



DRAFT

SUNSET STRIP BIKE JUMP PARK **CONCEPT DESIGN**



SUNSET STRIP LOCAL DIRT JUMPS

DESIGN STRATEGY

INTRODUCTION

World Trail has been engaged by the Bass Coast Mountain Bike Association (BCMBA) and Bass Coast Shire Council to help develop an alternative 'enhanced' concept trail design within the Sunset Strip reserve.

A concept design was previously developed for the site as part of the Bass Coast Mountain Bike Parks Concept Report 2025. This previous design utilised the available corridors through the vegetation to offer two short jumps lines and a cross-country/skills trail. Since this design, a significant amount of woody weeds (pittosporum) has been removed from the site, which has opened up the site significantly. With the increased clearing at the site, the BCMBA recognised the potential to utilise all the available slope (10 meter fall over 100m) for longer jump trails.

DESIGN CONSIDERATIONS

As a local 'micro' site, the trails and jump features are intended to be constructed out of a suitable imported compactable fill, with a decomposed granite (or equivalent) ride surface (if required). Structures are to be kept to a minimum and ideally constructed from timber. This approach will provide a more natural facility that allows scope for periodic modifications, which could either be done professionally or by partnering with the local riders for their active involvement.

The site is immediately adjacent to the residents along Vision Circuit, so to reduce impact to these residents planting of native trees and shrubs is proposed along the northern edge to provide a natural buffer.

The trailhead is located on the cleared grassy high point in the northern corner of the reserve. An elevated start mound is proposed to provide a formalised roll in, and to provide critical speed into the first jump on the Advanced line.

Three trails are proposed: Easy, Intermediate and Advanced, with each trail being

approximately 120m long. The Intermediate and Advanced lines use all available slope to exit through the trees at the bottom of the site. The trails follow the natural flow of the landscape incorporating tight berms to change direction and weave between the trees.

All three trails roll back up slope before merging as one and joining the existing concrete pathway back to the top of the site. A compacted gravel path then takes riders back to the start mound.

TRAIL DESIGN

Advanced Line

The advanced 'difficult' line starts from the start mound to build some momentum into the first feature, a gap drop jump; a feature designed to filter out less experienced riders at the beginning of the run. This is followed by a large shark-fin style feature that bends left directing riders into a large step-up tabletop positioned in the clearing. This is the largest jump with open space for spectating. From the step-up tabletop, riders use the speed to whip through two tight berms that provide the line into a right-hand hip. The run finishes through a double roller into a large berm that is shared with the Intermediate line.

Intermediate line

The Intermediate line drops in to a series of table-top jumps interspersed by a couple of tight berms. The jumps are intended to be slightly variable, with a 'quark knuckle' design (increasing heights across the jump) to allow for progression.

Easy line

The easy line snakes through a series of double rollers, small table-tops and berms. The design provides excellent opportunity for new riders to improve their riding skills.



SUNSET STRIP JUMPS PARK CONCEPT DESIGN



LEGEND

- Advanced Jumps
- Intermediate Jumps
- Beginner Jumps
- Gravel surface
- Platform seat
- Buffer tree and shrub planting
- (A) Low fence
- (B) Start Mound (multi level)
- (C) Return Trail to Start Mound
- (D) Bike Park Signage(Optional)
- (E) Potable Water Point (Optional)
- 1 Berm
- 2 Roller
- 3 Double Roller
- 4 Table Top
- 5 Step up Table Top
- 6 Gap drop
- 7 Double Berm
- 8 Hip Jump
- 9 Shark Fin

Scale: 1:500



SUNSET STRIP LOCAL DIRT JUMPS

DIRT JUMP FEATURES

1

Berm

- Enables riders to corner faster without braking
- Variable sizes to suit different rider ability/speed
- Small 'snake run' berms a fun beginner feature



2

Roller

- Good for practicing 'pumping'
- Used between jumps to generate speed



3

Double Roller

- A double roller is a pair of rollers placed close together in sequence.
- Designed so riders can either pump through to generate speed or jump across





4

Table top

- Table top provide flat safe landing suitable for all abilities
- Facilitates progression by allowing less experienced riders to land on elevated landing, while advanced riders can clear the crest



5

Step-up table top

- More advanced style of table top jump where riders jump onto or over a raised crest and down the landing ramp
- Facilitates progression by allowing less experienced riders to land on elevated landing, while advanced riders can clear the crest



6

Gap drop

- Suitable for advanced riders
- Jump landing is lower than take-off ramp

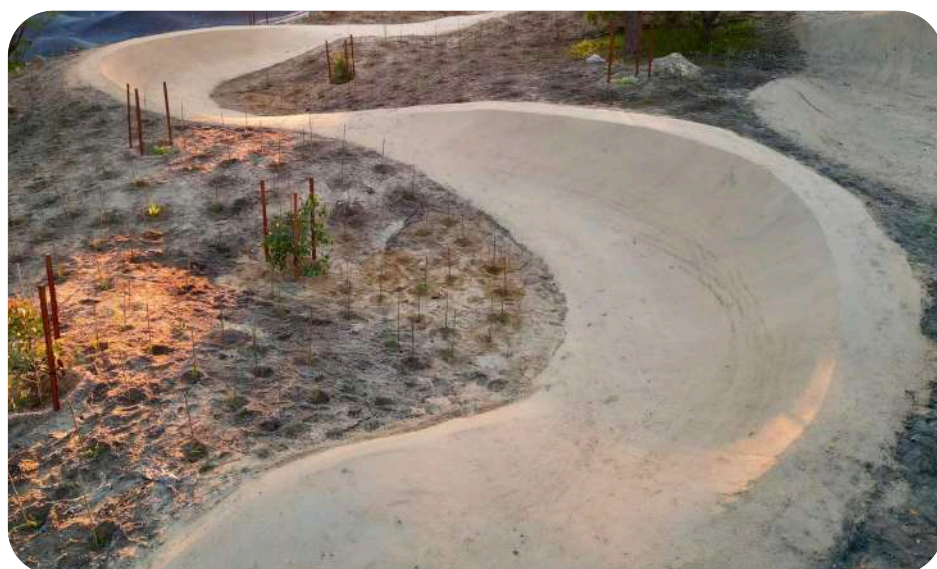




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Double Berm

- A pair of consecutive, banked turns allowing riders to carry speed smoothly from one corner into the next without heavy braking.
- Used to control flow manage rider momentum and



8

Hip Jump

- Suitable for riders of all levels
- Take-off and landing are offset at an angle requiring rider to change direction mid-air
- Can be rolled or jumped offering opportunity for progression



9

Shark fin

- Timber or dirt feature with pronounced side angle for change of direction
- Requires riders to move laterally
- Can be jumped or rolled





SUNSET STRIP LOCAL DIRT JUMPS

COST ESTIMATION

This cost estimate has been prepared based on the approved concept designs and reflects anticipated costs for tender ready design documentation and construction delivery of the proposed bike facilities. The estimated costs have been provided for each of the regional and district sites.

This cost estimate represents an opinion of probable cost only, based on current industry rates and recent comparable projects. All costs remain subject to market fluctuation, including variations in material supply, labour availability and contractor pricing, and will require confirmation as the detailed design is finalised and procurement is undertaken.

The cost estimate is based on construction costs applicable to the 2025–26 financial year. A cost escalation allowance of four (4) percent per annum is recommended to be applied beyond this period where delivery occurs in subsequent financial years.

A construction contingency of 20 percent has been applied.

The estimate is subject to the following assumptions and exclusions.

Approvals & Statutory Processes

- Council will manage and obtain all planning, statutory and landowner approvals.
- No allowance is included for community consultation, planning reports, permit conditions or approval-related design revisions.

Specialist Assessments

- No environmental impact assessments, flora/fauna surveys or offset requirements included.
- No cultural heritage assessments or management plans included.
- No arborist assessments, tree protection plans or vegetation removal approvals included.
- No DDA compliance audit or access reporting included.

Site Conditions & Ground Risk

- No allowance has been made for abnormal or latent ground conditions.
- No allowance for contaminated land, hazardous materials, site remediation or disposal of unsuitable material.
- Existing site levels are assumed suitable for construction, with no requirement for flood mitigation works or raising of finished surface levels.

Civil & External Infrastructure

- No design or construction of access roads, car parking areas, buildings, criterium track included.
- No provision of power supply, electrical infrastructure or public lighting included.
- No allowance for major service relocations or authority upgrade works.

Post-Construction

- No establishment, or maintenance period beyond standard practical completion included.

Any variation to the above assumptions, site conditions, approval requirements or market conditions may result in cost adjustments. The estimate should therefore be considered indicative and subject to refinement following detailed site investigations, authority requirements and completion of detailed design documentation.

Item	Description	Unit	Quantity	Cost \$ (excl.GST)
Tender Design Documentation				
Site Assessment	Detailed site assessment by team of two to inform construction methodology.	hours	54	10,800
Survey	Expenses			1,500
	<i>Excluded</i>	Item	0	-
Geotechnical Investigation	Site Land and Feature Survey			
	<i>Excluded</i>	Item	0	-
Safety in Design (SID) Report	Geotechnical lab testing to inform construction requirements. Including contaminated land testing.			
	Develop and review SID report across the project duration.	Item	1	1,500
Design Consultancy	Development of construction design documentation suitable for tendering. This is a low estimate cost and may increase significantly depending on the preferred level of detailed documentation.	percent	1	15,000
Design Total				\$ 28,800
Construction Preliminaries				
Project Establishment	Mobilisation and site establishment (inc. equipment hire, site office, temporary fencing, etc.), works insurance and overheads, construction management plans, staff accommodation and incidentals. Estimation based on percentage of construction cost.	percent	15.00%	31,051
Project Management	Management of construction contract. Estimation based on percentage of construction cost.	percent	15.00%	21,171
Construction – Trails				
Start Mound	Bulk earthworks to form start mound. Approximate size of 3m wide x 2m deep x 1.5m high.	tonne	56	3,360
Advanced line	machine operator	hours	16	2,400
	labour x 2	hours	32	3,200
	Construction of Difficult rated Mega Airflow trail style using suitable imported material.	m	118	4,720
	feature x 8	tonnes	192	11,520
Intermediate line	machine operator	hours	63	9,450
	labour x 2	hours	126	12,600
	Construction of Intermediate rated Mega Airflow trail style using suitable imported material.	m	142	5,680
	feature x 6	tonnes	96	5,760
Beginner line	machine operator	hours	45	6,750
	labour x 2	hours	90	9,000
	Construction of Easy rated Airflow trail style using suitable imported material.	m	118	4,720
	feature x 6	tonnes	67	4,032
Return track	machine operator		45	6,750
	labour x 2		90	9,000
	Compacted gravel return trail to start mound	m2	50	5,500
Subtotal				104,442
Landscaping – Soft				
Trees/shrubs	Supply and establishment of native vegetation to provide buffer along Vision Circuit.	Item	14	7,700
Large rocks/logs	Allowance for large rocks and logs around site.	Item	1	5,000
Subtotal				12,700
Landscaping – Hard				
Seating platform	Supply and install 2x2m seating platform	Item	1	10,000
Bike rack	6m long bike rack	Item	1	3,000
Sign large	Supply and installation of Large trailhead information sign. Does not include design.	Item	1	5,000
Sign small	Supply and installation of small trail difficulty/information signs at start of each trail. Design not included.	Item	3	6,000
Subtotal				24,000
Subtotal Construction (Excl. GST)				\$ 193,365
Contingency	Project contingency	Item	20.00%	38,673
ConstructionTotal (Excl. GST)				\$ 232,037



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