

THE PROJECT

The Pump Track and Skate Park at Alma Treloar Reserve are being developed to cater for the youth of Cockatoo and the growing demand in mountain biking and skating in the greater Cardinia region. It will be a facility which caters for the youth within the community through the provision of a unique and emerging activity which is complimentary to surrounding youth facilities.

The following report outlines the design process and outcomes for the Alma Treloar Reserve Pump Track and Skate Park Concept.



PLANNING BACKGROUND

Through the 2018 master planning process for the Reserve, it was decided that a pump track should be constructed at the southern end of the reserve, with access from Pakenham Road and the proposed jogging track and new skate infrastructure provided adjacent the existing skate bowl, to allow and support entry level skate park users, combined with the addition of a skate park shelter.

Designed within the context of the Alma Treloar Master Plan these facilities will play a key part in establishing Alma Treloar Reserve as a community hub.



PAGE 3

THE PROJECT SITE

As identified in the Master Plan, the proposed Pump Track sits in the southern end of the Reserve. The site sits at the base of a significant slope and will be accessed via the proposed primary pedestrian spine which links the stair entry from Pakenham Road to the dog park and carpark. To the west of the site is Cockatoo Creek and riparian vegetation which will be fenced to protect habitat. There is also a sewer line running parallel to the creek.

The proposed Skate Park additions are located south of the existing skate bowl and will again be accessed from the primary pedestrian spine. Informal entry to the existing skate bowl is occurring from the north west and off of the existing retaining wall.









PAGE 4

REFERENCE IMAGES

Pump tracks and skate parks have a variety of different options in terms of layout and features. The images presented here show some of the variety and have been used as reference in development of the pump track and skate park concept for Alma Treloar Reserve.





















PUMP TRACK SURFACE MATERIAL

Pump tracks can be constructed with a diverse range of surface materials. Each material has advantages and disadvantages which are outlined below. While the consultation results indicated a preference for a combination of surfaces, due to the larger user base and lower ongoing maintenance it is recommended that the Alma Treloar Pump Track is constructed primarily with an asphalt surface. A range of feature materials could also be incorporated into the design.



MODULAR

- Relocatable
- Suitable for bikes,
- skateboards, inline skate, scooters

Unskilled labour

ALMA TRELOAR PUMP TRACK

ASPHALT

Moderate cost

& sustainable

High traction

Suitable for bikes,

weather

scooters

vandalism

Low maintenance, durable

Year round usability in any

skateboards, inline skate,

Consistent surface quality

Neat look & resistant to

Low rolling resistance



CONCRETE

- Durable, sustainable
- Low rolling resistance
- Year round usability in any weather
- Surface structure choice (smooth, grippy, rough)
- Colour choice
- Usable for bikes, skateboards, inline skate, scooters
- Resistant to vandalism
- Neat look

ADVANTAGES

Low material cost

NATURAL

- Involvement of local volunteers
- Flexibility (layout and design can be changed any time)
- Natural look and feel
- Construction possible in bushland
- Softer surface

High cost

- Moderate maintenance
- damage and to vandalism
- Damage irreparable
- Limited customisation

- High material cost
- Abrasive surface
- Skilled labour

- High construction cost High material cost
- Abrasive surface
- Skilled labour

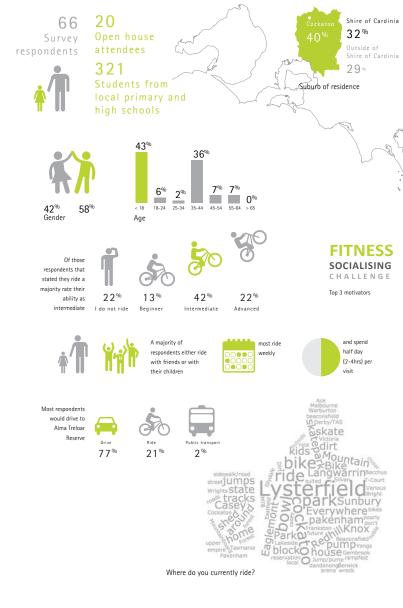
DISADVANTAGES

- High and frequent maintenance
- Only usable in good weather conditions
- Suitable for off road bikes only
- Susceptible to vandalism and damage
- Typically falls into disrepair
- Often looks dilapidated

- Highly susceptible to

CONSULTATION

A comprehensive community and stakeholder consultation process is being carried out as part of development of the Pump Track and Skate Park (refer to the consultation report for details). To date stage 1 of the consultation process has been completed and provided valuable input into development of this concept. Surveys, picture voting and presentations have helped to determine local rider profile and desires in terms of features to include.







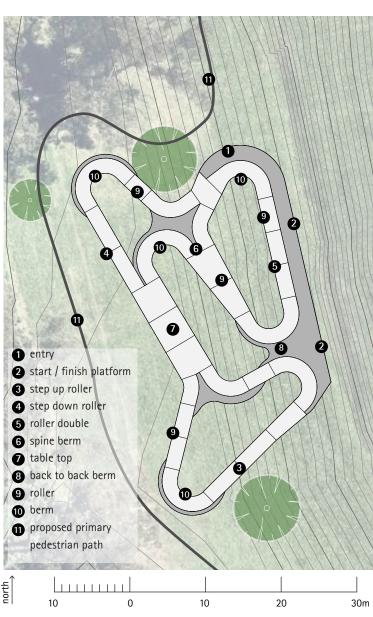
The Alma Treloar Pump Track has been designed to cater for a range of user types and experience levels. It features 600sqm of asphalt riding surface which will provide options for riders and a non repetitive experience.

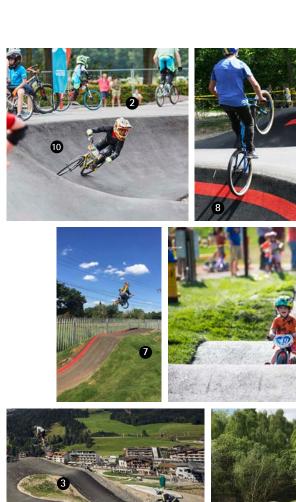
The design includes a single entry and exit point to manage risk with entry point signage. A large platform and associated start ramps connect to the entry and provide a flat area for users to socialise between loops.

The track incorporates a number of rollable features such as table tops, doubles and step up/downs. These features will create interest for new users and challenge for experienced users.

The top feature preferences identified in the consultation including berms, table top, rollers and back to back berms have all been incorporated into the design. The community also expressed a strong desire for spaces to socialise and spectate which are provided for at the entry point, rest platform and on the slope to the east of the track.

The proposed pump track will be cut into the sloping site, setting the eastern edge of the track into the hill. To the west the pump track will be raised and expressed within the landform. The pump track has been designed to maximise the slope of the site with the start platform cut into the slope. This will ensure viewsheds across the site are maintained and allow for spectators to see the whole track from the hillside east of the track.

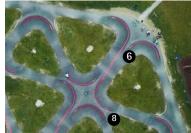












Precedent images of pump track features

The Alma Treloar Pump Track has been designed to be an engaging experience for users of all levels and to allow users to progress their skills. In terms of progression integration the community indicated they would like to see a pump track that catered for all abilities. Taking this into account while also considering safety for younger beginner riders a beginner loop has been designed into the track which can also be ridden as part of a larger loop for intermediate and advanced riders. The design features a range of intermediate and advanced lines including optional transfers between features for intermediate and advanced users. Most importantly, the track has been designed to allow new users with little confidence to navigate the track and gradually increase their abilities. The image on this page demonstrates the potential alignments users can take.

Beginner Line

Intermediate Line

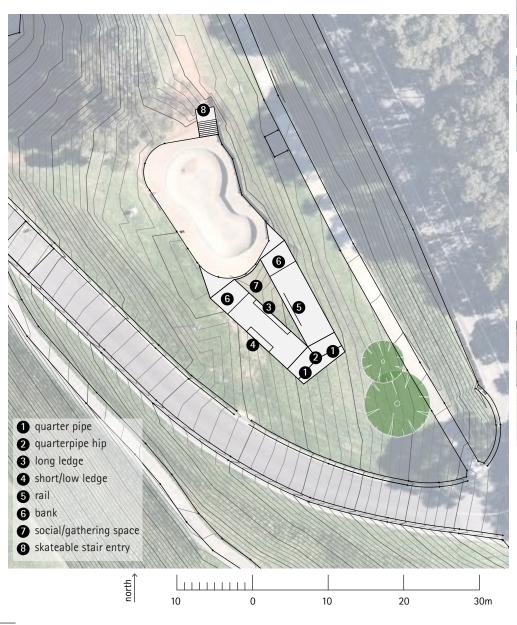
Advanced Line



The Alma Treloar Skate Park additions have been designed to cater for a range of user types and experience levels. It features 120sqm of concrete riding surface which will provide entry level options for beginner and intermediate riders and compliment the existing advanced skate bowl.

The design includes quarter pipes leading down into ledge and rail options and finishing with banks that lead into the existing edge of the bowl. These features allow for different transistion options catering for beginner and intermediate skaters. For more advanced skaters the design also allows for optional run-ins to the bowl. The stairs at the northern end will be skateable, providing a more formal entry option that is still fun. The existing retaining wall will also be upgraded to tie in with the new additions.

The top feature preferences identified in the consultation including rails, different transitions and banks have all been incorporated into the design. The community also expressed a strong desire for spaces to socialise and spectate which are provided for surrounding the skate park and in the space between the two runs.













Precedent images of skate features

The topography between the skate park and the pump track presents an opportunity to include a unique feature that is not often seen in Australia, a snake run. A snake run is a long winding purpose built path which includes features such as hipped banks, berms and rollers.

The location of the pump track at the base of a hill presents an opportunity to include a snake run which would also help to manage potential conflict with pedestrians using the proposed primary pedestrian path. With a snake run riders would only be using the proposed primary pedestrian path to get back to the top of the hill.

Note, this is outside the current scope of works for the skate park and pump track, but could be considered as a second stage of works pending funding.









Precedent images from Woodward Pennsylvania

BENCHMARK PROJECTS

The following tracks provide examples of benchmarks for the Alma Treloar Pump track proejct.



ONE71 BALDIVIS, BALDIVIS WA

- Pump track located in family oriented recreation precinct in residential estate, One71 Baldivis
- Co-located with nature playground
- Low/no maintenance asphalt surface
- 35m x 35m space
- Approx 300m2 of total track
- Beginner to intermediate bike users
- Receives high visitation from scooters, skateboards and bikes



SHEPHERD'S BUSH RESERVE, KINGSLEY WA

- Premier pump track in Perth's Northern Suburbs
- Redeveloped a dilapidated BMX jump site
- Added to a highly visual recreation precinct connected to existing bikeways and kid's cycle safety track
- 30m x 60m space
- Beginner Advanced Level Pump Track
- Approx 250m total pump track area
- Intermediate and Advanced Jumps Tracks
- Approx 120m total length of Jumps Tracks
- Asphalt surfaced construction
- Jumps Track with Asphalt surfaced lips and clay landings
- Features include rollers, jumps, berms, transfers and hips all accessed from tiered start ramp



CALEYA, TREEBY WA

- Designed to incorporate two long roller straights
- Surrounded by cycle safety track
- Constructed on greenfields site
- 60m x 40m space
- Beginner Advanced Level Pump Track
- Multiple lines and transfers
- Approx 550m total pump track area
- Features include rollers, jumps, berms, transfers and hips all accessed from tiered start ramp