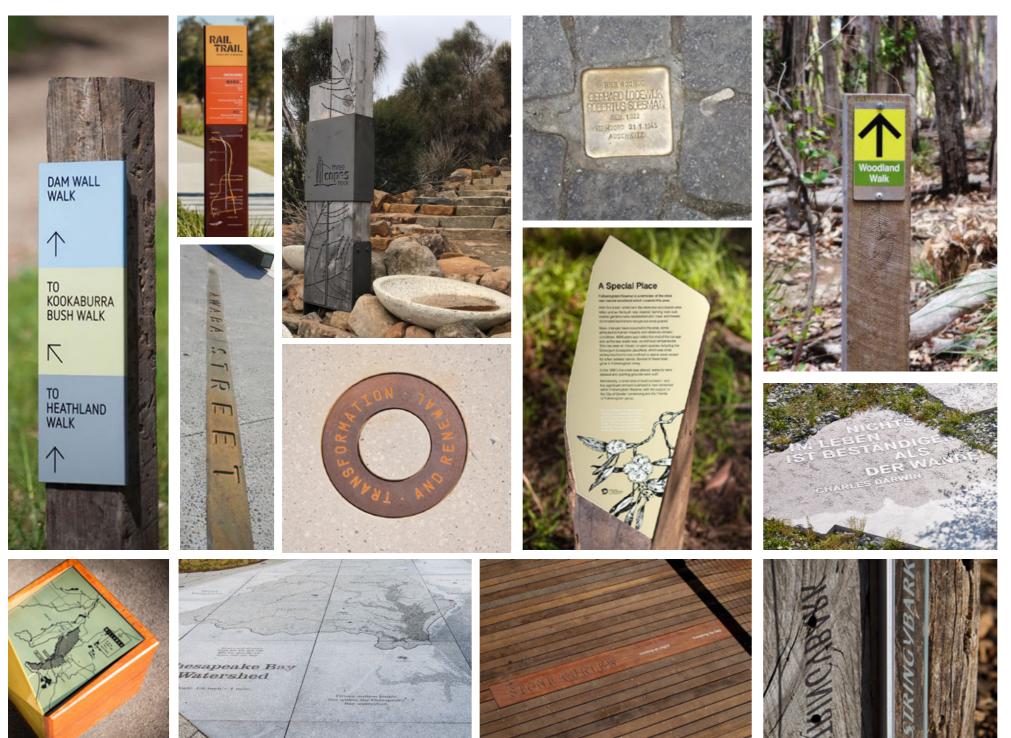


For illustrative/ planning purposes only* Detailed design to review trails, locations and classifications.



6.0 Materials and Style Guide

6.1 Wayfinding and Signage



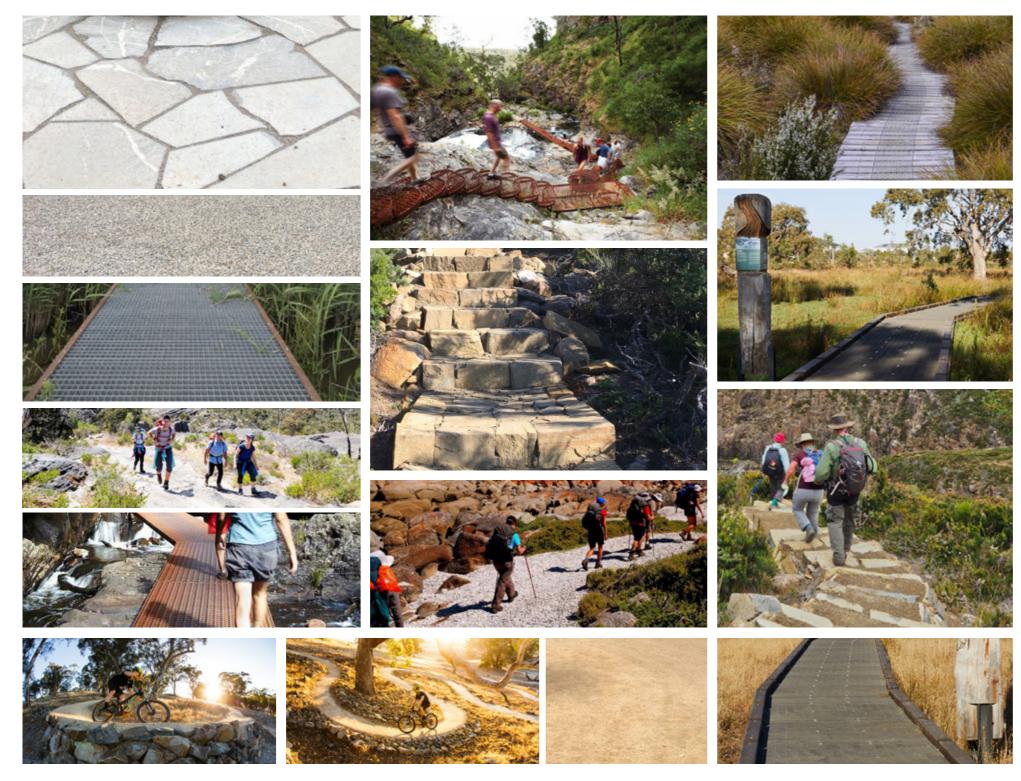
Key considerations

- Prioritise essential information: Identify the most important information that needs to be communicated and ensure that it is prominently displayed.
- Keep messages brief and easy to read: Use clear, concise language and simple graphics to communicate your message effectively.
- Use appropriate sign placement: Place signs where they are most likely to be seen and read by visitors, and ensure that they are not obscured by visual clutter.
- Avoid excess signage: Prioritise the most important messages and avoid cluttering the environment with excessive or redundant signs.
- Develop a style guide: Create a style guide that specifies the types of signs to be used, their size and placement, and the preferred wording and graphics. This guide should also provide guidance on how to ensure that signage is consistent with the overall look and feel of the environment, and how to maintain and update signage over time.
- All materials should be selected to withstand the corrosive properties of the coastal
- It is recommended that a budget be allocated for regular inspections and maintenance of the signage to ensure that it is in good condition and remains effective. Additionally, funds should be set aside for the repair of any damaged or worn signage, and for upgrades or replacements when necessary. It is important to ensure that the signage is maintained to a high standard to enhance the visitor experience and promote safety.



6.0 Materials and Style Guide

6.2 Surfaces, Stepped Access and Ground Treatments

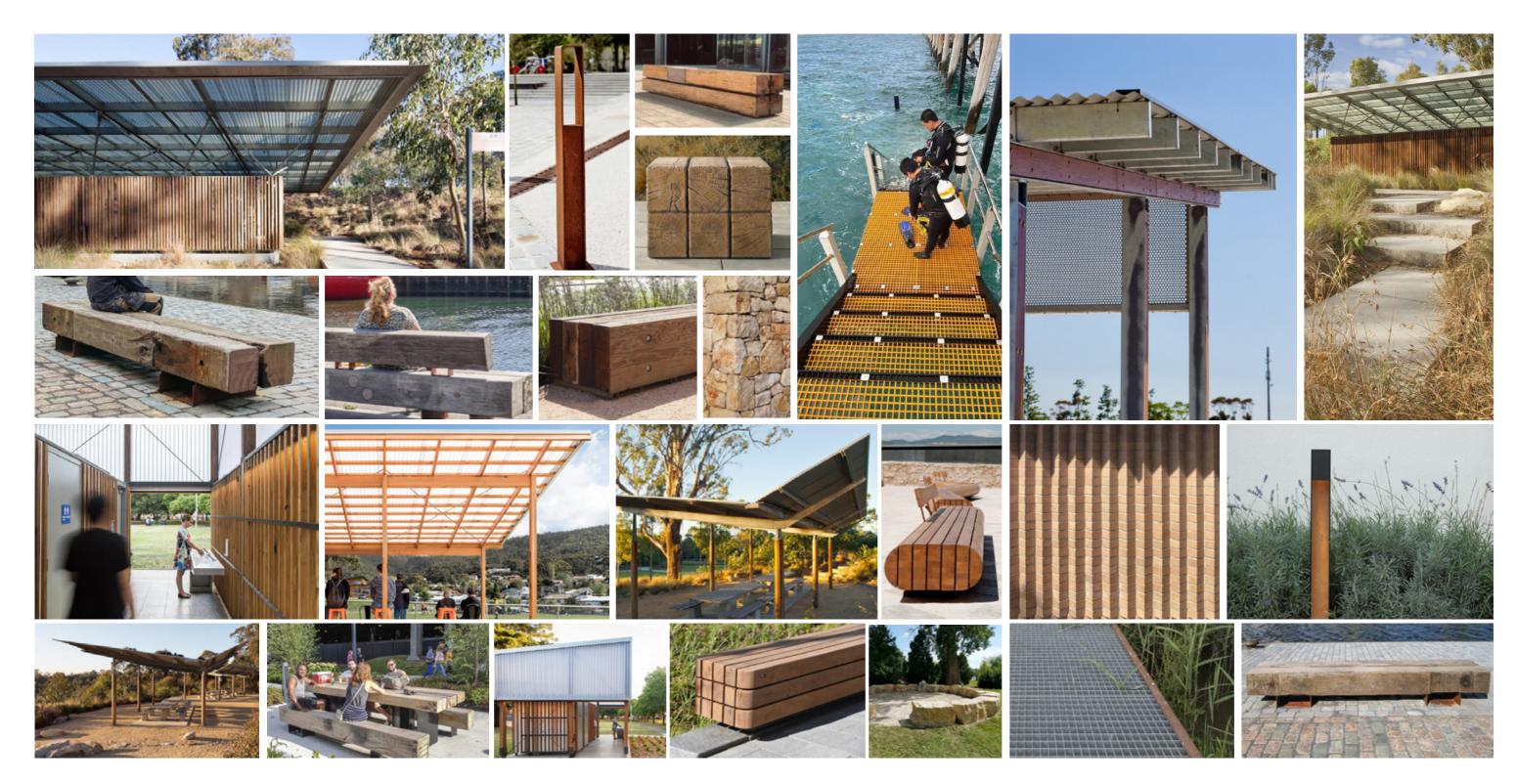


Key considerations

- Surface treatments for foreshore environment should be both durable and natural.
- Recommended surface treatments include recycled timbers, exposed aggregate concrete, quality stone pavers, and compacted cement-stabilized sand paths.
- Ground surfaces should blend with the surroundings in natural colors using one or two tones that match the area's character.
- Highlight details such as corten steel, stone, and timber can be used to establish a connection with the historical and cultural context of the foreshore.
- Artistic elements like mosaic tiles, shot blasted patterns, or cast metal details can reinforce a strong cultural identity.
- Surface treatments should blend in with the natural surroundings and not aim to make a
- Trails and footpaths should be constructed using appropriate materials to ensure safety, durability, and not detract from the natural appearance.
- Choice of materials depends on factors like terrain, foot traffic, and local climate.
- Materials like crushed stone, gravel, wooden or fibreglass reinforced boardwalks may be appropriate to prevent erosion and maintain safe footing.
- Consider the impact of materials on the surrounding ecosystem when constructing trails and
- Choice of materials should balance the need for safety and durability with maintaining the natural appearance of the surrounding environment.
- Steps should be equally spaced and of consistent height to prevent tripping hazards and ensure ease of use.

6.0 Materials and Style Guide

6.3 Facilities, Furniture and Amenities



6.0 Materials and Style Guide

6.4 Indicative plant species

The importance of preserving, improving and increasing vegetation was identified and reinforced. As part of the Master Plan a key focus on improving existing walking trails, developing new trails and opportunity for trail closures to improve walking experience, safety and legibility have been considered. In alignment with the values of The Bluff Reserve Vegetation Management Plan 2015, To create a natural landscape, as close to a pre-European ecosystem as practicable, and improve recreational, educational, scientific and ecological values within the reserve.

Key actions

- · In line with the Bluff Reserve Vegetation Management Plan 2015, manage pest plant and animal species within these zones to protect and enhance existing remnant and indigenous
- Consideration of landscape works that integrate to support wider wildlife and biodiverity corridors to improve environmental connectivity with wider sites within the region. Using the Bluff Reserve Vegetation Management Plan 2015, restore areas with little or no native vegetation.
- Decrease pest plant regeneration and increase native plant species recruitment, by controlling weed species.
- Use a broad range of indigenous plant species within revegetation to provide habitat and food for local fauna, while taking into account the loss of habitat and food sources when removing exotic plants.
- For revegetation purposes, collect local plant material, and remove non-indigenous plant species and plants originating from non-local plant material.
- Where appropriate, incorporate regionally significant and sparsely represented flora into revegetation plans.
- Plan and coordinate the management of pest plants and animals and revegetation works in accordance with the 2007 Coastal Action Plan for the Southern Fleurieu.
- When planting vegetation at the reserve, use appropriate plant species near furniture, signs, paths, and viewing areas, and maintain existing vegetation to enhance amenities at the
- Deter or direct traffic in areas susceptible to unnatural erosion with vegetation or structures, and monitor and respond to rabbit activity.
- On-ground works will be monitored and assessed throughout the Bluff Reserve Vegetation Management Plan 2015, and schedules may need to be adjusted accordingly.

Common Name	Botanical Name
Groundcovers and climbers	
Common Everlasting	Chrysocephalum apiculatum
Old Man's Beard	Clematis microphylla

Kidney-weed Dichondra repens Round-leaf Pigface Disphyma crassifolium Climbing Saltbush Einadia nutans Twining Glycine Glycine rubiginosa Running Postman Kennedia prostrata Muntries Kunzea pomifera Coast Plover-daisy Leiocarpa supina Wingless Fissue-plant Maireana enchylaenoides Pale Fanflower Scaevola albida

Tetragonia implexicoma

Xanthorrhoea semiplana

Grasses and sedges Spear Grasses Austrostipa spp. Windmill Grass Chloris truncata Pale Flax-lily Dianella longifolia subsp. grandis Dianella brevicaulis Short-stem Flax-lily Black-head Grass Enneapogon nigrans Knobby Club-rush Ficinia nodosa Black Grass Saw-sedge Gahnia lanigera Coast Blown-grass Lachnagrostis billardierei Little Seword-sedge Lepidosperma curtisiae Coast Sword-sedge Lepidosperma gladiatum Soft Tussock Mat-rush Lomandra densiflora Scented Mat-rush Lomandra effusa Coast Tussock-grass Poa poiformis Slender Wallaby-grass Rytidosperma racemosa Knotty-butt Paspalidum Setaria constricta Kangaroo Grass Themeda triandra

Bulbs and herbaceous plants

Yacca

Bower Spinach

Common Woodruff Asperula conferta Bulbine-lily Bulbine bulbosa Pink Garland lily Calostemma purpurea Yam Daisy Microseris lanceolata Wiry Dock Rumex dumosus Creamy Candles Stackhousia subterranea Spur Velleia Velleia paradoxa Yellow-wash Bluebell Wahlenbergia luteola

Low shrubs Sticky Cassinia White Correa Tall Scurf-pea Ruby Saltbush Common Eutaxia Clasping Goodenia Dwarf Hakea Coast Cushion-bush Short-leaf Bluebush Australian Hollyhock Coast Daisy-bush Twiggy Daisy-bush Smooth Riceflower Coast Pomaderris Sea-berry Saltbush Coast Groundsel Scented Groundsel

Eutaxia microphylla Goodenia amplexans Hakea rugosa Leucophyta brownii Maireana brevifolia Malva preissiana Olearia axillaris Olearia ramulosa Pimelea glauca Pomaderris paniculosa subsp. par Rhagodia candolleana Senecio pinnatifolius subsp. marit. Senecio odoratus Threlkeldia diffusa Vittadinia cuneata

Cassinia complanata

Cullen australasicum

Enchylaena tomentosa

Correa alba var. pannosa

Medium and tall shrubs

Fuzzy New Holland Daisy

Coast Bonefruit

Hop-bush Wattle Acacia dodonaeifolia Kangaroo Thorn Acacia paradoxa Sweet Bursaria Bursaria spinosa Sticky Hop-bush Dodonaea viscosa subsp. spatulata Coast Beard-heath Leucopogon parviflorus Common Boobialla Myoporum insulare

Trees

Drooping Sheoak Allocasuarina verticillata Coastal White Mallee Eucalyptus diversifolia Ridge-fruited Mallee Eucalyptus incrassata Santalum acuminatum Quandong



6.0 Materials and Style Guide

6.4 Indicative plant species

A selection of indicated species have been provided as a visual summary below.



7.0 Project priorities and implementation

7.1 Project Priority

As a result of consultation, Council input, and community engagement, actions identified within each of the four zones have been prioritised as high, medium, or low priority. The following provides guidance for the development of future projects, considerations, and actions.



Realigning the entrance of The Bluff Reserve/Jagger Road intersection, to improve vehicle movements, sightlines, improve signage, speed restrictions, footpath connections, landscaping and dedicated cycling lanes.

Zone 1

- Providing a high-quality public toilet facility.
- Improving walking trails that cater for a range of abilities, experience levels and provide a range of diverse trail experiences, with a focus on developing walking loops within the Reserve.
- Developing a fence line trail along the western site boundary to connect to the Victor Harbor Heritage trail, Heysen Trail and Wild South Coast Way to provide a diverse range of walking experiences, including smaller rest stops and places to sit and enjoy views.
- Connecting the Bluff Reserve with Oyster Reserve to provide new walking trails including accessible walking opportunities, increased parking to Jagger Road and landscape improvements.

· Closure of unsanctioned bike trails with a focus on revegetation and

Zone 2

- Closures of ad-hoc trails with a focus on revegetation, increasing site biodiversity and habitat creation, to 're-wild' The Bluff.
- Providing a public toilet near The Bluff Jetty.
- Modifications to the Bluff Jetty Road including improvements to road surface, developing a dedicated turnaround area, clear parking areas and dedicated pedestrian access to the Jetty.
- Improve walking connections to the Bluff from the Encounter Bikeway, Franklin Parade and Victor Harbor township.

Closures of ad-hoc trails with a focus on revegetation, increasing site biodiversity and habitat creation, to 're-wild' The Bluff.

Zone 3

- Improve the trail to the top of The Bluff to make it clear how to access, including stepped access (where required), improvements to trail surface and wayfinding signage.
- Upgrade the informal lookout that overlooks Petrel Cove and is accessed from the car park including an all-abilities path to provide
- Upgrade existing lookout including setting it back from the cliff edge to improve safety, increasing landscape planting to limit erosion and increasing all abilities access.

Zone 4

- Improved step access to Petrel Cove including beach platform to base, including improved signage to reinforce dangerous beach conditions and increased vegetation to limit erosion.
- Inclusion of a cultural meeting point and yarning circle (through ongoing consultation) to provide a space for cultural ceremonies.
- New picnic facilities including shelter, seating and areas to support group activities, increase shade planting and path connections.

Zone 1

- Providing a removable barrier to Franklin Parade/ Bluff Jetty Road to allow road closures to vehicles (Emergency Services only) during storm surge events to improve public safety.
- Increasing boat trailer overflow parking to support peak demands.
- Develop a dedicated mountain bike trail area with the closure of existing unsanctioned tracks, including signage, car parking and landscape improvements.
- Upgrade stepped access to the Rosetta Track including trail surface upgrades, revegetation, and signage.
- Development of a cultural narrative trail including in ground stories, rest stops and viewpoints.

Zone 2

- Provide spaces that allow for increased learning, support, and acknowledgment of First Nations connection to country.
- Upgrades to the car park (that overlooks Granite Island and the Victor Harbor township).
- Develop new walking trails to the central reserve to increase walking opportunities.

Improved bike lane and surface upgrades to support safe cycling.

Zone 3

- Develop a new contour trail to link car park 2 with the Coolanine mine site including improved signage and trail markers.
- New shelter and lookout area by Petrel Cove car park that supports activities like whale watching or surf carnivals.

Zone 4

Zone 1

Provide a 'quick turnaround' at the fork of the one-way road to

Zone 2

- Improving beach access.
- Provide 'difficult' track to cater for experienced walkers/ hikers
- Providing a dedicated scuba/ snorkeling access point.
- Develop a lookout and dedicated meeting point to support abseiling (controlled activity)

Zone 3

More parking opportunities within the existing road footprint for larger vehicles (buses, caravans, etc)

Zone 4

allow vehicles to turnaround without the need to use entire ring Improving car parking within the existing road area to increase pull in bays for large vehicles, RV's, caravans, and buses with improved

path connections to the lookout (car park one)

Develop a trailhead and lookout to the Coolanine mine site.

including appropriate signage.

hatch

8.0 Cost planning

8.1 Probable Opinion of Costs

Estimated costs presented are provisional and may be subject to changes resulting from further design development, investigations, and documentation. They have been provided to give an indication of the project's scale and should be used as a guide in future planning.

The costs presented do not include:

- Maintenance costs or ongoing management expenses
- Escalation, preliminaries, construction, and contingency costs
- Professional fees and project management fees
- GST, CITB or planning fees
- Major utility upgrades
- Additional expenses associated with working in a live environment
- Escalation beyond the costs based on August 2022 pricing

7.2 Probable Opinion of Costs: Zone 1



Description	Indicative cost
Oyster Reserve	
Reclassification of Oyster Reserve	\$50,000
Carparking and walking trails	\$105,000
Improve existing drainage and stormwater management to parallel	\$10,000
carpark including demolition and making good to existing	
Improve landscape including new trees	\$25,000
Viewing platform, rest stop and seating node	\$35,000
Maintain and manage Oyster Avenue	\$50,000
Allowance for sundries including crossovers, pram ramps, wheel	\$21,500
stops, line-marking, bollards etc	
Jagger Road Intersection	
Allowance for weather shelter and seating including improvements	\$35,000
to open grassland area	
Road alignment and correction to intersection to west including	\$215,000
separated bike lane, formalised carparking	
Improve footpaths and pedestrian links	\$153,000
Improve landscaping	\$130,000
Toilet block including landscaping and path connections and lighting	\$165,000
Allowance for sundries including crossovers, pram ramps,	\$18,750
wheel stops, line-marking, etc.	
Bike Trails	
Bike trail and Walking Trail compacted gravel pavement including	\$225,000
sub-base, and excavation to design depths typically 1500mm wide	
Improve landscaping	\$530,000
Walking, Movement and Connections	
Walking trails (compacted gravel pavement), landscaping, rest stop	\$66,890
and seating node	
Signage	\$180,000
Total Cost – Zone 1	\$ 2,015,140

7.3 Probable Opinion of Costs: Zone 2



Description	Indicative cost
Bluff Jetty Road	
Improving access to Bluff Jetty Road by improving the existing road	\$300,000
surface, developing an informal roundabout and formalised	
turnaround area	
Bitumen car park	\$22,000
Improvements to pathways including existing stepped access to	\$120,000
Rosetta Track, beach access, existing scuba access facilities and	
improvements to the jetty area including seating, signage and	
lighting	
Toilet facilities	\$125,000
Allowance for sundries including pram ramps, wheel stops, line-	\$15,000
marking, bollards, etc.	
Car Park 1	
Improve existing carpark	\$13,000
Viewing platform	\$25,000
Formalise existing road shoulder to create parking area	\$35,000
Improve landscaping	\$27,000
Bitumen pavement pathway	\$51,000
Allowance for sundries including pram ramps, wheel stops, line-	\$11,500
marking, bollards, etc.	
Walking, Movement and Connections	
Trail closure - approximately 600mm wide	\$16,500
Walking trail compacted gravel pavement including sub-base, and	\$312,000
excavation to design depths - typically 1800mm wide	
Improve landscaping	\$630,000
Viewing platform	\$35,000
Improve existing Coolanine mine site	\$15,000
Signage	60,000
Total Cost – Zone 2	\$ 1,813,000



8.0 Cost Planning

7.4 Probable Opinion of Costs: Zone 3



Description	Indicative cost
Car Park 2	
Improve existing drainage	\$150,000
Viewing platform and allowance for seating	\$45,000
Formalised parallel car parking to the edge of road	\$2,500
Landscaping improvements	\$25,000
Walking, Movement and Connections	
Trail closure - approximately 600mm wide	\$24,000
Walking trail compacted gravel pavement including sub-base, and	\$233,000
excavation to design depths – typically 1800mm wide	
Viewing platform including rest stop/seating node	\$85,000
Improve landscaping	\$211,000
Signage	\$30,000
Total Cost – Zone 3	\$ 805 ,500

7.5 Probable Opinion of Costs: Zone 4



Description	Indicative cost
Petrel Cove Car Park	
Removal of existing shelters and construction of new shelter	\$35,000
Improvements to existing car park including sealed car parking; and	\$120,000
development of formalised road should to create parking area	
Improved existing stepped access to Petrel Cove	\$25,000
Walking, Movement and Connections	
Trail closure - approximately 600mm wide	\$5,000
Viewing platform, rest stop and seating node	\$50,000
Develop formalised road shoulder to create parking area	\$25,000
Shelter	\$15,000
Walking trail compacted gravel pavement including sub-base, and	\$488,000
excavation to design depths – typically 1800mm wide	
Cultural meeting point	\$18,000
Landscape improvements	\$495,000
Signage	\$40,000
Total Cost – Zone 4	\$ 1,316,000

