

# HORNSBY AQUATIC CENTRE

## Public Information Sessions

Tuesday 15<sup>th</sup> March  
(6.30pm to 9.00pm)

and

Saturday 19<sup>th</sup> March  
(2.00pm to 4.30pm)



# Aquatic Centre - Design process

- Research
- Identify the boundaries
- Develop criteria and prioritise
- Create range of options
- Test options against the criteria
- Determine a preferred option



- Investigate the situation
- Determine the givens
- Find out what matters to people, and what is more important
- Come up with a range of ideas
- Test the ideas to find best match
- Go with best match

# Engagement process

- Explain what, why, how
- Validate what is important to stakeholders
- Create and test design options
- Recommendation to Council



# Today

- Explain situation - background, constraints, opportunity, issues
- Answer your questions
- Seek to understand what is important to you about a new aquatic centre
- Get some representatives from this group
- Get your ideas on design



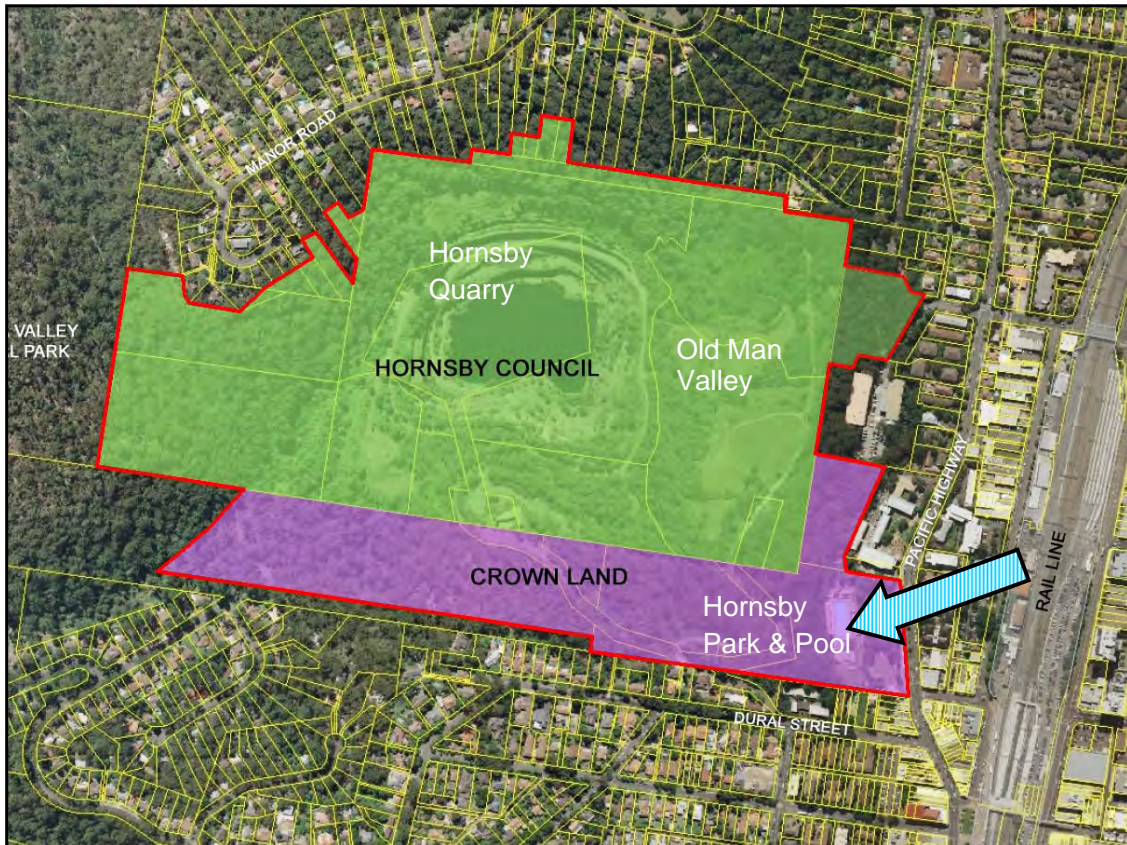
# Presentation

If you have questions, please write them with a marker on a sheet of paper on your table - one question per sheet

Staff will collect them and we will answer them at breaks in the presentation

Council commit to answer all questions, either in the session or in writing subsequently





Classification of the land is important, because it controls what Council can do with it.

Council owns the lands shaded green – the Quarry and Old Man Valley sites. They are community land and zoned for open space purposes.

Council is currently working on 2 projects on the green lands

- Hornsby Quarry - preparing environmental studies in order to seek approval to fill the pit with VENM (Virgin Excavated Natural Material).
- Old Man Valley - has undertaken a community consultation process and is preparing a Plan of Management.

Crown Land is shaded purple. Pool site is part of Hornsby Park – there are two portions – the formal part of the park that fronts the Highway, and extends to the pool and the escarpment, and bushland section behind and to the west of the pool

Council is the trustee for this land and must manage it in accordance with the Crown Lands Act. We have consulted with LPMA about the proposal and will continue dialog as the project progresses.

When we lodge the DA we will need to give LPMA notice. Our communication with LPMA will ensure that there will be no surprises on our part.

## Why Hornsby Aquatic Centre Closed



Pool was built in the 1960s, and not to a high standard.

The pool can be described as a giant bath tub, with elements added over the years to end up with what is a complex structure.

It is built out of the ground. The elements are of reinforced concrete – steel gives the concrete tensile strength and allows it to deflect when loaded. Concrete is generally OK when acting in compression.

To be effective, steel needs to be protected by concrete – it should have good cover and not be able to corrode. What we see here is not good, particularly when we take into account the corrosive environment that is created by chlorine laden water leaching into the concrete.

Deterioration of the structure was first noted about 10 years after opening – it was repaired and monitored by regular inspection.

This continued over the years, notably in the 90s.

New liner installed in 2001 . Major structural repairs to grandstand in 2005.

Major inspection in 2008 predicted likelihood of closure in 2012.

## Why Hornsby Aquatic Centre Closed

- Structural Engineer could no longer certify safe use
- Engineer changed the predicted failure from controlled to catastrophic – i.e. failure could be without warning!!



In 2009, three monthly inspections commenced. Repairs in 2010, with report recommending closure by Aug 2011 given to Council in November 2010.

Problem for Council: we could see some of what was wrong with the structure, we could not see what was hidden, we cannot analyse the structure properly we could not reliably guess what is going on.

Our previous repairs have changed the way the structure operates, load testing is not possible.

We cannot accurately predict the risks of failure, and therefore we cannot mitigate them .

My main concern was that we now had to face the chance that the structure could be subject to an uncontrolled failure without warning, with potentially serious consequences

Comment has been made about the timing of the closure. Our advice was based on normal usage, and was always qualified by stating that unexpected developments could bring the date forward.

We were coming into the peak season, and carnivals were scheduled in Feb 2011. Loadings would not have been normal.

Council was advised in December 2010 of the November report and had to make a hard decision.

## Progress to date

- Engage Design Team
- Survey of site
- Geotech investigation
- Service investigations
- Recreational Planning issues
- Other pool visits
- Cost planning
- Public Consultation commenced



### **What have we done to date?**

Council has appointed a full time project Manager to manage the pool project. In Feb 2010 Council considered a proposal to proceed with the project, nominated a budget of \$20M, and agreed to invite tenders for the design and construction management of the project. Following a process of EOI, selective tenders and interviews, Peter Hunt Architect was commissioned in Sept 2010.

Peter Hunt Architect (PHA) support team –

- Geoff Ninnes Fong - Pool structure & filtration
- AECOM – Mechanical, Electrical, Hydraulic & Fire Services
- S&G Consulting –Design, documentation & contract admin
- Acoustic Consulting Engineers Pty Ltd
- Howard Heritage Consultants
- Davis Langdon – QS & Financial Advise, BCA consultant
- Paul Scrivener Landscape Architect
- McLaren Engineering – Traffic
- Phillip Chun & Associates – Access

A series of design ideas has been developed to work out what can fit on the site, within the indicative budget

Pools visited – Bathurst (PHA), Thomastown (VIC), Leichhardt, Marrickville, Granville, Parramatta, Cabravale, Maroubra, Hurstville (PHA), Fairfield

# Funding

- Council committed to design development
- Proposed rate variation identifies \$20M for redevelopment of HAC
- Rate Variation will be determined in June 2011



Council has acknowledged that this project is a strategic priority.

Budget for 2010/11: \$600K for design

2011/12:\$600K tentatively allocated to continue design and documentation

Our application for a rate increase in 2009/10 was rejected by the Minister – Council voted to continue with the design (this was before we knew that the pool would close)

What happens if the rate increase is again rejected? I don't know the exact answer, other than to say that Council has repeatedly stated that it is committed to the replacement of the pool. It is serious in its intent. There will have to be some hard decisions made regarding priorities in service delivery across all the areas of Council's operations, and what can ultimately be built.



## Questions/Answers



Prior going to the next slide, keep in mind:

- The new pool complex will be around for 80+ years!
- Don't just think of your needs. Think of the needs of your kids and there kids in the future
- Will you have the same needs in 10 years time?



This slide shows there are many needs that Aquatic Centres can accommodate:

- Learn to Swim
- Warm Water
- Yoga
- Rehabilitation
- Leisure
- Toddler Area
- Kiosk
- Lap swimming
- Aqua
- Squads
- School Carnivals
- Spa
- Sauna
- Water slides
- Parking
- Swim Clubs
- Café

# Need For An Aquatic Centre

- Hornsby Leisure Strategic Plan 2000

- Community Satisfaction Study 2006

- Community Research Study June 2009

*“Majority agreement by the community that the Hornsby Aquatic Centre is the highest priority project for funding by an infrastructure levy”*



These are 3 studies that Council has undertaken with most the most recent study stating:

*“Majority agreement by the community that the Hornsby Aquatic Centre is the highest priority project for funding by an infrastructure levy”*

# Usage Patterns

- 80% of usage from Hornsby or to the north
- The Housing Strategy will increase population in these areas
- Waiting list of over 50 for learn to swim program (at time of pool closure)
- Approx 130,000 visits per annum



In Term 4 2010, the program pool catered for approximately 850 children per week and had approximately 130,000 visits per annum.

Not bad for an old pool with no black lines.

## What are some of the issues that have emerged to date?

- The \$20m budget will limit us on the range of facilities that can be provided.
- There is a need to resolve:
  - The range of aquatic and complementary dry facilities
  - The number of parking spaces that should be provided on-site
- Site constraints mean we cannot provide everything



## What are some of the issues that have emerged to date?

- There is an urgent need to resolve the design concept so Council can get on with gaining the necessary approvals to construct the new pool.
- A successful learn to swim program will contribute to the financial viability of the pool – (break even or surplus).



## Recreation Planning – Demographic issues

- The Hornsby-Waitara CBD contains a culturally diverse population with a significant number in high density dwellings.
- Shire-wide there is an ageing population.



# Recreation Planning

- Indoor component is increasingly emerging as necessary for encouraging year round use
- Pools are places to socialise. People commonly spend more time outside of the water than inside
- Most people travel to the pool by car.



Indoor component – used by Sun Smart Swimmers

Pools are places to socialise – They turn into social hubs



This is Cabravale Leisure Centre with easy access for the disabled and parents with prams.

# Recreation Planning

- The pool needs to provide attractions for the whole family. It needs to have shallow areas for interactive and static activities
- Older people (and children) like warm water
- A kiosk/café complements the aquatic attractions



Shallow water, commonly called zero depth water parks, attract families to the centre.

Outdoor (lap) pools are typically kept at approximately 27° C.

Warm water pools are typically kept at approximately 32° C.



This is Hurstville Leisure Centre, designed by Peter Hunt Architect.

You can see the social hub that this centre has become.



Outdoor pools will cater for carnivals and Swim Clubs

# Need For An Aquatic Centre

Council has acknowledged the redevelopment of Hornsby Aquatic Centre is a strategic priority



This project is a long term facility – 50 years plus



Leichardt Park Aquatic Centre.

- A very good example of a “happy feeling”.
- Program Pool caters for approximately 2,500 learn to swim lessons each week.



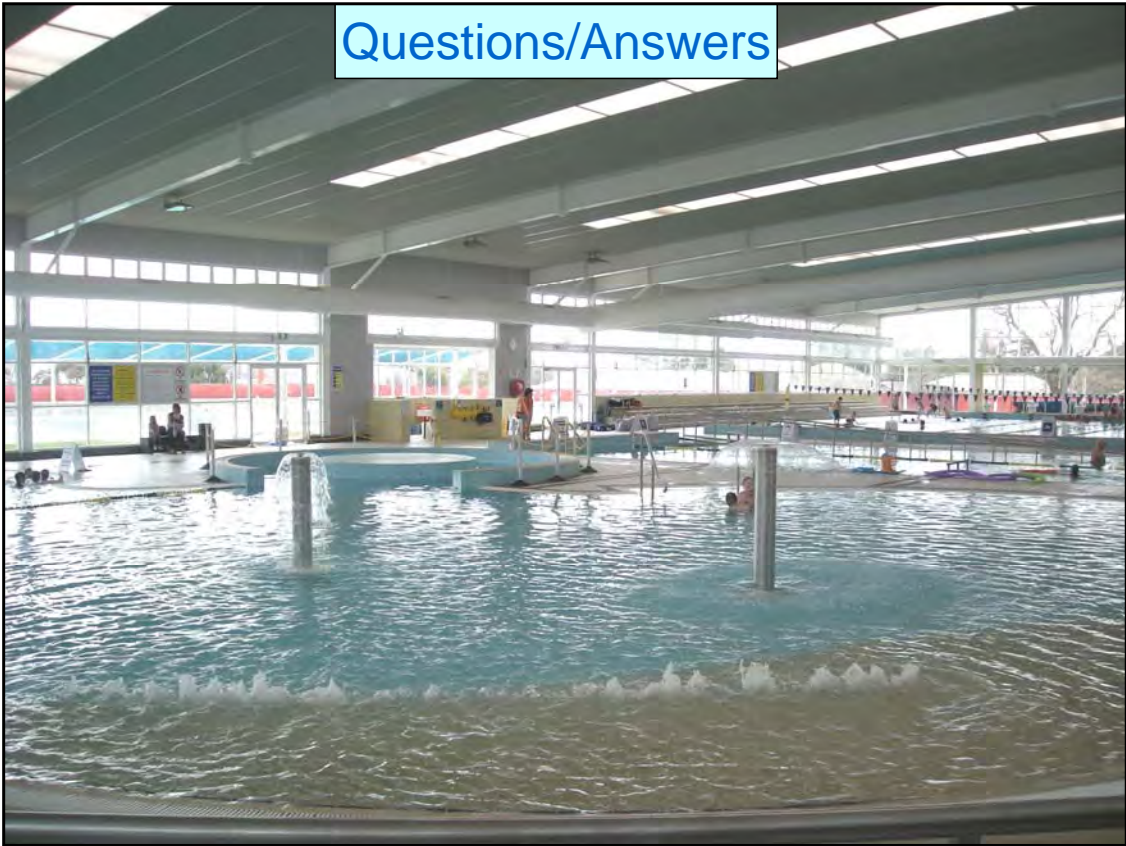
This is an example of a play feature aimed at the 2 to 6 year old market.

Would attract families to the Aquatic Centre.



Another play feature – aimed at the 2 to 6 year old market.

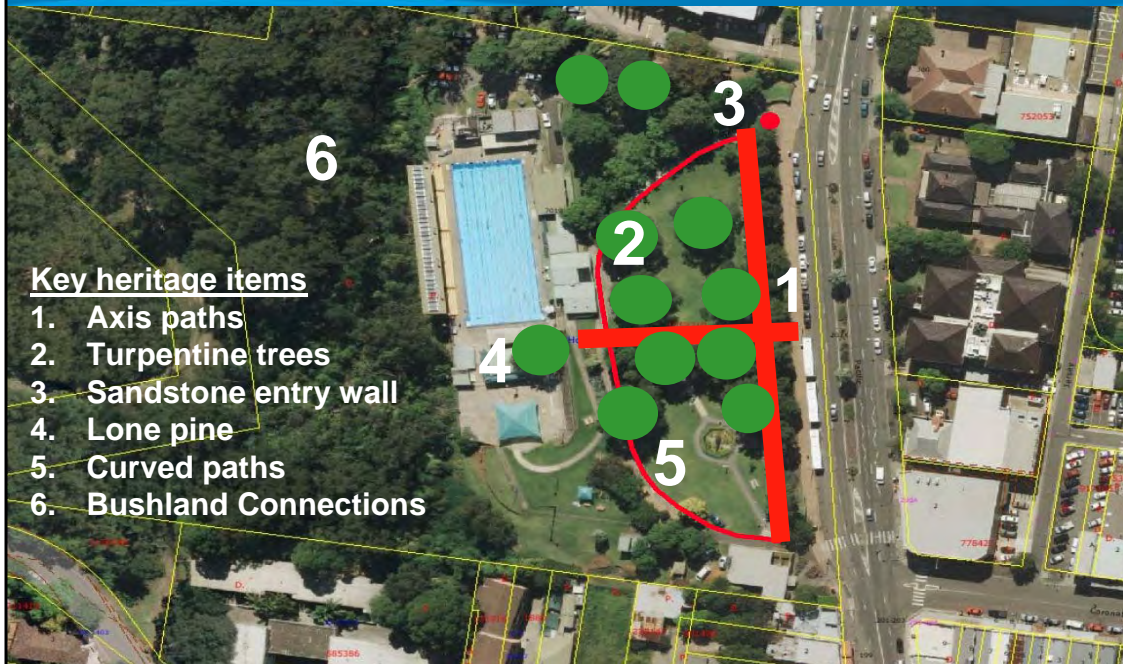
## Questions/Answers



Bathurst Aquatic Centre (designed by Peter Hunt Architect)

- Indoor 25m pool at rear of indoor section
- Learn to Swim Pool in centre
- Zero depth entry into play pool with whirl pool
- 50m outdoor pool in background

## Site Analysis - Heritage



OK so I am going to talk about the pool and its context in the developed portion of Hornsby Park.

Hornsby Park has regional Heritage Significance as an example of 'City Beautiful' park design.

Key elements are the north-south and east west axis paths. The 17 large and healthy turpentine trees that were originally planted around 1900. The sandstone entry wall at the northern end of the park built in the 1930s and the Lone Pine tree within the pool complex that was planted sometime after WW1.

Visual connections to the bush are considered important as the park originally had a strong relationship with the bushland before the pool was developed.

We see the whole open space area of Hornsby Park, Old Man Valley and the quarry lands as a valuable open space asset that can be opened up in the longer term. It is important to think about the pool in this larger context.

## Site Analysis



Existing entry buildings and grandstand block views to the bushland from the park.  
The potential aquatic site area is limited in size by the park heritage elements.

## Site Analysis



There is an opportunity to improve the relationship between the park & pool through careful building design.

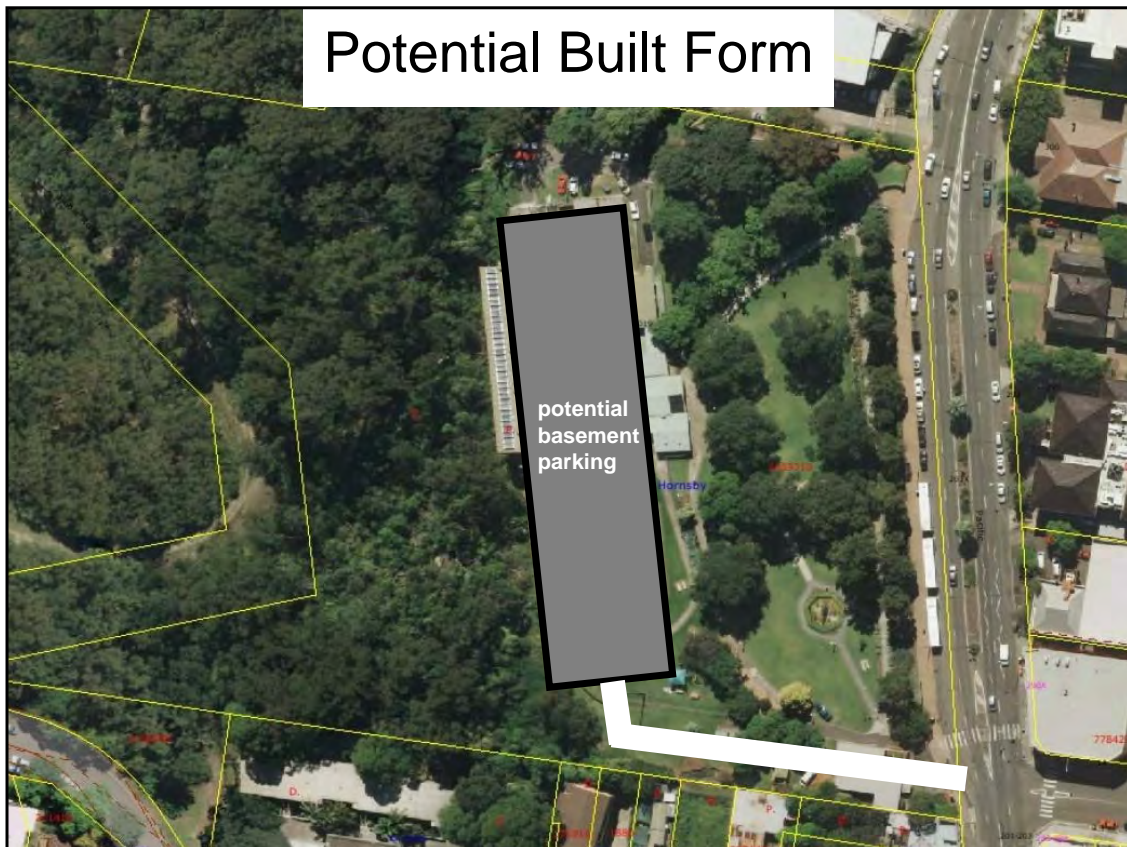
On balance it is considered that the aquatic centre site should be limited to the existing site area to the rear of the heritage park area.

There are limitations on what we can fit in this site

And there are budget constraints with the steep land

There is a need to think about the flexibility of the pool to meet the long term future needs

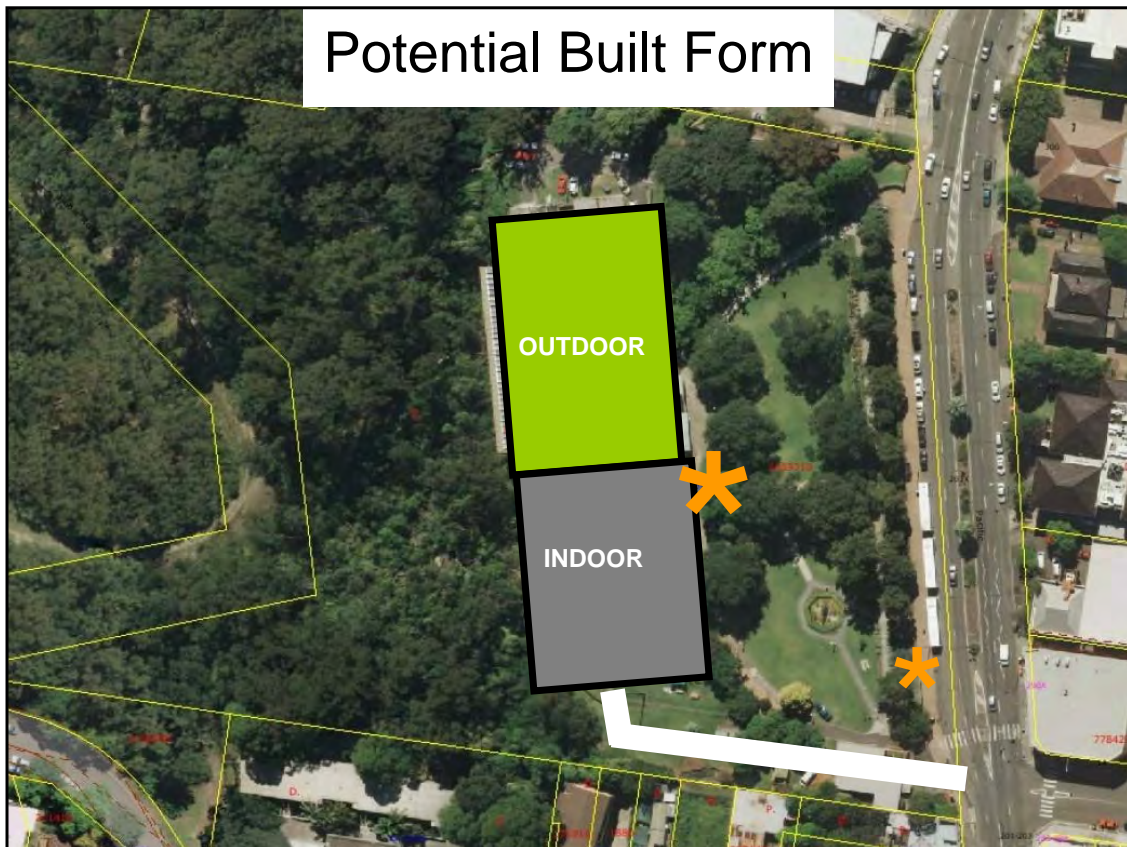
The challenge is to determine what is the best mix for Hornsby.



We have looked at a few options for parking and access including the existing laneway to the north adjacent to the playground. We have also looked at access off Dural Street utilising the Council owned land where the current Montessori pre-school is located. Both these options are considered problematic. The laneway through the northern portion of the park would need to be widened to 2 way to accommodate service trucks and many more cars. It may not be able to meet gradient requirements for ramping down to a basement and its intersection with the Pacific Highway has issues associated with a need to upgrade it to accommodate the larger traffic volumes. The access off Dural Street through the Montessori pre-school also issues with gradients, site lines and the fact that you would be entering the pool complex from a back street, which is not ideal.

We have also considered the potential for parking nearby and on the street.

The outcome of this is that the best approach is considered to be an extension of Coronation Street, which leads into a basement carpark. This access way can be achieved with acceptable gradients and connects into the road network very well, where there are existing traffic lights that can be modified to 4 way.



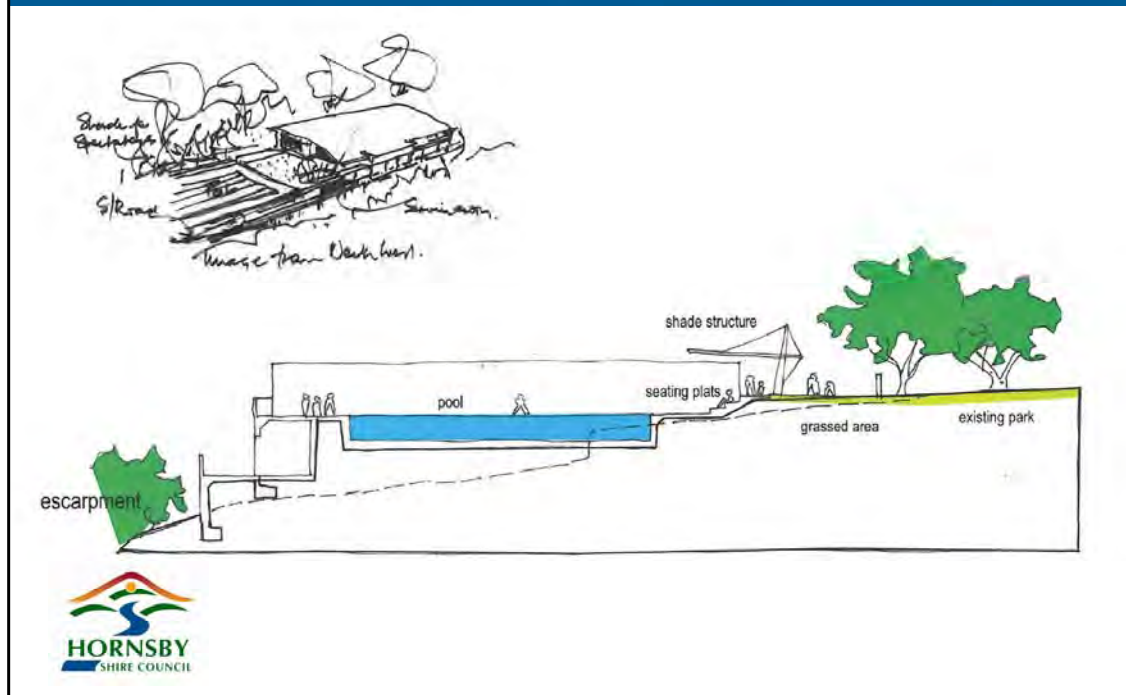
A new pool entry location could be expressed in the architecture

Removal of the existing grandstand and amenities would open views into the bushland for an outdoor pool area, improving the visual linkages between the developed park and the bush.

A Pool building envelope to the south will reinforce this opportunity

A Pool entry marker could be established on the Highway in the form of signage or some other form of structure that relates to the pool architecture.

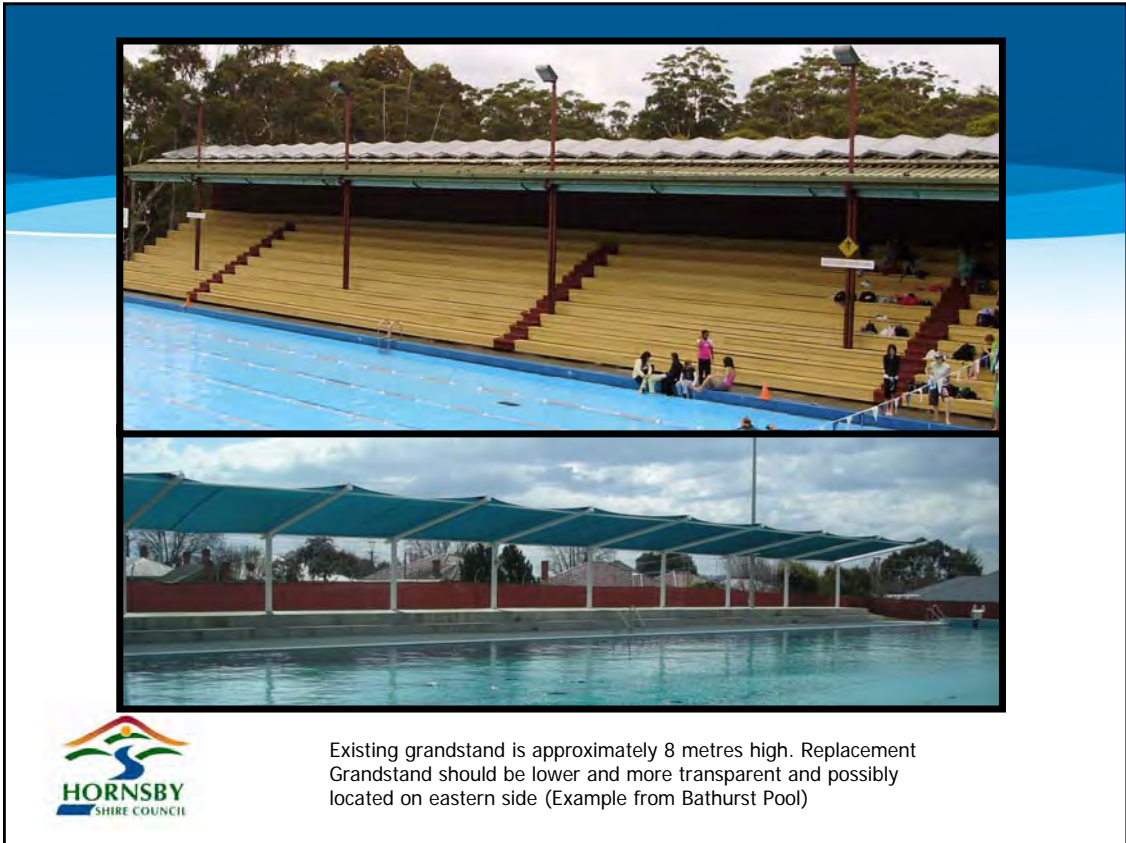
# Potential Built Form



The architect has looked into how a pool could relate to the site.

This sketch indicates that an outdoor pool deck and seating area could be set at a level quite close to the adjacent park (and above the existing pool level).

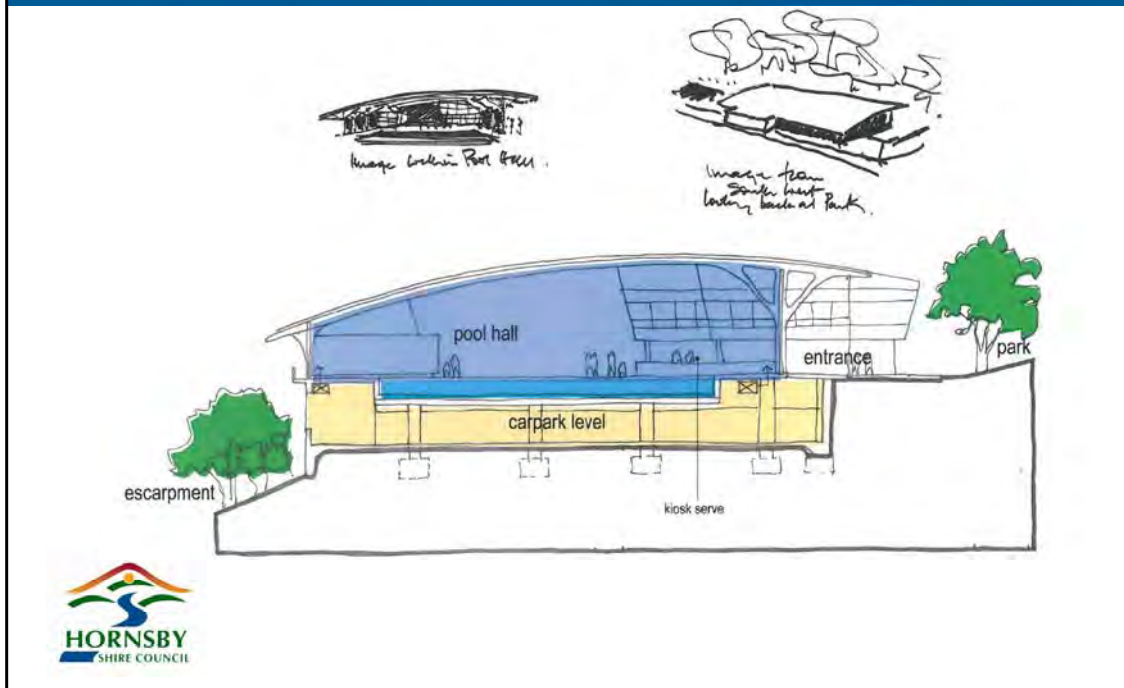
A shade structure and seating could be built on the eastern (developed park) side of the pool and there could be clear views into the pool from the park.



This slide looks at the existing grandstand which is approximately 8 metres high.

The example below indicates how a replacement grandstand could be lower and more visually transparent.

# Potential Built Form



This slide highlights how the indoor pool could be set at a similar level to the existing park and basement carparking could be accommodated below, with a lift providing access to the pool deck.

## Potential Built Form



The architects have looked at the potential visual character of an outdoor pool. It is expected that a new arrangement should be able to open up views to the bushland beyond.

# Design Principles

- Outdoor pool facilities should be to the north of the site with views to the bush beyond opened up;
- Indoor pool should be developed to the south with main entry preferably centrally placed;
- On-site parking is important. Best solution is as basement parking;
- Vehicle access should be from Pacific Highway. Best solution is opposite Coronation Street.
  - CWA building, public toilets and Lone pine will be removed.



These design investigations have led Council to identify a number of design principles for the built form.

## Questions/Answers



Belconnen Pool (designed by Peter Hunt Architect)

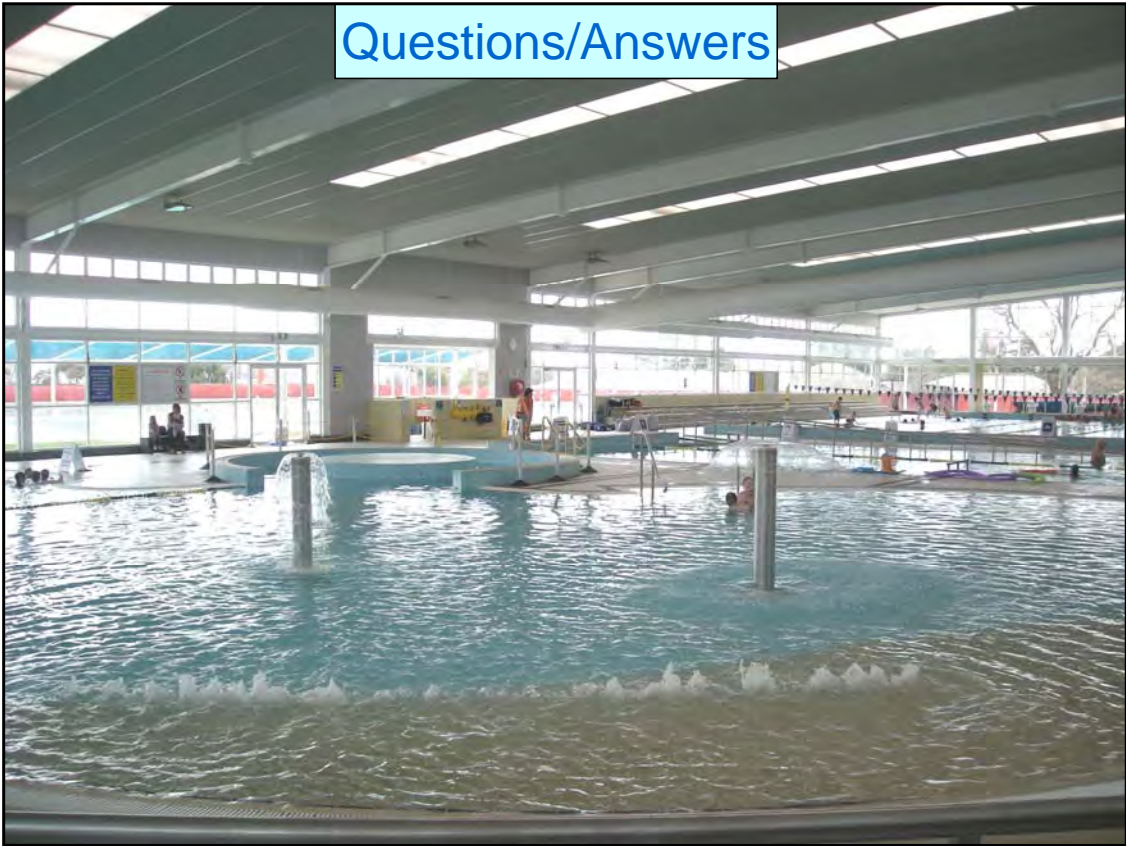
Includes a shallow warm water leisure pool linked into a 5 lane 25m learn to swim pool.

The water slide in the background is good for a bit fun for the kids and is obviously very popular.

# What are your needs?



## Questions/Answers



Bathurst Aquatic Centre (designed by Peter Hunt Architect)

- Indoor 25m pool at rear of indoor section
- Learn to Swim Pool in centre
- Zero depth entry into play pool with whirl pool
- 50m outdoor pool in background

# On line input- what is important

- **Healthy, safe and hygienic**
- **Useable all year round**
- **Cost effective**
- **Environmentally sound design, construction and use**
- **Maintained properly**
- **Accessible**
  - Parking
  - Easy to access
  - Suit people with disability
  - Encourage sustainable transport
- **Meets community needs**
  - Kids needs
  - Learn to swim
  - Competitive swimming
  - Non aquatic use
  - Exercise and physical activity
  - Flexible to cater for broad range of activities



# Draft Selection Criteria

i.e. what are the key factors that matter to the stakeholders about the HAC that can be used to evaluate design alternatives?

*Financial*  
*Technical*  
*Social*  
*Environmental*



# Draft Selection Criteria

## *Financial*

- Total cost within \$20 M
- Can raise sufficient operating revenue to break even in ongoing operational running costs



# Draft Selection Criteria

## *Technical*

- Incorporates a learn to swim facility
- Is technically buildable and fits on the site
- Allows for complementary non aquatic activities
- Is safe and secure for users
- Optimises the available space
- Allows for pedestrian and cycleway access into Old Man Valley



# Draft Selection Criteria

## *Social*

- Meets the recreational needs of the largest number of HSC residents and stakeholders
- Provides both structured and unstructured pool activities across all age groups
- Is easily accessible and useable
- Easy walking and accessible for all
- Carparking readily available
- Is attractive and available for year round use



# Draft Selection Criteria

## *Environmental*

- Optimises energy efficiency in design, construction and use
- Attractive in the setting of Hornsby Park and Old Man Valley
- Complements the heritage aspects of Hornsby Park
- Applies the principles of Ecologically Sustainable Development
- Minimizes the use of potable water e.g. recycles water



# Validate what matters to you

At your table, discuss the criteria:

- Do they make sense?
- Is anything missing?

What would you add to make them more useable to evaluate options?

Are there other criteria we should consider?

Put comments on a sticky note and add to the flip chart



# Next steps

- Public Information sessions
- On-line forum
- Recruiting representative group
- Two deliberative forums
- Report to Council
- Public exhibition of preferred option



# Deliberative Forum

- Learn a lot quickly
- Confirm what is important to people
- Establish a range of design options
- Test options against criteria
- Develop recommendation



# Deliberative Forums -Nominations

Up to 6 from each of these sessions to join the forums

- Available for the two forums
- Will represent who is here
- Willing to work together
- An openness to new information and views
- Willing to work hard to get a design that best meets what is important to people



# Design ideas

Think of what specific ideas or suggestions you have for the design of the aquatic centre, write them on a card and put on the sticky wall



# Evaluation

Please complete the yellow evaluation form  
on your table and hand in as you leave.

## Thank You

