Universal Design "Applying the Principles to Community Sporting and Recreation Facilities"

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North West Metro Councils

state and a state

- Significant population growth
- Demand for infrastructure and services
- Changing demographics



North West Metro Councils cont'd



- Diverse communities (new arrivals, nonenglish speaking background, ageing)
- Need for quality and accessible community sport and rec facilities



Snapshot: Wyndham

- 10,000 new residents 2013-14
- Fastest growing municipality in Victoria 2013-14 (5.6%)

a snapshot of Wyndham...





The City of Wyndham is located on the western edge of Melbourne, between the metropolitan area and Geelong. Wyndham covers an area of 542km² and

features 27.4 km of coastline bordering Port Phillip to the east. The municipality is situated in one of Australia's most productive regions, part of the largest area of rich basalt soils on the continent. Wyndham

is adjacent to the municipalities of Greater Geelong,

The forecasts for the City of Wyndham for 2036 are: Population 384,275²

Households 132,919²

Moorabool, Melton, Brimbank and Hobson's Bay.

WYNDHAM'S GROWTH

There are 11 babies born

each day in Wyndham

(based on 2014 birth





WHO IS MOVING HERE?

204 NEW RESIDENTS A WEEK.⁴

 Wyndham's population grew by 10,60 persons from 2013 to 2014.¹ This is expected to increase to an average 8,727 people per year by 2036.¹

Dogs registered 20,281 Cats registered 6,283 (current as at Feb 2015)

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HEALTH AND WELLBEING

40.1% OF PEOPLE IN WYNDHAM SELF-REPORT HAVING EXCELLENT OR VERY GOOD HEALTH.

- 37.8% of persons meet the guidelines for fruit intake in Wyndham.
- 58.0% reported sufficient times and sessions of physical activity within the local area.
- 53.9% of people are overweight or obese in Wyndham.

HOW OLD ARE WE?

WYNDHAM IS EXPERIENCING GROWTH ACROSS ALL AGE GROUPS

- The largest age group is 35 to 49 years, with a population of 46,807 people. This is followed by 25 to 34 years with 36,646 persons.²
- In 2014, there was a record 4,120 births in Wyndham.³
- Between 2011 and 2036, the age structure forecasts indicate a 133% increase in population of retirement age.²

Source: wyndham.vic.gov.au

Last updated May 2015

records).³

Snapshot: Wyndham



- Largest age group 35 49 years, ageing population
- English is not main language for 25% of residents
- 53.9% population overweight or obese

Sport and Recreation Victoria



- Provides funding support in the form of grants to Local Government.
- Includes planning, building new and improving existing facilities.
- Focus on strategic need, participation, multiuse and optimal design outcomes.

Sport and Recreation Victoria



2016-17 Community Sports Infrastructure Fund Application guidelines



Country Football and Netball Program 2015-16

Application Guidelines







Project Types





Project Types





Applying Principle Based Thinking



- The intent of Universal Design is to simplify life by making the built environment more usable and accessible by more people.
- It is a philosophy or 'way of thinking' that is based on a set of principles and is not linked to any specific standard or building code.

Applying Principle Based Thinking



Design Innovation

UNIVERSAL DESIGN

Based on 7 key principles and philosophy

PROMOTES BEST PRACTICE

MINIMUM COMPLIANCE

ACCESSIBILITY REGULATIONS

- > Disability and Discrimination Act
- Building Code of Australia

Timing Is Everything







Project Stages

Project Example: Craigieburn Park



- Total Project Cost: **\$48.5M**
- SRV Commitment \$3M (Better Pools)
- Federal Government \$9M
- Construction to commence late 2015



CRALC





CRALC





SRV Involvement



- Management identified need for ongoing involvement and support to Council as project progressed through design phase.
- Application of Universal Design Principles a priority to help inform design outcomes.

How the Process Unfolded

- Four hours a week meeting with Council, Architect, Landscape Architect, Sub Consultants.
- Ongoing input into design via email, phone calls, other meetings etc.
- Focus on whole precinct including aquatic centre, athletics track, pavilion and events area.

Universal Design Workshops



- 1 x Internal
- 2 x Internal/ External
- 1 x Colour
- 1 x Car Park





How the Process Unfolded

Reporting

- Formal report in response to Schematic Design.
- Includes reference to Universal Design Principles, Safety Design, Environmentally Sustainable Design, Shared Space Principles.





Reporting and Universal Design



Areas Discussed:

- Aquatic Centre layout, configuration, preferred placement of amenities, sightlines, accessible seating in grandstand.
- Athletics pavilion layout, proximity of entrance to car park, connectivity to track, location and proposed use of accessible amenities.

Reporting and Universal Design

- Car park design and shared space opportunities.
- Park layout, connectivity with pathways, public transport options, destination points within park etc.
- Consideration of other design principles: ESD, CPTED, Safety.

- Inclusion of 'Changing Places' high needs accessible change.
- Re-design of SW corner to open up sightlines, consolidate amenities, improve flow of large groups e.g. schools.
- Re-design of main reception desk to ensure lowered section visible to all visitors upon entry.

Changing Places

Design options

The Changing Places Consortium in Australia has developed three typical design options for use as follows.

Type 1A

01	Room coverage hoist		
02	Accessible pan and cistern including back rest, grab rails		
03	Two 800mm long horizontal grab rails mounted at 800mm and 1000mm above floor level for adjusting clothes.		
04	Adjustable height change table, 1800mm long with side safety rail.		
05	Disposable change table cover dispenser with shelf over.		
06	Integrated hand washbasin		
07	Hand drier and/or paper towel dispenser		
08	Rubbish bin		
	Automatic door with a minimum 900mm clear opening, 1000mm is recommended		
▼	Automatic door control		

Design Input

- Universal Design overlay to sanitary fixtures and fittings.
- Universal Design assessment of water play equipment as part of tender package.
- Preferred layout of amenities within the athletics pavilion.
- Desktop review of play space design.

Design Input

Other Reporting Tools Used by SRV

Mark Oracle	Sound achievement of the requirements specified in the application for the criterion.	SCORE
very Good	Some minor errors, risk weakness or omission which may be acceptable as offered.	16-19

Other Reporting Tools Used by SRV

Design Reflections

- Workshops involving stakeholders are key to ensuring best design outcomes, however timing is important.
- A 'user based' approach needs to be applied at the front end of design, not as an after thought.
- Access Consultant input at front end of design.

Design Reflections

- SRV plays an important role as an independent design facilitator.
- Ongoing support of the process and guidance from management is crucial.
- UD Principles can be applied to more than infrastructure/buildings e.g. programming, technology.

Quick Wins

1: Equitable Use

The design is useful and marketable to people

with diverse abilities.

2. Flexibility in Use

The design accommodates a wide range of individual preferences and abilities.

3. Simple and Intuitive

Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level.

3. Simple and Intuitive

4. Perceptible Information

The design communicates necessary information effectively to the user, regardless of ambient conditions or sensory abilities.

4. Perceptible Information

5. Tolerance for Error

- Design minimizes hazards and the adverse consequences of accidental or unintended
 - actions.

5. Tolerance for Error

6. Low Physical Effort

 Design can be used efficiently, comfortably and with minimum fatigue.

7. Size and Space for Approach and Use

 Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility.

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Questions?

"A mind is like a parachute.

It doesn't work if it is not open."

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