

Development Plan

Down Hill Mountain bike Track

Hassans Walls Reserve



To: General **Manager, Lithgow city council.**

Issue

The Central Tablelands Mountain Bike Club inc (CTMBC) is keen to establish a local downhill mountain bike course capable of hosting club and state level events.

We seek Council approval of this proposal for a downhill cycling facility on Council controlled land within Hassans Walls reserve.

Since loosing access to the State Mine trail due to land ownership changes CTMBC has been without a quality down hill venue and thus unable to bid on State or National races nor promote the local riding area for Down Hill.

While our club has promoted Lithgow as a riding destination since 1984 the impending loss of the Lidsdale State Forest venue due to planned logging in 2010 will therefore leave the club with out a venue in the local Lithgow area.

In Hassans Walls reserve council has the opportunity to provide a quality mountain bike facility for its residents and visitors.

Demand for a downhill cycling venues

Due to development squeeze and National Park restrictions there are no legal downhill courses in the Sydney basin that are not situated on private property and

very few courses within easy reach of the enormous population base in the Sydney basin and Blue Mountains.

Proper downhill courses have been constructed at Mt Stromlo in Canberra, Awaba in the Hunter valley and at Thredbo and Mt Buller in the snow fields. The latter are seasonal facilities a long way from Sydney and the former a competition course purpose built for the world championships in 2009.

There is a very real demand for an area close to the Sydney basin, selected specifically for its ability to provide an exceptional downhill event, and for this venue to be setup specifically to meet the needs of downhill cycling.

Evidence from established cycling parks overseas, eg the Whistler Mountain bike park in Canada, suggests that, an area specifically selected, planned and built for downhill cycling will be immensely popular. Lithgow has benefitted in the past from its reputation as a Down Hill mountain biking mecca,

The 2006 national round held at the State Mine venue attracted some 325 entrants and a tourism report estimated that the visitor expenditure over the event weekend reached \$600,000 (Attached)

The event also featured in Mountain Biking DVDs and magazines as well as a new clips around the country, directly reaching targeted tourism market.



Suitability of the Hassans Walls reserve site.

For a Down Hill mountain bike venue to be successful it requires a trail that traverses down various terrain features with close road access to provide a vehicle shuttle, a parking area as well as an easily accessible event centre.

Hassans Walls reserve has all this with the existing event centre/parking area used by the pony Club proposed for use in this venture.

Correspondence has already taken place between the CTMBC and the Lithgow Pony club and an in principal access agreement has been reached between our two organisations in regards to use of their existing facilities.

The CTMBC personnel have inspected a possible descent route in the section of Hassans Walls reserve immediately above the Pony club and have concluded that, were Council amenable, a course could be constructed suitable for club and state level racing.

Further the club would be prepared to construct a course to meet councils environmental standards.



Technical specifications.

CTMBC have experienced trail builders within its organisation, in the past constructing and maintaining some of the most popular trails in the country. We use the two technical manuals on course design, construction and maintenance published by the International Mountain Bike Association(IMBA) as references.

The guide lines set out in the IMBAs manuals combined with CTMBC cyclists own experience with course construction will provide a good basis for a challenging yet environmentally responsible design for the course. MTB Australia is keen to promote and use only well designed courses as this sport must be seen as responsible and sustainable.



Prevention of other users.

Inspection has revealed that the proposed slope is not in use by other users. If this track was constructed it would be desirable to try and keep trail bikes off it. At Stromlo and Awaba boom gates and removable chains along the trails assist restricting unwanted access

We believe in this instance the start deck will act as a gate to prevent trail bikes venturing on to the trail. Signage and the tight nature of the trail will also assist this task.

What's in it for Council

1. Lithgow City Council would be a participating partner in a project with potentially a national profile, without a significant resource input.
2. Be seen as participating in objectives of the State Plan for out door recreation and therefore able to claim and possibly assist with any funding made available for such initiatives.
3. The Organising body would be able to direct any profits from events into improving the venue and its facilities and continue to promote Lithgow in a positive light as a tourist destination.
4. Many would argue it is very important with a population with a growing sedentary lifestyle and damning reports on local health problems this brings to encourage activity in young and old alike. Coupled with the need for more environmentally sustainable (non-motorised) recreation close to large urban centres you are in a unique situation to give many people the opportunity to enjoy greater access to our wonderful outdoor terrain.
5. On the news of the impending closure of the State Mine Trail council voted to assist the club in any way possible to secure a new venue.



Councils who already provide open Mountain Bike Facility on council managed land.

Like council supplied skate parks facilities it is becoming widely accepted that mountain biking facilities are needed too.

The Cycling Promotion Fund states, "... a record 1.47 million bicycles sold in 2007... Cycling has become the 4th most popular physical activity with more than 1.6 million Australian adults cycling in 2006, an increase of 17% from 2001.". Further more, Retail Cycle Traders Australia statistics show that 1998-2005 70% of all bike sales were mountain bikes.

There is a real demand for Mountain Bike facilities and government/council authorized trails are being constructed. Mountain bike sites constructed around Australia with the control, approval and assistance of local authorities in recent years include the following:

- Townsville, Queensland
- Glenorchy Mountain Bike Park- Hobart, Tasmania.
- Adelaide City Dirt jumps – Adelaide Parklands, South Australia.
- Darlington Dirt Jumps – Mundaring Shire, Western Australia.
- Anglesea Bike Park- Anglesea, Victoria.
- “The Castle” – Windsor Siding, Melbourne, Victoria.
- Albany Creek Dirt Jumps – North Brisbane, Queensland.
- Ferny Grove Dirt Jumps – North West Brisbane, Queensland.
- Lilydale Dirt Jump Park – Launceston, Tasmania.
- Port Kennedy, Singleton and Warnbro Dirt Jumps - Rockingham Western Australia.

- Tahmoor Dirt Jumps – Tahmoor, New South Wales.
- “Zone Room” Dirt Jumps – Margaret River, Western Australia.
- Depot Road Jumps-Mortdale, Sydney.
- San Remo Extreme park_ Wyong
- Monster Mtn X track- Sydney Olympic park



Key Issues

Land Ownership:

The land is Crown land currently managed as a recreational reserve by Lithgow City Council under trust with the end of the trail coming out into an area currently leased by the Lithgow Pony Club.

We believe mountain bike trail would sit well within the charter of a recreational reserve.

Access.

It is proposed that the bottom section trail be open only for official club days approved by the Pony Club.

It is envisioned that major club races would take place 4 to 5 times a year at this venue.

If council is agreeable, the top section of trail could remain as an open facility with a push up or walk through option (depending on the final agreement with the Pony Club) from where the trail enters the area used by the pony club.

Zoning:

The area falls into Zone 6 Open Space and while it is listed as environmentally sensitive, no threatened species are listed as being recorded in the area. Trail design and construction will take this sensitivity into account.

Removal of Trees and Disturbance of Bush land.

It is not envisioned that any trees will be required to be removed. Disturbance of bush land would be restricted to the narrow (1 meter on average) trail corridor and a parallel spectator walking track corridor.

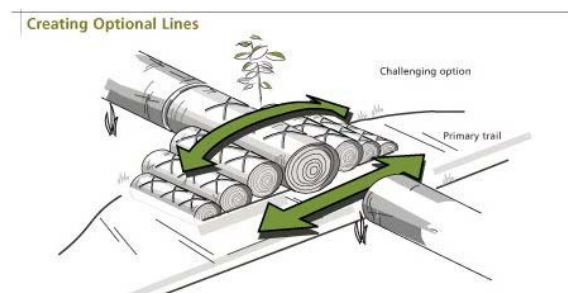
It appears that the undergrowth in the area is sparse and thus clearing the trail corridor would entail raking back the leaf litter and the occasional removal of native grasses and small shrubs. Any native grass or bush removed from the trail corridor could be replanted immediately to the side of the trail.

Design and construction.

A Down Hill mountain bike trail generally makes use of natural obstacles and terrain as it traverses from a high point at the start line to a low point at the finish.

Riders typically use highly specialised equipment and enjoy and challenging descent.

The trail corridor is generally 1 to 2 meters wide with a narrower trail pad. Optional “b lines” placed around the more challenging obstacles to allow passage of less skilled riders.



Erosion and sediment control

It is noted that major studies from both Australia and over seas have found little difference in the erosion effects of bike riders and foot traffic. In fact sediment creation and run off have been found to be less of an issue with wheeled traffic as opposed to foot traffic.

The New Zealand Department of Conservation 1995 report "Off-Road Impacts of Mountain Bikes" states:

"Research to date has indicated that the degree of impacts from mountain bikes, relative to those of walkers who have their own unique forms of impacts, appear to be similar."

And goes on to say:

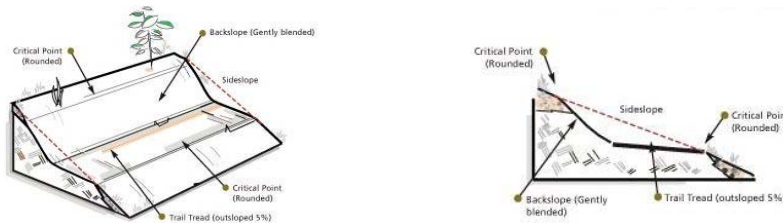
"... research has consistently indicated the location of the track and the condition of its construction through susceptible areas was more important in the occurrence of impacts than the type of activity present".

It is recognised that the key to building sustainable trails is water management.

CTMBC would undertake to construct the trail in accordance with the guide lines set out in IMBA's "Trail Solutions" manual.

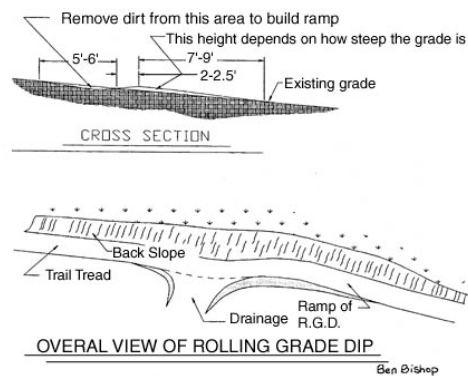
This would include, where appropriate:

- **Outwardly sloping trail surface** allowing water to sheet off the trail rather than funnelling down it.

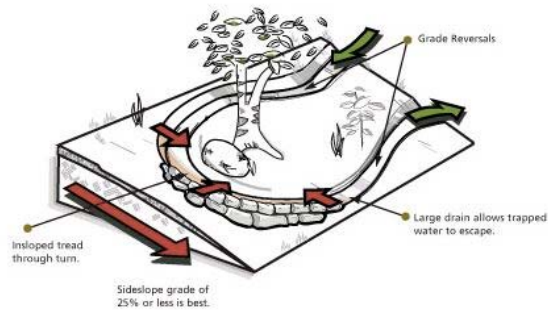


- **Grade reversals and rolling dips.**

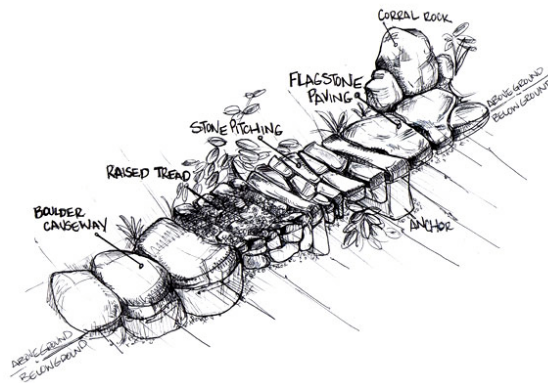
These are short sections of trail where the outward slope is increased in an area before a small rise to help water dish off. Small silt pits placed along side these trap sediment running off. This sediment can then be easily accessed for future trail maintenance purposes.



- **Inwardly sloping corners** allowing riders to maintain rhythm without excess braking/skidding.



- **Rock armouring.** Building the trail surface up with rock collected from the locale can minimise erosion issues in steeper sections of the trail.





Introducing foreign soil

The majority of the trail will be able to be constructed from the natural terrain with the aid of soil, rocks and fallen timber sourced from the benching in of the upward slope of the trail. For those areas that need additional soil to help build up the trail surface certified clean fill will be sourced and used.

Signage and trail difficulty ratings.

IMBA offers the following trail signage suggestions. Adapted from alpine ski systems they are becoming the internationally recognised grading system for mountain bike trails.

Trail Difficulty Rating System					
	Easiest White Circle 	Easy Green Circle 	More Difficult Blue Square 	Very Difficult Black Diamond 	Extremely Difficult Obl. Black Diamond 
Trail Width	72" or more	36" or more	24" or more	12" or more	6" or more
Tread Surface	Hardened or surfaced	Firm and stable	Mostly stable with some variability	Widely variable	Widely variable and unpredictable
Average Trail Grade	Less than 5%	5% or less	10% or less	15% or less	20% or more
Maximum Trail Grade	Max 10%	Max 15%	Max 15% or greater	Max 15% or greater	Max 15% or greater
Natural Obstacles and Technical Trail Features (TTF)	None	Unavoidable obstacles 2" tall or less Avoidable obstacles may be present Unavoidable bridges 36" or wider	Unavoidable obstacles 8" tall or less Avoidable obstacles may be present Unavoidable bridges 24" or wider TTF's 2' high or less, width of deck is greater than 1/2 the height	Unavoidable obstacles 15" tall or less Avoidable obstacles may be present May include loose rocks Unavoidable bridges 24" or wider TTF's 4' high or less, width of deck is less than 1/2 the height Short sections may exceed criteria	Unavoidable obstacles 15" tall or greater Avoidable obstacles may be present May include loose rocks Unavoidable bridges 24" or narrower TTF's 4' high or greater, width of deck is unpredictable Many sections may exceed criteria

A trail head sign could advise riders of the overall trail difficulty while small trail side "totem poles" could advise of impending obstacles and "B lines"

Rider Marshalling and Traffic management.

In race situations riders are shuttled to the top of the course utilising mini bus's and trailers.

It is envisioned that riders would board the buses within the Pony Club Grounds and disembark at the start of the trail (Junction with the Lookout turn off). Buses could then use the lookout car park as a u turn bay before heading back down.

As the road is capable of supporting two way traffic along its entire length this will allow the buses to be spread out thus minimising the amount of riders being delivered to the top at any one time.

Directly opposite the proposed trail starting point in a cleared section some times used for ad hoc parking by current reserve users. For racing times this area could be used to marshal the riders in their groups. Riders would then be called across one at a time to the start deck.

The top corner on Hassans walls Rdis typically a slow speed area for traffic and we believe "Beware of Cyclists" signs 100m down from either side of the intersection would be ample warning to drivers that there may be cyclist walking their bikes from the marshalling area across to the start deck during race times.

Spectator access trail

A narrower single file foot pad would be constructed parallel to the Race trail using the same principles of construction as the bike trail. This would give access to the full length of the bike trail for spectator viewing and also emergency response personnel without the need to venture onto the bike trail and risk on coming traffic.

This additional trail could also serve as a general walking trail as an alternative to the under cliff walks, which are currently closed off due to safety concerns on their side of the escarpment.

Parking and Amenities.

The site has previously been used for several large events.

A large parking area is available onsite as are toilet facilities as per the existing pony club lease.



Food Stalls.

The Pony Club has canteen facilities available. Part of the access agreement with them will entail the Lithgow Pony Club having first option to run this canteen on race days. If this is turned down the CTMBC has members with the necessary approvals to provide this service from the canteen at club races while at major events such as State races the option would be tendered to local school groups for fund raising.

Start Deck.

It is proposed that a start deck will be constructed. This involves a slightly elevated platform large enough for timing staff and starting rider. A ramp from the platform to the start of the trail acts as a starting ramp for the riders.

This would also act as an access gate to the trail with signage to educate trail users to the rules of trail, the status of the trail (open/ closed) and the degree of difficulty.

Attached.

- 1) Map with proposed route marked
- 2) Start ramp design
- 3) Lithgow Tourism committee report on Central Tablelands Mountain Bike Club National Downhill Event held at the State Mine Track on the 28th – 29th October 2006.