[redacted]

8.6. Encounter Bikeway - Engagement Outcomes

C24013

Moved Cr Sue Miller seconded Cr Lou Nicholson

That Council endorse the Encounter Bikeway Final Concept Report and make it publicly available to close out the community consultation.

CARRIED

[redacted]

8.6. Encounter Bikeway - Engagement Outcomes

Responsible Officer: Jon Smyth, Manager Assets

Report Author: Geoff Norris, Team Leader Open Space and Building Assets

Recommendation

Recommendation 1 - Endorse Encounter Bikeway Final Concept Report

That Council endorse the Encounter Bikeway Final Concept Report and make it publicly available to close out the community consultation.

Recommendation 2 - Next Steps

1. **That to enable Council to be spade ready for any future external funding that an amount of $300,000 to undertake detailed designs be included in the draft 2024/25 Annual Business Plan and Budget for consideration of inclusion for consultation on the draft plan.**
2. **That Administration continue to consult with the City of Victor Harbour Council to coordinate alignment at the Council boundaries and funding opportunities for the Encounter Bikeway in its entirety.**

Prior Resolutions

Meeting Date	Agenda Item Number	Report Title	Resolution Number
15 March 2021	Item 5.3	Notice of Motion - Cr Lewis - Extension of Bikeway	ACM21904
18 October 2021	Item 5.4	Notice of Motion - Cr Lewis - Encounter Bikeway	ACM211180

Community Strategic Plan Impact

LIVEABLE	**Distinctive townships, places, spaces, and transport networks that support active lifestyles vibrant cultures and productive enterprise**
GREEN	Climate-ready, a place where nature is valued, and resources are managed sustainably and creatively to support a new economy
CONNECTED	Created for, with and by the community. We are safe, healthy and all enjoy accessible infrastructure and services

Report Objective

To seek Council support of the proposed alignment for the Encounter Bikeway following community consultation and support for funding to be allocated to detailed design during the 2024-25 financial year.

Executive Summary

The Encounter Bikeway is a significant asset offering recreational and tourism attractions to the local and broader community.

Both the RAA assessment and community consultation identified that the bikeway should be off road wherever possible to provide the safest and best experience for users. It will also reduce the potential conflict between vehicles and pedestrians/cyclists making the roads safer for all users.

As of 2024 the total cost to upgrade the Bikeway to the preferred alignment identified from the Community Consultation within the Alexandrina Council boundaries is about $21 Million with $16 Million as upgrade/expansion works and about $5 Million that can be undertaken through renewal.

There are opportunities in partnership with the City of Victor Harbour to seek funding through grants and other levels of government to support the upgrade of the trail in its entirety making it a key tourism attraction to the Fleurieu.

It is estimated funding of $300,000 is required to complete detailed design to be "shovel ready" to assist with sourcing external funding opportunities.

Having an approved alignment will enable the maintenance and renewal of the existing Encounter Bikeway infrastructure to be managed in consideration of future requirements reducing potential for waste.

The City of Victor Harbour are waiting for Alexandrina's position following consideration of our community consultation as presented in this report.

Context

The Encounter Bikeway, located on South Australia's Fleurieu Peninsula, is an on-road and off-road shared-use trail that links the coastal city of Victor Harbor and the river port town of Goolwa, via the coastal towns of Port Elliot and Middleton.

The portion that is identified within the scope of this concept plan and community consultation is approximately 21.5km in length and commences at Laffins Point in Goolwa North (intersection of Liverpool Road and Howell Street) and terminates at the Alexandrina Council boundary with Victor Harbor Council along Seagull Avenue in Chiton. The encounter Bikeway continues through to the Bluff in the Victor Harbour Council.

The RAA undertook and assessment of the encounter Bikeway on 2021 and a key recommendation was to establish an off-road trial from Goolwa North to the Bluff to improve safety for users.

General Analysis

The existing Bikeway was reviewed, and draft concept plans were prepared for nine (9) sections of the Bikeway in the Alexandrina Council area. For each section, a variety of upgrades were proposed including route realignment options, new off road or enhanced on road bikeways, intersection safety improvements and bridge upgrades.

The proposed upgrade aims to elevate the profile of the Bikeway and attract visitors to the region by enhancing the Bikeway alignment and linking to key tourist destinations, while also improving safety, accessibility and amenity for users.

Issues identified through the RAA assessment have been considered in preparation of the options that were consulted on and in preparation of the final alignment and scope of possible works.

Community Engagement

Council engaged with community and stakeholders to understand the level of support for each of the upgrade options for each section of the Bikeway in the Alexandrina Council area.

The engagement sought feedback to understand the level of community and stakeholder support for the different upgrade options in the draft Concept Plans prepared for each section of the Encounter Bikeway in the Alexandrina Council area.

The engagement was undertaken between 16 May and 13 June 2022 and included:

1. Drop-in sessions at which the community could drop-in, view the plans, ask questions of the design team and fill in a hard copy survey:
   - 20 May 12-3pm Goolwa Library
   - 21 May 1-4pm Chiton Rocks Surf Life Saving Club
2. Online survey on Council's Your Say Page (www.mysay.alexandrina.sa.gov.au/encounterbikeway).

The draft Concept Plans were available to view from the Council's My Say page and were on display in the Goolwa Library from 22 May to 13 June 2022.

The engagement was also promoted through temporary signage established at key points along the Bikeway.

Preferred Alignment

The options presented and the preferred alignment following community consultation are identified in Attachment 1.

Options were presented for each segment of the Encounter Bikeway through the Council area.

In summary, the consultation found that, not unexpectedly, there are many stakeholders that were keenly interested in the Encounter Bikeway realignment, evidenced by the number of people that engaged in the consultation process. There was a clear preference for the Bikeway to be taken off-road as much as possible with support for off-road options being divided between the rail corridor and road reserve options. The following table provides a summary of the preferred options.

Table 1 - Consultation Summary

Map	**Bikeway Sections**	**Most Supported route option**	**Why did people choose this option?**
CP-01	Dump Beach/Chiton Rocks/Bullies Beach	71% Option A - Establish new bikeway through coastal dunes	Natural extension of the path along the rail line Attracts customers to the surf lifesaving club; Good experience for riders (views coastal) Like separation from cars
CP-02	Boomer Beach/Port Elliot Headland/Horseshoe Bay	85% Option A - New link along embankment contour	Coastal views The boardwalk Utilises the existing on-road bikeway and maintains existing pedestrian only zone.
CP-03,04	Horseshoe Bay/Bashams Beach	92% Option A - Designated off road bikeway.	Because it is off-road. Provides good views and goes pass the caravan park.
CP-05	Middleton/Ocean Parade	74% Option A - Proposed designated bikeway alignment along Ocean Parade	The cantilevered section around Middleton Point providing views. Bikeway stays along the coast.

Map	Bikeway Sections	Most Supported route option	Why did people choose this option?
			Reduces conflicts between cars and cyclists.
CP-06,07	Surfers Parade/Goolwa Beach	68% Option A - Upgrade existing on-road bikeway or footpath along Kightley Road	Enhances use and safety of the area for pedestrians and cyclists. Cost effective and least invasive of the natural landscape. Cyclists still have the option of utilising the existing gravel path across the flood plain.
CP-08,09	Barrage Road/Riverside Drive/Goolwa Wharf/Amelia Park/Richard Ballard Park	87% Option A - Trail continues along shared path.	Elimination of the dangerous unpaved section through the parking lot just east of the Hindmarsh Island Bridge. Safer for cyclists as Jaralde Park can be busy. Brings cyclists the Wharf area which will support the current project. Improved connectivity between boardwalk and paths.

City of Victor Harbour

The Encounter Bikeway crosses both City of Victor Harbor and Alexandrina Council. The City of Victor Harbour has recently completed consultation on alignment options including at the boundary of the two Councils. The outcome of the two community consultations have identified the same preferred alignment at the boundary.

Administration at City of Victor Harbour have presented the outcomes from their engagement in February 2022 and resolved the following;

12.5 Encounter Bikeway Realignment Consultation Summary (Hindmarsh Road to Council Boundary)

OC912022 Moved: Cr Marilyn Henderson

Seconded: Cr Andrew Robertson

1. *That Council receive and note the Encounter Bikeway Realignment Consultation Summary (Hindmarsh Road to Council Boundary) report.*
2. *That Council provide a copy of the consultation findings to key stakeholders, but that no further action is taken until the outcome of Alexandrina Council's Encounter Bikeway consultation is available for consideration.*

CARRIED

Financial

The estimated costs as of 2024 is around $21.0 Million. Of the $21.0 Million about $16.0 Million would be considered expansion/new works and $5.0 Million funded through Council's renewal program. The following table provides a breakdown of the costs per map section identified in Attachment 1.

Table 2 - Breakdown of costs

Map Reference	Expansion/New '000's	Renewal '000's	Total '000's
CP-01	$1,100	$290	$1,390
CP-02	$1,200	$570	$1,770
CP-03	$2,500	$200	$2,700
CP-04	$0	$1,000	$1,000
CP-05	$3,100	$1,000	$4,100
CP-06	$4,600	$1,500	$6,100
CP-07	$1,300	$0	$1,300
CP-08	$830	$430	$1,260
CP-09	$1,400	$0	$1,400
Total	$16,030	$4,990	$21,020

Note the above table has escalated the costs shown in attachment 1 by 20 percent to better reflect potential costs as of 2024.

The Encounter Bikeway that runs from the Bluff to Goolwa North has the potential to attract external Commonwealth and State funding as a major regional project. Early discussions with staff at the City of Victor Harbour has confirmed interest at administration level to partner with Alexandrina to attempt to attract significant external investment.

The City of Victor Harbour staff will progress a further report to their council body following Alexandrina Council confirming its position.

Existing Bikeway

There are currently sections of the existing Bikeway that are nearing end of life and will require renewal over the next 1-5 years. Should the preferred alignment shown in Attachment 1 be approved, works to these sections can be undertaken in consideration of the future design. By having an agreed future alignment, it will also inform the level of maintenance to be undertaken on sections that may become redundant to prevent wasting resources.

Comparative Analysis

Nil

Financial and Economic Implications

In accordance with the Alexandrina Council's Adopted Budget / Long Term Financial Plan, the financial implications of adopting this recommendation will be considered as part of the 2024/25 budget process.

Risk Management

In accordance with Alexandrina Council's Risk Assessment Matrix, the risk of adopting this recommendation is considered High. The identified alignment moves a proportion of the Bikeway to being off road reducing the potential for conflict between vehicles and pedestrian/cyclists. There are still sections of the Bikeway that will be shared by vehicles and cyclists, however with the reduced level of shared roadways the likelihood of incident is reduced to being unlikely however the consequences in the event will still be considered catastrophic.

Conclusion

The Encounter Bikeway is significant asset and attraction to the Alexandria Council and the City of Victor Harbour. Sections of the existing Bikeway are ageing and in poor condition and will require investment over the coming years.

Establishment of a future alignment will enable the existing infrastructure to be managed appropriately, while meeting future requirements.

The expenditure of $300,000 to develop detailed designs for the preferred alignment identified through the community consultation will essentially have the project "shovel ready" giving it the best opportunity to attract external funding via grants and/or election opportunities.

Attachments

Attachment 1 - 2021 RAA Bikeway Assessment Encounter Bikeway

Attachment 2 - Encounter Bikeway Final Concept Report



Bikeway Assessment

Encounter Bikeway

Version 1.3 | June 2021

RAA

RAA at a glance

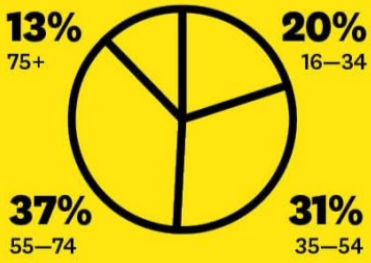
RAA

South Australia's **largest** membership organisation

Advocating for South Australians for over **115 years**

770k+ current members (55% of SA adults)

150k+ RAA members are also cyclists



Our members span all adult age groups

1000+ staff employed across SA

Largest personal lines insurer in SA

340k+ roadside callouts per year

530+ tourism providers promoted on Experience SA

450+ businesses accredited through RAA's Approved Repairer network

29k+ people educated on road, bike and child safety each year

23k+ free lessons delivered to keep SA learner drivers safe

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Disclaimer

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Introduction

The Encounter Bikeway is a pedestrian and cycle route extending over 30km from Goolwa North to Encounter Bay via the coastal towns of Goolwa, Middleton, Port Elliot and Victor Harbor. The route starts at the intersection with Liverpool Rd and Howell St (Goolwa North) and terminates at The Bluff (Encounter Bay) and is a mixture of on-road and shared pathway. It is frequently used by pedestrians and cyclists, particularly for shorter walks and rides on shared sections in Goolwa and Victor Harbor. The bikeway is under the care and control of Alexandrina Council between Goolwa North and Hayborough/Chiton (just west of the intersection with Seagull Avenue and Third Avenue), and City of Victor Harbor Council between Hayborough/Chiton and The Bluff in Encounter Bay.

Following a high level of community feedback compared with other cycle infrastructure, RAA reviewed the Encounter Bikeway in two stages as part of our Fleurieu Regional Road Assessment, due for release later in 2021. Initially, the route was reviewed by car with multiple stops and ad-hoc reviews of discrete sites. This identified a need to review the bikeway from the perspective of a user to gain better insight into bikeway condition, wayfinding, and continuity. On Friday 30 April 2021, two e-bikes were hired from Goolwa Bike Hire and RAA staff rode the full length of the bikeway in both directions, cycling a total of 65km.

Community feedback

As part of RAA's Fleurieu Peninsula Regional Road Assessment, an online survey was circulated to RAA members in the Fleurieu Peninsula region and advertised via social and traditional media platforms to reach the greater community. In total, 1,080 responses were received from the local community between 23 November 2020 and 16 December 2020, highlighting a range of transport and mobility concerns.

The Encounter Bikeway was the most frequently nominated cycle infrastructure in the Fleurieu Peninsula community survey, receiving 22 nominations in questions about cycling, with 13 of these coming from respondents who had ridden a bicycle in the six months prior to completing the survey.

Responses from cyclists were more likely to raise concerns about pedestrians and dogs on the path, as highlighted by the comments below.

> "Busy path, often congested with pedestrians walking dogs - I tend not to use it as never sure when a dog might come at me - also some cycle at speed".
>
> "Very popular walking paths for pedestrians and animals. Need to cycle on road to maintain theirs and my safety. Especially those pedestrians who have earphones on".
>
> "Lots of older pedestrians wearing earphones and don't hear the bell on approaching".

Responses from pedestrian path users were more likely to raise issues about the behaviour of cyclists, as highlighted in the comments below.

> "Cyclists aren't always good at sharing this bike / walking path with walkers. They often come through in large packs and go too fast, even though there are signs in sections asking for cyclists to slow down for blind corners."

"Some cyclists have no warning bells and have almost been hit by them while walking on this narrow track".

"Many cyclists ride at great speed. With pedestrians, often elderly, this is very risky!"

Both cyclists and non-cyclists raised safety concerns with the on-road sections of the bikeway and wanted the number of interactions between motor vehicles and bikeway users reduced, ideally through physical separation.

"Needs to be off roads, in particular around Victor Harbor".

"Needs to be a dedicated bike path rather than painted lines mixing with car traffic".

"The path often spills out to general roads and the traffic is fast, the roads narrow. The path is popular but making it continuous would improve safety and encourage more families to explore the beautiful ride".

"This bikeway would be fantastic if there was a way that it could be completely on the cycle path and not on any shared roads, especially when riding with children".

"There is a dedicated cycle track, but I still see cyclists on the road as it is not easy to find and not good in places. Once in Victor Harbor, more bicycle lanes are required".

"Too often mixing with cars in back roads. Could follow rail line for less intersections with roads".

Recent bikeway improvements

Several improvements have been made to sections of the Encounter Bikeway in recent years, including (but not limited to):

- Widening and resurfacing of the shared path in Encounter Bay (2020)
- Widening the shared path in Victor Harbor near the Victor Harbor Bowling Club
- Construction of a 75m boardwalk behind the Victor Harbor Visitor Information Centre between the Esplanade Car Park and Granite Island Causeway
- Repair to damaged sections of the path being lifted by tree roots in Goolwa North.

RAA welcomes City of Victor Harbor Council's vision to "establish the Encounter Bikeway as the best coastal bike route in Australia" as highlighted in its 2016 *Victor Harbor Bicycle Strategy*[1], and commends the steps it has taken in recent years to progress this vision.

[1] Tonkin Consulting, 2016, Victor Harbor Bicycle Strategy, accessed at <https://www.victor.sa.gov.au/__data/assets/pdf_file/0024/285126/Victor-Harbor-Bicycle-Strategy_Adopted-20160926.pdf>.

Crash history

RAA has reviewed reported injury crashes along the Encounter Bikeway between 2015 and 2019. The crash data reviewed is provided by the Department for Infrastructure and Transport and only includes on-road crashes that were reported to police. As such, crashes on off-road sections are not considered in this review. It is also important to note that many cyclist crashes go un-reported, especially those that only involve a cyclist (and no other road user) resulting in minor injury and these will therefore not be represented in this analysis.

Between 2015 and 2019 there were seven casualty crashes involving cyclists or pedestrians that occurred on or near the on-road sections of the Encounter Bikeway.

There were two crashes that occurred on Newell Avenue in Middleton, both resulting in serious injuries to the cyclists. One of these occurred in January 2016 and involved a cyclist rollover whilst making a left turn from Newell Avenue onto Andrew Avenue, which may be due to the gravel road shoulder at this location. The second was in December 2018 and also involved a cyclist rollover just west of Waikiki Way, heading east.

Another single cyclist crash occurred in Middleton on Ocean Parade in March 2017, where a cyclist collided with a fixed object (tree) and sustained minor injuries when turning right onto Surf Street.

Two crashes involving cyclists or pedestrians occurred on Hindmarsh Road in Victor Harbor, both resulting in minor injuries. Although not on a formal part of the Encounter Bikeway, RAA considers that these crashes may be somewhat related to the Encounter Bikeway, but more information about the crash circumstances is required to fully determine this. A pedestrian was hit while crossing the road from south to north, near Pine Avenue (where the footpath ends), and a northeast bound cyclist and car turning right onto Renown Avenue collided at the intersection with Renown Avenue.

In May 2016, a rear end crash involving a cyclist occurred heading northeast on Franklin Parade approaching the Bartel Boulevard roundabout, resulting in minor injuries.

In October 2015, a northwest bound cyclist rolled over on Bluff Jetty Road and sustained minor injuries.

Observations

Off-road path widths

Whilst path widths were not formally measured during RAA's assessment, Table 1 shows a reasonable approximation of path widths along the Encounter Bikeway as estimated by RAA traffic engineers at the time of assessment and using satellite imagery.

Table 1: Sealed width of Encounter Bikeway sections

Location	Approx. path width*
Goolwa North (Liverpool Rd)	3.0m
Goolwa South (Barrage Rd)	3.5m
Goolwa – Middleton path	3.0m
Middleton – Port Elliot path	3.0m
Victor Harbor (near Bridge Tce Bowling Club)	3.5m
Victor Harbor (Soldiers Memorial Gardens)	1.8m
Victor Harbor (Soldiers Memorial Reserve)	2x 2.0m
Victor Harbor (Esplanade)	2.5 - 3.0m
Encounter Bay (Franklin Parade)	3.5m
*Approximation using satellite imagery and/or reasonable approximation made by RAA traffic engineers at the time of assessment.	

Austroads Guide to Road Design Part 6A: Paths for Walking and Cycling[2] covers the recommended design guidelines for shared paths. The desirable width for regional cycle paths is 3m, however a minimum of 2.5m may be adopted in certain circumstance where cyclist volumes and speeds will remain low. Figure 5.5 of the guide considers a 3m shared path to be acceptable for two-way volumes of up to about 100 pedestrians and about 150 cyclists over the peak hour, with higher pedestrian or cyclist volumes triggering investigatory levels for a separate bike path and footpath.

[2] Austroads, 2021, Guide to Road Design Part 6A: Paths for Walking and Cycling, accessed at <https://austroads.com.au/publications/road-design/agrd06a>.

On-road sections

One of the most frequent complaints RAA received about the Encounter Bikeway in the community survey was about interactions with motor vehicle traffic along on-road sections of the bikeway. In the longer term, both City of Victor Harbor Council and Alexandrina Council should be progressively working towards providing a continuous off-road shared path between Goolwa and Victor Harbor, applying for state and federal government funds where applicable. While RAA recognises there are challenges in constructing a separated pathway on some sections of the route, it is considered that locations for off-road pathways should be prioritised based on safety and net benefit to the community. Some sections that RAA consider to be a high priority for improvement include:

- Goolwa Wharf, Goolwa
- Beach Road, Goolwa Beach
- Surfers Parade, Middleton
- Port Elliot – McCracken adjacent to the rail corridor
- Kent Reserve carpark, Victor Harbor
- Hindmarsh Road, McCracken

Recommendation 1

Alexandrina Council and City of Victor Harbor Council work towards providing a continuous off-road path between Goolwa and Victor Harbor by investigating and prioritising future alignments for new off-road sections.

Sharrows

Sharrows and bicycle pavement marking are used in various places along the route, mostly on local roads under the care and control of the City of Victor Harbor. RAA considers sharrows to be effective in helping with cyclist wayfinding, whilst providing warning to other road users of the possible presence of cyclists and providing some guidance on lateral lane positioning for cyclists. Whilst guidance on sharrows is not provided under Australian Standards or Austroads Guidelines, the Department for Infrastructure and Transport has produced an Operational Instruction[3] on the use of these devices.

[3] Department for Infrastructure and Transport, 2015, *Operation Instruction 9.4, Advisory Bicycle Pavement Marking: Shared Lane Marking (Sharrow)*, accessed at <https://dit.sa.gov.au/standards/tass>.

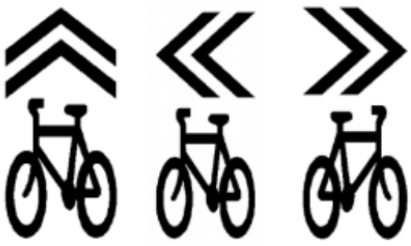


Figure 1: Sharrow lane marking (Source: DIT, 2015)

RAA supports the use of sharrows in accordance with this Operational Instruction, which details the technical requirements for placement, spacing and line marking. RAA recommends that sharrows be installed on all on-road sections of the Encounter Bikeway in accordance with this Operational Instruction. These locations are detailed throughout this report and highlighted in Table 2.

Recommendation 2

Install sharrow pavement markings on all on-road sections of the Encounter Bikeway where they are currently not provided to assist with wayfinding, warn other road users of the possible presence of cyclists and provide guidance on lateral lane position for cyclists.

Table 2: Recommended roads to install or improve sharrow pavement markings

Suburb	Road Name
Goolwa	Install on Goolwa Wharf, Admiral Terrace
Goolwa South	Install on Admiral Terrace, Riverside Drive, Barrage Road (S of Shore Court), Bristow-Smith Avenue, Beach Road (off-road path or cycle lanes preferred)
Goolwa Beach	Install on Beach Road (off-road path or cycle lanes preferred), Eaton Avenue, Bradford Road, Kightley Road, Redclift Street
Middleton	Install on Newell Avenue, Waikiki Way, Surfers Parade, Esplanade, Mill Terrace, Higgins Terrace, Mindacowie Terrace (Ocean Parade – Dover Rd), Dover Road, Ocean Parade
Port Elliot	Install on Scrymgour Road, Coleman Place, Strangways Terrace Improve on Murray Place, Barbara Street, Rosetta Terrace, Battunga Avenue, Railway Terrace, Ocean Road
Chiton	Improve on Seagull Avenue
Hayborough	Improve on Seagull Avenue, First Avenue, Olivers Parade (east) Install on Olivers Parade (west), Granite Grove
McCracken	Install on Hayward Street, Hayward Court (eastbound)

It is important to note that RAA considers sharrows to be an interim passive safety treatment, and that our preference is to gradually provide continuous off-road shared facilities along the Encounter Bikeway wherever possible.

Signs and wayfinding

A variety of signage is used along the route. As a minimum, Austroads recommends route markers be applied along the length of local and tourist recreational routes[4]. Australian Standard AS1742.9 – 2018 stipulates that these markers must incorporate at least the bicycle symbol and an arrow, with a white legend on a blue background being the preferred colour scheme, which has been used in most instances. These route markers are generally used consistently when the route uses local roads, however they are missing in some locations, or have different variations at points where on and off road sections meet.



Figure 2: Examples of varying or confusing wayfinding signage along the Encounter Bikeway route

There are few reminders directed at route users of where they are situated along the bikeway, or of the distance to various destinations. Signs showing this type of information are particularly useful for tourists who are less likely to be familiar with the area. It was noted that the signs in the City of Victor Harbor Council section appear to be relatively new, and designed to current standards, but some are positioned towards those joining the bikeway rather than those already riding along it. There are opportunities for Alexandrina Council to update the signage within its area and for both jurisdictions to consider installing additional signs with wayfinding information at more regular intervals. Signs should preferably refer to townships by name rather than using more ambiguous terms such as 'Town Centre'.

Consideration should be given to providing larger format signs at the entry point to townships that could also incorporate a list of popular destinations in the town alongside a map of the local area to assist tourist wayfinding and attract visitors to places that aren't adjacent to the path. Without such signs, visitors may not know when they have arrived in a particular town.

Recommendation 3A

Install more distance reminder signs along the Encounter Bikeway route. These may also be incorporated with town entry treatments that also list popular destinations in the town alongside a map of the local area.

[4] Austroads, 2017, Cycling Aspects of Austroads Guides (2017 Edition), accessed at <https://austroads.com.au/publications/road-design/ap-g88-17>.



Figure 3: Distance reminder signs are scarcely used along the path but are useful for tourist navigation

This, in combination with additional signage along the bikeway directing cyclists to town centres, retail precincts and attractions would provide further opportunities for the bikeway to promote additional tourist experiences and encourage additional tourist spending in town centres.

The end of the bikeway is not well defined, particularly at Goolwa North where there is only an end of shared path sign and an old map of the bikeway. There was a lack of amenities such as seating or toilets available near this end point. At Encounter Bay, The Bluff is a natural endpoint of the path, and offers two possible end points, either at the Bluff Jetty or the scenic view point at the top of The Bluff. While facilities at this end of the pathway are better, there is still no formal recognition that the end of the path has been reached. A clearly signed endpoint would address this and act as an attraction in itself, giving path users a sense of accomplishment when travelling the entire length of the bikeway.

Recommendation 3B

Clearly signpost both endpoints of the Encounter Bikeway and consider making improvements to facilities at the Goolwa end.

Whilst centre lines are marked on the busier off-road sections of the path in Goolwa and Encounter Bay, other sections of the path are not marked. Centre lines encourage path users to keep to the left and would act to reduce the potential conflict between pedestrians and cyclists.

Recommendation 3C

Where not already installed, install centre lines on shared paths to encourage path users to keep to the left and reduce conflict between pedestrians and cyclists.

The installation of road rule advisory signage near the Victor Harbor Beachfront Holiday Park is a welcome addition, and rollout of similar signage at other high-traffic locations should be considered by both councils to remind all path users of their obligations when using a shared path.

Recommendation 3D

Continued installation of road rule advisory signage along the path at high-traffic locations to remind all path users of their obligations when using a shared path.



Figure 4: Road rule advisory signs are a welcome addition near the Victor Harbor Beachfront Holiday Park

Goolwa North

The section of Encounter Bikeway in Goolwa North runs along the riverbank reserve between Liverpool Terrace and the Murray River. It is characterised by its good quality 3m wide shared path that contributed to a safe riding experience due in part to the separation provided between motor vehicle traffic on Liverpool Road and the path for most of its length.



Figure 5: The Encounter Bikeway is constructed to a good standard in Goolwa North

Goolwa

The 3m wide shared path extends from Goolwa North and continues adjacent to Liverpool Road until it reaches the rail line, where the path begins to follow the rail alignment. The path bisects an off-street parking area opposite the intersection of Liverpool Road and Richards Street creating potential conflict between reversing vehicles and path users. Ideally, this path would bypass the parking area completely. As a minimum, sharrows and bicycle warning signs should be installed to alert drivers of the potential presence of cyclists riding through the carpark.



Figure 6: The Bikeway traverses several car parks including near the intersection with Liverpool Road and Richards Street

The shared path continues along the rail line before terminating at the gravel carpark near the Hindmarsh Island Bridge at the Goolwa Wharf. This results in unsafe interactions between path users and reversing vehicles. The sudden change to a gravel surface can be detrimental to path uses, particularly those using road bikes with narrow tyres.

Cyclists are then directed through the busy sealed section of the Goolwa Wharf carpark without physical separation from traffic, and across the rail line before being directed along a gravel path and through another gravel parking area adjacent to Admiral Terrace.



Figure 7: Gravel pathways near the Goolwa Wharf Precinct

The route crosses the rail line again, and cyclists are directed along Admiral Terrace (south) and Riverside Drive through to Barrage Road. There is an opportunity to extend the shared path along Admiral Terrace (south) and Riverside Drive, noting that traffic volumes are low on these roads and sharrows may assist with wayfinding in the short term. A lack of wayfinding signage was observed in both directions near the intersection with Riverside Drive and Barrage Road.

In June 2020, a $7.5m funding announcement[5] was made for revitalisation of the Goolwa Wharf precinct. This important upgrade is 50% funded by federal government (*Building Better Regions Fund*), 33% by Alexandrina Council, and 17% by state government. Improvements to shared paths are included in this project scope and this is an ideal opportunity to provide a safe and continuous shared path through the Goolwa Wharf precinct. Cycle connectivity to Cadell Street via Cutting Road should also be improved by constructing a shared path adjacent to Cutting Road. Bike racks should be installed in the vicinity of the Goolwa Visitor Information Centre, allowing cyclists to explore Cadell Street by foot.

Recommendation 4

Ensure continuous shared pathways are provided through the Goolwa Wharf precinct as part of the $7.5m Goolwa Wharf Precinct Revitalisation Project.

RAA raised this feedback with the project management consultant in a meeting on 25 May 2021 and subsequently in writing during the community consultation stages of the project.

[5] Alexandrina Council, 2020, *MEDIA RELEASE, Goolwa Wharf Precinct Revitalisation Project $7.5 Million Project funding announced 5 June 2020*, accessed at <https://www.alexandrina.sa.gov.au/__data/assets/pdf_file/0046/685999/Media-Release-Goolwa-Wharf-Precinct-Funding-Announcement-FINAL.pdf>.

Goolwa South and Goolwa Beach

From the intersection with Riverside Drive and Barrage Road, an off-road shared path extends for about 1km through to the intersection with Shore Court. This path is predominantly 3.5m wide with the exception of a pinch point near the Goolwa Aquatic Club which could be resolved by some relatively minor path and on-street parking realignments. It was observed that low lying vegetation was used to split the path prior to some driveway crossings along Barrage Road which is less effective than using holding rails which inhibit vehicle access and provide something to hold onto whilst waiting for traffic.

From the intersection with Shore Court, the first substantial on-road section of the bikeway begins. The route follows the local road network along Barrage Road and Bristow-Smith Avenue through to Beach Road, which is a much busier collector road providing primary access to Goolwa Beach. Extending the shared path alongside Barrage Road between Shore Court and Bristow-Smith Avenue should be considered to provide continuity of the off-road route and provide a safer environment for cyclists and pedestrians given the curved geometry of Barrage Road.

Recommendation 5A

Extend the shared path alongside Barrage Road between Shore Court and Bristow-Smith Avenue.

In the shorter term, sharrows should be used along this on-road section to help direct cyclists and alert other road users that this is an on-road cycle route.

Recommendation 5B

Install sharrows along Barrage Road and Bristow-Smith Avenue to assist cyclist wayfinding and warn other road users of the presence of cyclists.

Whilst construction of an off-road path between Barrage Road and Beach Road is possible and would be preferred to the current route along Bristow-Smith Avenue, this is expected to be expensive and have some environmental implications. This should be considered as a long-term goal for the Encounter Bikeway and possible path alignment explored further.

Installing a 115m long section of shared path on the western side of Beach Road, between Bristow-Smith Avenue and the commencement of the off-road path should also be considered to allow safer travel along this busy road corridor. Full time cycle lanes highlighted with green tactile paint should be provided as a minimum for this section.

Recommendation 5C

Install a 115m long section of shared path on the western side of Beach Road, between Bristow-Smith Avenue and the commencement of the off-road path.

In the longer term, a new path alignment between Beach Road and Reed Place should be considered with possible future alignments and costings explored further to determine the feasibility of this path.

From Beach Road, an off-road path extends for approximately 360m through to Hume Street, where the bikeway follows local roads in Eaton Avenue, Bradford Road, Kightley Road and Redclift Street. Sharrows should be provided along these roads to assist cyclist wayfinding and warn other road users of the presence of cyclists, whilst longer term plans for an off-road path are explored.

A new off-road pathway between Reed Place and Redclift Street should be investigated in the shorter term to increase the off-road footprint of the bikeway.

The off-road path continues for almost 2km, approximately 3-3.5m wide from Redclift Street through to Andrew Avenue in Middleton. This path is constructed to a good standard and is a valuable asset to the Encounter Bikeway. A short section of boardwalk exists on this section which creates some potential conflict points between opposing cyclists or cyclists and pedestrians, however there are appropriate warning signs in place. In the longer term, council should consider upgrades to the width and alignment of this boardwalk to improve safety.

Middleton

In Middleton, the bikeway follows the coastal local road network from Andrew Avenue through to Newell Avenue, Waikiki Way and Surfers Parade. It was noted that the sealed section on Andrew Avenue is relatively narrow, with a wide gravel shoulder at the intersection with Andrew Avenue and Newell Avenue. Alexandrina Council should consider sealing this section to provide a higher radius corner for eastbound cyclists following the bikeway. It should also be noted that a cyclist sustained serious injuries in a 2016 crash when turning left at this location.

Recommendation 6A

Seal the inside of the corner at Andrew Avenue and Newell Avenue in Middleton.



Figure 8: The gravel shoulder at the intersection with Andrew Avenue and Newell Avenue creates a rollover risk for cyclists

There is an opportunity to construct a wide shared path along the southern side of Surfers Parade, however this may have an impact on car parking and RAA would expect that pedestrian use would also be high during peak season, meaning that some cyclists may still prefer travelling on-road unless the path was wide enough to safely accommodate pedestrians and cyclists. A shared path would still be a far more attractive alternative to riding on-road for less confident cyclists and families with younger children.

At the western end of Surfers Parade, a 350m off road path links to the Esplanade, a cul-de-sac with two off-street carparks. Riders follow a 450m on-road section along the Esplanade before being directed to another off-road path alongside Padman Crescent which crosses the waterway to Mill Terrace. Mill Terrace is another on-road section, with a short off-road path connecting to Higgins Terrace where cyclists are directed around the Dover Road/Ocean Parade/Mindacowie Terrace one-way loop. Whilst an off-road path exists along Ocean Parade, this is generally busy with foot traffic and too narrow to operate effectively as a shared path, with several pinch points. There is no signage directing cyclists to the off-road path, indicating that the preferred route for cyclists is through the carpark and along the road. RAA considers this to be the better option for most cyclists given the low-speed road environment, however further traffic calming measures or a speed limit reduction on Ocean Parade may need to be considered.

The bikeway follows a different route in each direction of travel at Dover Road/Ocean Parade/Mindacowie Terrace due to the one-way priorities of Ocean Parade, and implementation of clearly placed sharrows along with destination signs would provide better guidance to cyclists travelling in each direction.

Sharrows should be installed to assist cyclist wayfinding and provide warning to motorists on all Middleton Roads forming part of the Bikeway, including Newell Avenue, Waikiki Way, Surfers Parade, Esplanade, Mill Terrace, Higgins Terrace, Mindacowie Terrace (Ocean Parade – Dover Rd), Dover Road and Ocean Parade.

Recommendation 6B

Install sharrows along all on-road sections of the Encounter Bikeway in Middleton.

Port Elliot, Chiton and Hayborough

An off-road path extends for 2.4km between Ocean Parade in Middleton and Scrymgour Road in Port Elliot. This path traverses the Basham Beach carpark and crosses the entry road to the Port Elliot Holiday Park. As with the Goolwa to Middleton section, this section of off-road path is one of the more enjoyable and picturesque parts of the ride.

From here, the bikeway follows the local road network, traversing the busy Strangways Terrace and the intersection with Basham Parade, which is the primary access to the popular Horseshoe Bay.

RAA acknowledges that it is technically very challenging to provide a continuous shared path through Port Elliot. RAA considers there to be two potential alignments, either adjacent to the rail corridor, or along the existing path from Horseshoe Bay, around Freeman Lookout to Knights Beach.

- The rail corridor is very narrow and may not offer sufficient width to install an adjacent path but is more direct. There may also be some local opposition to a path constructed immediately behind properties. The Cockle Train is an infrequent service, and an adjacent path would create a pleasant cycling experience in most cases.

- The coastal route provides spectacular scenery and is a longer route which would require substantial widening and some realignment of curves to safely accommodate regular cyclist use as it is a highly popular walking trail. It is also likely that local roads in Basham Parade, Scrymgour Road or Strangways Terrace would still be required to access the path.

In the shorter term, RAA suggests delineation improvements are made to the current on-road route through Port Elliot. Bicycle pavement markings are first used on Strangways Terrace, prior to the intersection with Murray Place, and are painted at various points on Barbara Street, Battunga Avenue, Ocean Road and Seagull Avenue. RAA suggests that these pavement markings be improved to include wayfinding arrows, and that they are painted more regularly, prior to turns and prior to non-priority intersections to indicate the intended route through the intersection, in line with the Department for Infrastructure and Transport's *Operation Instruction 9.4, Advisory Bicycle Pavement Marking: Shared Lane Marking (Sharrow)*.



Figure 9: Bicycle pavement markings in Port Elliot can be improved by adding wayfinding arrows (Pictured: Barbara Street)

When the bikeway crosses Rosetta Terrace and the level crossing from Barbara St to Battunga Avenue, a short section of Battunga Avenue is traversed before path users are directed along a shared path linking to the Railway Terrace (Boomer Beach) car park. It is not ideal for cyclists to have to travel through the carpark, and alternate alignments should be considered as to reduce the level of interaction between path users and motor vehicles.

In Chiton, opportunities to extend an off-road path adjacent to the rail corridor should be explored. This could provide a walking and cycling link between the Sixth Avenue/Hindmarsh Esplanade car park and the Dump beach/Investigator car park.

Sharrows are first used as the bikeway crosses onto roads under the care and control of the City of Victor Harbor Council. Their placement is somewhat disjointed however, with the first sharrow installed on the inside of a left turn curve on Seagull Avenue, and the second located on First Avenue, around the corner instead of prior to the intersection. These markings should ideally be

installed about 10m in advance of intersections, with arrows pointing to the left, right or straight ahead to indicate the intended path of travel through the intersections.



Figure 10: Sharrow use could be improved in Hayborough by installing prior to key intersections

Sharrow use should also be improved and expanded on Olivers Parade and Granite Grove in Hayborough.

Recommendation 7

Review and improve placement of sharrows in Hayborough, Chiton and Port Elliot.

In the longer term, the feasibility of an off-road pathway adjacent to the rail corridor from the Dump Beach carpark through to Hayward Court in McCracken should be explored which would significantly reduce the amount of on-road travel required.

McCracken

The bikeway continues through McCracken on-road along Hayward Drive and Hayward Court, which are connected by a short off-road path at the Hayward Court cul-de-sac. A short cycle lane is provided for westbound cyclists on Hayward Court, which ends at the intersection with Hindmarsh Road.

Hindmarsh Road is a busy arterial road carrying almost 16,000 vehicles per day. When reaching Hindmarsh Road, it is not clear whether cyclists should travel on the road or on the footpath, with no bikeway signage present at all. Not only is the road an uncomfortable environment for less confident cyclists (and inconsistent with the rest of the bikeway), but the footpath is also hazardous due to the uneven surface, steep downhill gradient, regular blind driveway access and narrow points past pram ramps and the bus stop. For cyclists who choose to ride on the road, there is no signage or easy access on to the shared path where it restarts opposite Wattle Drive, meaning they may remain on the main road all the way into Victor Harbor.

RAA considers this section of Hindmarsh Road and the adjacent footpath to be one of the most hazardous parts of the Encounter Bikeway and generally inappropriate for cycling. RAA recommends that an alternative route be constructed in the vicinity as a high priority. Improvements such as upgraded wayfinding and warning signage should be implemented in the short term.

RAA is aware that several alternative alignments have been investigated by council, as listed in the 2016 Victor Harbor Bicycle Strategy[6]. These include a new alignment:

- behind houses on Hindmarsh Road to access the existing route at Hayward Court.
- using the northern side of the rail corridor, including some excavation and construction of retaining walls at the Hindmarsh Road end to ensure a safe buffer from the railway.
- upgrading paths on the southern side of the railway, adjacent to Kleinigs Hill before switching to the northern side below Hayward Street near Olivers Reef.

Preliminary cost estimates range from $220,000 to upgrade the existing footpath on Hindmarsh Road to $4.6m for a significant construction involving excavation and retaining on the northern side of the rail line.

RAA's preference for the path alignment in McCracken and Hayborough is to construct a 1.9km long (approx.) shared use path adjacent to the rail line between Hindmarsh River and the Investigator Carpark at Dump Beach, bypassing Hindmarsh Road. However, RAA supports any alignment which is able to provide more off-road sections of the Encounter Bikeway and expects and encourages the state government to contribute significantly to this project.

Recommendation 8

Construct a 1.9km long (approx.) shared use path adjacent to the rail line between Hindmarsh River and the Investigator Carpark at Dump Beach, bypassing Hindmarsh Road.



Figure 11: Hindmarsh Road in McCracken is an uncomfortable and hazardous cycling environment

[6] Tonkin Consulting, 2016, Victor Harbor Bicycle Strategy, accessed at <https://www.victor.sa.gov.au/__data/assets/pdf_file/0024/285126/Victor-Harbor-Bicycle-Strategy_Adopted-20160926.pdf>.

Victor Harbor

After crossing Hindmarsh River, the best option for cyclists following the Encounter Bikeway is to cross the rail line onto Bridge Terrace, utilising this quieter (than Hindmarsh Road) cul-de-sac to travel along the shoreline. Unfortunately, there is no signage for westbound path users directing them across the rail line, and the assumption is that the path continues straight on (this assumption is supported by an Encounter Bikeway directional sign marked 'Town Centre'). When travelling straight on at this location, cyclists are required to ride alongside busy traffic on Hindmarsh Road, or cross Hindmarsh Road and travel on the footpath if wishing to continue travelling off-road.

RAA recommends that wayfinding signage be improved which should direct bikeway users across the rail line to Bridge Terrace.

Recommendation 9A

Provide wayfinding signage on the section of path between Hindmarsh River and Bridge Terrace, that directs users across the rail line onto Bridge Terrace.

From Bridge Terrace, cyclists are directed to travel on-road alongside the Bridge Terrace Reserve. RAA supports Victor Harbor Councils plans[7] to construct a shared path alongside Bridge Terrace, linking to the existing path near the Victor Harbor Yacht Club. This upgrade also intends to improve facilities in the reserve, with an overall benefit to amenity in the area.

South of the Victor Harbor Yacht Club, sharrows are used along Bridge Terrace and Flinders Parade, and it's not evident to cyclists that there is a 3.5m wide shared path that runs along the coast to the Victor Harbor Bowling Club.

RAA welcomes recent path widening between Eyre Terrace and Coral Street and encourages council to continue widening the current path between Coral Street and the Granite Island Causeway as highlighted in the 2016 Victor Harbor Bicycle Strategy.

Recommendation 9B

Widen the shared path between Coral Street and the Granite Island Causeway.

A boardwalk was recently constructed behind the Visitor Information Centre and links the foreshore and Granite Island Causeway to the Esplanade carpark. This is signposted as part of the Encounter Bikeway, however, there is no clear direction from the bikeway to this boardwalk when approaching from the north. This may be due to the current preference for cyclists to ride on-road along Flinders Parade due to the currently narrow section of pathway between Coral Street and the Granite Island Causeway.

The bikeway follows a relatively narrow (<3m) path alongside the Foreshore carpark before traversing the Soldiers Memorial Reserve where the path is only about two metres wide, noting that there are two adjacent pathways through the reserve.

From the Soldiers Memorial Reserve, an off-road path is present through to the Inman River Bridge, however, the width of this path is generally less than 3m, and this can be even narrower in places due to front overhang of angle parked vehicles along the Esplanade. Consideration should

[7] City of Victor Harbor, 2020, Bridge Terrace Master Plan, accessed at <https://www.yoursay.victor.sa.gov.au/bridge-terrace-master-plan>.

be given to future widening of this pathway or providing wheel stops in the 45 degree angle parking bays on the Esplanade to reduce vehicle overhang. Due to this, riding on-road along the Esplanade is currently a preference for many cyclists. It is not clear to road cyclists that the bikeway continues off-road at the intersection with Inman Street to cross the Inman River, and RAA suggests that signage be improved, and better access is provided here from the road to the shared path.

From the Esplanade, the shared path passes behind the Victor Harbor Beachfront Holiday Park and crosses the Inman River Bridge before passing through Kent Reserve. Of interest, RAA observed a 10km/h regulatory speed limit sign installed on the Inman River Bridge. Whilst RAA acknowledges that this is prior to a blind corner on a section highly-utilised by pedestrians, the use of regulatory speed limits on shared path is not standard practice. Speed limits on shared paths are impractical to enforce, and difficult to adhere to given that speedometers are not mandatory on bicycles. Nevertheless, the sign does not cause any harm, but other treatments such as advisory speed or warning signs, through to vegetation removal or path realignment, are likely to be more beneficial to safety than regulatory speed signs.



Figure 12: 10km/h regulatory speed sign on the Inman River bridge

The bikeway currently directs cyclists through the Kent Reserve car park, however there is ample space to construct a wide path to the west of the car park which would meet up with the recently upgraded Franklin Parade path. This would improve safety for path users and complete the final section of off-road path between the Bluff and the Granite Island Causeway.

Recommendation 9C

Construct a pathway to the west of the Kent Reserve carpark, allowing path users to bypass the carpark.



Figure 13: The wide path ends abruptly for eastbound path users at the beach access driveway in the Kent Reserve carpark

As a general comment on wayfinding through Victor Harbor, RAA noted that this could be improved. Whilst sharrows on-road provide welcome guidance, there is minimal confirmation for path users that they are following the correct route. Given that there are several paths linking with the Encounter Bikeway through Victor Harbor, RAA recommends that additional Encounter Bikeway signage and branding be installed along the bikeway.

Recommendation 9D

Install additional Encounter Bikeway signage and branding along the off-road bikeway through Victor Harbor.

Encounter Bay

The recently widened section between Kent Reserve and The Bluff in Encounter Bay has been a highly successful project, converting this previously narrow and somewhat uneven section of shared path into a substantially safer and much higher standard pathway, able to be used by more users concurrently. In doing this, City of Victor Harbor has provided an excellent example of a shared-use path which should be used as a benchmark in all future upgrades along the bikeway. In addition, the off-road path has been well designed to run between the Encounter Bay boat ramp car park and the road rather than through the car park, which reduces the risk of collisions between cyclists and other vehicles.



Figure 14: The path runs alongside the carpark rather than through the carpark at the Encounter Bay boat ramp carpark

At the intersection of Franklin Parade and Jagger Road, cyclists have the option of riding to either the Bluff Jetty or the lookout, with both providing natural and scenic end points. Sealing the Bluff Jetty Road or providing a sealed walking and cycling path as a minimum should be investigated between Franklin Parade and the Bluff Jetty, however RAA notes that there are geometric constraints and that a 30km/h speed limit and cyclist warning signage have been implemented to improve safety in the short term.

> **Recommendation 10**
>
> Consider sealing the Bluff Jetty Road or providing a sealed walking and cycling path between Franklin Parade and the Bluff Jetty.

The shared path to the top of the Bluff Lookout is a welcome addition, however, it is noted that this path is quite steep, which is unappealing to many casual cyclists. RAA also considers the crossing point between the shared path and the cycle lane on the incline to be situated in a dangerous location where sight distance is poor for cyclists and for road users due to the combination of vertical and horizontal curves.



Figure 15: Hazardous location of the crossing point on the incline of the Bluff Lookout

Summary of recommendations for the Encounter Bikeway

Recommendation 1
Alexandrina Council and City of Victor Harbor Council work towards providing a continuous off-road path between Goolwa and Victor Harbor by investigating and prioritising future alignments for new off-road sections.

Recommendation 2
Install sharrow pavement markings on all on-road sections of the Encounter Bikeway where they are currently not provided to assist with wayfinding, warn other road users of the possible presence of cyclists and provide guidance on lateral lane position for cyclists.

Recommendation 3A
Install more distance reminder signs along the Encounter Bikeway route. These may also be incorporated with town entry treatments that also list popular destinations in the town alongside a map of the local area.

Recommendation 3B
Clearly signpost both endpoints of the Encounter Bikeway and consider making improvements to facilities at the Goolwa end.

Recommendation 3C
Where not already installed, install centre lines on shared paths to encourage path users to keep to the left and reduce conflict between pedestrians and cyclists.

Recommendation 3D
Continued installation of road rule advisory signage along the path at high-traffic locations to remind all path users of their obligations when using a shared path.

Recommendation 4
Ensure continuous shared pathways are provided through the Goolwa Wharf precinct as part of the $7.5m Goolwa Wharf Precinct Revitalisation Project.

Recommendation 5A
Extend the shared path alongside Barrage Road between Shore Court and Bristow-Smith Avenue.

Recommendation 5B
Install sharrows along Barrage Road and Bristow-Smith Avenue to assist cyclist wayfinding and warn other road users of the presence of cyclists.

Recommendation 5C
Install a 115m long section of shared path on the western side of Beach Road, between Bristow-Smith Avenue and the commencement of the off-road path.

Recommendation 6A
Seal the inside of the corner at Andrew Avenue and Newell Avenue in Middleton.

Recommendation 6B
Install sharrows along all on-road sections of the Encounter Bikeway in Middleton.

Recommendation 7
Review and improve placement of sharrows in Hayborough, Chiton and Port Elliot.

Recommendation 8
Construct a 1.9km long (approx.) shared use path adjacent to the rail line between Hindmarsh River and the Investigator Carpark at Dump Beach, bypassing Hindmarsh Road.

Recommendation 9A
Provide wayfinding signage on the section of path between Hindmarsh River and Bridge Terrace, that directs users across the rail line onto Bridge Terrace.

Recommendation 9B
Widen the shared path between Coral Street and the Granite Island Causeway.

Recommendation 9C
Construct a pathway to the west of the Kent Reserve carpark, allowing path users to bypass the carpark.

Recommendation 9D
Install additional Encounter Bikeway signage and branding along the off-road bikeway through Victor Harbor.

Recommendation 10
Consider sealing the Bluff Jetty Road or providing a sealed walking and cycling path between Franklin Parade and the Bluff Jetty.



ENCOUNTER BIKEWAY
FINAL CONCEPT REPORT

ALEXANDRINA COUNCIL
17 JANUARY 2024

PROJECT #	ADL22005/01
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PREPARED BY	LS/DY
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ASPECT Studios



Boomers Beach (www.southaustralia.com)

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Appendix A - Engagement Report

Section 1

Background

The Encounter Bikeway, located on South Australia's Fleurieu Peninsula, is an on-road and off-road shared-use trail that links the coastal city of Victor Harbor and the river port town of Goolwa, via the coastal towns of Port Elliot and Middleton.

The Alexandrina Council has commissioned this concept report to explore options for the improvement of the route within the Council area, to cater for the increasing popularity of the Bikeway.

The proposed upgrade aims to elevate the profile of the Bikeway and attract visitors to the region by enhancing the Bikeway alignment and linking to key tourist destinations, while also improving safety, accessibility and amenity for users.

The region has plenty to offer visitors including a great variety of options for accommodation, fantastic food and wine, surf beaches, bushwalking and much more. The Bikeway upgrades will enhance and stimulate socio-economic development in the area.

A range of riding distances are available, making it suitable for all ages and levels of fitness. The Bikeway is suitable to be used by cyclists, walkers, skaters, rollerbladers and is wheelchair accessible.

The portion that is identified within the scope of this concept plan is approximately 21.5km in length and commences at Laffins Point in Goolwa North (intersection of Liverpool Road and Howell Street) and terminates at the Alexandrina Council boundary with Victor Harbor Council along Seagull Avenue in Chiton.



Basham Beach (www.fleurieupeninsula.com.au)

Section 2

Consultation

The existing Bikeway was reviewed, and draft concept plans were prepared for 9 sections of the Bikeway in the Alexandrina Council area. For each section a variety of upgrades were proposed including route realignment options, new off road or enhanced on road bikeways, intersection safety improvements and bridge upgrades.

Council engaged with community and stakeholders to understand the level of support for each of the upgrade options for each section of the Bikeway in the Alexandrina Council area.

The Engagement Report (Appendix A) summarises the engagement undertaken and its results.

Engagement Process

The engagement sought feedback to understand the level of community and stakeholder support for the different upgrade options in the draft Concept Plans prepared for each section of the Encounter Bikeway in the Alexandrina Council area.

The engagement was undertaken between 16 May and 13 June 22 and included:

1. 1. Drop in sessions at which the community could drop-in, view the plans, ask questions of the design team and fill in a hard copy survey:

- 20 May 12-3pm Goolwa Library
- 21 May 1-4pm Chiton Rocks Surf Life Saving Club

2. Online survey on Council's Your Say Page (www.mysay.alexandrina.sa.gov.au/encounterbikeway).

The draft Concept Plans were available to view from the Council's Your Say page and were on display in the Goolwa Library from 22 May to 13 June 2022.

The engagement was also promoted through:

- Temporary signage established at key points along the Bikeway

Finalisation of Concept Designs

The Bikeway concept plans have been finalised following the community and stakeholder engagement. The updates to the plans have been based on this engagement with final proposals aligning with strong community and stakeholder feedback.

The length of the Bikeway within Alexandrina Council has been divided into 33 seperable sections, envisioned as potential packages of works to be delivered in the future. Estimates of Probable Cost are provided for each of these 33 sections.



Civil Design, Safety & Compliance

Project Wide Summary

The Encounter Bikeway project proposes significant increases to the safety and enjoyment to cyclists and pedestrians along the Encounter Bikeway. Where possible, cyclists should be completely removed from possible conflicts with vehicles. Recommendations such as boardwalks adjacent to Surfers Parade at Middleton, Basham Parade at Horseshoe Bay and Ocean Parade at Middleton Point, will successfully remove this exposure to collisions. Altering routes, such as taking the path along the shoreline at Chiton Rocks or at Freeman Lookout is also a successful example of this outcome. Where not possible to remove cyclists from roads, clear linemarking and signage must be present in order to provide all road users with the expectation that conflicts may occur, and to be aware of these. Low volume roads, containing little parking volumes and/or turnover with wider carriageways are preferred in the selection of options.

Enhanced Existing On-Road Bikeway

There exists a range of sections on the Encounter Bikeway where constraints will mean that cyclists will be required to share the road with other vehicles. In these cases, an 'enhanced' on-road bikeway is proposed. The enhanced bikeway should limit areas where the road width is not enough to accommodate for a vehicle and a cyclist. This would involve limiting parking on one side of the road or choosing roads with larger widths. Where given the opportunity, roads with lower traffic volumes should be considered. "Sharrow" linemarking should be implemented. Clear signage for vehicles, such as G9-57A 'Watch for Bicycles' signage (see below), should be present.

Recommendations:

- Select roads with wider carriageways and low volume traffic
- Limit parking
- Sharrow linemarking
- "Watch for Bicycles" signage



Carpark Crossover

Many carparks along the path have been identified as a particularly dangerous sections of the Encounter Bikeway, due to the close proximity of vehicles and cyclists. Vehicles and cyclists enter the carpark from different areas and drivers/cyclists not paying proper attention will likely cause collisions. Attempts should be made to reduce the speed of vehicles, such as utilising a raised intersection to slow both cyclists and vehicles entering and leaving the carpark (should be utilised at Surf Street) or outlining clearly with linemarking and signage who must give way when these intersections occur. Parking spaces should be properly linemarked or contain wheel stops to formalise the parking area. Separation from the carpark is preferred either physically or using clear linemarking. Sight distances to intersections, at carparks such as Surf Street should be increased.

Recommendations:

- Separate cyclists from vehicles
- Increase sight distances through vegetation removal
- Formalise parking spaces with linemarking or wheel stops
- Slow vehicles with bumps or raised platforms



Unsafe conditions at Surf Street Middleton

Pavement Condition

There are sections of pavement throughout the path where the opportunity should be taken to re-lay the surface. Sections of path, such as between Scrymgour Road and the Holiday Park access road, or between Ocean Road and New Road already have significant crack sealing, but still have existing cracks and significant tree root damage. Aside from poor aesthetic, the range of cracking indicates that sections path should be re-layed to avoid cyclists having an uncomfortable and/or unstable ride in the near future.

Recommendations:

- Re-lay pavement in selected areas



Deteriorated surface at Port Elliot

Bikeway Grades

There is a significant constraint in sections of the path where gradient exceeds what would be considered comfortable for cyclists. This may include section on Surfers Way, Ocean Parade, Ocean Road, Investigator Carpark, and Strangways Tce. Many of these slopes are also dangerous when travelling downhill. At the Investigator Carpark, Strangways Tce, and Surfers Way, there is a risk of vehicle collisions on these downhill sections with intersections and parked vehicles present at the bottom of these slopes. The sharp left turn from Ocean Road onto the bike path may also cause collisions between hand railing and cyclists travelling at speed. The very nature of following the natural landscape makes this difficult to resolve, however where possible, these sections of road/path should be avoided.

Recommendations:

- Look for alternative routes where possible, to avoid significant slopes.



Existing steep section at Middleton Point



Steep alignment at Middleton Beach

Section 4

Socio-economic Benefits Assessment

The Encounter Bikeway is a key part of the Southern Fleurieu Peninsula's recreational and tourism offer. Covering a distance of some 30km and linking the important coastal townships of Victor Harbor, Port Eliot, Middleton and Goolwa, it provides opportunities for both residents and tourists to experience the picturesque coastline and views to the hinterland, providing users with a connection to nature and opportunities to link in with other nature based recreational activities, lifestyle and tourism offerings along it's length.

Benefits to Tourism and Economy

The Fleurieu Peninsula is one of South Australia's premier destinations for local, interstate and international tourism with an estimated 3 million combined day and overnight visits per year and an estimated $493mil in visitor spend as at December 2019. According to the South Australian Regional Visitor Strategy published by SA Tourism, the potential growth in expenditure has the potential to rise to $643mil by the end pf 2025. It is worth noting that a progress snapshoot of the regions spend for the year ending December 2021 there was a total of $663 mil in visitor spend from a total of $3.5mil visitors. This alludes to the very real potential that the growth of the tourism market across the peninsula will substantially exceed projected targets.

Key strategic priorities relating to the Encounter Bikeway that have been identified to encourage year round visitation and increase visitor spend are focused on providing enhanced visitor experience and marketing. Specifically, the following strategies have been set;

- Enhance existing experiences with a focus on food and drink, adventure, nature and wildlife, arts and culture, wellness, coastal and aquatic themes.
- Support tourism developments which match the aspirations of their communities
- Develop appealing nature-based walking and cycling trail infrastructure.

(source: SA Tourism Regional Visitor Strategy, February 2021)

Based on this assessment of the wider region, it is clear that the Encounter Bikeway will support economic uplift driven by increased visitation that will;

- Provide opportunities for leveraging businesses aligned with the bikeway including bike hire companies, tourism operators, food and drink establishments in the vicinity of the bikeway
- Create higher demand for use of the bikeway through enhanced amenity and accessibility.

Benefits to Improving Health and Wellbeing

Launched in February 2021, the Alexandrina Strategic Plan A2040 articulates a strong vision for the community to thrive which is Livable, Green and Connected. The Encounter Bikeway has the ability to influence all three of these key objectives through providing amenity to residents via an experiential pathway that connects places of interest and the communities that live within the City as well as to promote alternative active transport for increased health and wellbeing.

At the broad community level, it is widely known that among the main benefits of visiting natural areas are the development of community stewardship/custodianship, sense of belonging and opportunities for community connections and positive mental wellbeing outcomes. Furthermore, in South Australia social interaction is a key motivation for nearly one third of those who take part in recreation and sport, while simply being outdoors or enjoying nature is a top motivation for 14% of people.*

Research that demonstrates the value of nature for mental health should lead to the creation of resources to support well-being in nature. The design of built infrastructure can influence the experience providing a link to quiet places and off-trail sites for exploration.

In addition, there is an exciting opportunity to interpret the important pre and post-colonial history associated with various sites along the length of the trail, providing educational benefits and further enriching the unique sense of place and connection that people have with this unique coastal location.

Benefits to Promoting Physical Activity

The need to provide more opportunities for physical activity in open space emerges from the local strategic and planning framework and it is in line with some of the clearest trends in sport and recreation:**

- Australians are becoming more health conscious
- People are increasingly playing sport to get fit rather than getting fit to play sport
- People are also increasingly opting to go for a run or bike ride rather than commit to a regular organised activity.
- Health/fitness is the top motivation for people who participate in sport in South Australia (77%)
- In South Australia the top activities are recreational walking, fitness/gym, athletics including jogging and running, swimming, and cycling

However, since participation decreases with age and people aged 65 and over have the lowest participation rate, it is particularly important to plan for the needs of the area's growing older population.***

It is therefore important that the Bikeway is developed and enhanced to cater for universal access to meet the demands of an increasingly diverse population and demographic of bicycle and walking user groups.

*AusPlay Results 2017-18 (Sport Australia) https://www.clearinghouseforsport.gov.au/research/smi/ausplay/results

**The Future of Australian Sport (Australian Sporting Commission), and AusPlay Results 2017-18 (Sport Australia)

***Participation in Sport and Physical Recreation, Australia, 2013-14 (ABS)



Flying Fish Cafe (www.booking.com)

Section 5

Concept Plans



CP-01



Chiton Rocks to Watson Gap

Consultation Outcome	71% in favour of Option A - new Bikeway along existing track through coastal dunes. This aligns with City of Victor Harbor Council consultation findings.
Reasons Provided	• Concern about safety of pedestrians and cyclists on Seagull Avenue • Natural extension of an existing path along the rail corridor • Attracts customers to the Surf Life Saving Club • Heightened experience for riders (views, coastal) • Path is separated from cars improving safety
Future Considerations	• Collaboration with City of Victor Harbor's outcomes and project delivery • Interfacing with SteamRanger rail corridor, provide fencing and access to beaches. Consultation with DIT and stakeholders • Potential vegetation removal; Consultation with Coast Protection Board (DEW) and Native Vegetation Council (DEW) • Cultural heritage protection; Consultation with Ngarrindjeri Aboriginal Corporation (NAC) • Interface with SLSC; Consultation with stakeholders • Undertake geotechnical testing of the area to inform engineering design
Cost (ex. GST)	$613,700 + GST

Watson Gap Bridge

Consultation Outcome	70% in favour of upgrading the Watson Gap Bridge.
Reasons Provided	• Dilapidated condition, in need of renewal • Narrow, overly steep gradients, difficult to navigate entry points • Provide a non-slip surface and lighting
Future Considerations	• Development approval of bridge (PlanSA)
Cost (ex. GST)	$239,510 + GST

Watson Gap to Bullies Beach

Consultation Outcome	Evenly divided opinion on Ocean Road off-road section
Reasons Provided	• Concerns raised for damage to vegetation. • Minimal safety gains as low traffic volumes. • Undesirable additional cost for little gain
Future Considerations	• Interfacing with SteamRanger rail corridor along Ocean Rd; Consultation with DIT and stakeholders • Potential vegetation removal along Ocean Rd; Consultation with Coast Protection Board (DEW) and Native Vegetation Council (DEW). • Cultural heritage protection; Consultation with Ngarrindjeri Aboriginal Corporation (NAC).
Cost (ex. GST)	$389,675 + GST

Legend

- Preferred Bikeway Alignment
- Bikeway Option A
- New off-road Bikeway
- Enhanced on-road Bikeway
- Existing off-road Bikeway
- Existing on-road Bikeway route to be decommissioned
- Upgrade bridge structure
- Rail corridor
- Existing path connection
- Perspective view
- Cafe
- Car Parking
- Public Toilet

Average Daily Traffic Volumes (January 2022)

	Location	Car	Heavy Vehicle	Cyclist	Pedestrian
1	Albatross (Second-Third)	84	13	4	NA
2	Albatross (Fourth-Fifth)	110	9	4	NA
3	Albatross (Butterfly-Sixth)	183	15	13	NA
4	Seagull (Second-Third)	428	99	113	NA
5	Seagull (Fifth-Fourth)	449	84	136	132
6	Seagull (Sixth-Fifth)	623	90	95	NA
7	Seagull (Sixth-New)	277	40	127	206
8	Ocean Rd (Midblock)	388	60	152	NA
9	Foreshore	NA	NA	NA	79



CP-02

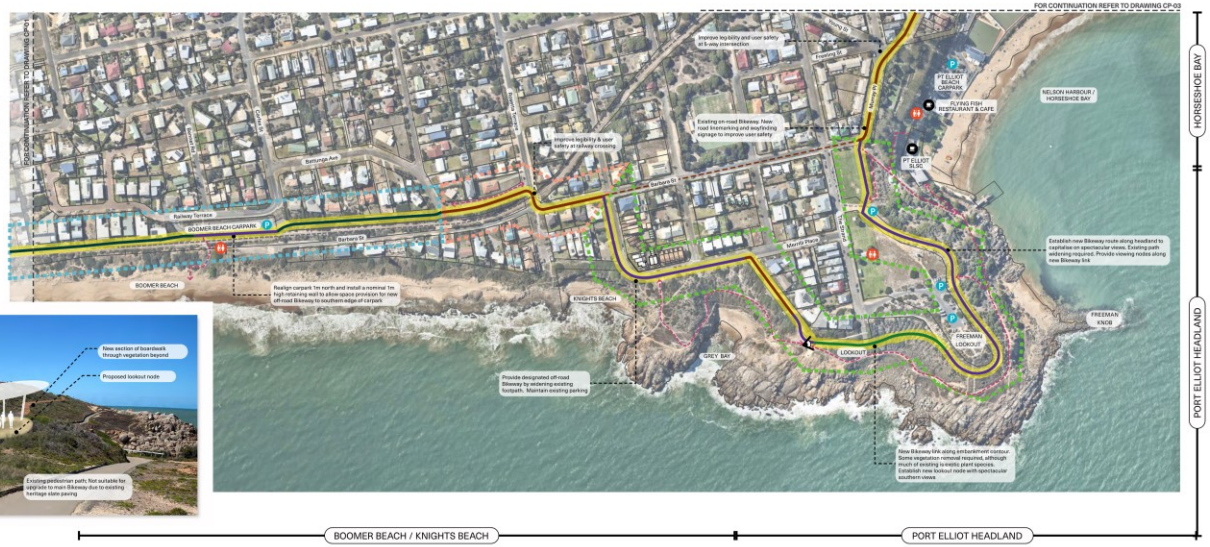
Legend

- Preferred Bikeway Alignment
- Bikeway Option A
- New off-road Bikeway
- New / enhanced on-road Bikeway
- Existing on-road Bikeway route to be decommissioned
- Existing off-road Bikeway
- Rail corridor
- Existing path connection
- Perspective view
- Cafe
- Car Parking
- Public Toilet

Average Daily Traffic Volumes (January 2022)

	Location	Car	Heavy Vehicle	Cyclist	Pedestrian
10	Murray (South End)	248	17	12	523
11	Frieling (East)	109	6	3	523
12	Young (East)	212	18	4	523
13	Murray (North End)	713	65	112	523
14	Strangways (Before Int)	962	66	46	523
15	Barbara (Merrilli Rail)	1110	82	177	NA





Boomer Beach

Consultation Outcome	Low number of responses mixed in with adjoining sections.
Reasons Provided	• Path needs resurfacing and widening • Path is close to railway tracks, fencing or realignment to be considered
Future Considerations	• Interfacing with SteamRanger rail corridor
Cost (ex. GST)	$276,560 + GST

Knights Beach (Battunga Avenue and Barbara Street)

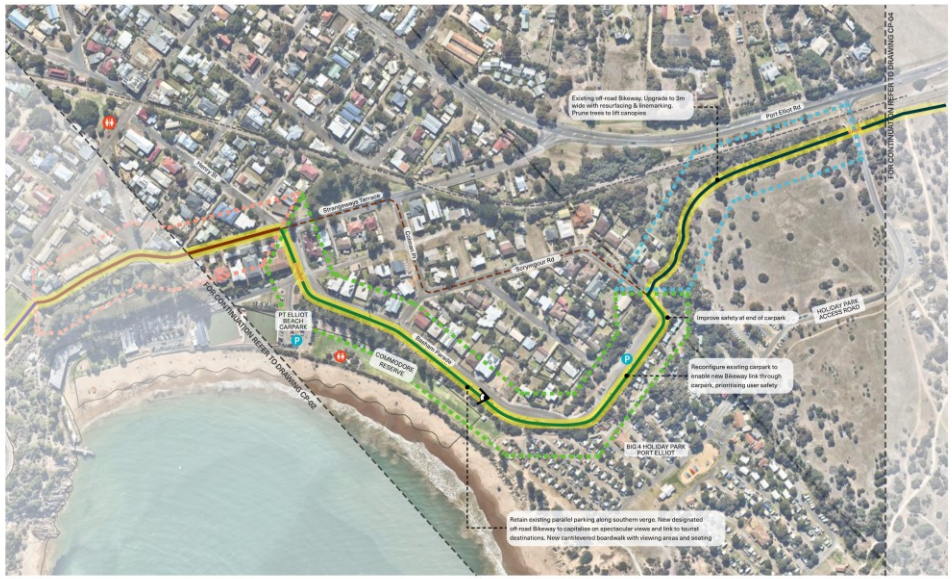
Consultation Outcome	41% support for enhancing on-road Bikeway links.
Reasons Provided	• Provide additional separation between cars and cyclists
Future Considerations	• Interfacing with the railway crossing
Cost (ex. GST)	$30,960 + GST

Knights Beach (Hutton Street and Merrilli Place) and Port Elliot Headland

Consultation Outcome	85% preferred Option A new link along embankment contour 60% support for new off-road Bikeway links 69% support for enhancing on-road Bikeway links.
Reasons Provided	• Coastal views • The boardwalk • Clear weeds and plant natives • Utilises the existing on-road bikeway and maintains existing pedestrian-only zone • Concerns of high number of cyclists clashing with pedestrians
Future Considerations	• Potential vegetation removal; Consultation with Coast Protection Board (DEW) and Native Vegetation Council (DEW) application • Cultural heritage protection; Consultation with Ngarrindjeri Aboriginal Corporation (NAC) and Heritage SA (DEW) • Development approval of boardwalk and shelter structures (PlanSA)
Cost (ex. GST)	$1,161,915 + GST

CP-03







HORSESHOE BAY — BASHAMS BEACH

Horseshoe Bay - Basham Parade

Consultation Outcome	92% preferred Option A designated off-road bikeway.
Reasons Provided	• Because it is off-road it separates vehicles and shared path users • Provides good views • Goes past the caravan park
Future Considerations	• Development approval of boardwalk (PlanSA) • Extensive construction
Cost (ex. GST)	$1,991,015 + GST

Horseshoe Bay - Strangeways Terrace

Consultation Outcome	56% support for upgrade to intersections. 40% support for proposed enhanced on-road Bikeway with 48% neutral/unsure.
Reasons Provided	• To improve safety
Future Considerations	• Integration with footpath network and vehicle parking requirements
Cost (ex. GST)	$115,050 + GST

Horseshoe Bay - Ratalang / Basham Beach South

Consultation Outcome	Comments provided to widen and improve surface.
Reasons Provided	• Trees roots encroaching into existing path creating bumps
Future Considerations	• Adjacent vegetation clearance to widen and resurface
Cost (ex. GST)	$168,025 + GST

CP-04



NOTE : ALL PROPOSALS IN RATALANG / BASHAM BEACH ARE SUBJECT TO APPROVAL THROUGH A REVIEW OF THE EXISTING MASTER PLAN

RATALANG/ BASHAM BEACH — MIDDLETON SOUTH

Ratalang / Basham Beach

Consultation Outcome	84% supported intersection upgrades. Preference to retain the existing off-road shared-use path for Bikeway users and retain the existing compacted rubble track for pedestrians and nature. Support for additional rest spots.
Reasons Provided	• To improve user safety • The enhanced off-road Bikeway would provide options and less congestion for riders and walkers. • Current unsealed path is enjoyed as a nature walking trailway from cyclists • This location is a Ngarrindjeri sacred place
Future Considerations	• Potential vegetation removal; Consultation with Coast Protection Board (DEW) and Native Vegetation Council (DEW). • Cultural heritage protection; Consultation with Ngarrindjeri Aboriginal Corporation (NAC)
Cost (ex. GST)	$430,690 + GST

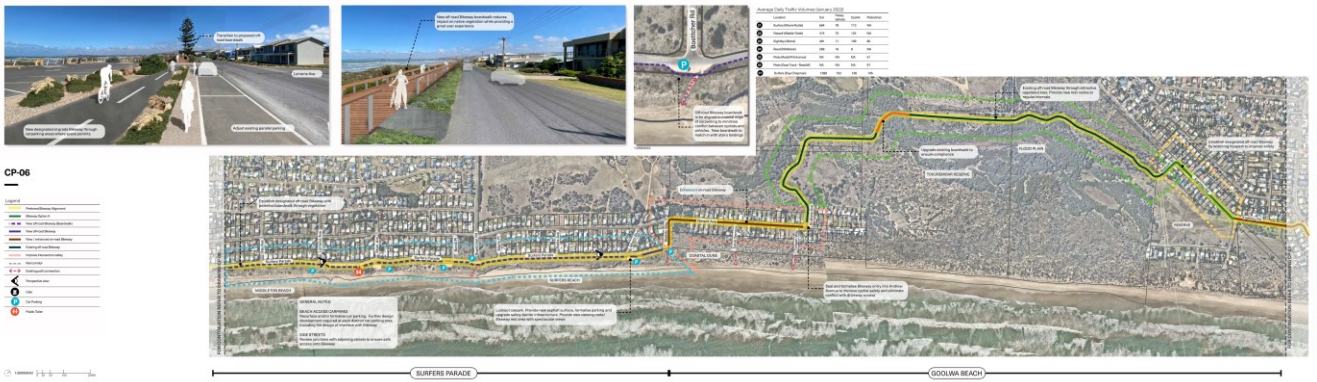
Ratalang / Basham Beach - Bridge Upgrade

Consultation Outcome	81% supported bridge upgrade.
Reasons Provided	• Bridge in dilapidated condition, in need of renewal
Future Considerations	• Potential vegetation removal; Consultation with Coast Protection Board (DEW) and Native Vegetation Council (DEW). • Cultural heritage protection; Consultation with Ngarrindjeri Aboriginal Corporation (NAC).
Cost (ex. GST)	$250,250 + GST

Middleton South

Consultation Outcome	Neutral responses
Reasons Provided	• Wider path allows safer passing of cyclists and pedestrians
Future Considerations	• None
Cost (ex. GST)	$189,475 + GST





Middleton - Surf Street

Consultation Outcome	58% support for improving intersection safety
Reasons Provided	• Improve safety by reducing the conflict of cyclists and pedestrians with cars in the carpark
Future Considerations	• Potential vegetation removal; Consultation with Coast Protection Board (CEW) and Native Vegetation Council (CEW) • Cultural heritage protection; Consultation with Ngarrindjeri Aboriginal Corporation (NAC)
Cost (ex. GST)	$200,888 + GST

Middleton Point - Ocean Parade

Consultation Outcome	74% preferred Option A designated bikeway alignment along Ocean Parade.
Reasons Provided	• The cantilevered section around Middleton Point providing views • Bikeway stays along the coast • Reduces conflict between cars and cyclists • Some concern about the cost of the cantilevered boardwalk and adding additional cycle traffic to an already busy area.
Future Considerations	• Potential vegetation removal; Consultation with Coast Protection Board (CEW) and Native Vegetation Council (CEW) • Cultural heritage protection; Consultation with Ngarrindjeri Aboriginal Corporation (NAC) • Development approval of boardwalk (PlanSA)
Cost (ex. GST)	$2,368,110 + GST

Middleton - Higgins Terrace

Consultation Outcome	48% support for enhanced on-road bikeway. 36% neutral or unsure.
Reasons Provided	• Opportunity to widen and reduce conflict between cyclists and walkers
Future Considerations	• Integration with existing footpath network and road users
Cost (ex. GST)	$28,240 + GST

Middleton - Mill Terrace and Esplanade

Consultation Outcome	58% support for improving intersection safety. 57% support for new off-road Bikeway sections.
Reasons Provided	• Opportunity to widen and reduce conflict between cyclists and walkers • Suggestion that roads along Mill Terrace and the Esplanade are not busy enough for there to be conflict between cyclists and cars.
Future Considerations	• None
Cost (ex. GST)	$416,845 + GST

Middleton - Mill Terrace Reserve Bridge

Consultation Outcome	71% support for upgrade of the bridge.
Reasons Provided	• Bridge in dilapidated condition, in need of renewal
Future Considerations	• Development approval of boardwalk (PlanSA) • Construction in/adjacent to a water course.
Cost (ex. GST)	$207,260 + GST

Middleton Beach - Esplanade to Surfers Parade

Consultation Outcome	Majority of positive comments to widen existing paths.
Reasons Provided	• Opportunity to widen and reduce conflict between cyclists and walkers
Future Considerations	• None
Cost (ex. GST)	$195,550 + GST

Surfers Parade

Consultation Outcome	77% support upgrade intersections. 61% support for new boardwalk along Surfers Parade.
Reasons Provided	• Upgrades would improve user safety. • Concern about conflict between cyclists, walkers, cars and scooters along Surfers Parade. • Suggestion to keep pedestrians and cyclists separated. • Suggestions for Surfers Parade to be one way and underground powerlines to provide more space for managing bikes, pedestrians and cars. • Suggestion for on-road Bikeway to Mburo Boulevard instead of Waikiki Way • Concern about impact to the dunes with boardwalk option.
Future Considerations	• Potential vegetation removal; Consultation with Coast Protection Board (CEW) and Native Vegetation Council (CEW) • Cultural heritage protection; Consultation with Ngarrindjeri Aboriginal Corporation (NAC) • Development approval of boardwalk (PlanSA) • Consultation with adjacent property owners.
Cost (ex. GST)	$3,621,040 + GST

Goolwa Beach - Waikiki Way to Andrew Avenue

Consultation Outcome	48% support for enhanced on-road Bikeway 27% were neutral / unsure.
Reasons Provided	• Improve on-road safety • Fix gravel corner at Andrew Ave.
Future Considerations	• Consultation with adjacent property owners
Cost (ex. GST)	$110,116 + GST

Goolwa Beach - Tokuremoar Reserve

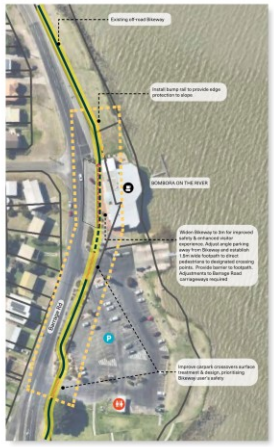
Consultation Outcome	78% support upgrade of the bridge.
Reasons Provided	• Bridge in dilapidated condition, in need of renewal
Future Considerations	• Construction complications in a flood plain/water course • Vegetation clearance for access and construction
Cost (ex. GST)	$961,630 + GST

Goolwa Beach - Kightley Road

Consultation Outcome	69% preferred Option A upgrade existing on road bikeway or footpath along Kightley Road
Reasons Provided	• Enhances use and safety of the area for pedestrians and cyclists • Costs effective and least invasive of the natural landscape • Cyclists still have the option of utilising the existing gravel path across the flood plain • Concerns that Kightley Road can be busy and dangerous for recreational cyclists during peak periods • Other options would disturb local wildlife and be intrusive to adjacent household.
Future Considerations	• None
Cost (ex. GST)	$294,080 + GST









Goolwa Beach - Enhance Existing On-road Bikeway

Consultation Outcome	62% supported enhancing the existing on-road Bikeway
Reasons Provided	• On road nothing much to see • Traffic, gradient and sightlines not favourable • Reduce conflict with traffic.
Future Considerations	• Integration with road users and footpath network development
Cost (ex. GST)	$168,740 + GST

Goolwa Beach - Beach Road

Consultation Outcome	88% supported new off-road Bikeway
Reasons Provided	• Off road improves safety and low elevation is easy for kids • Location on the western side of Beach Road is much safer
Future Considerations	• Potential vegetation removal
Cost (ex. GST)	$236,810 + GST

Barrage Road - Bombora On The River

Consultation Outcome	86% supported intersection upgrades
Reasons Provided	• Off-road Bikeway improves safety near restaurants • Very dangerous for cyclists and pedestrians crossing from parked cars to the restaurant
Future Considerations	• Consultation with business and property owners • Interfacing with Barrage Road
Cost (ex. GST)	$406,690 + GST

Barrage Road South

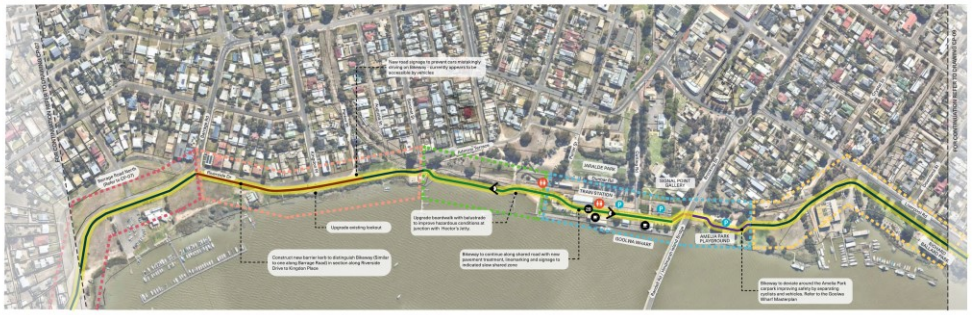
Consultation Outcome	88% supported new off-road Bikeway Suggestion that the bikeway should be extended to Beacon 19 and the Barrages as it is a significant local heritage site of the river. Suggestion to reduce vehicle speed limit at this location, and prioritising pedestrians and cyclists.
Reasons Provided	• Off road improves safety and low elevation is easy for kids
Future Considerations	• Potential vegetation removal, Consultation with Coast Protection Board (DEW) and Native Vegetation Council (DEW) • Cultural heritage protection; Consultation with Ngarrindjeri Aboriginal Corporation (NAC) • Interfacing with Barrage Road. Consultation with DIT
Cost (ex. GST)	$416,990 + GST

Barrage Road North (Continues CP-08)

Consultation Outcome	88% supported intersection upgrades Suggestion to improve path radius at intersection with Riverside Drive. Suggestion to provide some crossovers across Barrage Road for access and connectivity.
Reasons Provided	• To improve safety
Future Considerations	• Integration of shared path with carpark entrances
Cost (ex. GST)	$111,970 + GST







BARRAGE ROAD — RIVERSIDE DRIVE — GOOLWA WHARF — AMELIA PARK — RICHARD BALLARD PARK

Riverside Drive

Consultation Outcome	65% support new off-road bikeway.
Reasons Provided	• Improved user safety and reduced conflict with vehicles
Future Considerations	• Interfacing with DIT roads & infrastructure. Consultation with DIT
Cost (ex. GST)	$144,625 + GST

Goolwa Wharf - Boardwalk at Hector's Jetty

Consultation Outcome	Multipe comments in favour of improving the alignment
Reasons Provided	• There are sharp bends at the end of the pontoons connecting to Goolwa Wharf
Future Considerations	• Development approval of boardwalk (PlanSA) • Environmental Protection Agency (work over/in water)
Cost (ex. GST)	$359,290 + GST

Goolwa Wharf

Consultation Outcome	87% supported Option A with the Bikeway continuing along the shared road. 43% support upgrade to intersections. 65% support for the proposed off-road Bikeway at Amelia Park Playground
Reasons Provided	• Elimination of the dangerous unpaved section through the parking lot just east of the Hindmarsh Island Bridge • Safer for cyclists as Jandakot Park can get busy. • Brings cyclists to Wharf area • Improved connectivity between boardwalk and paths • A more direct route that avoids conflict with the main and steep grades • New off-road Bikeway through Amelia Park removes conflict with motorists, particularly dangerous when vehicles are reversing
Future Considerations	• Cohesion with the Goolwa Wharf Project
Cost (ex. GST)	$514,085 + GST

Goolwa Wharf - Amelia Park Playground to Richard Ballard Park

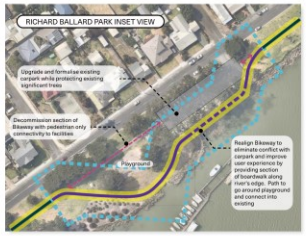
Consultation Outcome	Neutral responses
Reasons Provided	• Existing shared path in good condition
Future Considerations	• None
Cost (ex. GST)	$37,040 + GST

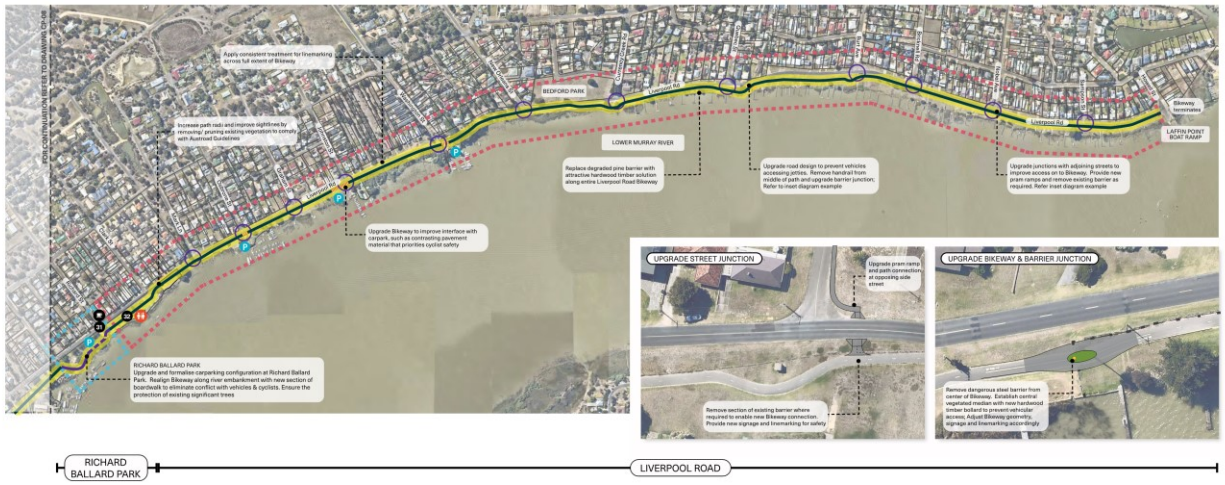
CP-09



Average Daily Traffic Volumes (January 2022)

	Location	Car	Heavy Vehicle	Cyclist	Pedestrian
1A	Richards (Carpark)	156	24	29	NA
1B	Liverpool (Bike Path)	122	20	79	333





RICHARD BALLARD PARK — LIVERPOOL ROAD

Richard Ballard Park

Consultation Outcome	82% supported a new off-road boardwalk at Richard Ballard Park
Reasons Provided	• Improves safety and access.
Future Considerations	• Cultural heritage protection; Consultation with Ngarrindjeri Aboriginal Corporation (NAC) • Significant Tree protection • Development approval of boardwalk (PlanSA)
Cost (ex. GST)	$511,450 + GST

Liverpool Road

Consultation Outcome	75% supported upgrade barriers. 81% supported upgrade street junctions. 90% supported upgrades at intersection.
Reasons Provided	• Improves safety and access. • Improve an already great section of the Bikeway
Future Considerations	• Integration with footpath network development
Cost (ex. GST)	$668,740 + GST

CP-10

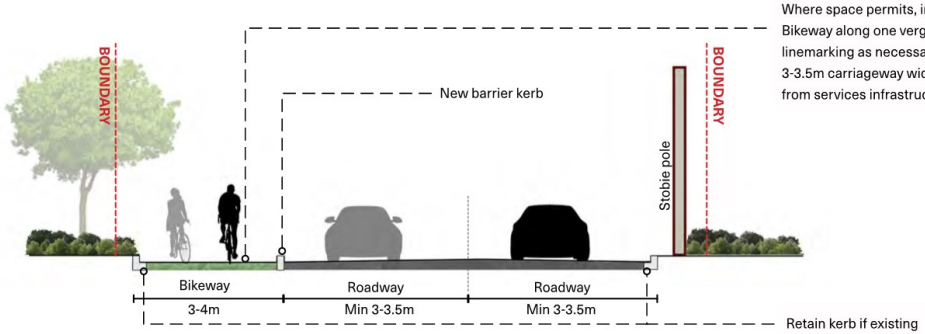


Where roadway width is limited, provide painted Bikeway sharrows in both directions

ENHANCED ON-ROAD BIKEWAY



PRECEDENT ON-ROAD BIKEWAY

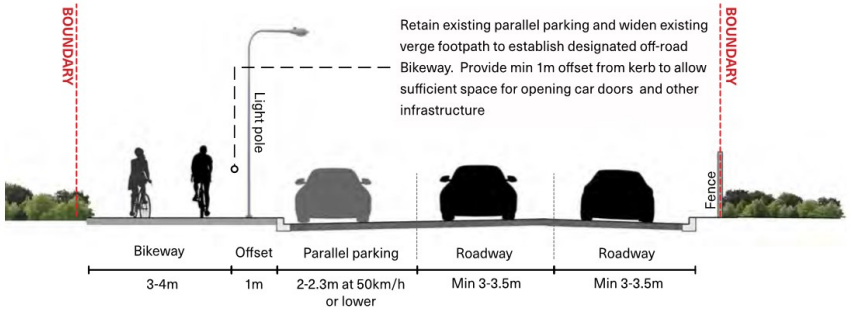


Where space permits, install designated 3m wide Bikeway along one verge of roadway. Adjust road linemarking as necessary, maintaining minimum 3-3.5m carriageway width and minimum offset from services infrastructure for compliance

DESIGNATED BIKEWAY



PRECEDENT DESIGNATED BIKEWAY



OFF-ROAD BIKEWAY



PRECEDENT OFF-ROAD BIKEWAY

SCALE
1:100@A3
0 0.5 1 2 4M

Cost Estimates

The following high-level estimates of probable costs have been provided to enable future funding applications and have been separated into sections to assist with implementation planning.

Refer to the concept plans for extent of works for each separable section. Detailed breakdowns for each section are provided on the following pages.

Summary

1. **Chiton Rocks to Watson Gap**
   Cost: $513,700 + GST
2. **Watson Gap Bridge**
   Cost: $239,510 + GST
3. **Watson Gap to Bullies Beach**
   Cost: $389,675 + GST
4. **Boomer Beach**
   Cost: $276,560 + GST
5. **Knights Beach - Battunga Avenue to Barbara Street)**
   Cost: $30,960 + GST
6. **Knights Beach - Hutton Street to Merrilli Place and Port Elliot Headland**
   Cost: $1,161,915 + GST
7. **Horseshoe Bay - Basham Parade**
   Cost: $1,991,015 + GST
8. **Horseshoe Bay - Strangeways Terrace**
   Cost: $115,050 + GST
9. **Horseshoe Bay - Ratalang / Basham Beach South**
   Cost: $168,025 + GST
10. **Ratalang / Basham Beach**
    Cost: $430,690 + GST
11. **Ratalang / Basham Beach - Bridge Upgrade**
    Cost: $250,250 + GST
12. **Middleton South**
    Cost: $189,475 + GST
13. **Middleton - Surf Street**
    Cost: $205,855 + GST
14. **Middleton Point - Ocean Parade**
    Cost: $2,359,110 + GST
15. **Middleton - Higgins Terrace**
    Cost: $28,240 + GST
16. **Middleton - Mill Terrace and Esplanade**
    Cost: $416,845 + GST
17. **Middleton - Mill Terrace Reserve Bridge**
    Cost: $207,350 + GST
18. **Middleton Beach - Esplanade to Surfers Parade**
    Cost: $195,550 + GST
19. **Surfers Parade**
    Cost: $3,831,580 + GST
20. **Goolwa Beach - Waikiki Way to Andrew Avenue**
    Cost: $115,115 + GST
21. **Goolwa Beach - Tokuremoar Reserve**
    Cost: $961,530 + GST
22. **Goolwa Beach - Kightley Road**
    Cost: $204,090 + GST
23. **Goolwa Beach - Enhance Existing On-road Bikeway**
    Cost: $168,740 + GST
24. **Goolwa Beach - Beach Road**
    Cost: $236,810 + GST
25. **Barrage Road - Bombora On The River**
    Cost: $406,690 + GST
26. **Barrage Road South**
    Cost: $416,990 + GST
27. **Barrage Road North**
    Cost: $111,970 + GST
28. **Riverside Drive**
    Cost: $144,625 + GST
29. **Goolwa Wharf - Boardwalk at Hector's Jetty**
    Cost: $359,290 + GST
30. **Goolwa Wharf**
    Cost: $514,085 + GST
31. **Goolwa Wharf - Amelia Park Playground to Richard Ballard Park**
    Cost: $37,040 + GST
32. **Richard Ballard Park**
    Cost: $511,450 + GST
33. **Liverpool Road**
    Cost: $668,740 + GST

Grand Total = $17,858,520 +GST

Exclusions: Professional design; locality loading; escalation; maintenance and establishment. This opinion provides illustrative calculations and indicative costs and should not be used as a substitute for a full and final costing of the works. It is not a recommendation by Aspect Studios Pty Ltd to participate in or to abstain from the project and cannot be relied upon as a definitive statement of the total cost of the project. Aspect Studios Pty Ltd does not accept any responsibility for and expressly disclaims and excludes all liability for any use of or reliance on this opinion or any loss or damage of whatever nature (including consequential loss), howsoever incurred, which is suffered by any person acting on or refraining from acting because of anything contained in this opinion.

Alexan
AGENDA
Monday, 22 January 2024

6.1 Cost Schedules - Chiton Rocks to Watson Gap

Chiton Rocks to Watson Gap

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1.00	**PRELIMINARIES**				
1.01	Establishment, insurances etc (Allowance 10%)	1	Item	$35,900.00	$35,900.00
	SUBTOTAL				**$35,900.00**
2.00	**SITE DEMOLITION & PREPARATION**				
	N/A				
	SUBTOTAL				**$0.00**
3.00	**SURFACES**				
3.01	Enhanced existing off-road bikeway	46	Lin m	$80.00	$3,680.00
3.02	Enhanced existing on-road bikeway (Sharrows, signage upgrades)	213	Lin m	$40.00	$8,520.00
	SUBTOTAL				**$12,200.00**
4.00	**CIVIL**				
	N/A				
	SUBTOTAL				**$0.00**
5.00	**FURNITURE & STRUCTURES**				
5.01	Sundry outdoor furniture incl. bins, seats, bollards etc.	1	Item	$15,000.00	$15,000.00
	SUBTOTAL				**$15,000.00**
6.00	**PRFERRED ALIGNMENT**				
	Option A				
6.01	New 3m wide asphalt Bikeway with linemarking, through coastal dunes	840	Lin m	$250.00	$210,000.00
6.02	Shared space interface with SLSC prioritising pedestrian & cyclist safety	1	Item	$40,000.00	$40,000.00
6.03	Fencing 1200mm high along rail line	765	Lin m	$50.00	$38,250.00
6.04	Reconfiguration and adjustments to existing carpark and roadway as a result of the new Bikeway (Allowance)	1	Item	$45,000.00	$45,000.00
	SUBTOTAL				**$333,250.00**
7.00	**SIGNAGE**				
7.01	Upgrade wayfinding and consolidate regulatory signage (Allowance)	1100	Lin m	$10.00	$11,000.00
	SUBTOTAL				**$11,000.00**
	SUBTOTAL OF LANDSCAPE AND EXTERNAL WORKS (not inc. GST)				**$395,150.00**
	Design Cost; Architectural, engineering, public consultation, DA's, etc (Allowance) 10%	1	Item	$39,515.00	$39,515.00
	Construction Contingency (Allowance) 20%	1	Item	$79,030.00	$79,030.00
	Subtotal including Contingencies & Preliminaries				**$513,695.00**
	10% GST				**$51,369.50**
	LANDSCAPE AND EXTERNAL WORKS TOTAL including GST				**$565,064.50**

6.2 Cost Schedules - Watson Gap Bridge

Watson Gap Bridge

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1.00	**PRELIMINARIES**				
1.01	Establishment, insurances etc (Allowance 10%)	1	Item	$20,525.00	$20,525.00
	SUBTOTAL				**$20,525.00**
2.00	**SITE DEMOLITION & PREPARATION**				
2.01	Demolish existing bridge. Remove debris, clear site where required (Allowance)	1	Item	$30,000.00	$30,000.00
2.02	Vegetation pruning to improve sightlines (Allowance)	1	Item	$5,000.00	$5,000.00
	SUBTOTAL				**$35,000.00**
3.00	**SURFACES**				
	N/A				
	SUBTOTAL				**$0.00**
4.00	**CIVIL**				
4.01	Upgrade intersection at New Rd, including relocate holding rail	1	item	$15,000.00	$15,000.00
	SUBTOTAL				**$15,000.00**
5.00	**FURNITURE & STRUCTURES**				
5.01	New min 3m wide bridge structure with compliant bike barriers	25	Lin m	$6,000.00	$150,000.00
5.02	Sundry outdoor furniture incl. bins, seats, bollards etc.	1	Item	$5,000.00	$5,000.00
	SUBTOTAL				**$155,000.00**
6.00	**SIGNAGE**				
6.01	Upgrade wayfinding and consolidate regulatory signage (Allowance)	25	Lin m	$10.00	$250.00
	SUBTOTAL				**$250.00**
	SUBTOTAL OF LANDSCAPE AND EXTERNAL WORKS (not inc. GST)				**$225,775.00**
	Design Cost; Architectural, engineering, public consultation, DA's, etc (Allowance) 10%	1	Item	$22,577.50	$22,577.50
	Construction Contingency (Allowance) 20%	1	Item	$45,155.00	$45,155.00
	Subtotal including Contingencies & Preliminaries				**$293,507.50**
	10% GST				**$29,350.75**
	LANDSCAPE AND EXTERNAL WORKS TOTAL including GST				**$322,858.25**

6.3 Cost Schedules - Watson Gap to Bullies Beach

Watson Gap to Bullies Beach

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1.00	**PRELIMINARIES**				
1.01	Establishment, insurances etc (Allowance 10%)	1	Item	$27,250.00	$27,250.00
	SUBTOTAL				**$27,250.00**
2.00	**SITE DEMOLITION & PREPARATION**				
2.01	Remove debris, clear site where required, earth mounding (Allowance)	1	Item	$7,500.00	$7,500.00
2.02	Vegetation pruning to improve sightlines (Allowance)	1	Item	$5,000.00	$5,000.00
	SUBTOTAL				**$12,500.00**
3.00	**SURFACES**				
3.01	Enhanced existing off-road bikeway (Sharrows, signage upgrades)	82	Lin m	$100.00	$8,200.00
3.02	New 3m wide asphalt designated off-road Bikeway with linemarking	600	Lin m	$400.00	$240,000.00
	SUBTOTAL				**$248,200.00**
4.00	**CIVIL**				
	N/A				
	SUBTOTAL				**$0.00**
5.00	**FURNITURE & STRUCTURES**				
5.01	Sundry outdoor furniture incl. bins, seats, bollards etc.	1	Item	$5,000.00	$5,000.00
	SUBTOTAL				**$5,000.00**
6.00	**SIGNAGE**				
6.01	Upgrade wayfinding and consolidate regulatory signage (Allowance)	680	Lin m	$10.00	$6,800.00
	SUBTOTAL				**$6,800.00**
	SUBTOTAL OF LANDSCAPE AND EXTERNAL WORKS (not inc. GST)				**$299,750.00**
	Design Cost; Architectural, engineering, public consultation, DA's, etc (Allowance) 10%	1	Item	$29,975.00	$29,975.00
	Construction Contingency (Allowance) 20%	1	Item	$59,950.00	$59,950.00
	Subtotal including Contingencies & Preliminaries				**$389,675.00**
	10% GST				**$38,967.50**
	LANDSCAPE AND EXTERNAL WORKS TOTAL including GST				**$428,642.50**

6.4 Cost Schedules - Boomer Beach

Boomer Beach

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1.00	**PRELIMINARIES**				
1.01	Establishment, insurances etc (Allowance 10%)	1	Item	$19,340.00	$19,340.00
	SUBTOTAL				**$19,340.00**
2.00	**SITE DEMOLITION & PREPARATION**				
2.01	Remove debris, clear site where required, earth mounding (Allowance)	1	Item	$7,500.00	$7,500.00
2.02	Vegetation pruning to improve sightlines (Allowance)	1	Item	$5,000.00	$5,000.00
	SUBTOTAL				**$12,500.00**
3.00	**SURFACES**				
3.01	Resurface existing off-road bikeway (nom 2.5m wide)	460	Lin m	$120.00	$55,200.00
3.02	New 3m wide asphalt designated off-road Bikeway with linemarking	110	Lin m	$400.00	$44,000.00
	SUBTOTAL				**$99,200.00**
4.00	**CIVIL**				
4.01	Reconfigure carpark 1m north to allow space provision for off-road bikeway to southern edge of carpark	110	Lin m	$200.00	$22,000.00
4.02	New nom.1m high retaining wall to Boomer Beach carpark	110	Lin m	$400.00	$44,000.00
	SUBTOTAL				**$66,000.00**
5.00	**FURNITURE & STRUCTURES**				
5.01	Sundry outdoor furniture incl. bins, seats, bollards etc.	1	Item	$10,000.00	$10,000.00
	SUBTOTAL				**$10,000.00**
6.00	**SIGNAGE**				
6.01	Upgrade wayfinding and consolidate regulatory signage (Allowance)	570	Lin m	$10.00	$5,700.00
	SUBTOTAL				**$5,700.00**
	SUBTOTAL OF LANDSCAPE AND EXTERNAL WORKS (not inc. GST)				**$212,740.00**
	Design Cost; Architectural, engineering, public consultation, DA's, etc (Allowance) 10%	1	Item	$21,274.00	$21,274.00
	Construction Contingency (Allowance) 20%	1	Item	$42,548.00	$42,548.00
	Subtotal including Contingencies & Preliminaries				**$276,562.00**
	10% GST				**$27,656.20**
	LANDSCAPE AND EXTERNAL WORKS TOTAL including GST				**$304,218.20**

6.5 Cost Schedules - Knights Beach - Battunga Avenue to Barbara Street

Knights Beach (Battunga Avenue and Barbara Street)

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1.00	**PRELIMINARIES**				
1.01	Establishment, insurances etc (Allowance 10%)	1	Item	$2,165.00	$2,165.00
	SUBTOTAL				**$2,165.00**
2.00	**SITE DEMOLITION & PREPARATION**				
	N/A				
	SUBTOTAL				**$0.00**
3.00	**SURFACES**				
3.01	Enhanced existing on-road bikeway	233	Lin m	$40.00	$9,320.00
	SUBTOTAL				**$9,320.00**
4.00	**CIVIL**				
	N/A				
	SUBTOTAL				**$0.00**
5.00	**FURNITURE & STRUCTURES**				
5.01	Sundry outdoor furniture incl. bins, seats, bollards etc.	1	Item	$10,000.00	$10,000.00
	SUBTOTAL				**$10,000.00**
6.00	**SIGNAGE**				
6.01	Upgrade wayfinding and consolidate regulatory signage (Allowance)	233	Lin m	$10.00	$2,330.00
	SUBTOTAL				**$2,330.00**
	SUBTOTAL OF LANDSCAPE AND EXTERNAL WORKS (not inc. GST)				**$23,815.00**
	Design Cost; Architectural, engineering, public consultation, DA's, etc (Allowance) 10%	1	Item	$2,381.50	$2,381.50
	Construction Contingency (Allowance) 20%	1	Item	$4,763.00	$4,763.00
	Subtotal including Contingencies & Preliminaries				**$30,959.50**
	10% GST				**$3,095.95**
	LANDSCAPE AND EXTERNAL WORKS TOTAL including GST				**$34,055.45**

6.6 Cost Schedules - Knights Beach - Hutton Street to Merrilli Place, and Port Elliot Headland

Knights Beach (Hutton Street and Merrilli Place) and Port Elliot Headland

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1.00	**PRELIMINARIES**				
1.01	Establishment, insurances etc (Allowance 10%)	1	Item	$81,700.00	$81,700.00
	SUBTOTAL				**$81,700.00**
2.00	**SITE DEMOLITION & PREPARATION**				
2.01	Remove debris, clear site where required (Allowance)	1	Item	$20,000.00	$20,000.00
	SUBTOTAL				**$20,000.00**
3.00	**SURFACES**				
3.01	Upgrade and widen existing off-road bikeway incl. cutting into embankment, new lookout nodes, resurfacing and new linemarking	526	Lin m	$250.00	$131,500.00
3.02	New 3m wide asphalt designated off-road Bikeway with linemarking	265	Lin m	$300.00	$79,500.00
3.03	Enhance existing on-road bikeway safety (Sharrows, signage upgrades) (Allowance)	102	Lin m	$40.00	$4,080.00
	SUBTOTAL				**$215,080.00**
4.00	**ROADS AND CARPARKING**				
4.01	Adjustments to existing carpark associated with new 3m wide offroad bikeway (Allowance)	1	Item	$25,000.00	$25,000.00
	SUBTOTAL				**$25,000.00**
5.00	**FURNITURE & STRUCTURES**				
5.01	Sundry outdoor furniture incl. bins, seats, bollards etc.	1	Item	$30,000.00	$30,000.00
	SUBTOTAL				**$30,000.00**
6.00	**ALIGNMENT OPTIONS**				
6.01	*Option A*				
6.01	New 3m wide boardwalk through existing coastal headland	174	Lin m	$3,000.00	$522,000.00
6.02	Remove existing vegetation	1	Item	$15,000.00	$15,000.00
6.03	Revegetation	350	m2	$30.00	$10,500.00
6.04	Establish new lookout node, including new shelter, furniture, feature paving & interpretive signage (Allowance)	1	Item	$80,000.00	$80,000.00
	SUBTOTAL				**$522,000.00**
	SUBTOTAL OF LANDSCAPE AND EXTERNAL WORKS (not inc. GST)				**$893,780.00**
	Design Cost; Architectural, engineering, public consultation, DA's, etc (Allowance) 10%	1	Item	$89,378.00	$89,378.00
	Construction Contingency (Allowance) 20%	1	Item	$178,756.00	$178,756.00
	Subtotal including Contingencies & Preliminaries				**$1,161,914.00**
	10% GST				**$116,191.40**
	LANDSCAPE AND EXTERNAL WORKS TOTAL including GST				**$1,278,105.40**

6.7 Cost Schedules - Horseshoe Bay - Strangeways Terrace

Horseshoe Bay - Strangeways Terrace

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1.00	**PRELIMINARIES**				
1.01	Establishment, insurances etc (Allowance 10%)	1	Item	$7,370.00	$7,370.00
	SUBTOTAL				**$7,370.00**
2.00	**SITE DEMOLITION & PREPARATION**				
2.01	Remove debris, clear site where required (Allowance)	1	Item	$5,000.00	$5,000.00
	SUBTOTAL				**$5,000.00**
3.00	**SURFACES**				
3.01	Enhance existing on-road bikeway safety (Sharrows, signage upgrades) (Allowance)	297	Lin m	$40.00	$11,880.00
	SUBTOTAL				**$11,880.00**
4.00	**ROADS AND CARPARKING**				
4.01	Improve dangerous 5-way interseciton	1	Item	$20,000.00	$20,000.00
	SUBTOTAL				**$20,000.00**
5.00	**FURNITURE & STRUCTURES**				
	N/A				
	SUBTOTAL				**$0.00**
6.00	**SIGNAGE**				
6.01	Upgrade wayfinding and consolidate regulatory signage (Allowance)	297	Lin m	$10.00	$2,970.00
	SUBTOTAL				**$44,250.00**
	SUBTOTAL OF LANDSCAPE AND EXTERNAL WORKS (not inc. GST)				**$88,500.00**
	Design Cost; Architectural, engineering, public consultation, DA's, etc (Allowance) 10%	1	Item	$8,850.00	$8,850.00
	Construction Contingency (Allowance) 20%	1	Item	$17,700.00	$17,700.00
	Subtotal including Contingencies & Preliminaries				**$115,050.00**
	10% GST				**$11,505.00**
	LANDSCAPE AND EXTERNAL WORKS TOTAL including GST				**$126,555.00**

6.8 Cost Schedules - Horseshoe Bay - Basham Parade

Horseshoe Bay - Basham Parade

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1.00	**PRELIMINARIES**				
1.01	Establishment, insurances etc (Allowance 10%)	1	Item	$139,000.00	$139,000.00
	SUBTOTAL				**$139,000.00**
2.00	**SITE DEMOLITION & PREPARATION**				
2.01	Remove debris, clear site where required (Allowance)	1	Item	$10,000.00	$10,000.00
	SUBTOTAL				**$10,000.00**
3.00	**SURFACES**				
	N/A				
	SUBTOTAL				**$0.00**
4.00	**ROADS AND CARPARKING**				
4.01	Upgrade intersection to improve safety	1	Item	$30,000.00	$30,000.00
4.02	Adjustments to existing carpark associated with new 3m wide offroad bikeway (Allowance)	1	Item	$25,000.00	$25,000.00
	SUBTOTAL				**$55,000.00**
5.00	**FURNITURE & STRUCTURES**				
5.01	Sundry outdoor furniture incl. bins, seats, bollards etc.	1	Item	$30,000.00	$30,000.00
	SUBTOTAL				**$30,000.00**
6.00	**ALIGNMENT OPTIONS**				
6.01	***Option A***				
6.01	New min 3m wide cantilevered boardwalk structure with custom balustrade, viewing and seating nodes and integration with existing stairs	250	Lin m	$4,000.00	$1,000,000.00
6.02	New 3m wide asphalt designated off-road Bikeway with linemarking	381	Lin m	$300.00	$114,300.00
6.03	Adjustments to existing road including possible rebuild of kerb and drainage upgrades	381	Lin m	$150.00	$57,150.00
6.04	Possible lighting upgrades associated with new boardwalk structure (Allowance)	1	Item	$120,000.00	$120,000.00
	SUBTOTAL				**$1,291,450.00**
7.00	**SIGNAGE**				
7.01	Upgrade wayfinding and consolidate regulatory signage (Allowance)	610	Lin m	$10.00	$6,100.00
	SUBTOTAL				**$6,100.00**
	SUBTOTAL OF LANDSCAPE AND EXTERNAL WORKS (not inc. GST)				**$1,531,550.00**
	Design Cost; Architectural, engineering, public consultation, DA's, etc (Allowance) 10%	1	Item	$153,155.00	$153,155.00
	Construction Contingency (Allowance) 20%	1	Item	$306,310.00	$306,310.00
	Subtotal including Contingencies & Preliminaries				**$1,991,015.00**
	10% GST				**$199,101.50**
	LANDSCAPE AND EXTERNAL WORKS TOTAL including GST				**$2,190,116.50**

6.9 Cost Schedules - Horseshoe Bay - Ratalang / Basham Beach South

Horseshoe Bay - Ratalang / Basham Beach South

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1.00	**PRELIMINARIES**				
1.01	Establishment, insurances etc (Allowance 10%)	1	Item	$11,750.00	$11,750.00
	SUBTOTAL				**$11,750.00**
2.00	**SITE DEMOLITION & PREPARATION**				
2.01	Remove debris, clear site where required (Allowance)	1	Item	$15,000.00	$15,000.00
2.02	Vegetation pruning to improve sightlines (Allowance)	1	Item	$10,000.00	$10,000.00
	SUBTOTAL				**$25,000.00**
3.00	**SURFACES**				
3.01	Upgrade existing off-road bikeway, widen to 3m with resurfacing & linemarking	330	Lin m	$240.00	$79,200.00
	SUBTOTAL				**$79,200.00**
4.00	**ROADS AND CARPARKING**				
4.01	Upgrade intersection to improve safety	1	Item	$10,000.00	$10,000.00
	SUBTOTAL				**$10,000.00**
5.00	**FURNITURE & STRUCTURES**				
	N/A				
	SUBTOTAL				**$0.00**
6.00	**SIGNAGE**				
6.01	Upgrade wayfinding and consolidate regulatory signage (Allowance)	330	Lin m	$10.00	$3,300.00
	SUBTOTAL				**$3,300.00**
	SUBTOTAL OF LANDSCAPE AND EXTERNAL WORKS (not inc. GST)				**$129,250.00**
	Design Cost; Architectural, engineering, public consultation, DA's, etc (Allowance) 10%	1	Item	$12,925.00	$12,925.00
	Construction Contingency (Allowance) 20%	1	Item	$25,850.00	$25,850.00
	Subtotal including Contingencies & Preliminaries				**$168,025.00**
	10% GST				**$16,802.50**
	LANDSCAPE AND EXTERNAL WORKS TOTAL including GST				**$184,827.50**

6.10 Cost Schedules - Ratalang / Basham Beach

Ratalang / Basham Beach

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1.00	**PRELIMINARIES**				
1.01	Establishment, insurances etc (Allowance 10%)	1	Item	$24,300.00	$24,300.00
	SUBTOTAL				**$24,300.00**
2.00	**SITE DEMOLITION & PREPARATION**				
2.01	Remove debris, clear site where required (Allowance)	1	Item	$5,000.00	$5,000.00
2.02	Vegetation pruning to improve sightlines (Allowance)	1	Item	$10,000.00	$10,000.00
	SUBTOTAL				**$15,000.00**
3.00	**SURFACES**				
3.01	Upgrade existing off-road bikeway, widen to 3m with resurfacing & linemarking	1,600	Lin m	$120.00	$192,000.00
3.02	Upgrade existing rubble track	1,740	Lin m	$40.00	$69,600.00
	SUBTOTAL				**$192,000.00**
4.00	**ROADS AND CARPARKING**				
4.01	Adjust Bikeway alignment at Bashams Beach carpark to improve safety	1	Item	$15,000.00	$15,000.00
	SUBTOTAL				**$15,000.00**
5.00	**FURNITURE & STRUCTURES**				
5.01	Sundry outdoor furniture incl. bins, seats, bollards etc.	1	Item	$15,000.00	$15,000.00
5.02	New shelter structure & picnic setting	2	Item	$35,000.00	$70,000.00
	SUBTOTAL				**$85,000.00**
6.00	**SIGNAGE**				
6.01	Upgrade wayfinding and consolidate regulatory signage (Allowance)	3340	Lin m	$10.00	$33,400.00
	SUBTOTAL				**$33,400.00**
	SUBTOTAL OF LANDSCAPE AND EXTERNAL WORKS (not inc. GST)				**$331,300.00**
	Design Cost; Architectural, engineering, public consultation, DA's, etc (Allowance) 10%	1	Item	$33,130.00	$33,130.00
	Construction Contingency (Allowance) 20%	1	Item	$66,260.00	$66,260.00
	Subtotal including Contingencies & Preliminaries				**$430,690.00**
	10% GST				**$43,069.00**
	LANDSCAPE AND EXTERNAL WORKS TOTAL including GST				**$473,759.00**

6.11 Cost Schedules - Ratalang / Basham Beach - Upgrade Bridge

Ratalang / Basham Beach - Upgrade Bridge

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1.00	**PRELIMINARIES**				
1.01	Establishment, insurances etc (Allowance 10%)	1	Item	$17,500.00	$17,500.00
	SUBTOTAL				**$17,500.00**
2.00	**SITE DEMOLITION & PREPARATION**				
2.01	Remove debris, clear site where required (Allowance)	1	Item	$20,000.00	$20,000.00
2.02	Vegetation pruning to improve sightlines (Allowance)	1	Item	$5,000.00	$5,000.00
	SUBTOTAL				**$25,000.00**
3.00	**SURFACES**				
3.01	N/A				
	SUBTOTAL				**$0.00**
4.00	**ROADS AND CARPARKING**				
4.01	N/A				
	SUBTOTAL				**$0.00**
5.00	**FURNITURE & STRUCTURES**				
5.01	New min 3m wide x 20m long bridge structure with compliant bike barriers	1	Item	$150,000.00	$150,000.00
	SUBTOTAL				**$150,000.00**
	SUBTOTAL OF LANDSCAPE AND EXTERNAL WORKS (not inc. GST)				**$192,500.00**
	Design Cost; Architectural, engineering, public consultation, DA's, etc (Allowance) 10%	1	Item	$19,250.00	$19,250.00
	Construction Contingency (Allowance) 20%	1	Item	$38,500.00	$38,500.00
	Subtotal including Contingencies & Preliminaries				**$250,250.00**
	10% GST				**$25,025.00**
	LANDSCAPE AND EXTERNAL WORKS TOTAL including GST				**$275,275.00**

6.12 Cost Schedules - Middleton South

Middleton South

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1.00	**PRELIMINARIES**				
1.01	Establishment, insurances etc (Allowance 10%)	1	Item	$13,250.00	$13,250.00
	SUBTOTAL				**$13,250.00**
2.00	**SITE DEMOLITION & PREPARATION**				
2.01	Remove debris, clear site where required (Allowance)	1	Item	$5,000.00	$5,000.00
2.02	Vegetation pruning to improve sightlines (Allowance)	1	Item	$5,000.00	$5,000.00
	SUBTOTAL				**$10,000.00**
3.00	**SURFACES**				
3.01	Upgrade existing (nom 2.5m wide) off-road bikeway, resurfacing & linemarking	370	Lin m	$240.00	$88,800.00
	SUBTOTAL				**$88,800.00**
4.00	**ROADS AND CARPARKING**				
4.01	N/A				
	SUBTOTAL				**$0.00**
5.00	**FURNITURE & STRUCTURES**				
5.01	Sundry outdoor furniture incl. bins, seats, bollards etc.	1	Item	$30,000.00	$30,000.00
	SUBTOTAL				**$30,000.00**
6.00	**SIGNAGE**				
6.01	Upgrade wayfinding and consolidate regulatory signage (Allowance)	370	Lin m	$10.00	$3,700.00
	SUBTOTAL				**$3,700.00**
	SUBTOTAL OF LANDSCAPE AND EXTERNAL WORKS (not inc. GST)				**$145,750.00**
	Design Cost; Architectural, engineering, public consultation, DA's, etc (Allowance) 10%	1	Item	$14,575.00	$14,575.00
	Construction Contingency (Allowance) 20%	1	Item	$29,150.00	$29,150.00
	Subtotal including Contingencies & Preliminaries				**$189,475.00**
	10% GST				**$18,947.50**
	LANDSCAPE AND EXTERNAL WORKS TOTAL including GST				**$208,422.50**

6.13 Cost Schedules - Middleton - Surf Street

Middleton - Surf Street

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1.00	**PRELIMINARIES**				
1.01	Establishment, insurances etc (Allowance 10%)	1	Item		$0.00
	SUBTOTAL				**$0.00**
2.00	**SITE DEMOLITION & PREPARATION**				
2.01	Remove debris, clear site where required (Allowance)	1	Item	$5,000.00	$5,000.00
2.02	Vegetation pruning to improve sightlines (Allowance)	1	Item	$5,000.00	$5,000.00
	SUBTOTAL				**$10,000.00**
3.00	**SURFACES**				
3.01	Enhance existing on-road bikeway safety (Sharrows, signage upgrades) (Allowance)	125	Lin m	$40.00	$5,000.00
3.02	Upgrade existing (nom 2.5m wide) off-road bikeway, resurfacing & linemarking	110	Lin m	$100.00	$11,000.00
	SUBTOTAL				**$16,000.00**
4.00	**ROADS AND CARPARKING**				
4.01	Proposed raised intersection and associated carpark upgrade works at Surf Street (Allowance)	1	Item	$120,000.00	$120,000.00
	SUBTOTAL				**$120,000.00**
5.00	**FURNITURE & STRUCTURES**				
5.01	Sundry outdoor furniture incl. bins, seats, bollards etc.	1	Item	$10,000.00	$10,000.00
	SUBTOTAL				**$10,000.00**
6.00	**SIGNAGE**				
6.01	Upgrade wayfinding and consolidate regulatory signage (Allowance)	235	Lin m	$10.00	$2,350.00
	SUBTOTAL				**$2,350.00**
	SUBTOTAL OF LANDSCAPE AND EXTERNAL WORKS (not inc. GST)				**$158,350.00**
	Design Cost; Architectural, engineering, public consultation, DA's, etc (Allowance) 10%	1	Item	$15,835.00	$15,835.00
	Construction Contingency (Allowance) 20%	1	Item	$31,670.00	$31,670.00
	Subtotal including Contingencies & Preliminaries				**$205,855.00**
	10% GST				**$20,585.50**
	LANDSCAPE AND EXTERNAL WORKS TOTAL including GST				**$226,440.50**

6.14 Cost Schedules - Middleton Point - Ocean Parade

Middleton Point - Ocean Parade

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1.00	**PRELIMINARIES**				
1.01	Establishment, insurances etc (Allowance 10%)	1	Item	$165,000.00	$165,000.00
	SUBTOTAL				**$165,000.00**
2.00	**SITE DEMOLITION & PREPARATION**				
2.01	Remove debris, clear site where required (Allowance)	1	Item	$30,000.00	$30,000.00
2.02	Vegetation pruning to improve sightlines (Allowance)	1	Item	$5,000.00	$5,000.00
	SUBTOTAL				**$35,000.00**
3.00	**SURFACES**				
	N/A				
	SUBTOTAL				**$0.00**
4.00	**ROADS AND CARPARKING**				
	N/A				
	SUBTOTAL				**$0.00**
5.00	**FURNITURE & STRUCTURES**				
5.01	Sundry outdoor furniture incl. bins, seats, bollards etc.	1	Item	$30,000.00	$30,000.00
	SUBTOTAL				**$30,000.00**
6.00	**ALIGNMENT OPTIONS**				
	Option A				
6.01	New 3m wide asphalt off-road Bikeway with linemarking	80	Lin m	$250.00	$20,000.00
6.02	New min 3m wide cantilevered boardwalk structure with custom balustrade, viewing and seating nodes and integration with existing stairs	390	Lin m	$4,000.00	$1,560,000.00
	SUBTOTAL				**$1,580,000.00**
7.00	**SIGNAGE**				
7.01	Upgrade wayfinding and consolidate regulatory signage (Allowance)	470	Lin m	$10.00	$4,700.00
	SUBTOTAL				**$4,700.00**
	SUBTOTAL OF LANDSCAPE AND EXTERNAL WORKS (not inc. GST)				**$1,814,700.00**
	Design Cost; Architectural, engineering, public consultation, DA's, etc (Allowance) 10%	1	Item	$181,470.00	$181,470.00
	Construction Contingency (Allowance) 20%	1	Item	$362,940.00	$362,940.00
	Subtotal including Contingencies & Preliminaries				**$2,359,110.00**
	10% GST				**$235,911.00**
	LANDSCAPE AND EXTERNAL WORKS TOTAL including GST				**$2,595,021.00**

6.15 Cost Schedules - Middleton - Higgins Terrace

Middleton - Higgins Terrace

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1.00	**PRELIMINARIES**				
1.01	Establishment, insurances etc (Allowance 10%)	1	Item	$1,975.00	$1,975.00
	SUBTOTAL				**$1,975.00**
2.00	**SITE DEMOLITION & PREPARATION**				
2.01	Remove debris, clear site where required (Allowance)	1	Item	$5,000.00	$5,000.00
2.02	Vegetation pruning to improve sightlines (Allowance)	1	Item	$5,000.00	$5,000.00
	SUBTOTAL				**$10,000.00**
3.00	**SURFACES**				
3.01	Enhance existing on-road bikeway safety (Sharrows, signage upgrades) (Allowance)	195	Lin m	$40.00	$7,800.00
	SUBTOTAL				**$7,800.00**
4.00	**ROADS AND CARPARKING**				
	N/A				
	SUBTOTAL				**$0.00**
5.00	**FURNITURE & STRUCTURES**				
5.01	N/A				
	SUBTOTAL				**$0.00**
7.00	**SIGNAGE**				
7.01	Upgrade wayfinding and consolidate regulatory signage (Allowance)	195	Lin m	$10.00	$1,950.00
	SUBTOTAL				**$1,950.00**
	SUBTOTAL OF LANDSCAPE AND EXTERNAL WORKS (not inc. GST)				**$21,725.00**
	Design Cost; Architectural, engineering, public consultation, DA's, etc (Allowance) 10%	1	Item	$2,172.50	$2,172.50
	Construction Contingency (Allowance) 20%	1	Item	$4,345.00	$4,345.00
	Subtotal including Contingencies & Preliminaries				**$28,242.50**
	10% GST				**$2,824.25**
	LANDSCAPE AND EXTERNAL WORKS TOTAL including GST				**$31,066.75**

6.16 Cost Schedules - Middleton - Mill Terrace and Esplanade

Middleton - Mill Terrace and Esplanade

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1.00	**PRELIMINARIES**				
1.01	Establishment, insurances etc (Allowance 10%)	1	Item	$29,150.00	$29,150.00
	SUBTOTAL				**$29,150.00**
2.00	**SITE DEMOLITION & PREPARATION**				
2.01	Remove debris, clear site where required (Allowance)	1	Item	$10,000.00	$10,000.00
2.02	Vegetation pruning to improve sightlines (Allowance)	1	Item	$5,000.00	$5,000.00
	SUBTOTAL				**$15,000.00**
3.00	**SURFACES**				
3.01	New 3m wide asphalt designated off-road Bikeway with linemarking	650	Lin m	$250.00	$162,500.00
	SUBTOTAL				**$162,500.00**
4.00	**ROADS AND CARPARKING**				
4.01	Adjustments to existing road including possible rebuild of kerb, pram ramps and drainage upgrades etc	450	Lin m	$150.00	$67,500.00
4.02	Improve intersection safety at carpark crossovers (Allowance)	2	Item	$15,000.00	$30,000.00
	SUBTOTAL				**$97,500.00**
5.00	**FURNITURE & STRUCTURES**				
5.01	Sundry outdoor furniture incl. bins, seats, bollards etc.	1	Item	$10,000.00	$10,000.00
	SUBTOTAL				**$10,000.00**
7.00	**SIGNAGE**				
7.01	Upgrade wayfinding and consolidate regulatory signage (Allowance)	650	Lin m	$10.00	$6,500.00
	SUBTOTAL				**$6,500.00**
	SUBTOTAL OF LANDSCAPE AND EXTERNAL WORKS (not inc. GST)				**$320,650.00**
	Design Cost; Architectural, engineering, public consultation, DA's, etc (Allowance) 10%	1	Item	$32,065.00	$32,065.00
	Construction Contingency (Allowance) 20%	1	Item	$64,130.00	$64,130.00
	Subtotal including Contingencies & Preliminaries				**$416,845.00**
	10% GST				**$41,684.50**
	LANDSCAPE AND EXTERNAL WORKS TOTAL including GST				**$458,529.50**

6.17 Cost Schedules - Mill Terrace Reserve Bridge

Middleton - Mill Terrace Reserve Bridge

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1.00	**PRELIMINARIES**				
1.01	Establishment, insurances etc (Allowance 10%)	1	Item	$14,500.00	$14,500.00
	SUBTOTAL				**$14,500.00**
2.00	**SITE DEMOLITION & PREPARATION**				
2.01	Remove debris, clear site where required (Allowance)	1	Item	$20,000.00	$20,000.00
2.02	Vegetation pruning to improve sightlines (Allowance)	1	Item	$5,000.00	$5,000.00
	SUBTOTAL				**$25,000.00**
3.00	**SURFACES**				
	N/A				
	SUBTOTAL				**$0.00**
4.00	**ROADS AND CARPARKING**				
	N/A				
	SUBTOTAL				**$0.00**
5.00	**FURNITURE & STRUCTURES**				
5.01	New min 3m wide x 15m long bridge structure with compliant bike barriers	1	Item	$120,000.00	$120,000.00
	SUBTOTAL				**$120,000.00**
	SUBTOTAL OF LANDSCAPE AND EXTERNAL WORKS (not inc. GST)				**$159,500.00**
	Design Cost; Architectural, engineering, public consultation, DA's, etc (Allowance) 10%	1	Item	$15,950.00	$15,950.00
	Construction Contingency (Allowance) 20%	1	Item	$31,900.00	$31,900.00
	Subtotal including Contingencies & Preliminaries				**$207,350.00**
	10% GST				**$20,735.00**
	LANDSCAPE AND EXTERNAL WORKS TOTAL including GST				**$228,085.00**

6.18 Cost Schedules - Middleton Beach - Esplanade to Surfers Parade

Middleton Beach - Esplanade to Surfers Parade

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1.00	**PRELIMINARIES**				
1.01	Establishment, insurances etc (Allowance 10%)	1	Item	$13,675.00	$13,675.00
	SUBTOTAL				**$13,675.00**
2.00	**SITE DEMOLITION & PREPARATION**				
2.01	Remove debris, clear site where required (Allowance)	1	Item	$5,000.00	$5,000.00
2.02	Vegetation pruning to improve sightlines (Allowance)	1	Item	$5,000.00	$5,000.00
	SUBTOTAL				**$10,000.00**
3.00	**SURFACES**				
3.01	Upgrade existing off-road bikeway, resurfacing & linemarking	347	Lin m	$240.00	$83,280.00
	SUBTOTAL				**$83,280.00**
4.00	**ROADS AND CARPARKING**				
	N/A				
	SUBTOTAL				**$0.00**
5.00	**FURNITURE & STRUCTURES**				
5.01	Sundry outdoor furniture incl. bins, seats, bollards etc.	1	Item	$5,000.00	$5,000.00
5.02	New shelter structure & picnic setting	1	Item	$35,000.00	$35,000.00
	SUBTOTAL				**$40,000.00**
6.00	**SIGNAGE**				
6.01	Upgrade wayfinding and consolidate regulatory signage (Allowance)	347	Lin m	$10.00	$3,470.00
	SUBTOTAL				**$3,470.00**
	SUBTOTAL OF LANDSCAPE AND EXTERNAL WORKS (not inc. GST)				**$150,425.00**
	Design Cost; Architectural, engineering, public consultation, DA's, etc (Allowance) 10%	1	Item	$15,042.50	$15,042.50
	Construction Contingency (Allowance) 20%	1	Item	$30,085.00	$30,085.00
	Subtotal including Contingencies & Preliminaries				**$195,552.50**
	10% GST				**$19,555.25**
	LANDSCAPE AND EXTERNAL WORKS TOTAL including GST				**$215,107.75**

6.19 Cost Schedules - Surfers Parade

Surfers Parade

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1.00	**PRELIMINARIES**				
1.01	Establishment, insurances etc (Allowance 10%)	1	Item	$267,940.00	$267,940.00
	SUBTOTAL				**$267,940.00**
2.00	**SITE DEMOLITION & PREPARATION**				
2.01	Remove debris, clear site where required (Allowance)	1	Item	$25,000.00	$25,000.00
2.02	Vegetation pruning to improve sightlines (Allowance)	1	Item	$10,000.00	$10,000.00
	SUBTOTAL				**$35,000.00**
3.00	**SURFACES**				
3.01	New 3m wide asphalt designated off-road Bikeway with linemarking	195	Lin m	$250.00	$48,750.00
3.02	New 1.5m wide rubble footpath along carpark interface	23	Lin m	$60.00	$1,380.00
3.03	Revegetation (Allowance)	5,800	m2	$30.00	$174,000.00
	SUBTOTAL				**$224,130.00**
4.00	**ROADS AND CARPARKING**				
4.01	Adjustments to existing road including possible rebuild of kerb, pram ramps and drainage upgrades etc	390	Lin m	$150.00	$58,500.00
4.02	Improve intersection safety at carpark crossovers (Allowance)	10	Item	$15,000.00	$150,000.00
4.03	Opportunity to resurface / formalise car parking (Allowance)	1	Item	$30,000.00	$30,000.00
	SUBTOTAL				**$208,500.00**
5.00	**FURNITURE & STRUCTURES**				
5.01	New min 3m wide boardwalk structure with custom balustrade, viewing and seating nodes and integration with existing stairs	1396	Lin m	$1,500.00	$2,094,000.00
5.02	Sundry outdoor furniture incl. bins, seats, bollards etc.	1	Item	$30,000.00	$30,000.00
5.03	New shelter structure & picnic setting	2	Item	$35,000.00	$70,000.00
	SUBTOTAL				**$2,194,000.00**
6.00	**SIGNAGE**				
6.01	Upgrade wayfinding and consolidate regulatory signage (Allowance)	1780	Lin m	$10.00	$17,800.00
	SUBTOTAL				**$17,800.00**
	SUBTOTAL OF LANDSCAPE AND EXTERNAL WORKS (not inc. GST)				**$2,947,370.00**
	Design Cost; Architectural, engineering, public consultation, DA's, etc (Allowance) 10%	1	Item	$294,737.00	$294,737.00
	Construction Contingency (Allowance) 20%	1	Item	$589,474.00	$589,474.00
	Subtotal including Contingencies & Preliminaries				**$3,831,581.00**
	10% GST				**$383,158.10**
	LANDSCAPE AND EXTERNAL WORKS TOTAL including GST				**$4,214,739.10**

6.20 Cost Schedules - Goolwa Beach - Waikiki Way to Andrew Avenue

Goolwa Beach - Waikiki Way to Andrew Avenue

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1.00	**PRELIMINARIES**				
1.01	Establishment, insurances etc (Allowance 10%)	1	Item	$8,050.00	$8,050.00
	SUBTOTAL				**$8,050.00**
2.00	**SITE DEMOLITION & PREPARATION**				
2.01	Remove debris, clear site where required (Allowance)	1	Item	$5,000.00	$5,000.00
2.02	Vegetation pruning to improve sightlines (Allowance)	1	Item	$5,000.00	$5,000.00
	SUBTOTAL				**$10,000.00**
3.00	**SURFACES**				
3.01	Enhance existing on-road bikeway safety (Sharrows, signage upgrades) (Allowance)	610	Lin m	$40.00	$24,400.00
	SUBTOTAL				**$24,400.00**
4.00	**ROADS AND CARPARKING**				
4.01	Upgrade intersection at Andrew Ave to improve user safety	1	Item	$30,000.00	$30,000.00
	SUBTOTAL				**$30,000.00**
5.00	**FURNITURE & STRUCTURES**				
5.01	Sundry outdoor furniture incl. bins, seats, bollards etc.	1	Item	$10,000.00	$10,000.00
	SUBTOTAL				**$10,000.00**
6.00	**SIGNAGE**				
6.01	Upgrade wayfinding and consolidate regulatory signage (Allowance)	610	Lin m	$10.00	$6,100.00
	SUBTOTAL				**$6,100.00**
	SUBTOTAL OF LANDSCAPE AND EXTERNAL WORKS (not inc. GST)				**$88,550.00**
	Design Cost; Architectural, engineering, public consultation, DA's, etc (Allowance) 10%	1	Item	$8,855.00	$8,855.00
	Construction Contingency (Allowance) 20%	1	Item	$17,710.00	$17,710.00
	Subtotal including Contingencies & Preliminaries				**$115,115.00**
	10% GST				**$11,511.50**
	LANDSCAPE AND EXTERNAL WORKS TOTAL including GST				**$126,626.50**

6.21 Cost Schedules - Goolwa Beach - Tokuremoar Reserve

Goolwa Beach - Tokuremoar Reserve

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1.00	**PRELIMINARIES**				
1.01	Establishment, insurances etc (Allowance 10%)	1	Item	$67,240.00	$67,240.00
	SUBTOTAL				**$67,240.00**
2.00	**SITE DEMOLITION & PREPARATION**				
2.01	Remove debris, clear site where required (Allowance)	1	Item	$50,000.00	$50,000.00
2.02	Vegetation pruning to improve sightlines (Allowance)	1	Item	$20,000.00	$20,000.00
	SUBTOTAL				**$70,000.00**
3.00	**SURFACES**				
3.01	Enhance existing off-road bikeway - new linemarking, compliance etc (Allowance)	1,715	Lin m	$40.00	$68,600.00
	SUBTOTAL				**$68,600.00**
4.00	**ROADS AND CARPARKING**				
4.01	N/A				
	SUBTOTAL				**$0.00**
5.00	**FURNITURE & STRUCTURES**				
5.01	Replace boardwalk with new min 3m wide boardwalk structure with compliant bike barriers	165	Lin m	$3,000.00	$495,000.00
5.02	Sundry outdoor furniture incl. bins, seats, bollards etc.	1	Item	$20,000.00	$20,000.00
	SUBTOTAL				**$515,000.00**
6.00	**SIGNAGE**				
6.01	Upgrade wayfinding and consolidate regulatory signage (Allowance)	1880	Lin m	$10.00	$18,800.00
	SUBTOTAL				**$18,800.00**
	SUBTOTAL OF LANDSCAPE AND EXTERNAL WORKS (not inc. GST)				**$739,640.00**
	Design Cost; Architectural, engineering, public consultation, DA's, etc (Allowance) 10%	1	Item	$73,964.00	$73,964.00
	Construction Contingency (Allowance) 20%	1	Item	$147,928.00	$147,928.00
	Subtotal including Contingencies & Preliminaries				**$961,532.00**
	10% GST				**$96,153.20**
	LANDSCAPE AND EXTERNAL WORKS TOTAL including GST				**$1,057,685.20**

6.22 Cost Schedules - Goolwa Beach - Kightley Road

Goolwa Beach - Kightley Road

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1.00	**PRELIMINARIES**				
1.01	Establishment, insurances etc (Allowance 10%)	1	Item	$14,270.00	$14,270.00
	SUBTOTAL				**$14,270.00**
2.00	**SITE DEMOLITION & PREPARATION**				
2.01	Remove debris, clear site where required (Allowance)	1	Item	$5,000.00	$5,000.00
2.02	Vegetation pruning to improve sightlines (Allowance)	1	Item	$2,000.00	$2,000.00
	SUBTOTAL				**$7,000.00**
3.00	**SURFACES**				
	N/A				
	SUBTOTAL				**$0.00**
4.00	**ROADS AND CARPARKING**				
	N/A				
	SUBTOTAL				**$0.00**
5.00	**FURNITURE & STRUCTURES**				
	N/A				
	SUBTOTAL				**$0.00**
6.00	**ALIGNMENT OPTIONS**				
	Option A				
6.01	Widen existing footpath to establish new 3m wide off-road bikeway, upgrade driveway crossovers	377	Lin m	$350.00	$131,950.00
	SUBTOTAL				**$131,950.00**
7.00	**SIGNAGE**				
7.01	Upgrade wayfinding and consolidate regulatory signage (Allowance)	377	Lin m	$10.00	$3,770.00
	SUBTOTAL				**$3,770.00**
	SUBTOTAL OF LANDSCAPE AND EXTERNAL WORKS (not inc. GST)				**$156,990.00**
	Design Cost; Architectural, engineering, public consultation, DA's, etc (Allowance) 10%	1	Item	$15,699.00	$15,699.00
	Construction Contingency (Allowance) 20%	1	Item	$31,398.00	$31,398.00
	Subtotal including Contingencies & Preliminaries				**$204,087.00**
	10% GST				**$20,408.70**
	LANDSCAPE AND EXTERNAL WORKS TOTAL including GST				**$224,495.70**

6.23 Cost Schedules - Goolwa Beach - Enhance Existing On-road Bikeway

Goolwa Beach - Enhance Existing On-road Bikeway

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1.00	**PRELIMINARIES**				
1.01	Establishment, insurances etc (Allowance 10%)	1	Item	$11,800.00	$11,800.00
	SUBTOTAL				**$11,800.00**
2.00	**SITE DEMOLITION & PREPARATION**				
2.01	Remove debris, clear site where required (Allowance)	1	Item	$5,000.00	$5,000.00
2.02	Vegetation pruning to improve sightlines (Allowance)	1	Item	$2,000.00	$2,000.00
	SUBTOTAL				**$7,000.00**
3.00	**SURFACES**				
3.01	Enhance existing on-road bikeway safety (Sharrows, signage upgrades) (Allowance)	2,220	Lin m	$40.00	$88,800.00
	SUBTOTAL				**$88,800.00**
4.00	**ROADS AND CARPARKING**				
	N/A				
	SUBTOTAL				**$0.00**
5.00	**FURNITURE & STRUCTURES**				
	N/A				
	SUBTOTAL				**$0.00**
6.00	**SIGNAGE**				
6.01	Upgrade wayfinding and consolidate regulatory signage (Allowance)	2220	Lin m	$10.00	$22,200.00
	SUBTOTAL				**$22,200.00**
	SUBTOTAL OF LANDSCAPE AND EXTERNAL WORKS (not inc. GST)				**$129,800.00**
	Design Cost; Architectural, engineering, public consultation, DA's, etc (Allowance) 10%	1	Item	$12,980.00	$12,980.00
	Construction Contingency (Allowance) 20%	1	Item	$25,960.00	$25,960.00
	Subtotal including Contingencies & Preliminaries				**$168,740.00**
	10% GST				**$16,874.00**
	LANDSCAPE AND EXTERNAL WORKS TOTAL including GST				**$185,614.00**

6.24 Cost Schedules - Goolwa Beach - Beach Road

Goolwa Beach - Beach Road

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1.00	**PRELIMINARIES**				
1.01	Establishment, insurances etc (Allowance 10%)	1	Item	$16,560.00	$16,560.00
	SUBTOTAL				**$16,560.00**
2.00	**SITE DEMOLITION & PREPARATION**				
2.01	Remove debris, clear site where required (Allowance)	1	Item	$5,000.00	$5,000.00
2.02	Vegetation pruning to improve sightlines (Allowance)	1	Item	$2,000.00	$2,000.00
	SUBTOTAL				**$7,000.00**
3.00	**SURFACES**				
3.01	New 3m wide asphalt designated off-road Bikeway with linemarking	110	Lin m	$250.00	$27,500.00
	SUBTOTAL				**$27,500.00**
4.00	**ROADS AND CARPARKING**				
4.01	Install new Bikeway crossing including refuge on Beach Road	1	Item	$30,000.00	$30,000.00
4.02	Upgrade lighting at Beach Road crossing (Allowance)	1	Item	$100,000.00	$100,000.00
	SUBTOTAL				**$130,000.00**
5.00	**FURNITURE & STRUCTURES**				
	N/A				
	SUBTOTAL				**$0.00**
6.00	**SIGNAGE**				
6.01	Upgrade wayfinding and consolidate regulatory signage (Allowance)	110	Lin m	$10.00	$1,100.00
	SUBTOTAL				**$1,100.00**
	SUBTOTAL OF LANDSCAPE AND EXTERNAL WORKS (not inc. GST)				**$182,160.00**
	Design Cost; Architectural, engineering, public consultation, DA's, etc (Allowance) 10%	1	Item	$18,216.00	$18,216.00
	Construction Contingency (Allowance) 20%	1	Item	$36,432.00	$36,432.00
	Subtotal including Contingencies & Preliminaries				**$236,808.00**
	10% GST				**$23,680.80**
	LANDSCAPE AND EXTERNAL WORKS TOTAL including GST				**$260,488.80**

6.25 Cost Schedules - Barrage Road South

Barrage Road South

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1.00	**PRELIMINARIES**				
1.01	Establishment, insurances etc (Allowance 10%)	1	Item	$29,160.00	$29,160.00
	SUBTOTAL				**$29,160.00**
2.00	**SITE DEMOLITION & PREPARATION**				
2.01	Remove debris, clear site where required (Allowance)	1	Item	$15,000.00	$15,000.00
2.02	Vegetation pruning to improve sightlines (Allowance)	1	Item	$15,000.00	$15,000.00
	SUBTOTAL				**$30,000.00**
3.00	**SURFACES**				
3.01	New 3m wide asphalt designated off-road Bikeway with linemarking	410	Lin m	$250.00	$102,500.00
	SUBTOTAL				**$102,500.00**
4.00	**ROADS AND CARPARKING**				
4.01	Install new Bikeway crossing including refuge on Barrage Road	1	Item	$30,000.00	$30,000.00
4.02	Improve intersection safety at carpark crossovers (Allowance)	1	Item	$10,000.00	$10,000.00
4.03	Upgrade lighting at Barrage Road crossing (Allowance)	1	Item	$100,000.00	$100,000.00
	SUBTOTAL				**$140,000.00**
5.00	**FURNITURE & STRUCTURES**				
5.01	Sundry outdoor furniture incl. bins, seats, bollards etc.	1	Item	$15,000.00	$15,000.00
	SUBTOTAL				**$15,000.00**
6.00	**SIGNAGE**				
6.01	Upgrade wayfinding and consolidate regulatory signage (Allowance)	410	Lin m	$10.00	$4,100.00
	SUBTOTAL				**$4,100.00**
	SUBTOTAL OF LANDSCAPE AND EXTERNAL WORKS (not inc. GST)				**$320,760.00**
	Design Cost; Architectural, engineering, public consultation, DA's, etc (Allowance) 10%	1	Item	$32,076.00	$32,076.00
	Construction Contingency (Allowance) 20%	1	Item	$64,152.00	$64,152.00
	Subtotal including Contingencies & Preliminaries				**$416,988.00**
	10% GST				**$41,698.80**
	LANDSCAPE AND EXTERNAL WORKS TOTAL including GST				**$458,686.80**

6.26 Cost Schedules - Barrage Road North

Barrage Road North

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1.00	**PRELIMINARIES**				
1.01	Establishment, insurances etc (Allowance 10%)	1	Item	$7,830.00	$7,830.00
	SUBTOTAL				**$7,830.00**
2.00	**SITE DEMOLITION & PREPARATION**				
2.01	Remove debris, clear site where required (Allowance)	1	Item	$5,000.00	$5,000.00
2.02	Vegetation pruning to improve sightlines (Allowance)	1	Item	$5,000.00	$5,000.00
	SUBTOTAL				**$10,000.00**
3.00	**SURFACES**				
3.01	Enhance existing off-road bikeway - new linemarking, compliance etc (Allowance)	866	Lin m	$40.00	$34,640.00
	SUBTOTAL				**$34,640.00**
4.00	**ROADS AND CARPARKING**				
4.01	Improve intersection safety at carpark crossovers (Allowance)	1	Item	$10,000.00	$10,000.00
	SUBTOTAL				**$10,000.00**
5.00	**FURNITURE & STRUCTURES**				
5.01	Sundry outdoor furniture incl. bins, seats, bollards etc.	1	Item	$15,000.00	$15,000.00
	SUBTOTAL				**$15,000.00**
6.00	**SIGNAGE**				
6.01	Upgrade wayfinding and consolidate regulatory signage (Allowance)	866	Lin m	$10.00	$8,660.00
	SUBTOTAL				**$8,660.00**
	SUBTOTAL OF LANDSCAPE AND EXTERNAL WORKS (not inc. GST)				**$86,130.00**
	Design Cost; Architectural, engineering, public consultation, DA's, etc (Allowance) 10%	1	Item	$8,613.00	$8,613.00
	Construction Contingency (Allowance) 20%	1	Item	$17,226.00	$17,226.00
	Subtotal including Contingencies & Preliminaries				**$111,969.00**
	10% GST				**$11,196.90**
	LANDSCAPE AND EXTERNAL WORKS TOTAL including GST				**$123,165.90**

6.27 Cost Schedules - Barage Road - Bombora On The River

Barrage Road - Bombora On The River

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1.00	**PRELIMINARIES**				
1.01	Establishment, insurances etc (Allowance 10%)	1	Item	$28,440.00	$28,440.00
	SUBTOTAL				**$28,440.00**
2.00	**SITE DEMOLITION & PREPARATION**				
2.01	Remove debris, clear site where required (Allowance)	1	Item	$30,000.00	$30,000.00
	SUBTOTAL				**$30,000.00**
3.00	**SURFACES**				
3.01	Enhance existing off-road bikeway - new linemarking, compliance etc (Allowance)	140	Lin m	$40.00	$5,600.00
	SUBTOTAL				**$5,600.00**
4.00	**ROADS AND CARPARKING**				
4.01	Reconfigure interface with Bombora café and adjacent parking area, including Bikeway widening, carpark alignment adjustments, new 1.5m wide footpath, new balustrade, bike racks etc. Note: Upgrade to Barrage Road alignment exculded and by others (Subject to detailed design and consultation with DIT)	1	Item	$150,000.00	$150,000.00
4.02	Bump rail to provide edge protection to steep grasses batter	20	Lin m	$100.00	$2,000.00
4.03	Improve safety at driveway crossovers, intersections and Bikeway road crossing	2	No.	$40,000.00	$80,000.00
	SUBTOTAL				**$232,000.00**
5.00	**FURNITURE & STRUCTURES**				
5.01	Sundry outdoor furniture incl. bins, seats, bollards etc.	1	Item	$15,000.00	$15,000.00
	SUBTOTAL				**$15,000.00**
6.00	**SIGNAGE**				
6.01	Upgrade wayfinding and consolidate regulatory signage (Allowance)	180	Lin m	$10.00	$1,800.00
	SUBTOTAL				**$1,800.00**
	SUBTOTAL OF LANDSCAPE AND EXTERNAL WORKS (not inc. GST)				**$312,840.00**
	Design Cost; Architectural, engineering, public consultation, DA's, etc (Allowance) 10%	1	Item	$31,284.00	$31,284.00
	Construction Contingency (Allowance) 20%	1	Item	$62,568.00	$62,568.00
	Subtotal including Contingencies & Preliminaries				**$406,692.00**
	10% GST				**$40,669.20**
	LANDSCAPE AND EXTERNAL WORKS TOTAL including GST				**$447,361.20**

6.28 Cost Schedules - Riverside Drive

Riverside Drive

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1.00	**PRELIMINARIES**				
1.01	Establishment, insurances etc (Allowance 10%)	1	Item		$0.00
	SUBTOTAL				**$0.00**
2.00	**SITE DEMOLITION & PREPARATION**				
2.01	Remove debris, clear site where required (Allowance)	1	Item	$10,000.00	$10,000.00
	SUBTOTAL				**$10,000.00**
3.00	**SURFACES**				
3.01	Enhance existing off-road bikeway - new linemarking, compliance etc (Allowance)	125	Lin m	$40.00	$5,000.00
3.02	Enhance existing on-road bikeway safety (Sharrows, signage upgrades) (Allowance)	250	Lin m	$40.00	$10,000.00
	SUBTOTAL				**$15,000.00**
4.00	**ROADS AND CARPARKING**				
4.01	New kerb barrier to edge of Bikeway along Riverside Drive	250	Lin m	$150.00	$37,500.00
	SUBTOTAL				**$37,500.00**
5.00	**FURNITURE & STRUCTURES**				
5.01	Sundry outdoor furniture incl. bins, seats, bollards etc.	1	Item	$15,000.00	$15,000.00
5.02	Upgrade existing lookout on Riverside Dr	1	Item	$30,000.00	$30,000.00
	SUBTOTAL				**$45,000.00**
6.00	**SIGNAGE**				
6.01	Upgrade wayfinding and consolidate regulatory signage (Allowance)	375	Lin m	$10.00	$3,750.00
	SUBTOTAL				**$3,750.00**
	SUBTOTAL OF LANDSCAPE AND EXTERNAL WORKS (not inc. GST)				**$111,250.00**
	Design Cost; Architectural, engineering, public consultation, DA's, etc (Allowance) 10%	1	Item	$11,125.00	$11,125.00
	Construction Contingency (Allowance) 20%	1	Item	$22,250.00	$22,250.00
	Subtotal including Contingencies & Preliminaries				**$144,625.00**
	10% GST				**$14,462.50**
	LANDSCAPE AND EXTERNAL WORKS TOTAL including GST				**$159,087.50**

6.29 Cost Schedules - Goolwa Wharf - Boardwalk at Hector's Jetty

Goolwa Wharf - Boardwalk at Hector's Jetty

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1.00	**PRELIMINARIES**				
1.01	Establishment, insurances etc (Allowance 10%)	1	Item	$25,125.00	$25,125.00
	SUBTOTAL				**$25,125.00**
2.00	**SITE DEMOLITION & PREPARATION**				
2.01	Remove debris, clear site where required (Allowance)	1	Item	$7,500.00	$7,500.00
2.02	Vegetation pruning to improve sightlines (Allowance)	1	Item	$5,000.00	$5,000.00
	SUBTOTAL				**$12,500.00**
3.00	**SURFACES**				
	N/A				
	SUBTOTAL				**$0.00**
4.00	**ROADS AND CARPARKING**				
4.01	Rehabilitation / potential rock revetment works associated with new boardwalk alignment at beach	1	Item	$40,000.00	$40,000.00
	SUBTOTAL				**$40,000.00**
5.00	**FURNITURE & STRUCTURES**				
5.01	Sundry outdoor furniture incl. bins, seats, bollards etc.	1	Item	$10,000.00	$10,000.00
	SUBTOTAL				**$10,000.00**
6.00	**ALIGNMENT OPTIONS**				
6.01	***Option A***				
6.01	Replace boardwalk with new min 3m wide boardwalk structure with compliant bike barriers	185	Lin m	$1,000.00	$185,000.00
	SUBTOTAL				**$185,000.00**
6.00	**SIGNAGE**				
6.01	Upgrade wayfinding and consolidate regulatory signage (Allowance)	375	Lin m	$10.00	$3,750.00
	SUBTOTAL				**$3,750.00**
	SUBTOTAL OF LANDSCAPE AND EXTERNAL WORKS (not inc. GST)				**$276,375.00**
	Design Cost; Architectural, engineering, public consultation, DA's, etc (Allowance) 10%	1	Item	$27,637.50	$27,637.50
	Construction Contingency (Allowance) 20%	1	Item	$55,275.00	$55,275.00
	Subtotal including Contingencies & Preliminaries				**$359,287.50**
	10% GST				**$35,928.75**
	LANDSCAPE AND EXTERNAL WORKS TOTAL including GST				**$395,216.25**

6.30 Cost Schedules - Goolwa Wharf

Goolwa Wharf

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1.00	**PRELIMINARIES**				
1.01	Establishment, insurances etc (Allowance 10%)	1	Item	$35,950.00	$35,950.00
	SUBTOTAL				**$35,950.00**
2.00	**SITE DEMOLITION & PREPARATION**				
2.01	Remove debris, clear site where required (Allowance)	1	Item	$25,000.00	$25,000.00
	SUBTOTAL				**$25,000.00**
3.00	**SURFACES**				
3.01	New 3m wide asphalt designated off-road Bikeway with linemarking	136	Lin m	$250.00	$34,000.00
	SUBTOTAL				**$34,000.00**
4.00	**ROADS AND CARPARKING**				
4.01	Improve safety at Brooking St crossover	1	Item	$25,000.00	$25,000.00
	SUBTOTAL				**$25,000.00**
5.00	**FURNITURE & STRUCTURES**				
5.01	Sundry outdoor furniture incl. bins, seats, bollards etc.	1	Item	$20,000.00	$20,000.00
	SUBTOTAL				**$20,000.00**
6.00	**ALIGNMENT OPTIONS**				
	Option A				
6.01	Establish new shared zone with possible paved roadway (nom 5m wide) upgrade with linemarking and signage	210	Lin m	$1,200.00	$252,000.00
	SUBTOTAL				**$252,000.00**
7.00	**SIGNAGE**				
7.01	Upgrade wayfinding and consolidate regulatory signage (Allowance)	350	Lin m	$10.00	$3,500.00
	SUBTOTAL				**$3,500.00**
	SUBTOTAL OF LANDSCAPE AND EXTERNAL WORKS (not inc. GST)				**$395,450.00**
	Design Cost; Architectural, engineering, public consultation, DA's, etc (Allowance) 10%	1	Item	$39,545.00	$39,545.00
	Construction Contingency (Allowance) 20%	1	Item	$79,090.00	$79,090.00
	Subtotal including Contingencies & Preliminaries				**$514,085.00**
	10% GST				**$51,408.50**
	LANDSCAPE AND EXTERNAL WORKS TOTAL including GST				**$565,493.50**

6.31 Cost Schedules - Goolwa Wharf - Amelia Park Playground to Richard Ballard

Goolwa Wharf - Amelia Park Playground to Richard Ballard Park

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1.00	**PRELIMINARIES**				
1.01	Establishment, insurances etc (Allowance 10%)	1	Item	$2,590.00	$2,590.00
	SUBTOTAL				**$2,590.00**
2.00	**SITE DEMOLITION & PREPARATION**				
2.01	Remove debris, clear site where required (Allowance)	1	Item	$5,000.00	$5,000.00
2.02	Vegetation pruning to improve sightlines (Allowance)	1	Item	$2,000.00	$2,000.00
	SUBTOTAL				**$7,000.00**
3.00	**SURFACES**				
3.01	Enhance existing off-road bikeway - new linemarking, compliance etc (Allowance)	278	Lin m	$40.00	$11,120.00
	SUBTOTAL				**$11,120.00**
4.00	**ROADS AND CARPARKING**				
	N/A				
	SUBTOTAL				**$0.00**
5.00	**FURNITURE & STRUCTURES**				
5.01	Sundry outdoor furniture incl. bins, seats, bollards etc.	1	Item	$5,000.00	$5,000.00
	SUBTOTAL				**$5,000.00**
6.00	**SIGNAGE**				
6.01	Upgrade wayfinding and consolidate regulatory signage (Allowance)	278	Lin m	$10.00	$2,780.00
	SUBTOTAL				**$2,780.00**
	SUBTOTAL OF LANDSCAPE AND EXTERNAL WORKS (not inc. GST)				**$28,490.00**
	Design Cost; Architectural, engineering, public consultation, DA's, etc (Allowance) 10%	1	Item	$2,849.00	$2,849.00
	Construction Contingency (Allowance) 20%	1	Item	$5,698.00	$5,698.00
	Subtotal including Contingencies & Preliminaries				**$37,037.00**
	10% GST				**$3,703.70**
	LANDSCAPE AND EXTERNAL WORKS TOTAL including GST				**$40,740.70**

6.32 Cost Schedules - Richard Ballard Park

Richard Ballard Park

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1.00	**PRELIMINARIES**				
1.01	Establishment, insurances etc (Allowance 10%)	1	Item	$26,675.00	$26,675.00
	SUBTOTAL				**$26,675.00**
2.00	**SITE DEMOLITION & PREPARATION**				
2.01	Remove debris, clear site where required (Allowance)	1	Item	$20,000.00	$20,000.00
2.02	Vegetation pruning to improve sightlines (Allowance)	1	Item	$15,000.00	$15,000.00
	SUBTOTAL				**$35,000.00**
3.00	**SURFACES**				
3.01	New 3m wide asphalt designated off-road Bikeway with linemarking	120	Lin m	$250.00	$30,000.00
	SUBTOTAL				**$30,000.00**
4.00	**ROADS AND CARPARKING**				
4.01	Upgrade and formalise existing carpark	1200	m2	$100.00	$120,000.00
	SUBTOTAL				**$120,000.00**
5.00	**FURNITURE & STRUCTURES**				
5.01	New min 3m wide boardwalk structure with compliant bike barrier	60	lin m	$3,000.00	$180,000.00
	SUBTOTAL				**$180,000.00**
6.00	**SIGNAGE**				
6.01	Upgrade wayfinding and consolidate regulatory signage (Allowance)	175	Lin m	$10.00	$1,750.00
	SUBTOTAL				**$1,750.00**
	SUBTOTAL OF LANDSCAPE AND EXTERNAL WORKS (not inc. GST)				**$393,425.00**
	Design Cost; Architectural, engineering, public consultation, DA's, etc (Allowance) 10%	1	Item	$39,342.50	$39,342.50
	Construction Contingency (Allowance) 20%	1	Item	$78,685.00	$78,685.00
	Subtotal including Contingencies & Preliminaries				**$511,452.50**
	10% GST				**$51,145.25**
	LANDSCAPE AND EXTERNAL WORKS TOTAL including GST				**$562,597.75**

6.33 Cost Schedules - Liverpool Road

Liverpool Road

ITEM No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1.00	**PRELIMINARIES**				
1.01	Establishment, insurances etc (Allowance 10%)	1	Item	$46,765.00	$46,765.00
	SUBTOTAL				**$46,765.00**
2.00	**SITE DEMOLITION & PREPARATION**				
2.01	Remove debris, clear site where required (Allowance)	1	Item	$15,000.00	$15,000.00
2.02	Remove existing pine barrier on Liverpool Rd	1	Item	$20,000.00	$20,000.00
2.03	Vegetation pruning to improve sightlines (Allowance)	1	Item	$15,000.00	$15,000.00
	SUBTOTAL				**$50,000.00**
3.00	**SURFACES**				
3.01	Enhance existing off-road bikeway safety (Sharrows, signage upgrades) (Allowance)	2,855	Lin m	$20.00	$57,100.00
	SUBTOTAL				**$57,100.00**
4.00	**ROADS AND CARPARKING**				
4.01	Upgrade bikeway and barrier junctions including realignment of bikeway lanes with new linemarking, harwood timber bollards, vegetated median	2	No.	$25,000.00	$50,000.00
4.02	Improve safety at driveway crossovers and intersections	3	No.	$10,000.00	$30,000.00
4.03	Improve access to Bikeway at junctions with adjoining streets (Allowance)	12	No.	$7,000.00	$84,000.00
	SUBTOTAL				**$164,000.00**
5.00	**FURNITURE & STRUCTURES**				
5.01	Sundry outdoor furniture incl. bins, seats, bollards etc.	1	Item	$30,000.00	$30,000.00
5.02	New hardwood timber barrier for full length of Liverpool Road	2760	lin m	$50.00	$138,000.00
	SUBTOTAL				**$168,000.00**
6.00	**SIGNAGE**				
6.01	Upgrade wayfinding and consolidate regulatory signage (Allowance)	2855	Lin m	$10.00	$28,550.00
	SUBTOTAL				**$28,550.00**
	SUBTOTAL OF LANDSCAPE AND EXTERNAL WORKS (not inc. GST)				**$514,415.00**
	Design Cost; Architectural, engineering, public consultation, DA's, etc (Allowance) 10%	1	Item	$51,441.50	$51,441.50
	Construction Contingency (Allowance) 20%	1	Item	$102,883.00	$102,883.00
	Subtotal including Contingencies & Preliminaries				**$668,739.50**
	10% GST				**$66,873.95**
	LANDSCAPE AND EXTERNAL WORKS TOTAL including GST				**$735,613.45**

Appendix A - Engagement Report

Alexandrina Council
22ADL-0078
4 August 2022

Encounter Bikeway

PART A: Engagement Report

SHAPING GREAT COMMUNITIES

URPS

Encounter Bikeway

4 August 2022

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In association with	ASPECT Studios
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URPS Ref	22ADL-0078

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V3	04/08/22	Z. Hambour		

We acknowledge the Kaurna People as the Traditional Custodians of the land on which we work and pay respect to their Elders past, present and emerging.

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URPS

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SNAPSHOT Alexandrina Encounter Bikeway Engagement

16 May and 13 June 22, 2022 - Draft Concept Plans to improve the safety, amenity and user experience along nine sections of the Bikeway



2 Community Drop-in Sessions attended by 25 people



210 Online and hard copy survey responses

Bikeway sections with most responses: Dump Beach/Chiton Rocks/Bullies Beach (119); Surfers Parade/Goolwa Beach (91)

Feedback on proposed route options

Bikeway sections with options proposed	Most supported route option (% support plus somewhat support)	Why did people choose this option?
Dump Beach/Chiton Rocks/ Bullies Beach	71% Option A - Establish new bikeway through coastal dunes	Natural extension of the path along the rail line; attracts customers to the Surf Live Saving Club; good experience for riders (views, coastal); like separation from cars
Boomer Beach/Port Elliot Headland/ Horseshoe Bay	85% Option A - New link along embankment contour	Coastal views; the boardwalk; clear weeds and plant natives; utilises the existing on-road bikeway and maintains existing pedestrian-only zone
Horseshoe Bay/ Bashams Beach	92% Option A – designated of-road bikeway	Because it is off-road, provides good views and goes past the caravan park.
Middleton/Ocean Parade	74% Option A - Proposed designated bikeway alignment along Ocean Parade.	The cantilevered section around Middleton Point providing views; bikeway stays along the coast; reduces conflict between cars and cyclists
Surfers Parade/ Goolwa Beach	68% Option A - Upgrade existing on-road bikeway or footpath along Kightley Road	Enhances use and safety of the area for pedestrians and cyclists; cost effective and least invasive of the natural landscape; cyclists still have the option of utilising the existing gravel path across the flood plain
Barrage Road/ Riverside Drive/ Goolwa Wharf/ Amelia Park/ Richard Ballard Park	87% Option A - Trail continues along shared road	Elimination of the dangerous unpaved section through the parking lot just east of the Hindmarsh Island Bridge; safer for cyclists as Jaralde Park can get busy; brings cyclists to Wharf area; improved connectivity between boardwalk and paths

Other key themes of feedback



- Proposed bridge and intersection upgrades were well supported
- Divided views on the proposed on and off road enhancements
- Concern about safety of pedestrians and cyclists on Seagull Avenue. Suggestions to remove stobie poles
- Concern about conflict between cyclists, walkers, cars and surfers along Surfers Parade. Suggestions for one way
- Concerns that Kightley Road Goolwa can be busy and dangerous for recreational cyclists during peak periods
- Desire to keep front path at Ratalang beach for walkers
- Preference for paths being off-road to reduce interaction with cars versus some desiring on-road to minimise cost
- Managing shared use path conflicts (eg. pedestrians versus cyclists)
- Protecting dunes and natural values
- Providing a good experience for cyclists (eg. views, natural areas)
- Managing gradients and sight lines
- Consider hazards from coastal erosion and inundation

Comparison to City of Victor Harbor bikeway engagement

In November 2021, City of Victor Harbor consulted on three options for realigning the bikeway up to the Alexandrina Council boarder.

69% of respondents to the Victor Harbor survey support route options within City of Victor Harbor that align to Alexandrina Council's most supported option, Option A -Establish new bikeway through coastal dunes.

Why we engaged

The Encounter Bikeway is an on-road and shared trail that links the four coastal towns of the City of Victor Harbor and the Riverport Town of Goolwa, via the coastal towns of Port Elliot and Middleton. The total distance of The Bikeway is 30km.

Alexandrina Council is planning for upgrades to the 21.5 km of the Bikeway in its Council area to improve safety, amenity and user experience. This includes the Bikeway between Laffins Point in Goolwa North (intersection of Liverpool Road and Howell Street) and the Alexandrina Council boundary with Victor Harbor Council along Seagull Avenue in Chiton.

The existing Bikeway was reviewed, and draft concept plans were prepared for 9 sections of the Bikeway in the Alexandrina Council area. For each section a variety of upgrades were proposed including route realignment options, new off road or enhanced on road bikeways, intersection safety improvements and bridge upgrades.

Council engaged with community and stakeholders to understand the level of support for each of the upgrade options for each section of the Bikeway in the Alexandrina Council area. This report summarises the engagement undertaken and its results.

This report (Part A) is supplemented by Part B - verbatim comments from the consultation survey (a separate document).

How we engaged

The engagement sought feedback to understand the level of community and stakeholder support for the different upgrade options in the draft Concept Plans prepared for each section of the Encounter Bikeway in the Alexandrina Council area.

The engagement was undertaken between 16 May and 13 June 22 and included:

1. **Drop in sessions** at which the community could drop-in, view the plans, ask questions of the design team and fill in a hard copy survey:

- 20 May 12-3pm Goolwa Library
- 21 May 1-4pm Chiton Rocks Surf Life Saving Club

2. **Online survey** on Council's Your Say Page (www.mysay.alexandrina.sa.gov.au/encounterbikeway) A copy of the survey questions is provided in Appendix A.

The draft Concept Plans were available to view from the Council's My Say page and were on display in the Goolwa Library from 22 May to 13 June 2022.

The engagement was promoted through:

- Temporary signage established at key points along the Bikeway
- Advertisement
- Advertisement in the Victor Times newspaper
- Council's website
- A presentation to Middleton Town and Foreshore Association
- Emails to known resident groups and local cycling club.

What we heard

25 people attended the drop-in sessions. 210 survey responses were received these include a combination of mainly online survey responses as well as some hard copy survey responses.

The following sections summarise the results of the survey. Verbatim comments are provided in Part C to this report (separate document).

About you

Most survey respondents were Alexandrina Council ratepayers (67%) and Alexandrina residents (47%). Only 2% were Alexandrina businesses. Most respondents were aged between 55 and 74 years. (Figure 1)

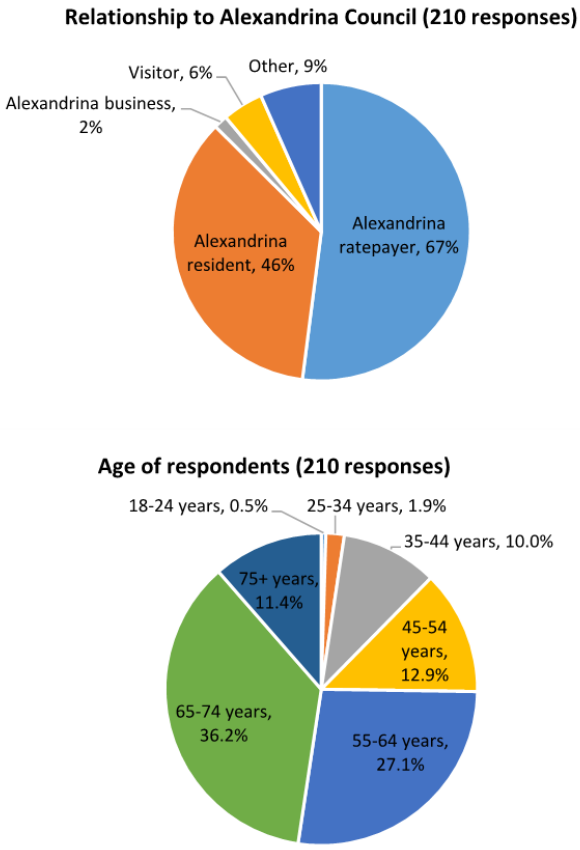


Figure 1- Relationship to Alexandrina Council and age of survey respondents

80% of respondents were users of the Encounter Bikeway and 70% were residents near the Bikeway. Respondents use the Bikeway for a variety of reasons with for fitness (76%), enjoying nature and the scenery (75%) and family or social outings (61%) being the most popular reasons for use. (Figure 2)

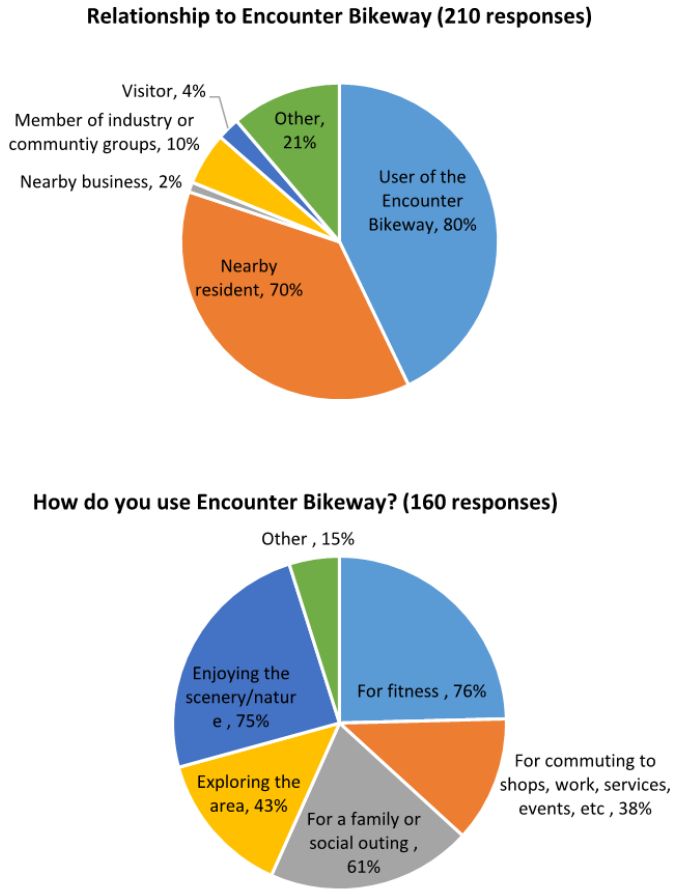


Figure 2 – Relation to and use of Encounter Bikeway by survey respondents

Feedback on proposed plans

The following pages display the level of support received for the different sections of the bikeway.

Survey respondents could choose which sections to provide feedback on. Table 1 shows the number of surveys responses received on each section. Dump Beach/Chiton Rocks/Bullies Beach (Plan CP-01) received the highest number of responses (119) and Richard Ballard Park/Liverpool Road (Plan CP-09) the least (48).

Section	# of responses
Dump Beach/Chiton Rocks/Bullies Beach (Plan CP-01)	119
Boomer Beach/Port Elliot Headland/Horseshoe Bay (Plan CP-02)	72
Horseshoe Bay/Bashams Beach (Plan CP-03)	97 (See note below)
Ratalang/Bashman Beach (Plan CP-04)	70
Middleton/Ocean Parade (Plan CP-05)	75
Surfers Parade/Goolwa Beach (Plan CP-06)	91
Goolwa Beach (Plan CP-07)	56
Barrage Road/Riverside Drive/Goolwa Wharf/Amelia Park/Richard Ballard Park (Plan CP-08)	60
Richard Ballard Park/Liverpool Road (Plan CP-09)	48

Table 1 - Number of responses for each section of the Encounter Bikeway

*Note. There was a malfunction in the extraction of data from the online survey for the 72 responses made online for the Horseshoe Bay/Bashams Beach (Plan CP-03). The quantitative results of which route options respondents prefer was unable to be downloaded. Only the verbatim comments were able to be downloaded. 25 hard copy surveys were completed.

Dump Beach/Chiton Rocks/Bullies Beach (Plan CP-01)

119 responses were received for Dump Beach/Chiton Rocks/Bullies Beach (Plan CP-01). Figure 3 displays the results for this section.

Option A (establish new bikeway through coastal dunes), was the most highly supported of the proposed realignment options (ie of Options A through to D) with a combined 71% of respondents either supporting (63%) or somewhat supporting (8%) Option A. Reasons for supporting Option A included:

- It's a natural extension of the path along the rail line
- It will assist the Surf Live Saving Club by attracting customers
- It provides a good experience for riders (views, coastal environment)
- A preference for an off road bikeway separated from cars

Those that did not support Option A (23%) were concerned with cost, environmental impact, safety and lack of views of running a path through the dunes. These respondents would either prefer to see Option B through the reserve where the coastal views are the best, or to see the money spent on Seagull Ave (Option C) where there are existing road safety issues that could be resolved at the same time as constructing the bikeway and making the street one way. Those with concerns about Seagull Avenue in its present state would like the safety issues addressed regardless of where the bikeway goes.

Reasons for not supporting the other options included:

- Option B impacts on the privacy and ocean views of residents on Seagull Avenue whose properties back onto the reserve (however, some other respondents argued that these homes are all holiday homes and the views from Option B would be "spectacular")
- Concern of conflict between cars and cyclists (Seagull Avenue Option C is already hazardous)
- Removing stobie poles is too expensive
- The on-road options don't provide a good view or rider experience.

Comparison to City of Victor Harbor bikeway engagement

In November 2021, City of Victor Harbor consulted on three options for realigning the bikeway up to the Alexandrina Council boarder.

Option 1 Road Reserves (139 responses) Connects to Alexandrina Option A (coastal dunes)

Option 2 Rail Corridor (177 responses) Connects to Alexandrina Option A (coastal dunes)

Option 3 On Road (139 responses) Connects to Alexandrina Council to Option C (Seagull Ave.)

69% of respondents to the Victor Harbor survey support route options within City of Victor Harbor that align to Alexandrina Council Option A Coastal Dunes. Support for these options was due to obtaining the best possible experience through access to views, separation from traffic and ease of connection from Hindmarsh Road to the Council boundary with Alexandrina.

For the proposed upgrades, most supported the upgrade to the bridge (70% combined support and somewhat support). Comments were made to provide a non-slip surface and to provide lighting.

The level of support for the proposed on and off road bikeways was less clear. Around half of combined respondents either support or somewhat support the off road bikeway and around 40% do not support or strongly do not support the enhanced on-road bikeway. Around a quarter to a third of respondents were unsure about the off-road and on-road bikeways.

Reasons for not supporting or being unsure of the on-road and off road bikeways included wanting to leave bikeway on-road where it won't damage the environment and requires less expenditure for construction, versus people wanting off-road bikeways for safety. Comments were also made about improving these bikeways in the vicinity of Watson's Gap, such as:

- Addressing the uphill gradient and sight lines at Watsons Gap/Ocean Road
- Running the bikeway from Sixth Avenue along the train line (road corridor) to Watson's Gap
- Including a bench at t Channon Street after bridge at the Gap.

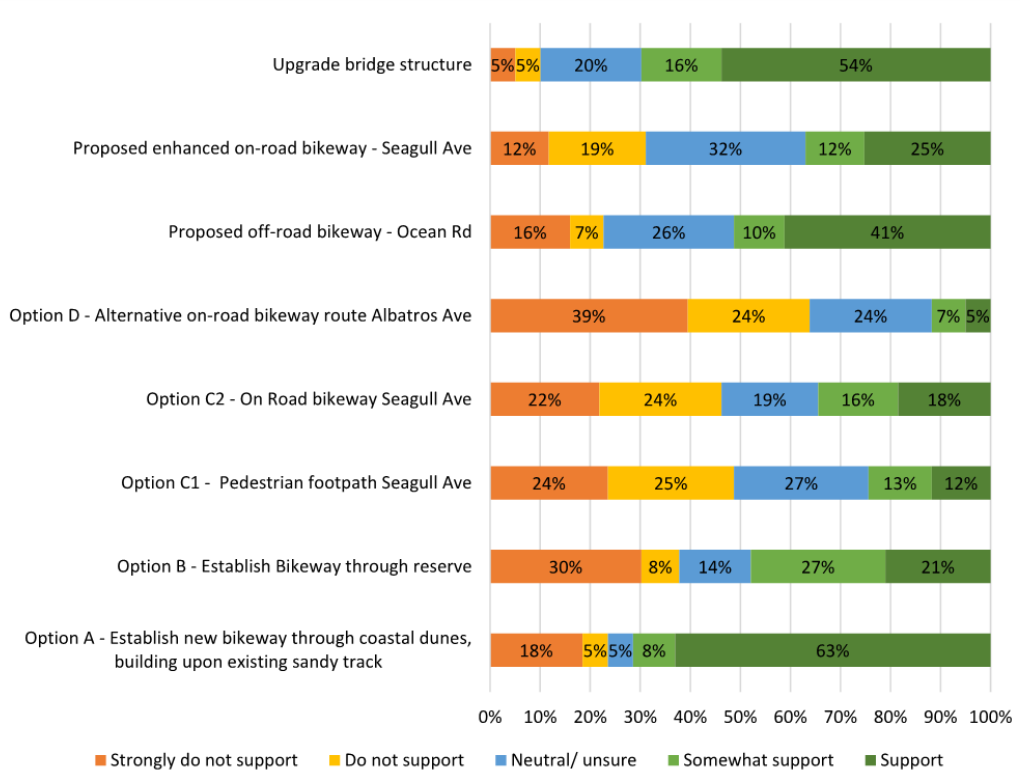


Figure 3 - Level of support for proposed upgrades to Dump Beach/Chiton Rocks/Bullies Beach (Plan CP-01; 119 responses)

Boomer Beach/Knights Beach/Port Elliot Headland/Horseshoe Bay (Plan CP-02)

72 responses were received for Boomer Beach/Port Elliot Headland/Horseshoe Bay (Plan CP-02). Figure 4 displays the results for this section.

Option A (New link along embankment contour) was by far the most highly supported of the proposed realignment options (ie of Options A or B) with a combined 85% of respondents either supporting (79%) or somewhat supporting (6%) Option A. Reasons for supporting Option A included:

- Utilises the coastal views
- The boardwalk upgrade
- Clearance of exotic pest plants – opportunity to consider a revegetation/restoration project
- Utilising the existing on-road bikeway and maintenance of existing pedestrian-only zone
- Reasons for not supporting the other Option B (Utilise existing track, heritage stairs and

Landing) included

- Requirement to dismount at Centenary Steps is not safe, inclusive and accessible

There was less overwhelming support for the off-road and on-road bike options.

60% of combined respondents either support (43%) or somewhat support (17%) the off road bikeway and around a quarter were neutral or unsure. 41% of combined respondents either support (28%) or somewhat support (13%) the on road bikeway and 38% were neutral or unsure.

Reasons for not supporting or being unsure of the on-road bikeway included:

- Bike paths are significant traffic generators and are not appropriate for the relaxed contemplative walking and lookout areas

Reasons for supporting the off-road bikeway included:

- Opportunity for great views
- Removes the risk between cyclists and vehicles

Reasons for not supporting or being unsure of the off-road bikeway included:

- Off-road bikeway would be difficult to implement due to the nature of the terrain
- The alignment is close to the Steamranger railway causing safety concerns

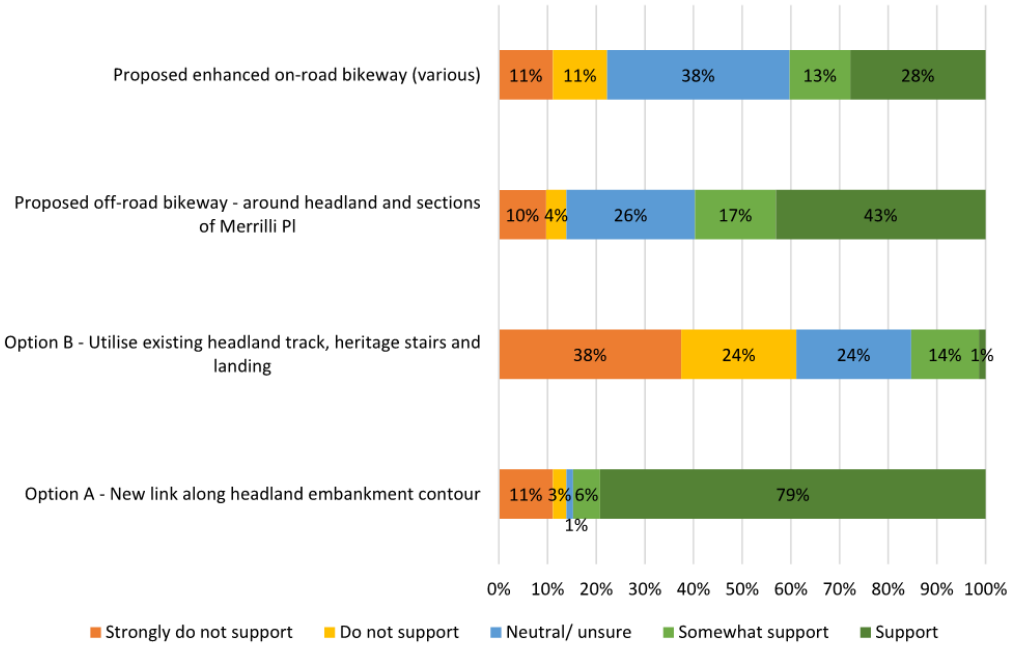


Figure 4 - Level of support for proposed upgrades to Boomer Beach/Port Elliot Headland/Horseshoe Bay (Plan CP-02; 72 responses)

Horseshoe Bay/Bashams Beach (Plan CP-03)

There was a malfunction in the extraction of data from the online survey for the 72 responses made online for the Horseshoe Bay/Bashams Beach (Plan CP-03). The quantitative results of route options respondents prefer were unable to be downloaded (verbatim comments were able to be downloaded). Instead, the 25 hard copy surveys completed have been used to provide quantitative results. Results are presented in Figure 5.

Option A (designated of-road bikeway) was by far the most highly supported of the proposed realignment options (ie of Options A or B) with a combined 92% of the 25 respondents either supporting (88%) or somewhat supporting (4%) Option A. Reasons for supporting Option A included it is:

- off road
- Maximises views
- Goes past the caravan park.

Other comments received included:

- Concerns that the proposed boardwalk will create conflict between pedestrians and cyclists and that it may get slippery. Once person suggested it be pedestrian only.
- Suggestions to resurface the bikeway between chicken run car park/Middleton and Horseshoe Bay
- Suggestions to remove tree roots/resurface path between Scrymgour Road and the caravan park entry road
- Option A is expensive to build and maintain
- To ensure paths are wide (e.g. 3m)
- To not damage the natural environment
- Improve signage including "watch for cyclist" at Strangways Terrace/Basham Parade
- To install safe crossing points (eg. zebra or wombat crossings)
- To establish a more scenic path along the foreshore (eg. Commodore Reserve)

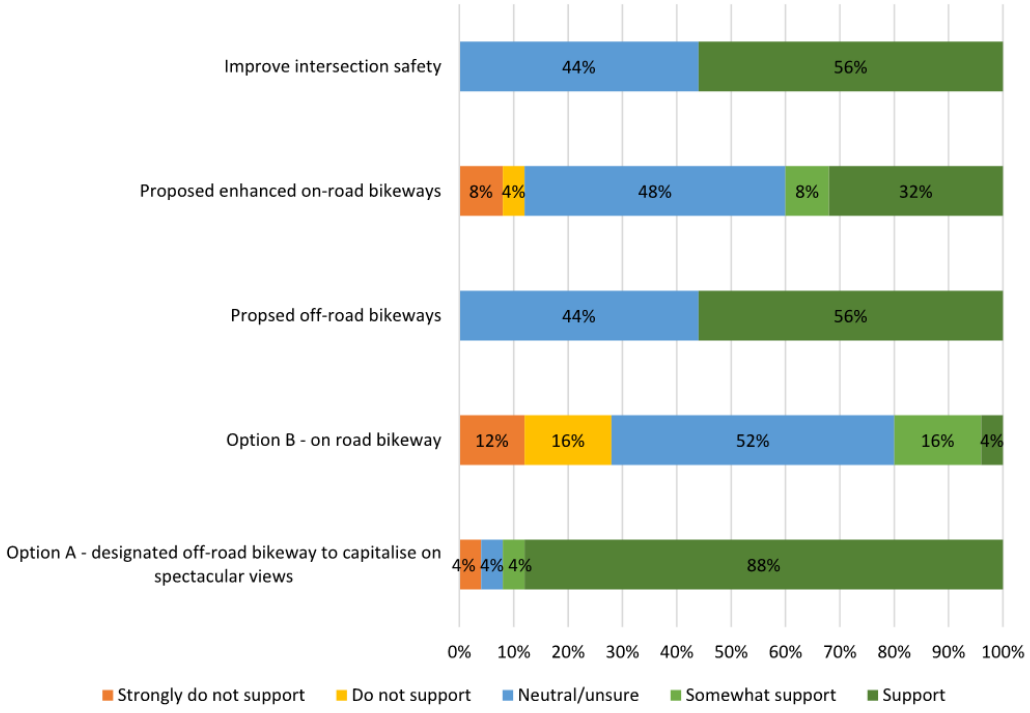


Figure 5 - Level of support for proposed upgrades to Horseshoe Bay/Bashams Beach (Plan CP-03; 25 responses hard copy survey forms only)

Ratalang/Bashman Beach (Plan CP-04)

70 responses were received for Ratalang/Bashman Beach (Plan CP-04). Figure 6 displays the results for this section.

There was strong support for both improving intersection safety and upgrading the bridge. 84% of combined respondents either support (77%) or somewhat support (7%) improving intersection safety. 81% of combined respondents either support (74%) or somewhat support (7%) the bridge upgrade.

Reasons for supporting intersection safety included:

- Opportunity to put line marking at the Basham Road crossover for motorists to give way to crossing cyclists
- Opportunity to improve sightlines (blind entry) at car park (vegetation pruning or path realignment)
- Opportunity to warn walkers and cyclists reaching a road

Reasons for supporting upgrading the bridge included:

- Opportunity to remove nails on the bridge and use a recycled environmentally friendly non-slip product on the surface.

There was an error in the wording of the off/on-road bikeways in the survey. They should have been labelled “proposed enhanced off road bikeway” and “existing off-road bikeway”. As such the quantitative results in the bottom two bars of Figure 5 cannot be confidently interpreted for these elements. However, the comments received do seem to indicate a preference for the existing off-road bikeway and for leaving the proposed/enhanced bikeway (the one closer to the ocean) as it is – to not seal it.

Reasons for supporting the existing off-road bikeway included:

- Current unsealed path is enjoyed as a nature walking trail
- The current dirt track provides a safe path for pedestrians and children away from cyclists
- Like the existing dirt track

Reasons for not supporting the proposed/enhanced off-road bikeway (closer to the beach) included:

- Impacts vegetation and dunes
- Sealing the track is not suitable for walkers and runners
- Keep it a quiet natural path in which to experience nature
- This location is a Ngarrindjeri sacred place
- Like being able to use both path options as they are

Comments did acknowledge the conflict of bikes and pedestrians sharing paths. One person suggested that the enhanced off-road route would provide options and less congestion for riders and walkers. Others suggested keeping the front path (ie that proposed to enhanced) as just for walkers and having signage as such, or suggested better promotion that cyclists need to share paths with walkers. One person suggested that the whole bikeway shouldn’t be called a bikeway but should be referred to as a pathway for all users.

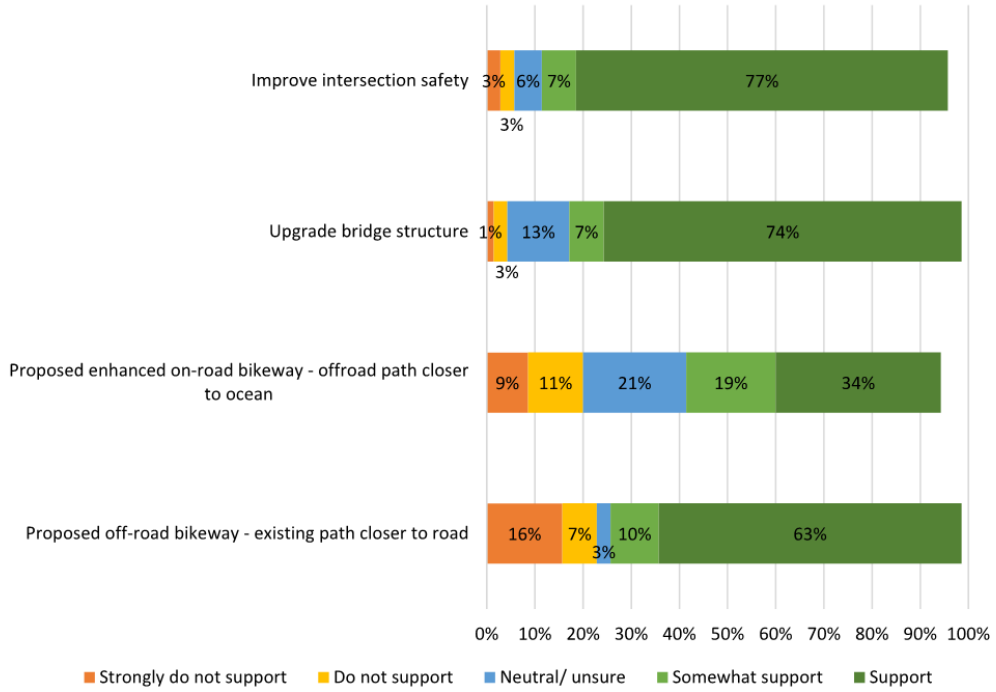


Figure 6 - Level of support for proposed upgrades to Ratalang/Bashman Beach (Plan CP-04; 70 responses)

NOTE: There was an error in the survey. It should have read "proposed enhanced off-road bikeway" and "existing off-road bikeway" as such the bottom two bars of the graph cannot be confidently interpreted

Middleton/Ocean Parade (Plan CP-05)

75 responses were received for Middleton/Ocean Parade (Plan CP-05). Figure 7 displays the results for this section.

Option A (Proposed designated bikeway alignment along Ocean Parade) was the most highly supported of the proposed realignment options (ie of Options A through to C) with a combined 74% of respondents either supporting (69%) or somewhat supporting (5%) Option A. Reasons for supporting Option A included:

- The cantilevered section around Middleton Point providing views
- The bikeway stays along the coast.
- Improves conflict between cars and cyclists improving safety, particularly:
  - At the east end of Ocean Parade.
  - Along the coast

Some did not support option A due to the cost of the cantilevered boardwalk and adding additional cycle traffic to the already busy area.

Reasons for not supporting or being unsure/neutral of the other options included:

- Gradient is very steep where the existing bikeway accesses Ocean Parade
- Missed opportunity for sea views at the Middleton Point carpark
- Conflict with traffic especially on busy days

For the proposed upgrades, most supported the upgrade to the bridge (71% combined support and somewhat support). However, the level of support for the proposed on and off-road bikeways and improving intersection safety was more divided.

Reasons for supporting these upgrades included:

- Opportunity to widen and reduce conflict between cyclists and walkers.
- Improve conflict of entering cycling traffic at Surf Street and Ocean Parade

Reasons for not supporting or being unsure of these upgrades included:

- Roads along Mill Terrace and the Esplanade are not busy enough for there to be conflict between cyclists and cars

Some respondents felt that the locations of the proposed picnic areas are in the wrong place as car parking is not nearby and is not accessible for families.

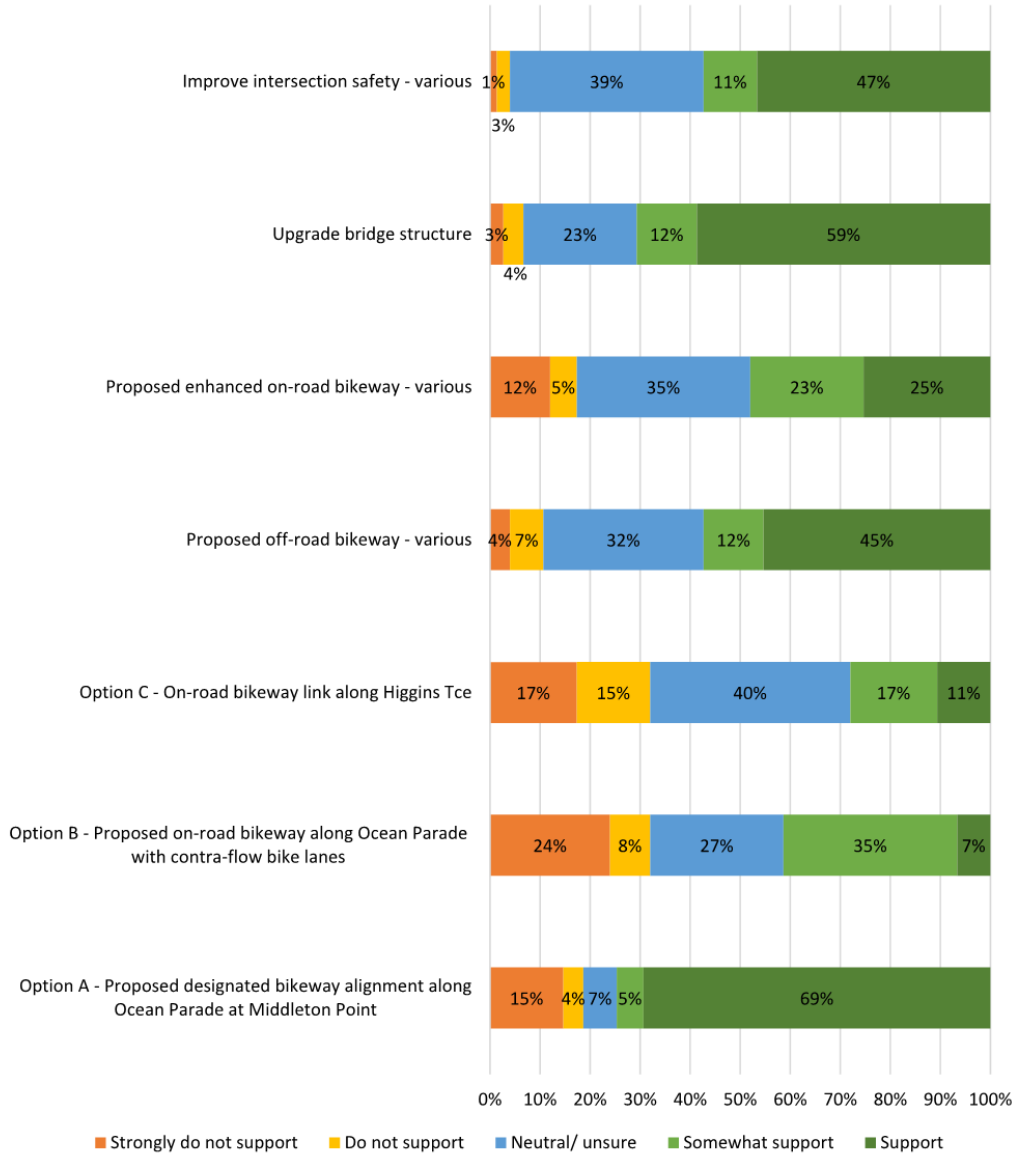


Figure 7 - Level of support for proposed upgrades to Middleton/Ocean Parade (Plan CP-05; 75 responses)

Surfers Parade/Goolwa Beach (Plan CP-06)

91 responses were received for Surfers Parade/Goolwa Beach (Plan CP-06). Figure 8 displays the results for this section.

Option A (Upgrade existing on-road bikeway or footpath along Kightley Road) was the most supported of the proposed realignment options (ie of Options A through to C) with a combined 68% of respondents either supporting (46%) or somewhat supporting (22%) Option A. Support for the other options was very divided.

Reasons for supporting Option A included:

- Enhances use and safety of the area for pedestrians and cyclists
- Cost effective and least invasive of the natural landscape
- Cyclists still have the option of utilising the existing gravel path across the flood plain

Some noted that Kightley Road can be busy and dangerous for recreational cyclists during peak periods.

Reasons for not supporting or being unsure/neutral of the other options included:

- The elevated boardwalk is not necessary
- Reed Place can be subject to pooling where there is heavy rain
- Disturbance to local wildlife
- Intrusive to households adjacent the bikeway i.e. intrusion of privacy
- Lack of seaviews

There was good support for both improving intersection safety and upgrading the bridge. 77% of combined respondents either support (62%) or somewhat support (15%) improving intersection safety. 78% of combined respondents either support (64%) or somewhat support (14%) the bridge upgrade.

Reasons for supporting improving intersection safety and upgrading the bridge included:

- Remove nails on bridge structure and use a recycled environmentally friendly non-slip surface product on the surface

Support for the on-road, off-road and off-road board walk upgrades was more divided. However, of these upgrades the board walk received the most combined support (61% of respondents either support or somewhat support). Key reasons for responses to these upgrades included:

- Need to consider conflict between surfers, cars and cyclists on Surfers parade, especially during peak periods. Give them separate spaces. Some suggested cyclists on the ocean side of car parks, others the reverse.
- Suggestion to separate walkers from cyclists versus keeping them together
- Boardwalk enhances use and safety if it is reserved for pedestrians versus concern that the boardwalk will obstruct views or be slippery or impact too greatly on the dunes. One suggested the boardwalk could be “lowered” to still enable views

- Shift on-road bikeway to Miami Boulevard instead of Waikiki Way
- Avoid on road pathways as much as possible
- Avoid damaging dunes and the natural environment
- Suggestions to make Surfers Parade one-way and underground powerlines to provide more space for managing bikes, pedestrians and cars
- Consider give way signage at car park crossovers to prevent collisions especially during peak periods and zebra crossings at intersections
- Ensure wide enough pathways (eg 3m)
- Upgrade boardwalk/bridge in Tokuremoar Reserve. Its slippery, has nails sticking up, has poor alignment and flooding is an issue.

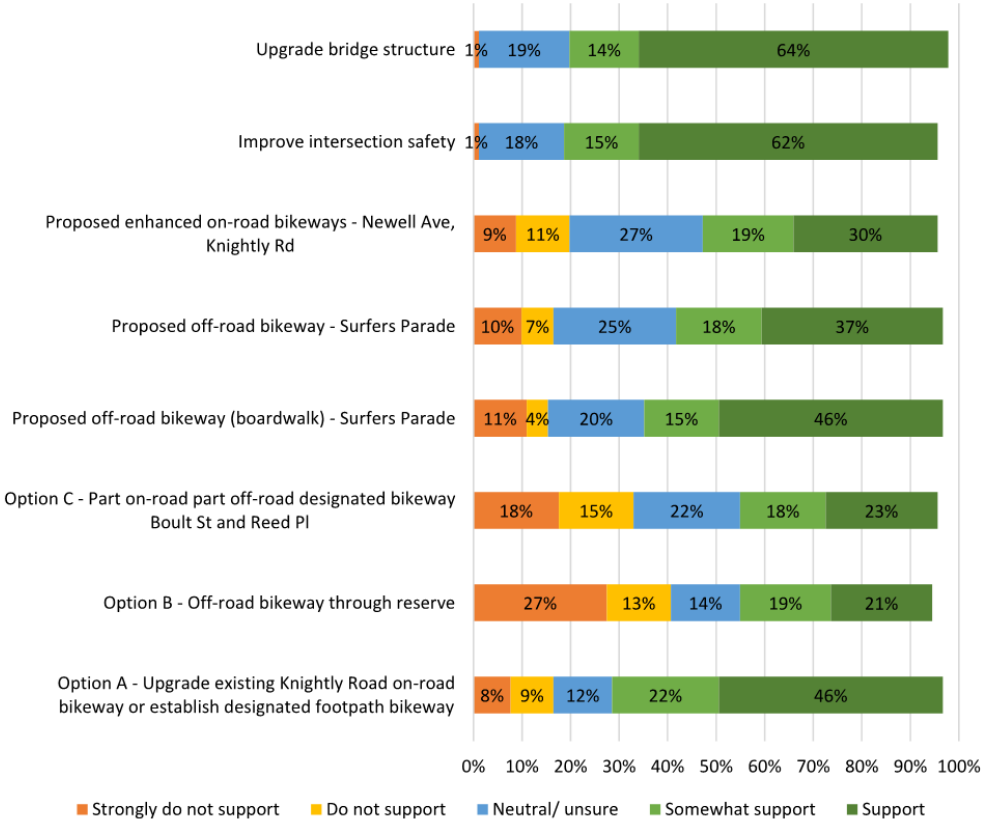


Figure 8 - Level of support for proposed upgrades to Surfers Parade/Goolwa Beach (Plan CP-06; 91 responses)

Goolwa Beach (Plan CP-07)

56 responses were received for Goolwa Beach (Plan CP-07). Figure 9 displays the results for this section.

Proposed upgrades to improve intersection safety and the off-road bikeway were both well supported with over 80% of combined respondents wither supporting or somewhat supporting the upgrades.

Reasons for supporting these upgrades included:

- Off-road track improves safety near restaurants
- Keeping the bikeway close to coast line keeps the elevation of the bikeway to a minimum, this is helpful for casual users and children
- Location on the western side of Beach Road is much safer

Support for the on-road bikeway upgrade was more divided. Although a combined 62% of respondents support or somewhat support the upgrade, the remaining approximately 40% of respondents were split between not supporting it or being neutral/unsure.

Reasons for not supporting the on-road bikeway or being neutral/unsure included:

- Nothing memorable along the on-road paths
- Conflicts along Bristow Smith Avenue including traffic, steep gradients and blind corners.

There was a view that the bikeway should be extended to Beacon 19 and the Barrages as it is a significant local heritage site of the river. The proposed off-road bikeway on the western verge of Beach Road would need to consider the Heritage Agreement which applies to the Goolwa Dunes to minimise damage to native vegetation.

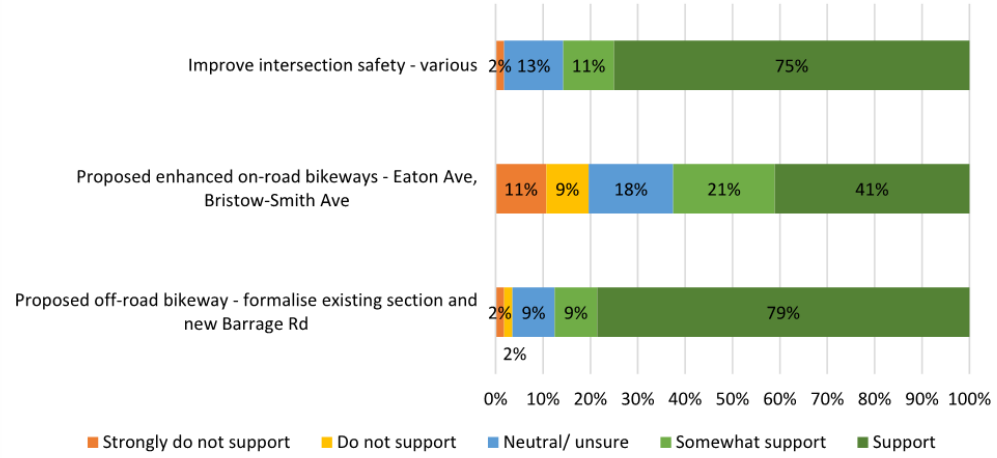


Figure 9 - Level of support for proposed upgrades to Goolwa Beach (Plan CP-07; 56 responses)

Barrage Road/Riverside Drive/Goolwa Wharf/Amelia Park/Richard Ballard Park (Plan CP-08)

60 responses were received for Barrage Road/Riverside Drive/Goolwa Wharf/Amelia Park/Richard Ballard Park (Plan CP-08). Figure 10 displays the results for this section.

Option A (Trail continues along shared road) route realignment received significantly stronger support than Option B. A combined 87% of respondents either supporting (82%) or somewhat supporting (5%) Option A. Reasons for supporting Option A included:

- Elimination of the dangerous unpaved section through the parking lot just east of the Hindmarsh Island Bridge
- Safer for cyclists particularly as Jaralde Park can get quite busy
- Makes sense to bring cyclists into the Wharf area
- Improved connectivity between boardwalk and adjoining paths at both ends

Reasons for not supporting or being unsure/neutral of Option B included:

- It is not the most direct route
- Not appropriate with the interface with the train and steep gradient

There was good support for both improving intersection safety and the off-road bikeway. 70% of combined respondents either support (57%) or somewhat support (13%) improving intersection safety. 65% of combined respondents either support (52%) or somewhat support (13%) the off-road bikeway.

Reasons for supporting improving intersection safety included the opportunity to straighten out the sharp bends.

There was less support for the on-road bikeway with more respondents combined being neutral/unsure or not supportive than those being supportive or somewhat supportive.

Reasons for supporting the off-road bikeway included the bikeway through Amelia Park removes conflict with motorists, particularly dangerous when vehicles are reversing.

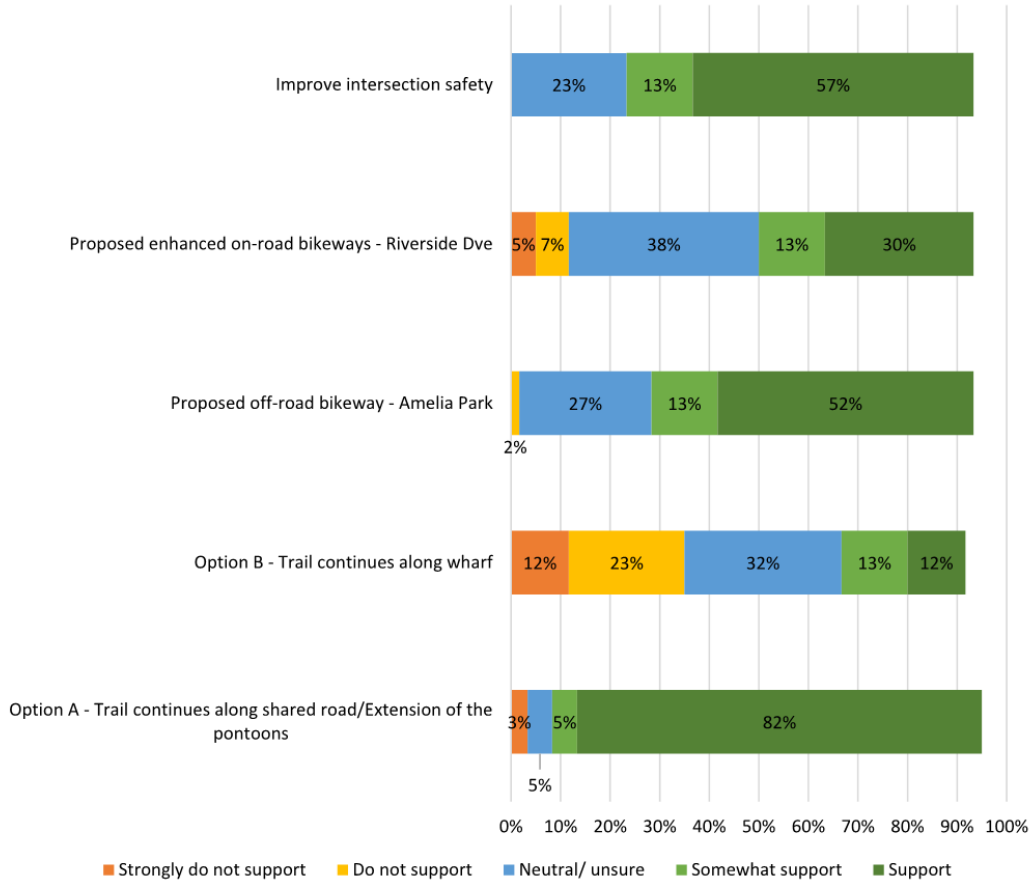


Figure 10 - Level of support for proposed upgrades to Barrage Road/Riverside Drive/Goolwa Wharf/Amelia Park/Richard Ballard Park (Plan CP-08; 60 responses)

Richard Ballard Park/Liverpool Road (Plan CP-09)

48 responses were received for Richard Ballard Park/Liverpool Road (Plan CP-09). Figure 11 displays the results for this section.

There was strong support for all upgrades in this section. All these upgrades were either supported or somewhat supported by more than 75% of combined respondents. Reasons for supporting these upgrades included:

- Improves safety and access
- Upgrades improve an already great section of the bikeway

Reasons for not supporting these upgrades included:

- The central vegetated median with new hardwood timber bollard ae hazardous for cyclists
- Safety concerns where the bikeway crosses through car parking areas.
- Upgrades such as replacing the pine barrier are unnecessary and expensive.

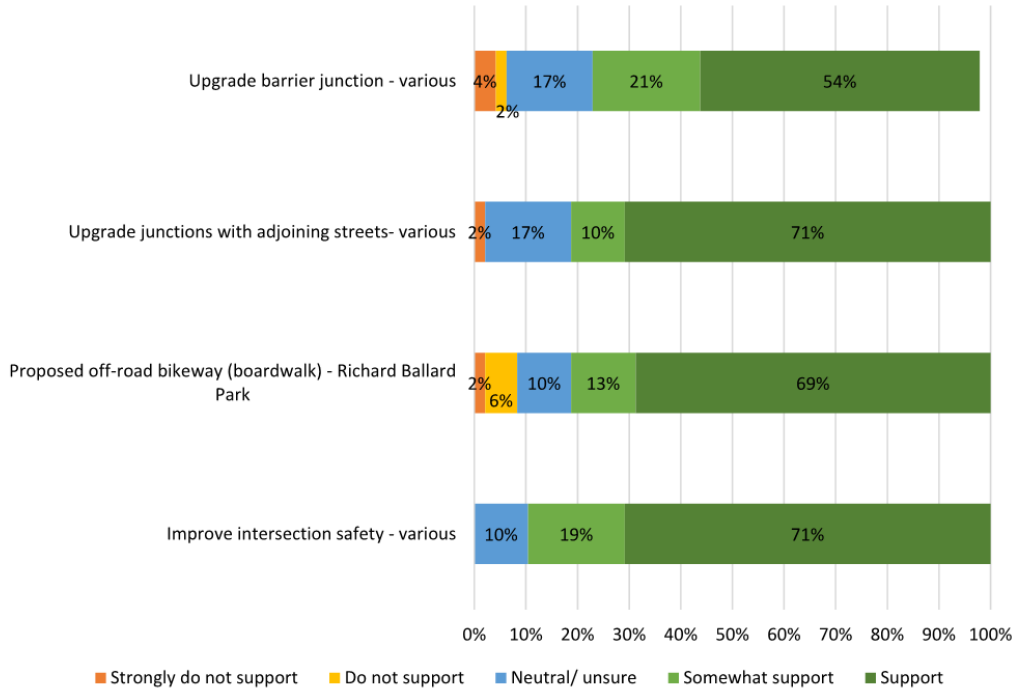


Figure 11 - Level of support for proposed upgrades to Richard Ballard Park/Liverpool Road (Plan CP-09; 48 responses)

Appendix A – Survey questions

Encounter Bikeway

Alexandrina Council has prepared draft concept plans for proposed upgrades to the Encounter Bikeway to improve safety, amenity and user experience.

The draft concept plans are divided into 9 sections of the Bikeway and can be viewed from Council's My Say Alexandrina website at www.mysay.alexandrina.sa.gov.au/encounterbikeway. Each section includes a variety of proposed upgrades including route realignment options, new off road or enhanced on road bikeways, intersection safety improvements and bridge upgrades.

You need to have viewed the draft concept plans prior to completing this survey.

The following survey will ask for your feedback on the 9 sections of the Bikeway. You can provide feedback on as many or as few of the sections as you wish by skipping to the next section.

Have your say by completing this survey by 5pm Sunday 5 June 2022.

Feedback received will be considered and the upgrade plans will then be finalised.

Thank you for providing your feedback.

ABOUT YOU

1. **Please provide your name and email address if you wish to be kept informed about this project** (OPTIONAL)

Name:

Organisation (if applicable):

Email:

2. **How old are you?** (COMPULSORY)
   - <10
   - 11-20
   - 21-30
   - 31-40
   - 41-50
   - 51-60
   - 61-70
   - 71-80
   - 80+

3. **What is your relationship to the Encounter Bikeway? (tick all that apply):** (COMPULSORY)
   - User of the Encounter Bikeway
   - Nearby resident

- Nearby business
- Member of industry or community group
- Rate payer
- Visitor
- Other (please specify)

4. **How do you use the Encounter Bikeway? (tick all that apply):** (COMPULSORY)
   - For fitness
   - For commuting to shops, work, services, events, ou etc
   - For a family or social outing
   - Exploring the area
   - Enjoying the scenery/nature
   - Other (please specify)

YOUR FEEDBACK

5. **Do you want to provide feedback on the DUMP BEACH/CHITON ROACKS/BULLIES BEACH (Plan CP-01) section of the Bikeway?**
   - Yes
   - No (survey jumps to next section)

6. **How strongly do you support each of the bikeway realignment options and upgrades for this section?**

	Support	Somewhat support	Do not support	Neutral /Unsure
Option A (preferred) Establish new bikeway **through coastal dunes**, building upon existing sandy track. Route provides unique experience and links to beach access. Formalised fencing (at least 1200mm high) must be implemented along rail corridor				
Option B Establish Bikeway **through reserve**, capitalising on unique, spectacular views across region. Privacy concerns by adjacent residents. Minimise removal of existing vegetation				
Option C **Existing on-road** bikeway. Street becomes very busy during peak periods with many vehicles, pedestrians &				

cyclists using narrow street creating high probability for conflict. Existing stobie poles limit opportunity to establish designated bikeway. Install sharrows for improved safety, or underground powerlines to create designated bikeway				
Option D **Alternative on-road** bikeway route. Conditions similar to existing alignment & without any opportunities for enhanced user experience				
Proposed off-road bikeway				
Proposed enhanced on-road bikeway				
Upgrade bridge structure				

7. **If you would like to comment on any of the options, or have indicated that you do not support some please help us to improve the plans by commenting below (optional)**

8. **Do you have any other feedback for how the user experience and safety could be improved in the DUMP BEACH/CHITON ROACKS/BULLIES BEACH (Plan CP-01) section of the Bikeway? (optional)**

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9. **Do you want to provide feedback on the BOOMER BEACH /KNIGHT BEACH / PORT ELLIOT HEADLAND / HORSESHOE BAY (Plan CP-02) section of the Bikeway?**

   - Yes
   - No (Survey jumps to next section)

10. **How strongly do you support each of the bikeway realignment options for this section?**

	Support	Somewhat support	Do not support	Neutral /Unsure
Option A (preferred) New link **along embankment contour**. Some vegetation removal required, although much of existing is exotic plant				

species. Opportunity to establish new lookout node with spectacular southern views				
Option B Utilise **existing track, heritage stairs and landing**. This option would require cyclist dismount to navigate stairs, and reconfiguring of kerb at carparking f Provide designated off-road bikeway or path widening				
Proposed off-road bikeway				
Proposed enhanced on-road bikeway				

11. **If you would like to comment on any of the options, or have indicated that you do not support some please help us to improve the plans by commenting below (optional)**

12. **Do you have any other feedback for how the user experience and safety could be improved in the BOOMER BEACH /KNIGHT BEACH / PORT ELLIOT HEADLAND / HORSESHOE BAY (Plan CP-02) section of the Bikeway? (optional)**

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13. **Do you want to provide feedback on the HORSESHOE BAY / BASHAMS BEACH (Plan CP-03) section of the Bikeway?**

- Yes
- No (survey jumps to next section)

14. **How strongly do you support each of the bikeway realignment options for this section?**

	Support	Somewhat support	Do not support	Neutral /Unsure
Option A (preferred) Retain existing parallel parking along southern verge. Proposed designated off-road bikeway to capitalise on spectacular views and links to tourist destinations.				

Potential for new cantilevered boardwalk with viewing areas and seating				
Option B Potential for on-road bikeway, however precinct gets extremely busy during peak periods with high risk of conflict between vehcles and cyclists				
Proposed off-road bikeways				
Proposed enhanced on-road bikeway				
Improve intersection safety				

15. **If you would like to comment on any of the options, or have indicated that you do not support some please help us to improve the plans by commenting below (optional)**

16. **Do you have any other feedback for how the user experience and safety could be improved in the HORSESHOE BAY / BASHAMS BEACH (Plan CP-03) section of the Bikeway? (optional)**

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17. **Do you want to provide feedback on the RATALANG / BASHAM BEACH (plan CP-04) section of the Bikeway?**

- Yes
- No (survey jumps to next section)

18. **How strongly do you support the proposed upgrades for this section?**

	Support	Somewhat support	Do not support	Neutral /Unsure
Proposed off-road bikeways				
Proposed enhanced on-road bikeway				
Upgrade bridge structure				
Improve intersection safety				

19. If you would like to comment on proposed off-road bikeway, or have indicated that you do not support it please help us to improve the plans by commenting below (optional)

20. Do you have any other feedback for how the user experience and safety could be improved in the RATALANG / BASHAM BEACH (plan CP-04) section of the Bikeway? (optional)

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21. Do you want to provide feedback on the MIDDLETON / SURFERS PARADE (plan CP-05) section of the Bikeway?

- Yes
- No (survey jumps to next section)

22. How strongly do you support each of the bikeway realignment options and upgrades for this section?

	Support	Somewhat support	Do not support	Neutral /Unsure
Bikeway option A (preferred) Proposed designated bikeway alignment along Ocean Parade. Precinct is extremely busy during peak summer periods & events, with existing footpath becoming congested of potential conflict with pedestrians & vehicles. Increase width of existing path with potential new cantilevered boardwalk where necessary				
Bikeway option B Proposed on-road bikeway with contra-flow bikelanes space permitting				
Bikeway option C On-road bikeway link along Higgins Terrace				
Proposed off-road bikeways				
Proposed enhanced on-road bikeways				
Upgrade bridge structure				

Improve intersection safety				

23. If you would like to comment on any of the options, or have indicated that you do not support some please help us to improve the plans by commenting below (optional)

24. Do you have any other feedback for how the user experience and safety could be improved in the MIDDLETON / SURFERS PARADE (plan CP-05) section of the Bikeway? (optional)

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25. Do you want to provide feedback on the SURFERS PARADE / GOOLWA BEACH (plan CP-06) section of the Bikeway?

- Yes
- No (survey jumps to next section)

26. How strongly do you support each of the bikeway realignment options and upgrades for this section?

	Support	Somewhat support	Do not support	Neutral /Unsure
Bikeway option A (preferred) Upgrade existing on-road bikeway or establish designated bikeway by widening footpath to improve safety				
Bikeway option B Off-road bikeway through reserve. Note: Area subject to flooding and safety/privacy concerns from residents				
Bikeway option C Part on-road part off-road designated bikway would require crossing flood plain and bikeway grade would actually be steeper than existing route				
Proposed off-road bikeway (Boardwalk)				
Proposed off-road bikeway				
Proposed enhanced on-road bikeways				

Improve intersection safety				
Upgrade bridge structure				

27. If you would like to comment on any of the options or upgrades, or have indicated that you do not support some please help us to improve the plans by commenting below (optional)

28. Do you have any other feedback for how the user experience and safety could be improved in the SURFERS PARADE / GOOLWA BEACH (plan CP-06) section of the Bikeway? (optional)

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29. Do you want to provide feedback on the GOOLWA BEACH (plan CP-07) section of the Bikeway?

- Yes
- No (survey jumps to next section)

30. How strongly do you support each of the bikeway realignment options and upgrades for this section?

	Support	Somewhat support	Do not support	Neutral /Unsure
Proposed off-road bikeway				
Proposed enhanced on-road bikeways				
Improve intersection safety				

31. If you would like to comment on any of the upgrades, or have indicated that you do not support some please help us to improve the plans by commenting below (optional)

32. Do you have any other feedback for how the user experience and safety could be improved in the GOOLWA BEACH (plan CP-07) section of the Bikeway? (optional)

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33. Do you want to provide feedback on the BARRAGE ROAD / RIVERSIDE DRIVE / GOOLWA WHARF / AMELIA PARK / RICHARD BALLARD PARK (plan CP-08) section of the Bikeway?

- Yes
- No (survey jumps to next section)

34. How strongly do you support each of the bikeway realignment options and upgrades for this section?

	Support	Somewhat support	Do not support	Neutral /Unsure
Bikeway option A (preferred) Trail continues along shared road with potential new pavement treatment and line-marking and signage to indicated slow shared zone				
Bikeway option B Trail continues along wharf; Possible conflict with other users, and surface issues with existing heritage wharf consisting of timber sleepers with significant gaps - a hazard to cyclist				
Bikeway option C Existing alignment				
Proposed off-road bikeway				
Proposed enhanced on-road bikeways				
Improve intersection safety				

35. If you would like to comment on any of the options or upgrades, or have indicated that you do not support some please help us to improve the plans by commenting below (optional)

36. Do you have any other feedback for how the user experience and safety could be improved in the BARRAGE ROAD / RIVERSIDE DRIVE / GOOLWA WHARF / AMELIA PARK / RICHARD BALLARD PARK (plan CP-08) section of the Bikeway? (optional)

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37. Do you want to provide feedback on the RICHARD BALLARD PARK / LIVERPOOL ROAD (plan CP-09) section of the Bikeway?

- Yes
- No (survey jumps to next section)

38. How strongly do you support each of the bikeway realignment options and upgrades for this section?

	Support	Somewhat support	Do not support	Neutral /Unsure
Improve intersection safety				
Proposed off-road bikeway (Boardwalk)				
Upgrade junctions with adjoining streets				
Upgrade barrier junction				

39. If you would like to comment on any of the upgrades, or have indicated that you do not support some please help us to improve the plans by commenting below (optional)

40. Do you have any other feedback for how the user experience and safety could be improved in the RICHARD BALLARD PARK / LIVERPOOL ROAD (plan CP-09) section of the Bikeway? (optional)

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41. Do you have any other comments on the draft concept plans for the Encounter Bikeway?

Free text comment box


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