Sunshine Coast COUNCIL

NAMBOUR AQUATIC CENTRE PRECINCT FEASIBILITY STUDY

FINAL REPORT

FEBRUARY 2017

OTIUM Planning group
SPORT + LEISURE

Prepared by
Otium Planning Group Pty Ltd in conjunction with
Liquid Blu, Greenedge Design Consultants, Turner
and Townsend and Pekol Traffic & Transport

OTIUM PLANNING GROUP PTY LTD

Head Office:
Level 6
60 Albert Road
South Melbourne VIC 3205
Phone: (03) 9698 7300
Email: vic@otiumplanning.com.au
Web: www.otiumplanning.com.au
ABN: 30 605 962 169
CAN: 605 962 169

Local Office
Suite 8, 29 Mount Cotton Rd
Capalaba QLD 4157
Contact: Michael King
Phone: 0417 536 198
Email: mike@otiumplanning.com.au

Otium Planning Group has offices in:

- Auckland
- Brisbane
- Cairns
- Christchurch
- Darwin
- Melbourne
- Perth
- Sydney

OPG, IVG and PTA Partnership has offices in Hong Kong, Shenzhen, Shanghai and Beijing

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1. INTRODUCTION

1.1 Background to the Study

Sunshine Coast Council is responsible for the operation of ten aquatic centres and pools, including the Nambour Aquatic Centre. As part of the activation and revitalisation activities contained within the *Nambour Activation Plan 2015*, a Feasibility Study into the development of leisure water into the Nambour Aquatic Centre Precinct is identified by Council as a key priority. This action is also included as a recommendation within the *Sunshine Coast Aquatic Plan 2016 – 2026* and the *draft Petrie Creek Open Space Master Plan*.

This study investigates the feasibility of leisure water/zero-depth splash pad to be incorporated into the Nambour Aquatic Centre Precinct. A Feasibility Study, concept design and an associated quantitative assessment are incorporated into the study. The Feasibility Study and concept plan integrates a range of development options within the precinct and considers car parking provision and access, open space and the former skate park.

The objectives, design principles and responses of the *Petrie Creek Open Space Master Plan* are supported within study recommendations and design, including the Master Plan emphasises the importance of the development of community hubs:

> "Alongside and within the open space areas of the Petrie Creek Parklands that promote family and community gathering and partnerships with local community groups and activate community hubs by improving the visual and physical integration between the parklands and civic spaces".

1.2 Project Aims and Objectives

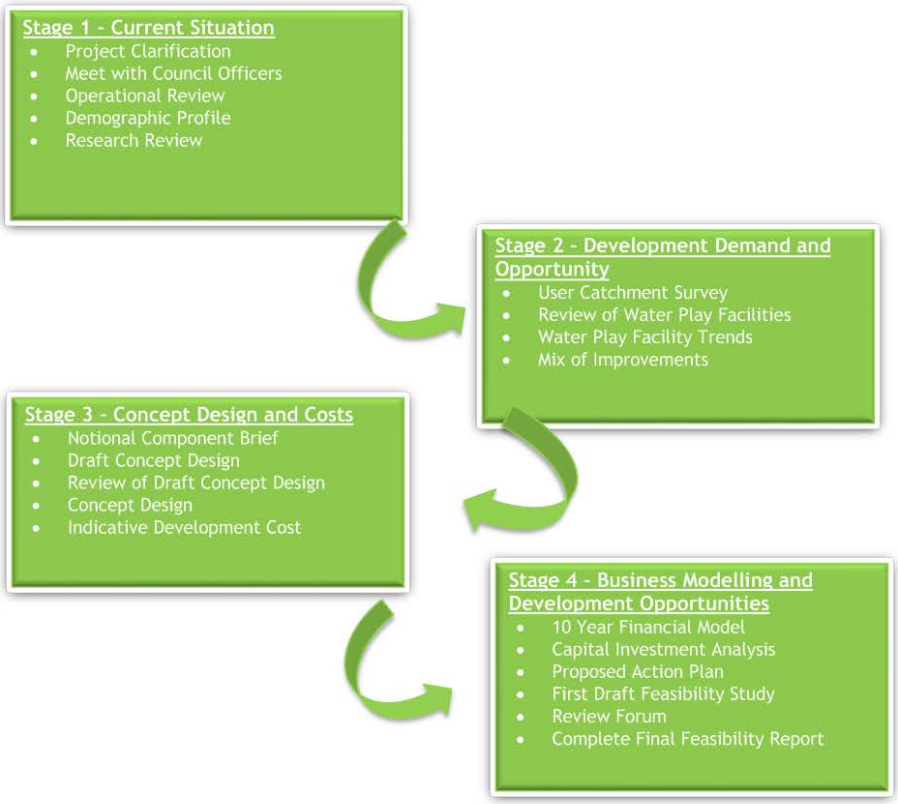
The scope of services as outlined in Council's brief comprised:

- Investigate the feasibility of the incorporation of a zero-depth splash pad/leisure water (including shade structures) within the Nambour Aquatic Centre Precinct at a scale and capital investment that will enhance the activation of the precinct as well as enhance the financial viability of the Nambour Aquatic Centre;
- Integrate the Aquatic Centre facility with inviting public open space and parkland offerings to encourage community activation/gathering that maximises favourable aspect and topography;
- Repurpose or removal of the now former skate park to incorporate uses that appeal to a range of age groups and abilities consistent with council policies and priorities;
- Improve the parking provision, ingress/egress for cars and formalise parking for coaches;
- Provide legible pathways that connect between elements within the precinct and to uses adjoining the precinct such as Petrie Park and Petrie Creek; and
- Incorporate CPTED principles, enhancing passive surveillance, legibility, permeability, lighting, foster community pride and consider longer term management strategies.

1.3 Project Methodology

The study was undertaken over four stages as outlined below:

Figure 1 Project Methodology



1.4 The Project Area

The study site is the Nambour Aquatic Centre Precinct. It is located on a 1.2Ha site incorporating an aquatic centre, associated car parking and vehicle access and an adjoining district level recreation park with a now former skate park.

The Precinct is adjacent to Petrie Creek Park and Figure 2 highlights the project area:

Figure 2 Nambour Aquatic Centre Precinct

Councils Development Information Report for the site identified the following potential site constraints because of a review of Council's T1Property and GIS available data:

- Growth Management Area - Land within the Urban Growth Management Boundary;
- Zones - Sport and Recreation Zone;
- Local Plan Area - Nambour Local Plan Area;
- Land Subject to Acid Sulfate Soils Overlay Area 2 - land above 5m AHD and below 20m AHD;
- Land Subject to Airport Environs Overlay - Obstacle Limitation Surface (OLS) and Runway Separation Distances;
- Land Subject to Biodiversity, Waterways and Wetlands Overlay - Native Vegetation Area (along north-west boundary);
- Land Subject to Flood Hazard Overlay - Flooding and Inundation Area (south-west corner);
- Height of Buildings and Structures Overlay - 8.5 metres;
- Land Subject to Landslide Hazard and Steep Land Overlay - Moderate Hazard Area Slope 15-20% and Slope 20-25% (northern section);
- Land Subject to Regional Infrastructure Overlay - Railway Corridor and Buffer (south-east corner); and
- Priority Infrastructure Plan - Priority Infrastructure Area.

1.4.1 The Project Area Population Review

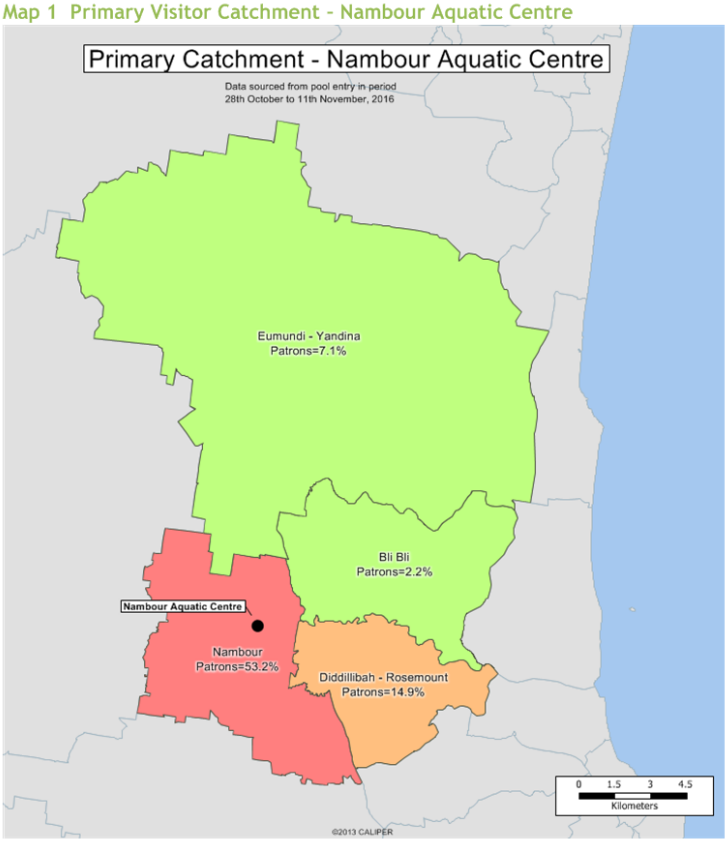
A user catchment review has been completed to help determine the local catchment of the Nambour Aquatic Centre. The review found over half (53.2%) of visitors to the Nambour Aquatic Centre reside within Nambour - Burnside and District (refer to map on next page).

The user catchment review indicated the primary catchment zone for users covers the following areas:

- Nambour area: 53.2% of patrons
- Diddilibah/Rosemount: 14.9% of patrons
- Eumundi/Yandina: 7.1% of patrons
- Bli Bli: 2.2% of patrons

The estimated 2016 Nambour Burnside and District population[1] is 17,303.

Map 1 Primary Visitor Catchment - Nambour Aquatic Centre



[1] Sunshine Coast Council, Social Policy Team, 2017 and Sourced from Population and Household Forecasts, 2016 to 2036, Prepared by .Id , the Population Experts, November 2015.

We have reviewed idcommunity[2] data, other demographic characteristics of Nambour - Burnside and District include:

- As at 2011, there was a higher proportion of people in Nambour - Burnside and District (47.9%) earning less than $1,000 per week, compared to Sunshine Coast (43.9%).
- As at 2011, there was a lower proportion of people in Nambour - Burnside and District (6.9%) earning more than $2,500 per week, compared to Sunshine Coast (10.8%).
- As at 2011, there was a higher proportion of people in Nambour - Burnside and District (8.2%) unemployed, compared to Sunshine Coast (7.5%).
- Nambour - Burnside and District has a higher level of disadvantage per its SEIFA Index of Disadvantage[3] (955.0), compared to Sunshine Coast (1007.0).

1.4.2 The Project Area Future Population Review

The Nambour - Burnside and District population is estimated to grow by 62.5% to 28,116 people by 2036[4]. The estimated 2016 and 2036 age population by age cohort is summarised in the table below:

Table 1 Estimated 2016 and 2036 Nambour and Sunshine Coast Population by Age Cohort[5]

	2016 Estimated Persons				2036 Estimated Persons			
Age Groups	Nambour		Sunshine Coast		Nambour		Sunshine Coast	
0-4	1,242	7.2%	17,340	6.0%	1,898	6.7%	30,310	6.5%
5-9	1,189	6.9%	18,334	6.3%	1,861	6.6%	31,588	6.7%
10-14	1,021	5.9%	18,464	6.4%	1,724	6.1%	30,608	6.5%
15-19	978	5.7%	17,119	5.9%	1,497	5.3%	26,946	5.8%
20-24	948	5.5%	15,548	5.4%	1,288	4.6%	23,943	5.1%
25-29	923	5.3%	14,914	5.2%	1,384	4.9%	24,414	5.2%
30-34	1,010	5.8%	16,261	5.6%	1,558	5.5%	27,826	5.9%
35-39	1,061	6.1%	17,826	6.2%	1,697	6.0%	30,887	6.6%
40-44	1,034	6.0%	19,894	6.9%	1,695	6.0%	32,028	6.8%
45-49	1,076	6.2%	20,187	7.0%	1,655	5.9%	31,103	6.6%
50-54	1,141	6.6%	19,887	6.9%	1,698	6.0%	29,068	6.2%
55-59	1,101	6.4%	19,362	6.7%	1,701	6.0%	27,205	5.8%
60-64	1,031	6.0%	18,385	6.4%	1,651	5.9%	26,388	5.6%
65-69	968	5.6%	17,666	6.1%	1,576	5.6%	25,159	5.4%
70-74	816	4.7%	14,085	4.9%	1,435	5.1%	22,898	4.9%
75-79	620	3.6%	10,179	3.5%	1,238	4.4%	19,168	4.1%
80-84	523	3.0%	7,136	2.5%	1,055	3.8%	14,403	3.1%
85+	622	3.6%	6,802	2.4%	1,504	5.4%	14,467	3.1%
Total	**17,303**	**100%**	**289,389**	**100%**	**28,116**	**100%**	**468,408**	**100%**

[2] Sunshine Coast Community Profile, idcommunity, November 2016
[3] SEIFA Index of Disadvantage measures the relative level of socio-economic disadvantage based on a range of Census characteristics. The index is derived from attributes that reflect disadvantage such as low income, low educational attainment, high unemployment, and jobs in relatively unskilled occupations. A higher score on the index means a lower level of disadvantage. A lower score on the index means a higher level of disadvantage.
[4] Queensland Government population projections, 2015 edition; Australian Bureau of Statistics, Population by age and sex, regions of Australia, 2014 (Cat no. 3235.0).
[5] Sunshine Coast Council, Social Policy Team, 2017 and Sourced from Population and Household Forecasts, 2016 to 2036, Prepared by .Id , the Population Experts, November 2015.

The primary users of water and adventure play are young people. The table above indicates that based on the estimated 2016 population, Nambour (25.7%) has a slightly higher proportion of young people aged 0-19 years compared to Sunshine Coast at (24.6%).

Whilst the proportion of young people is estimated to decline slightly by 2036, Nambour is estimated to continue to have a slightly higher proportion of young people aged 0-19 years compared to Sunshine Coast by 2036.

1.4.3 Population Trend Implications for Water Play at the NAC Precinct

The Nambour – Burnside and District population has a relatively small base (17,303), however this is estimated to increase to 28,116 by 2036 representing growth of 62.5%[6].

This growth is likely to place pressures on local services, including for sport and recreation facilities such as those offered by the Nambour Aquatic Centre. Further, with a higher proportion of young people compared to Sunshine Coast area, so demand for leisure opportunities such as water play is likely to be proportionally higher.

The higher level of disadvantage, higher unemployment and higher proportion of low income earners suggests fees and charges associated with aquatic facilities, including water play within the Nambour – Burnside and District population is likely to be price sensitive.

[6] Sunshine Coast Council, Social Policy Team, 2017 and Sourced from Population and Household Forecasts, 2016 to 2036, Prepared by .Id , the Population Experts, November 2015.

2. NAMBOUR AQUATIC CENTRE & PRECINCT REVIEW

2.1 Facilities Review

The Nambour Aquatic Centre incorporates:

- 50m outdoor heated pool (1.2m to 2m);
- 25m heated enclosed pool (1m to 1.5m);
- Outdoor program pool
- Outdoor toddler pool and fountains/play area;
- Poolside Café; and
- Amenities and change areas
- Plantrooms and storage areas.

The main outdoor facilities are covered in the following section.

Figure 3 Nambour Aquatic Centre outdoor pools from embankment

Figure 4 Nambour Aquatic Centre 50m Outdoor Pool

Figure 5 Nambour Aquatic Centre Splash Pad

Figure 6 Nambour Aquatic Centre Outdoor Program Pool

The car park zone and skate park area are covered in the following photos.

Figure 7 Nambour Aquatic Centre Amenities Building

Figure 8 Precinct Skate Park

Figure 9 Walkway from Car Park to Skate Park

2.2 Site Review

The following diagram highlights the project area listed within the red line and highlights the Nambour Aquatic Centre Precinct and the skate park.

Figure 10 Nambour Aquatic Centre Precinct

The precinct presents several opportunities that support the introduction of a water play space, including:

- Proposed community splash park and investigation of carpark expansion at Nambour Aquatic Centre was highlighted as a future development in the precinct and is noted within the Petrie Creek Parklands Open Space Master Plan.
- The skate park which has been superseded by a new facility at a different location presents a sealed area that could be redeveloped.
- The site is currently well serviced by existing water and power with capacity already on site for proposed new facilities.
- It is adjacent recreational parkland and creek.
- There is an opportunity at the Nambour Aquatic Centre to demolish the aged and low use program pool/leisure water and replace it with new splash pad and water slides.
- Potential expansion into unused area in north-east of corner of the aquatic centre site for water slides and tower.
- Building internally at Nambour Aquatic Centre will reduce capital and operating cost as no new amenities needed and internal area already supervised by existing staff.
- Potential to re-use Nambour Aquatic Centre filtration system (reduced capital cost).
- Location at Nambour Aquatic Centre adjacent to kiosk so increased secondary spend opportunities.
- Opportunity for new management lease to contribute capital funds if built at Nambour Aquatic Centre and to charge for entry to facilities.

The site has several issues to be considered as part of any future potential inclusion of new water play space, including:

- Site has low passing traffic and is hidden – no main road frontage or major passing traffic.
- Low patronage aquatic facilities.
- Low provision of car parking – needs new car parks/bus drop off.
- Located in a local neighbourhood area – noise/user impacts.
- Steep slope between Aquatic Centre to skate and recreation park.
- Steep slope and flooding to south-east corner.
- Significant fig trees adjacent to main car park may need part removal.
- Poorly located bus drop-off/ pick-up; PWD; family parking.
- Lack of space for new facility expansion to front of Aquatic Centre.
- Rock situated in north-east corner of Aquatic Centre.
- If built over skate park there will need to be amenities and change space funded and built. Separate operational budget also required.

2.3 Nambour Aquatic Centre Operational Review

Otium Planning Group Pty Ltd (OPG) have completed an analysis of the recent operating performance of the Nambour Aquatic Centre (NAC). The data analysed was provided by the Centre's contract management operator (Swimfit) via Council.

2.3.1 NAC Visitation Review

The table on the next page indicates total visitation has been consistent between the 2014/15 (86,138) and 2015/16 (86,992) operating years.

Table 2 NAC Visitation Trends 2014 to 2016

NAC Visitation Category	2014/15	2015/16
Multi-pass	11,677	15,077
General Entry	23,048	23,155
Membership	344	413
Aerobics	2,438	2,972
Learn-to-swim	19,390	18,258
School Swimming	17,422	15,143
Swim School	6,050	7,311
Swim Squad	4,515	4,263
Misc.	1,254	400
Total Visitation	86,138	86,992

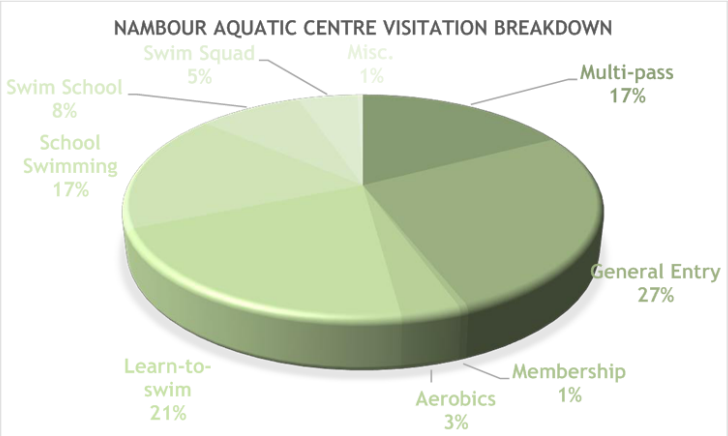
In reviewing the visitation data, it is noted that general entry which is the largest entry category is not divided up into children and adults. OPG have discussed the potential user trends and NAC management have indicated that they estimate 65% of general entry would be children and 35% would be adults.

This would see in 2015/16 approximately 15,000 child general entries and 8,100 adult entries. If we use a similar ratio for multi-pass entries this would see 9,800 child multi-passes and 5,300 adult multi-passes.

The graph below indicates the major visitation types at NAC are:

- General Entry (27%);
- Learn-to-Swim (21%); and
- School Swimming (17%).

Figure 11 Nambour Aquatic Centre Visitation Breakdown



The visitation review indicates that most users of NAC are children and these are also the major users of water play and splash pad facilities.

2.3.2 NAC Financial Review

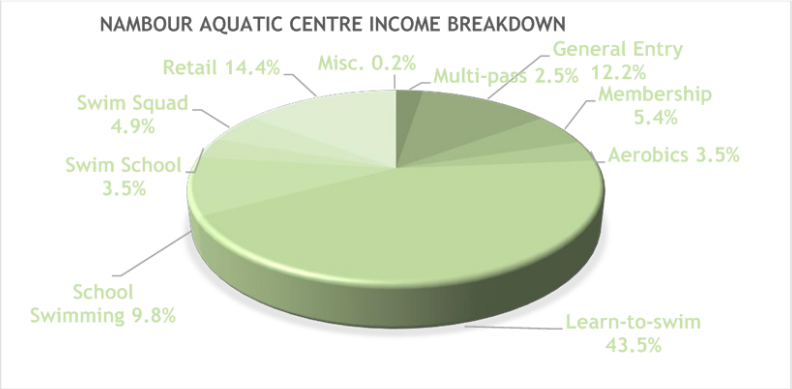
The table below indicates total income has been consistent between 2014/15 ($851,765) and 2015/16 ($837,089) operating years.

Table 3 NAC Financial Performance Trends 2014 to 2016

Income	2014/15	2015/16
Multi-pass	$23,109	$21,122
General Entry	$104,577	$102,209
Membership	$35,296	$45,401
Aerobics	$19,581	$29,189
Learn-to-swim	$396,719	$364,014
School Swimming	$91,479	$82,128
Swim School	$23,396	$29,439
Swim Squad	$35,995	$41,381
Retail	$118,368	$120,546
Misc.	$3,247	$1,661
Total Income	$851,765	$837,089

The graph below indicates the major income generator for NAC is derived from Learn-to-swim (43.5%) followed by retail (14.4%) and general entry (12.2%).

Figure 12 Nambour Aquatic Centre Income Breakdown



From an industry benchmark perspective, the most recent operating year of 2015/16 resulted in:

- Fees per visit of $9.62 C/W CERM[7] Group 6 Indoor/Outdoor Aquatic Centres <3,000m^2 of $6.55

7 7 CERM is the University of South Australia's 'Centre for Environmental and Recreation Management' and is recognised nationally for the development of performance indicators for indoor sporting centres, and aquatic & leisure centres. CERM PI ® data measures operational management efficiency (cost recovery, operational ratios, catchment usage rates, secondary spending etc.). Participation and provision of information is on a voluntary subscription basis. Most facilities on the CERM database are local government owned. Data for 2014 categorised aquatic centres by the type of facility (ie. outdoor only, indoor only, or indoor and outdoor) and further segmented it by the size (m^2) of the facility. 2014 CERM data was used as the most recent (2015) CERM data does not segment pools by size. Nambour Aquatic Centre was compared with pools in similar categories on the CERM database. It should be noted participation in, and provision of information for, the CERM database is on a purely voluntary subscription basis. To that end their database represents a "convenience sample" and is not necessarily representative of all Australian aquatic centres. For this reason, CERM data serves as a comparative guide only, based on similar pools on their database but it does not represent a definitive standard.

- Secondary spend per visit of $1.39 compared to CERM Group 6 Indoor/ Outdoor Aquatic Centres <3,000m^2 of $0.84.

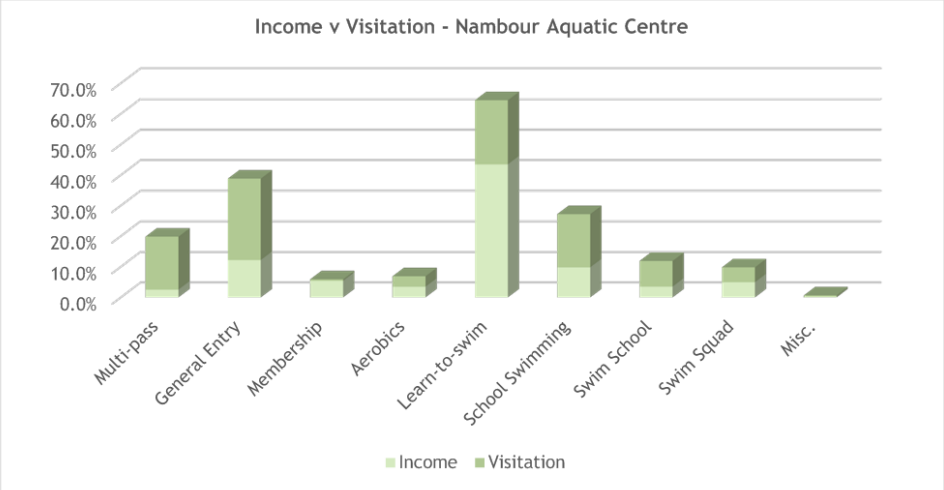
2.3.3 Visitation and Financial Combined Analysis

The table and graph below summarises the 2015/16 rates of income against visitation:

Table 4 NAC Income / Visitation Combined Analysis 2015/16

Category	Income	Visitation
Multi-pass	2.5%	17.3%
General Entry	12.2%	26.6%
Membership	5.4%	0.5%
Aerobics	3.5%	3.4%
Learn-to-swim	43.5%	21.0%
School Swimming	9.8%	17.4%
Swim School	3.5%	8.4%
Swim Squad	4.9%	4.9%
Misc.	0.2%	0.5%
Total	85.6%	100.0%

Figure 13 Nambour Aquatic Centre Income / Visitation Combined Analysis Graph



The table and graph above indicate that whilst learn-to-swim attracts visitation of 21.0%, it generates significantly the highest income at 43.5% of total income. Conversely, the following visitation groups generate lower income than visitation:

- Multi-pass - visitation (17.3%) / income (2.5%);
- General entry – visitation (26.6%) / income (12.2%);
- School swimming – visitation (17.4%) / income (9.8%); and
- Swim school – visitation (8.4%) / income (3.5%).

3. RESEARCH AND TRENDS

3.1 Literature Review

Several documents relevant to this study were reviewed to assist the study context and identify key considerations for the planning, design and management of water and adventure play at the Nambour Aquatic Centre Precinct. A summary of the key findings relevant to this study from these documents are outlined below:

3.1.1 Petrie Creek Parklands Open Space Master Plan (2016)

This *Petrie Creek Parklands Open Space Master Plan* was prepared by Sunshine Coast Council's Landscape and Urban Design Unit in 2012 and updated in 2016. The master plan is aligned with legislation and the endorsed *Sunshine Coast Planning Scheme 2014*. The Planning Scheme supports Nambour's role as a Major Regional Activity Centre, as defined by the South-East Queensland Regional Plan 2009-2031.

The master plan was delivered as a key action of the adopted *Nambour Activation Plan* (see below). The master plan aims to guide the revitalisation of Petrie Creek as a major recreational open space corridor which links to Nambour's town centre, provides a safe and legible pathway network to improve walkability and cycling, promotes health and well-being and enhances the natural environment in line with community vision. The master plan proposes nine (9) open space precincts, including the Petrie Park - Sporting and Community Precinct, incorporating the Nambour Aquatic Centre Precinct.

Figure 14 Petrie and Apex Park Master Plan

Master plan themes include:

- A new economy;
- A strong economy;
- An enviable lifestyle and environment;
- Well connected communities; and
- Service excellence and a public-sector leader.

Recommendations for the Nambour Aquatic Centre Precinct include:

- Proposed community splash park (subject to feasibility study);
- Investigate carpark expansion at Nambour Aquatic Centre; and
- Wayfinding signage.

3.1.2 Nambour Activation Plan (2015)

This *Nambour Activation Plan* provides a framework to activate the streets and places of Nambour and enable local businesses and community to energise their township and celebrate their place.

The Activation Plan was prepared as an 'enabler' and was not intended to limit or dictate actions and ideas. The Activation Plan has drawn from a substantial list of previous planning documents for Nambour, with the aspiration/ vision being derived from a recent 'place creation workshop '.

Based on a contemporary approach to activation and place making the Activation Plan seeks to use temporary/lighter solutions to activate streets and key spaces, allowing ideas to be trialed and refined before significant investment in street and building improvements are undertaken.

The Activation Plan provides a framework only and is intended to stimulate more ideas, solutions and actions. The Activation Plan is intended to be a living document which is intended to evolve and change over time.

While the focus of the Activation Plan is the town centre, there are four key strategic projects that contribute to the activation of Nambour, including one to investigate a Nambour splash water park and leisure corridor.

3.1.3 Sunshine Coast Aquatic Plan 2011-2026 (June 2016 Edition)

The *Sunshine Coast Aquatic Plan 2011-2026* was developed to inform and guide the planning, development and management of the aquatic network across the Sunshine Coast region through to 2026. The Plan was revised in June 2016.

This Plan focuses on Council owned land where aquatic programs and ancillary services are delivered, or where Council has a defined role in the delivery of an aquatic facility, including the Nambour Aquatic Centre.

The recommendation within the Plan for the Nambour Aquatic Centre was to:
"Undertake a feasibility study which develops concept plans on the preferred option for the provision of leisure water (with potential for delivery through public-private partnership) and ensures adequate car parking is available to meet current and future demands."

3.1.4 Sunshine Coast Social Strategy 2015

The *Sunshine Coast Social Strategy 2015* provides a long-term social direction that builds on the region's positive social attributes and identifies shorter term initiatives for responding to the social needs of the region, and further developing community strengths.

Key findings from the Strategy relevant to this study include:

- The trend for less active and less healthy lifestyles leads to health and wellbeing issues. Although the Sunshine Coast fairs better in comparison to other areas of the State, there is a need to continue to provide environments and stimulating activities which help residents to undertake sufficient physical activity and participate in community life.
- Councils role includes encouraging active lifestyles through the provision of 10 aquatic centres with over one million visits annually.
- On average, one person attends Council's major venues, aquatic facilities, libraries, gallery and events 10 times per year.
- Councils target is to increase the frequency our population attends council's major venues, aquatic facilities, libraries, gallery and events.
- Council aims to ensure people and places are connected by creating spaces which can be used as incubators for social gathering, activities and developing social enterprises.

3.2 Water Play Facility Trends

A key requirement of the study was to review key water play industry trends. Aquatic Facility reviews completed by OPG and its associated companies have reviewed water play developments in Australia, New Zealand, North America, Canada, the Middle East and China as background to help guide to potential aquatic facility innovations and trends.

Key features that should be considered when redeveloping or retrofitting aquatic facilities with outdoor water play are outlined under the headings below.

1) Recreation and Leisure User Markets

Traditionally many local authority aquatic leisure facilities were built for specialist or limited market users (i.e. competitive swimmers or high level sport participants). Detailed planning and comprehensive feasibility studies now can show more targeted user profiles.

Such studies usually identify the demographic profile of residents in the project area, their current aquatic and leisure participation patterns and use of surrounding aquatic facilities that provide a sound base for more user-friendly and the high attractor facilities.

Most aquatic facility market research indicates future complexes must equally cater for four distinct aquatic user markets as outlined below:

- **Recreation and Leisure Market** - usually made up of families, people coming with friends and groups for fun, relaxation, social activity and low level competition/participation.
- **Competitive/ Training/Fitness Market** - usually made up of people predominantly attending facilities alone for structured fitness or competition activities.
- **Education Market** - usually made up of children and adults wishing to increase water safety and survival skills. Includes Learn to swim classes, school and club use and individuals improving their skills and techniques. They require warm water pools and water depths with some straight edges and easy water access etc.
- **Health and Therapy Market** - usually made up of children, adults and older adults wanting to relax or exercise in warm water. This market also includes specialist health condition groups such as arthritis, asthma suffers, etc. They require warm water pools and associated health relaxation areas, i.e. Spa/ saunas, etc.

Previous studies have indicated that the recreation and leisure market will usually be the largest as it contains people of all ages, ability, types, interest and gender. The competitive/ training/ fitness market is a more specialist market as it usually contains younger, fitter and more active people who have made time to train and compete.
Benchmarking studies have indicated that up to 60% to 70% of facility users come from the recreation/leisure sector with 20% to 30% coming from the competitive/ training/ fitness markets. The health and therapy and education markets can range from 10% to 20% of the market subject to the age and health profile of the community in which the facility is located.

The most successful centres attract all user markets and should be set up to allow people to participate in a range of activities at the one site.

2) Recreation and Water Play Fun Zones

Changing static shallow water areas into water play and fun zones is one of the most popular renovations that can be done at older aquatic facilities. This can be done by demolishing old low use pools and creating active water based play equipment, water sprays and interactive equipment to a new splash pad.

Simply we are building a fun playground with water and sprays on a splash pad that reduces the need for extensive supervision as it has negative water depth. When it is not operating, it can be designed to drain all water into underground balance tanks and therefore be safe to use as a dry playground and not require any direct staff supervision.

Many such outdoor pools that have been retrofitted have been linked to high use indoor pools.

3) Mix of Combination Units and Single Water Play Equipment

The most popular water play developments present a mix of combination play units (with a large range of sprays, sprinklers, water showers and slide/s) a single play equipment.

The combination unit is like a dry playground unit with water that enables a lot of users to play in the one zone as well as explore different zones across the unit. The combination units have a mix of at ground equipment (fully accessible) as well as higher level water play equipment linked by stairs and platforms (usually 1m to 2m above ground).

All combination units need to be designed to meet Australian Playground Safety Standards and must ensure all elevated areas have barriers to stop any falls and all equipment needs to be designed to stop hand and limb entrapment.

Single water play equipment can be smaller and larger scale to cater for toddlers or older children and are usually zoned away from each other. Examples of water play equipment includes showers and sprays, water guns, interactive ground sprays and water mist units

4) Other Older User Attraction Water Play Features

Water slides and similar challenge and adventure type activities are also popular if the venue has a range of slides/rides with height and different speeds to keep peoples interest. Single water slide ride facilities struggle to keep interest due to the lack of variety with only one slide. Multi ride slide areas allow users to try different length, speed and configuration rides. The main cost is in the provision of the tower and the slides are usually a much lower cost

There are also a range of new water rides that have a slide component leading to another ride experience such as dropping into a bowl and then water, or onto a ramp and then into a splash pool.

A key design trend is to link all slides to a common entry platform to ensure one staff person can supervise the area. A common splash down run out flume zone (not a splash down pool) also allows one lifeguard to control a range of ride waterslide exit points.

3.2.1 Water Play Development Case Studies

The tables on the following pages summarise the cost, key issues and impact on operations of water and adventure play facilities at the following locations:

- Cotton Tree Aquatic Centre (Sunshine Coast);
- Deception Bay Aquatic Centre (Moreton Bay);
- Moree Artesian Aquatic Centre (New South Wales);
- Noble Park Aquatic Centre (Victoria); and
- The Strand Water Park (Townsville).

These are summarised as follows.

Table 5 Cotton Tree Aquatic Centre Water Play

Review Item	Details
Equipment	Splash pad with tip bucket/water play items
Date Opened	2011
Development Area	Approx. 200m2
Indicative Capital Cost	$650,000
Estimated Visitation Impacts	Increased child, family and infant use by 19% - 10,000 extra visits
Secondary Spend	Increased secondary spend by 2.4%[8]
Operating/Development Review	• Water is not heated • Has supported increased learn-to-swim registrations • Centre visitation increased whilst other aquatic centres in the region decreased around the time of the 2011 global financial crisis • Encourages longer stays at the centre resulting in increased spending at the kiosk • Separate plant installed – considered necessary to isolate from the remainder of the plant given the smaller water volume and high intensity use area, and to protect other pools from closure in the event of a faecal accident
	

[8] Operator advised that small growth was a positive operating result when other aquatic centres were facing reduced revenues following the Global Financial Crisis.

Review Item	Details
	

Table 6 Deception Bay Aquatic Centre Water Play (Moreton Bay)

Review Item	Details
Equipment	Splash pad with tip bucket and public start-up button
Date Opened	2015
Development Area	Approx. 200m2
Indicative Capital Cost	$400,000
Estimated Visitation Impacts	Increased child, family and infant use by 43% - 5,000 extra visits
Secondary Spend	Increased secondary spend by $1.00/entry
Operating/Development Review	• Separate plant • Large increase to visitation since commissioning • Increase to kiosk revenue since commissioning • Recognised as a community play destination • Tip bucket element most popular amongst all interactive elements
	

Review Item	Details
	

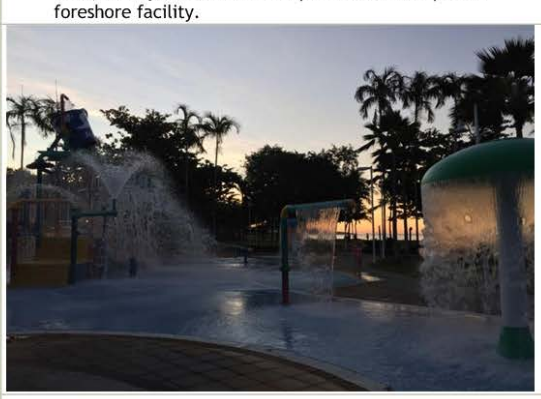
Table 7 Moree Artesian Aquatic Centre Water Play

Review Item	Details
Equipment	Splash pad with interactive play equipment and separate tower and water slide
Date Opened	2014
Development Area	Water Play 350m2, Water Slide 200m2, Existing amenities
Indicative Capital Cost	$900,000
Estimated Visitation Impacts	Large increase to family/child casual visits (+30%: 60,000)
Secondary Spend	Increased kiosk and secondary spend sales (+35%: $130K)
Operating/Development Review	• Separate plant and filtration • Large increase to visitation since commissioning • Increase to kiosk revenue since commissioning • Recognised as a community play destination • Older children and youth attracted to waterslide
	
	

Table 8 Noble Park Aquatic Centre Water Play

Review Item	Details
Equipment	Splash pad with interactive play equipment and separate tower and water slide
Date Opened	2014
Development Area	Water Play 450m2, Water Slide 200m2, Existing amenities
Indicative Capital Cost	$1.300M
Estimated Visitation Impacts	Large increase to family/child casual visits (+20%: 30,000)
Secondary Spend	Increased kiosk and secondary spend sales (+30%: $90K)
Operating/Development Review	• Separate plant and filtration • Large increase to visitation since commissioning • Increase to kiosk revenue since commissioning • Recognised as a community play destination • Older children and youth attracted to waterslide

Table 9 The Strand Water Park - Townsville Foreshore

Review Item	Details
Equipment	Splash pad with interactive play equipment in public park
Date Opened	1999
Development Area	Water Play 550m2 plus 200m2 public toilets and change. Located 200m from Tobruk Memorial Swimming Pool
Indicative Capital Cost	$1.500M
Estimated Visitation Impacts	Free use and major tourist attraction with an estimated 250,000 annual visitations
Secondary Spend	Nil
Operating/Development Review	• Separate plant and filtration • Recognised as a community play destination • Needs 2 to 3 pool staff when operating • Can be turned off outside of operational hours • Major drop in family and children use of Tobruk Pool once opened. • Major operating cost to Council at an estimated $300,000 to $350,000 a year to staff and operate this free public foreshore facility.
	
	

3.3 Key Trends and Impacts for NAC Precinct Water Play Development

The aquatic facility water play industry trends review indicates the following key learnings that should be considered when developing facility options and operating models for the Nambour Aquatic Centre Precinct Water Play project.

1. Facility Design and Equipment Selection

- The most successful water play areas have a mix of play equipment that include combination units, separate larger water play equipment and water slides.
- All water play areas should be designed to have their own filtration systems and not use water from other aquatic installations on site. This enables them to be operated independently and in case of any water contamination issues can be isolated from other aquatic areas.
- The design should ensure that the water play area has several play zones for different ages and abilities and that the zones/equipment should be designed to cater for different user needs i.e. toddler's area away from older children's play zone.
- To maximise safety all active areas such as slides and climbing areas should be placed in one zone so staffing can be positioned to control these areas.
- The splash pad should have a non-slip surface applied to ensure minimum user slippage when wet.
- Waterslides and more active older children zones should be located away from younger children zones. The waterslide tower stair entry must be able to be secured to restrict users when the waterslides are not operational.
- All waterslides user entry should be on the same level so only one slide supervisor is required to control users. The exit slide flumes should also be at the same ground level and be located side by side so one supervisor can control rider exit from the flumes.
- All waterslide tower steps and platforms need to be non-slip and the tower needs to be designed to drain away water dropped by users as they use the stairs and platforms. This will be highly corrosive water so this needs to be considered when selecting building materials.
- The splash pad should be designed to drain inwards and draining outlets to the balance tank and filtration return need to be located under equipment and combination units to minimise water spill onto adjoining concourses.
- Seating should be located away from splash down zones and located around the water play area facing inward so people sitting can informally supervise water play users.
- Best use and viable water play areas are located close to a café/kiosk area so users and supervisors can easily purchase food and beverage during their use of this area.
- Water play areas should be located close to change and amenity areas.

2. Operating Trends

- Industry trends indicate well designed water play areas can attract up to 20% to 30% more visitations from children, family and adult users.
- Due to the cost of aquatic area supervision and energy and maintenance most operators need to set up an increase in entry fees and specific charges for waterslides etc.
- Some developments have enabled entry fees to be increased and waterslides are usually set up with entry fees for a ride session or cost per ride. These fees assist with meeting some of the staffing, energy and maintenance costs
- Due to water safety requirements, it is critical that qualified aquatic lifeguards are employed to control usage at all operational times. The water play area should ensure clear vision zones so active lifeguarding (lifeguards moving around the water play area) can occur at all operational times.

4. NAMBOUR AQUATIC CENTRE PRECINCT DEVELOPMENT OPTIONS

4.1 Initial Water Play and Precinct Improvement Development Options

To help determine the best future site for the development of a water play space at the NAC Precinct, three options, as summarised below were prepared:

1. **Option One: Develop splash pad and water play equipment plus waterslides (x 2) on skate park site** and develop car park, amenities, plant room etc. close to the development. Need to fence development to stop children's access to roads etc.
2. **Option Two: Develop splash pad and water play equipment plus waterslides (x 2) and tower on the upper car park area** and develop car park, new plant room areas etc. and link to internal pool grounds. This option will likely require redevelopment and repositioning of the existing amenities building to accommodate the spatial needs in this area.
3. **Option three: Develop splash pad and water play equipment over the current program pool and leisure water** plus waterslides (x 2) and tower using embankment area and develop new car park over skate park with ramp access to upper car park.

All options were guided based on a maximum spend of $1 million for the water splash pad and water play equipment plus watersides components. Any other car parking, access, amenity implications were considered as additional project costs. A new car park and bus drop off was incorporated within all options.

An analysis of the constraints and benefits of each option is outlined in the following sections.

4.1.1 Option 1: Development on Skate Park Site

The key benefits of Option 1 are:

- New public park positioning at roadway level.
- Improved vehicular, bus and pedestrian access with new car park.

The key constraints of Option 1 are:

- High capital cost for fully greenfield development as requires new filtration, plant room, services and new amenities.
- New car parking will need to be developed over current green space.
- Requires removal of small number of trees.
- Takes up all available land.
- Car park next to residential area may cause impacts to neighbours.
- Dedicated lifeguarding and water testing required generating an additional operational cost.
- Public park location impacts on ability to charge for use/cover costs.
- No option of capital contribution from future Nambour Aquatic Centre management.
- Area required to be fenced from surrounding greenspace.

Figure 15 on the next page highlights the design layouts for Option 1:

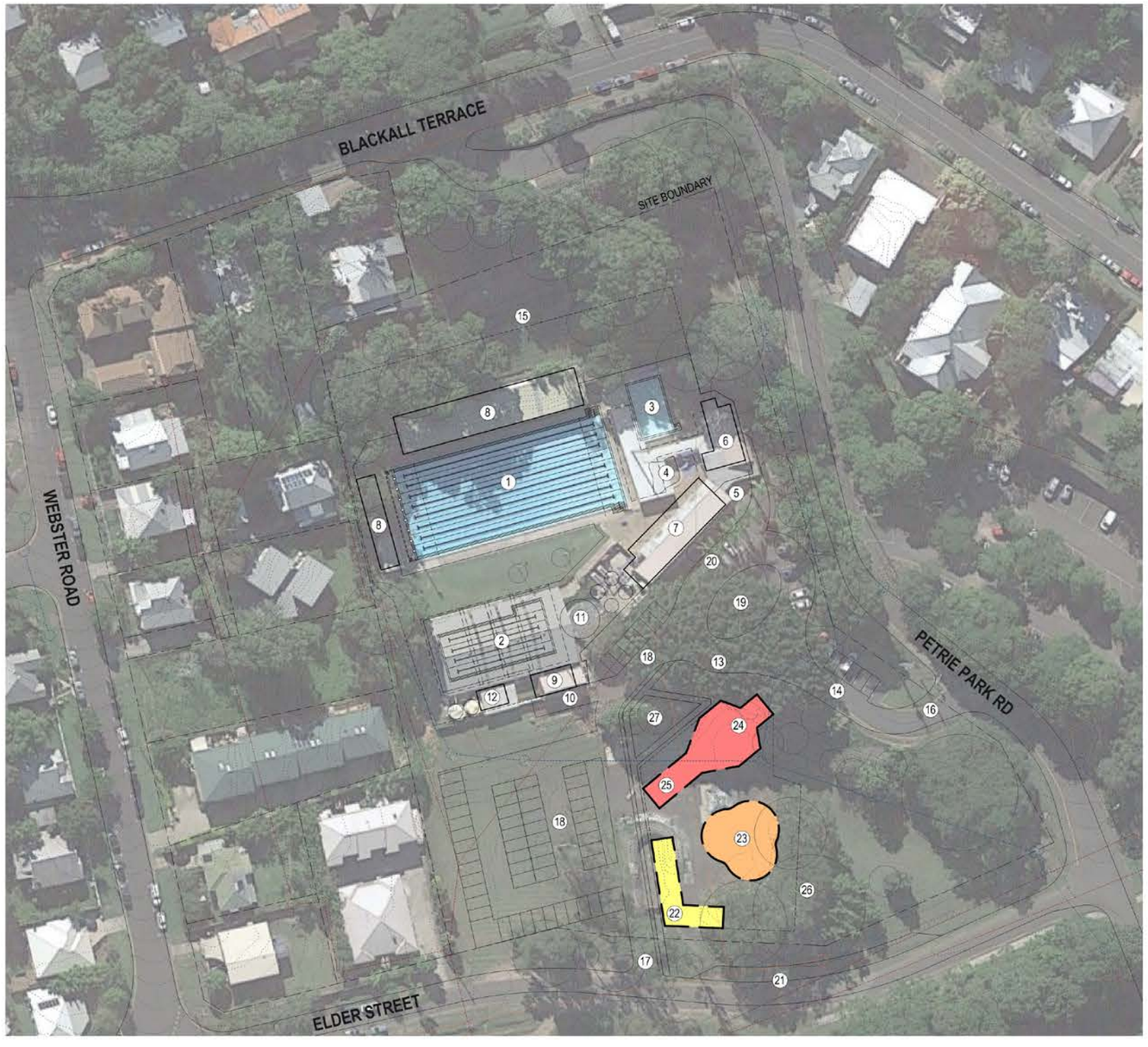
OPTION 1

LEGEND

1. EXISTING HEATED 50m POOL
2. EXISTING HEATED ENCLOSED PROGRAMME POOL
3. EXISTING TODDLER POOL
4. EXISTING FOUNTAIN / PLAY POOL
5. EXISTING FACILITY ENTRY
6. EXISTING ADMINISTRATION BUILDING
7. EXISTING AMENITIES BUILDING
8. EXISTING SHELTERED SHADE AREA
9. EXISTING PLANT ROOM
10. EXISTING SERVICE YARD
11. EXISTING HEAT PUMP COMPOUND
12. EXISTING STORAGE / RAIN WATER TANKS
13. EXISTING TREES TO BE REMOVED SHOWN DASHED
14. EXISTING CAR PARKS
15. EXISTING FENCE LINE
16. CAR PARK ENTRY (BUS ENTRY & EXIT)
17. CAR PARK EXIT
18. CAR PARK (ONE WAY CIRCULATION)
19. BUS TURN AROUND ZONE
20. BUS DROP OFF – LOCATION 1
21. BUS DROP OFF – LOCATION 2
22. AMENITIES BUILDING
23. 250m2 ZERO-DEPTH SPLASHPAD + WATER PLAY EQUIPMENT
24. 2x WATERSLIDES ACCESSED VIA TOWER
25. WATERSLIDE RUN-OUT AREA
26. FENCE LINE
27. PWD RAMP + PEDESTRIAN STAIR ACCESS

SITE LEGEND

- EXISTING SEWER SERVICE LINE
- EXISTING WATER MAIN SERVICE LINE
- EXISTING FIRE HYDRANT SERVICE LINE
- CONTOUR LINES (0.5m INTERVALS)
- FENCE LINE
- BOUNDARY LINE



PRELIMINARY ONLY
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CLIENT: SUNSHINE COAST COUNCIL
PROJECT: CM-16-011 - NAMBOUR AQUATIC FEASIBILITY
SHEET NAME: FACILITY CONCEPT LAYOUT INVESTIGATION - OPTION 1
SCALE: 1 : 500 @ A1
SHEET # SK-0001
REV # A

4.1.2 Option 2: Development on Upper Car Park Site

The key benefits of Option 2 are:

- Closer connectivity to kiosk to improve secondary spending.
- Supports some opportunity for capital funding partnership with operator.
- Economies of scale savings through:
  - Shared lifeguarding and water testing
  - Connectivity to existing services.
- Opportunity for improved aquatic centre layout to maximise revenue.
- Improved vehicular, bus and pedestrian access.

The key constraints of Option 2 are:

- Likely equal high capital cost (with option 1) due to need to relocate and rebuild amenities and entry building.
- Sub-optimal position of proposed new amenities.
- Requires removal of some trees.

Figure 16 on the next page highlights the design layouts for Option 2:

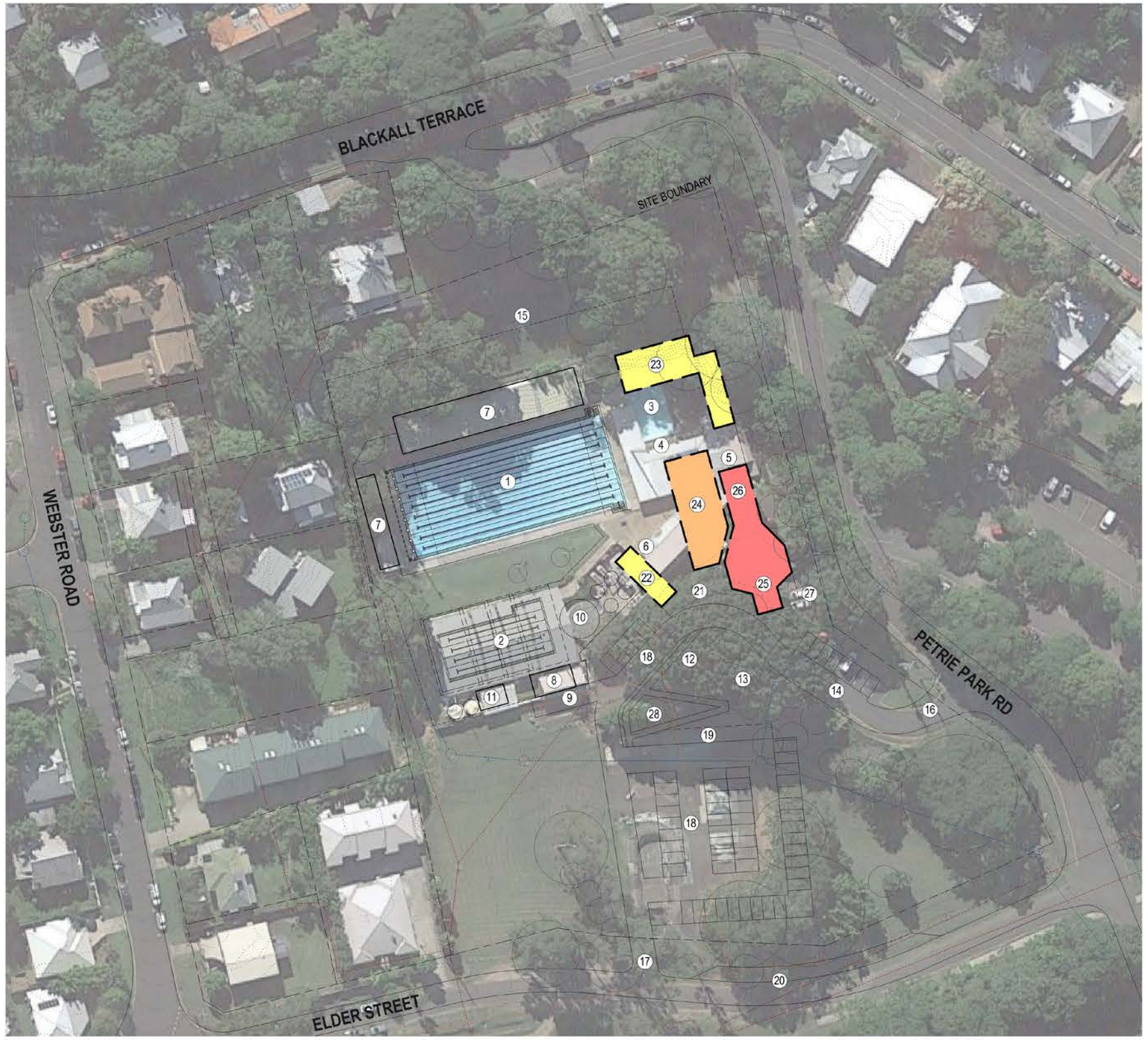
OPTION 2

LEGEND

1. EXISTING HEATED 50m POOL
2. EXISTING HEATED ENCLOSED PROGRAMME POOL
3. EXISTING TODDLER POOL DEMOLISHED
4. EXISTING FOUNTAIN / PLAY POOL DEMOLISHED
5. EXISTING ADMINISTRATION BUILDING DEMOLISHED
6. EXISTING AMENITIES BUILDING DEMOLISHED
7. EXISTING SHELTERED SHADE AREA
8. EXISTING PLANT ROOM
9. EXISTING SERVICE YARD
10. EXISTING HEAT PUMP COMPOUND
11. EXISTING STORAGE / RAIN WATER TANKS
12. EXISTING NORTHERN TREES x4 TO BE REMOVED SHOWN DASHED
13. EXISTING SOUTHERN TREES x4 TO BE RETAINED
14. EXISTING CAR PARKS
15. EXISTING FENCE LINE
16. CAR PARK ENTRY ONLY
17. CAR PARK EXIT ONLY
18. CAR PARK (ONE WAY CIRCULATION)
19. BUS DROP OFF – LOCATION 1
20. BUS DROP OFF – LOCATION 2
21. FACILITY ENTRY
22. PLANT ROOM + RECEPTION BUILDING
23. AMENITIES BUILDING
24. 250m2 ZERO-DEPTH SPLASHPAD + WATER PLAY EQUIPMENT
25. 2x WATERSLIDES ACCESSED VIA TOWER
26. WATERSLIDE RUN-OUT AREA
27. FENCE LINE
28. PWD RAMP + PEDESTRIAN STAIR ACCESS

SITE LEGEND

- EXISTING SEWER SERVICE LINE
- EXISTING WATER MAIN SERVICE LINE
- EXISTING FIRE HYDRANT SERVICE LINE
- CONTOUR LINES (0.5m INTERVALS)
- FENCE LINE
- BOUNDARY LINE



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PROJECT: CM-16-311 - NAMBOUR AQUATIC FEASIBILITY
SHEET NAME: FACILITY CONCEPT LAYOUT INVESTIGATION - OPTION 2
SCALE: 1 : 500 @ A1
SHEET #: SK-0002
REV #: A

4.1.3 Option 3: Development within Nambour Aquatic Centre Site

The key benefits of Option 3 are:

- Redevelops an existing low use water area.
- Existing filtration system can be reused saving capital costs.
- Closer connectivity to kiosk to improve secondary spending.
- Supports opportunity for capital funding partnership with operator for longer term management agreement.
- Economies of scale operating savings through:
    - Shared lifeguarding and water testing
    - Connectivity to existing NAC services
- Likely lowest capital cost option.
- Improved vehicular, bus and pedestrian access.
- Makes use of embankment area for water slide tower that is currently unused.

The key constraints and benefits of Option 3 are:

- Requires removal of some trees.

Figure 17 on the next page highlights the design layouts for Option 3:

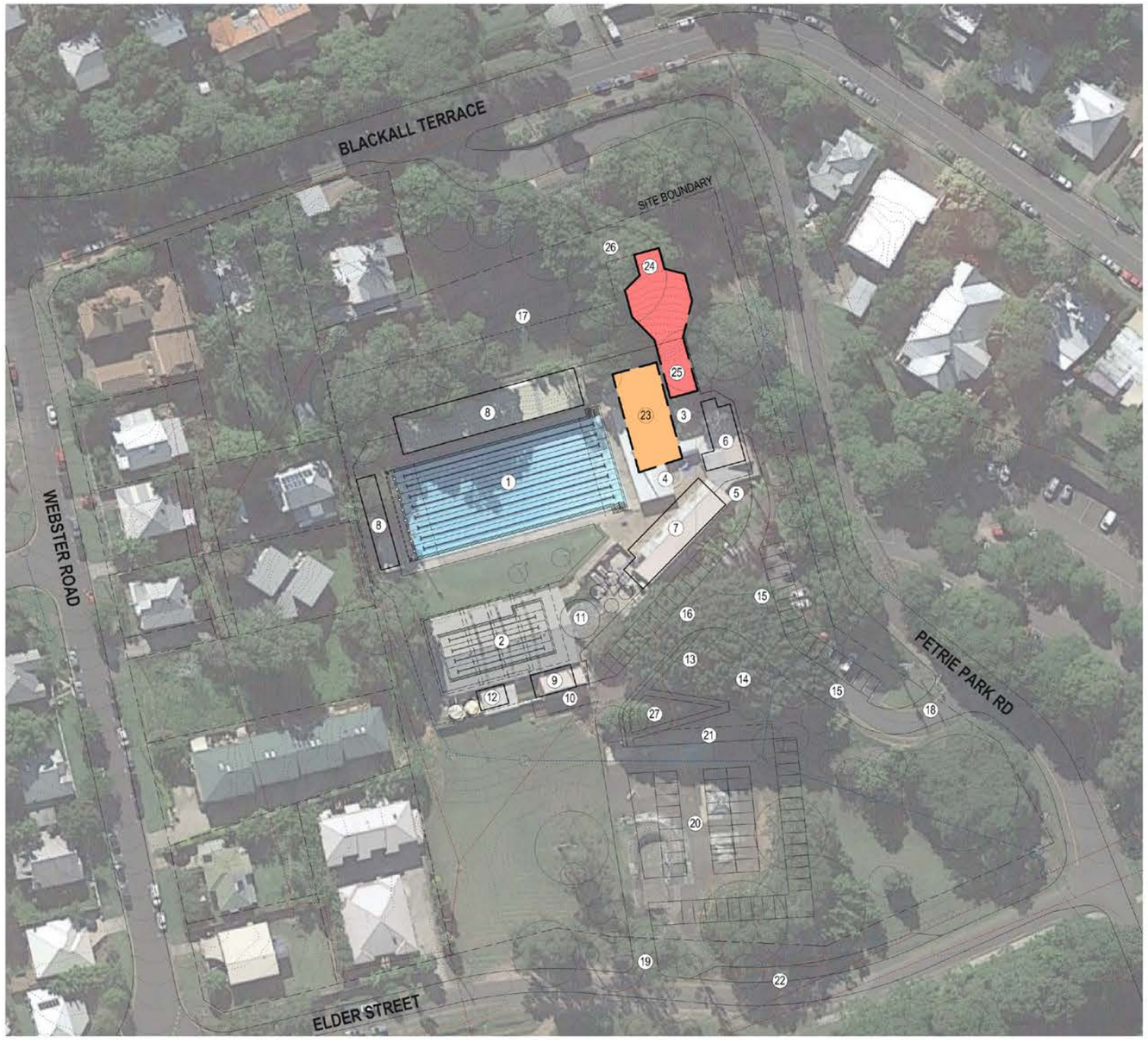
OPTION 3

LEGEND

1. EXISTING HEATED 50m POOL
2. EXISTING HEATED ENCLOSED PROGRAMME POOL
3. EXISTING TODDLER POOL DEMOLISHED
4. EXISTING FOUNTAIN / PLAY POOL DEMOLISHED
5. EXISTING FACILITY ENTRY
6. EXISTING ADMINISTRATION BUILDING
7. EXISTING AMENITIES BUILDING
8. EXISTING SHELTERED SHADE AREA
9. EXISTING PLANT ROOM
10. EXISTING SERVICE YARD
11. EXISTING HEAT PUMP COMPOUND
12. EXISTING STORAGE / RAIN WATER TANKS
13. EXISTING NORTHERN TREES x4 TO BE REMOVED SHOWN DASHED
14. EXISTING SOUTHERN TREES x4 TO BE RETAINED
15. EXISTING CAR PARKS
16. EXISTING CAR PARK WITH ADDITIONAL PARALLEL CAR PARKS
17. EXISTING FENCE LINE
18. CAR PARK ENTRY ONLY
19. CAR PARK EXIT ONLY
20. CAR PARK (ONE WAY CIRCULATION)
21. BUS DROP OFF – LOCATION 1
22. BUS DROP OFF – LOCATION 2
23. 250m2 ZERO-DEPTH SPLASHPAD + WATER PLAY EQUIPMENT
24. 2x WATERSLIDES ACCESSED VIA TOWER
25. WATERSLIDE RUN-OUT AREA
26. FENCE LINE
27. PWD RAMP + PEDESTRIAN STAIR ACCESS

SITE LEGEND

- EXISTING SEWER SERVICE LINE
- EXISTING WATER MAIN SERVICE LINE
- EXISTING FIRE HYDRANT SERVICE LINE
- CONTOUR LINES (0.5m INTERVALS)
- FENCE LINE
- BOUNDARY LINE



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PROJECT: CM-16-011 - NAMBOUR AQUATIC FEASIBILITY
SHEET NAME: FACILITY CONCEPT LAYOUT INVESTIGATION - OPTION 3
SCALE: 1 : 500 @ A1
SHEET # SK-0003
REV # A

4.2 NAC Development Options Comparisons

An analysis was undertaken of the preliminary information using a set of development assumptions and estimated capital and operating costs of the development options. This is summarised in Table 10 below:

Table 10 Water Play Development Option Analysis

Review Item	Option 1	Option 2	Option 3
Water Play and Slides	$1,000,000	$1,000,000	$1,000,000
Filtration System	$300,000	$150,000	$50,000
Services Connection	$100,000	$100,000	$10,000
Change/ Amenities	$500,000	$600,000	$0
Demolition/ Amenities	$250,000	$300,000	$100,000
Car Park/ Ramps	$800,000	$700,000	$700,000
Indicative Capital Cost	**$2,950,000**	**$2,850,000**	**$1,860,000**
Operating Costs	**$300,000 p.a.**	**$100,000 p.a.**	**$80,000 p.a.**
Capital Contribution Potential	**Low**	**Medium**	**High**

The table information indicates that:

Option 3 has the lowest capital and operating cost whilst also the highest opportunity for capital funding contribution partnership from operators as it can be linked to the internal area of the NAC that is already staffed and will therefore has lower operational costs.

It is adjacent to existing kiosk and is located away from the main pool and indoor pool.

It also has an existing filtration system for the program and leisure pool that can be converted at low cost. It has existing amenities and change areas close by so no cost impacts and the location of the waterslides off the embankment reduces the cost of the tower.

Option 2 was estimated to cost more than $1M than option 3 due to the need for a new filtration system, redevelopment of the current amenities and higher demolition costs. It was estimated to require some new staff so operating costs were also estimated to cost slightly more than option 3.

Option 1 had the highest capital cost which was estimated at $1.100M more than option 3 due to the need for a new filtration system, higher cost services connection, new change and amenity block construction and car parking costs. The operating costs will be significantly higher than option 3 due to the need to have separate staff than already employed at NAC.

4.3 Preferred Development Option

OPG presented the three options and associated preliminary cost and operating estimates to the Project Group in early December 2016. The project group considered the constraints and benefits and cost implications of each option and completed a range of internal Council department reviews.

In line with the project brief of the need to select one option for detailed design, it was agreed by Otium Planning Group and Council, that in consideration of the constraints and benefits and cost implications of each option, the preferred Option 3 (Development of water play area within the internal site) was approved for detailed planning.

This included progressing this option to concept design, traffic management planning, landscape design and business and operating impact estimates so the option could go through detailed analysis which is covered in section five of this report.

5. COMMUNITY & STAKEHOLDER ENGAGEMENT

5.1 Consultation Approach

Following the completion of the draft Nambour Aquatic Centre Precinct Concept Plan and Feasibility Report, a community and stakeholder engagement process was undertaken. The draft Nambour Aquatic Centre Precinct Concept Plan was made available to the community and stakeholders for review and comment.

A Community Engagement Plan was developed by Council. The community of Nambour and surrounds were made aware of the opportunity to provide feedback during the public consultation period via:

- Media releases;
- Council's website;
- Social media posts;
- Public display at the Nambour Library; and
- Public display at the Nambour Aquatic Centre.

Targeted consultation was also held with key internal and external stakeholders to seek detailed feedback on the draft concept plans. This included:

- Nambour community;
- Public Display and Consultation Session at Nambour Plaza;
- Meeting with Nambour Alliance;
- Meeting with stakeholders from the local Nambour business community who participated in Council's Nambour Place Creation Workshop in February 2015;
- Meeting with Swimfit (current Nambour Aquatic Centre lessee);
- Internal feedback from Sunshine Coast Council officers; and
- Direct email invitation to comment to Nambour Aquatic Centre members/ customer database.

Feedback from the community and key internal and external stakeholders were collected through:

- Online surveys;
- Hard copy surveys completed at the Nambour Library; and
- Hard copy and online surveys completed at the public consultation session at Nambour Plaza.

5.2 Consultation Themes

A number of **key themes** emerged consistently from the consultation, as summarised below:

Community Consultation

- Strong support for the Draft Concept Master Plan.
- Fees and charges for the water and adventure play elements need to be affordable.
- Need to ensure the facilities incorporate accessibility outcomes.

Stakeholder Consultation

- Generally strong support for the Draft Concept Master Plan.
- Mixed reaction to the location of water play elements. Some stakeholders agreed with locating the water play elements in the Aquatic Centre whilst others voiced a preference for free water play outside the Aquatic Centre precinct in Petrie Park.
- Fees and charges for the water and adventure play elements need to be affordable.

Council Consultation

- Support for the incorporation of the water play elements at the Nambour Aquatic Centre.
- Relocate the lower carpark to the west to enable greater consolidation of recreational space.
- Conversely, some business units of Council had a preference for no lower car park whilst others suggested increasing the capacity or reducing the footprint.

5.3 Consultation Summary

A summary of consultation advice and comments is outlined below by engagement method:

5.3.1 Community Survey

A total of 88 community survey responses were received via:

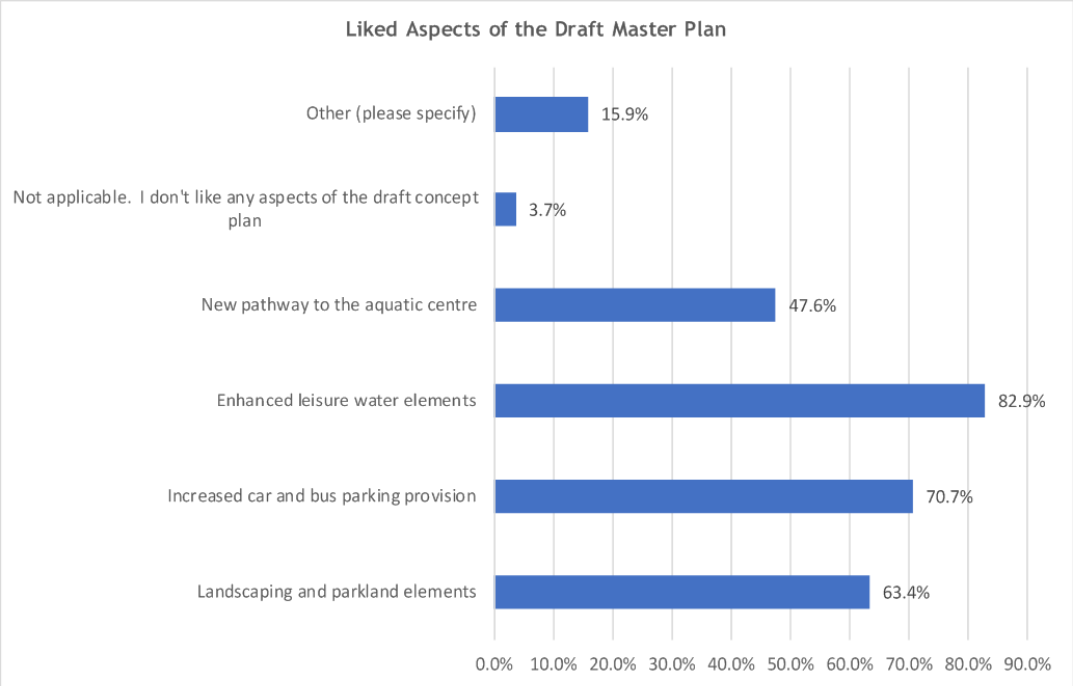
- Online response;
- Nambour Library; or
- Consultation Session at Nambour Plaza.

The majority of respondents were from Nambour and surrounds (67.0%), followed by Yandina and surrounds (6.8%) and Woombye and surrounds (8.0%). Over 85% of respondents were aged 30+ with 76.1% females. 74.7% of respondents have visited the Nambour Aquatic Centre in the last 12 months. 18 respondents indicated they would like a council officer to contact them about their comments.

The aspects respondents most **liked** about the Draft Concept Plan were:

1. Enhanced leisure water elements
2. Increased car and bus parking provision
3. Landscaping and parkland elements.

Figure 18 What aspects of the draft concept plan do you like?



Generally, respondents indicated they liked most aspects of the draft Nambour Aquatic Centre Precinct Concept Plan with 67.9% of respondents indicating "I like all aspects of the draft concept plan".
The common aspects of the draft concept plan respondents indicated they would like to see **changed** were:

- Suggestions for further improvement/ expansion of the Nambour Aquatic Centre;
- More car parking; and
- Ensure accessibility.

A large proportion (83.7%) of respondents indicated they were **more likely to visit** the Nambour Aquatic Centre Precinct if the proposed improvements in the draft concept plan are made.

A large proportion (75.9%) of respondents indicated they see the **waterslide element as an important addition** to the concept plan, despite being informed the waterslide will attract an additional fee to the general pool admission fee and will likely operate at advertised session times.

57.0% of respondents indicated they were **prepared to pay an additional fee** for the waterslide to be included.

The common **other comments** on the draft concept plan from respondents were:

- Support the Draft Concept Master Plan:
  - "It is an awesome idea and I'm really happy that they are proposing this for Nambour"
  - "Great idea, we need as many safe and fun outdoor activity zones for our kids as we can provide";

- Suggestions for further improvement/ expansion of the Nambour Aquatic Centre:
  - "Put in a lean to swim pool so it free up the other pools"
  - "We need a at last three pools that everyone can use";
- Ensure accessibility:
  - "Happy to see the zero depth entry to wet play area as this also allows easier access to pool for people with disabilities"
  - "I think it is very important to have access for people in wheelchairs and facilities with a change room that will have a table or bed that would hold an adult and a hoist"; and
- Ensure fees and charges are affordable:
  - "Extra charge needs to be affordable"
  - "Changes need to be affordable".

5.3.2 Stakeholder Meetings

Meetings were held with the following stakeholders:

- Swimfit (Nambour Aquatic Centre lessee);
- Nambour Alliance; and
- Stakeholders from the local Nambour business community who participated in Council's Nambour Place Creation Workshop in February 2015.

The key outcomes from these discussions were:

- General support and acknowledgement of the concept to collocate the water play elements within the Nambour Aquatic Centre in order increase the opportunity to secure third party funding and support the facility maximising its viability;
- Support the proposed improved car park and access arrangements;
- Need to ensure fees and charges are affordable;
- Need for improved directional signage to the Nambour Aquatic Centre;
- Good location near the kiosk; and
- May need to incorporate long term bus parking provision.

The Nambour Alliance expressed disappointment with the draft Nambour Aquatic Centre Precinct Concept Plan and indicated that a larger scale, free lagoon style leisure pool within Petrie Park would provide a better tourism outcome for Nambour.

5.3.3 Sunshine Coast Council Officer Feedback

Council officers were invited to comment on the Draft Concept Master Plan. Comments from Council officers included:

General

- There may be insufficient space creating a potential conflict in the areas between the kiosk, water play and adventure slides.
- The Draft Nambour Aquatic Centre Precinct Leisure Water Concept Plan is comprehensive and explores a number of options for upgrade of the existing facility before providing a proposed final option.

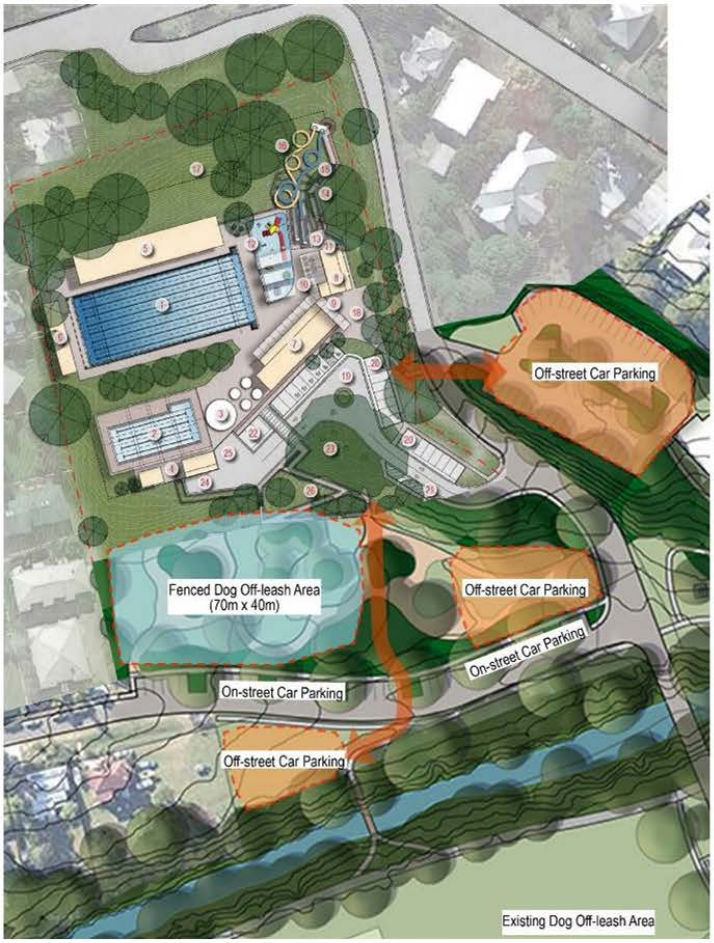
Planning

- The design meets the majority of principles and desired outcomes of the Sunshine Coast Social Infrastructure Strategy 2011 and the Sunshine Coast Open Space Strategy 2011.
- The proposed design does not align with the draft Petrie Creek Parklands Open Space Master Plan or the Open Space Strategy.
- The extent of the Nambour Aquatic Centre (Specific Purpose Sport) should be within the current fenced area.
- Large areas of this site are mapped as a major spray site.
- The landscape concept is consistent with advice regarding tree retention value. Demolition of the existing skate park hardstand will need to be undertaken by hand beneath tree canopy areas and supervised by a Council arborist at all times. A tree protection management plan including the requirement for full exclusion fencing to be erected around trees for retention will also be necessary.

Car Parking and Access Arrangements

- It is really important to have the additional carparking spaces and bus access areas to service the upgraded precinct as the poor car parking situation at the current centre frustrates families and is inadequate for school groups.
- The placement of the car park segments two open space parcels in the current form and could be moved adjacent to housing on the western boundary to consolidate open space. Any future design will need to be located at one of the ends of the park area to minimise any impacts on the parks usable space.
- The proposed plan to develop car parking within Petrie Park at Elder Street is not consistent with the Sunshine Coast Open Space Strategy which specifies – "Strategy 6.3.5: Actively seek to reduce space lost to secondary uses, especially in foreshore area (e.g. car parking, commuter paths, storage spaces).
- The proposed development of lower level car parking is not consistent with the planning within the draft Petrie Creek Parklands Open Space Master Plan that retains this area for park purposes and accommodates car parking on-street.
- The proposed lower level car park is a valuable area of flood resilient parkland that should be retained for park based recreation and not developed for car parking.
- Demand for car parking in Petrie Park is likely to reduce significantly in the coming months as functions of the Nambour Hospital transfer to the new Kawana Hospital.
- Car parking requirements for the Aquatic Centre should be accommodated through:
    - Nose-in on street parking along Elder Street (refer attached plan)
    - Off-street parking in lower value open space areas within the Petrie Park Reserve along Elder Street (refer attached plan)
    - Time limited off-street car parking in the existing Sunshine Coast Genealogy Society Car Park (refer attached plan).
- An additional pedestrian crossing may be required from Petrie Park (across Elders Street) to aquatic centre.
- The area of Petrie Park at Elder Street was identified as the only flood free site within the Nambour Parks network suitable for the development of a fenced dog off-leash area (in the Draft Sunshine Coast Dog Off-leash Area Plan).
- The Parks and Gardens Review – Nambour Aquatic Precinct, February 2017 is outlined below.

Figure 19 Parks and Gardens Review - Nambour Aquatic Precinct



5.4 Response to Consultation Themes

There was strong support for the draft Nambour Aquatic Centre Precinct Concept Plan from the majority of the community and stakeholders.

There have been concerns raised by Parks and Gardens on the proposed car parking and access layout situated on the lower Petrie Park level. The following key considerations informed the proposed position, design and layout of the lower car park:

- Insufficient car parking was identified as part of the project scope as insufficient and a major barrier to the Nambour Aquatic Centre maximising its use and viability;
- There is currently a lack of safe drop-off areas for buses and cars;
- The width of the lower car park road accommodates bus turning;
- The new upper level roundabout supports vehicles safely exiting the upper level if they are unable to locate a car park;

- Given the former skatepark is already a hardstand area, this area was identified as the location that would have least impact on existing greenspace; and
- The western edge of the site has adjacent housing which may be conflicted by vehicular movement in close proximity.

The following key considerations informed the proposed position, design and layout of the lower car park:

- Insufficient car parking is a major barrier to the Nambour Aquatic Centre maximising its use and viability;
- There is currently a lack of safe drop-off areas for buses and cars;
- The width of the lower car park road accommodates bus turning;
- The new upper level roundabout supports vehicles safely exiting the upper level if they are unable to locate a car park;
- Given the former skatepark is already a hardstand area, this area was identified as the location that would have least impact on existing greenspace; and
- The western edge of the site has adjacent housing which may be conflicted by vehicular movement in close proximity.

Table 11 below summarises the actions taken to address the common concerns identified from the consultation process:

Table 11 Consultation Themes and Actions

Consultation Theme	Action
Fees and charges for the water and adventure play elements need to be affordable.	Fees and charges will be determined by Council in consultation with their operator, however the consultation found that the Nambour Aquatic Centre already charges to use inflatables (currently at $9.50 including entry) would be mostly acceptable to the community.
Need to ensure the facilities incorporate accessibility outcomes.	The study's architect and traffic engineer partners have advised that the draft Nambour Aquatic Centre Precinct Concept Plan has been designed to maximise accessibility outcomes and is consistent with current accessibility legislative, regulatory and Council policy requirements. Accessibility considerations have been factored into the car parking and access arrangements, pedestrian movement, PWD unloading and water play areas.
Relocate the lower carpark to the west to enable greater consolidation of recreational space.	Following this feedback, the final Nambour Aquatic Centre Precinct Concept Plan incorporates the spatial requirements of this alternative location as a second option.
Some stakeholders voiced a preference for free water play outside the NAC precinct in Petrie Park.	The Council endorsed Nambour Activation Plan identified the Nambour Aquatic Centre Precinct as the site for investigation of a water splash park that included the existing aquatic centre as well as the adjacent open space to the south that incorporates the former skate park site and green space either side of this. The brief for the splash park followed this recommendation. The green space area further south across the creek, in which Nambour Alliance

Consultation Theme	Action
	have identified as an area for a potential future lagoon precinct, has been identified in the draft Petrie Creek Open Space Master Plan as an important area for existing uses including the sport of hockey and as a dog off-leash zone. Furthermore, this area is highly flood prone with strong inundation levels under existing and future flood modelling.
Some business units of Council had a preference for no lower car park whilst others suggested increasing the capacity or reducing the footprint.	The lower car park has been designed to maximise accessibility outcomes and is consistent with current accessibility legislative, regulatory and Council policy requirements. The proposed carpark provides a balance between the need for extra car parking, the need to maximise the use of recreational open space and safe and accessible pedestrian pathways. Given the former skatepark is already a hardstand area, this area was identified as the location that would have least impact on existing greenspace. In order to support and enable greater consolidation of recreational space, the final Nambour Aquatic Centre Precinct Concept Plan incorporates the spatial requirements of the lower car park to the west as a second option. Options for long term bus parking adjacent to the Nambour Aquatic Centre Precinct are also considered within the final Concept Plan order to better support school carnivals and other major swimming events.

6. NAMBOUR AQUATIC CENTRE PRECINCT DEVELOPMENT PLAN

This section of the report presents information on the recommended Nambour Aquatic Centre Precinct Development Plan and covers:

- Proposed scope of works
- Potential future building improvements and waterslide works
- Detailed site and development concept plans and detailed site landscape plans
- NAC development business and financial modelling

6.1 Recommended Development Overview

As detailed in section 4.3 of this report the review of the three preliminary development options saw option three being nominated as the recommended precinct development plan and was also approved for detailed concept design, capital cost estimation and business impact review.

A draft Nambour Aquatic Centre Precinct Concept Plan was prepared and was made available to the community and stakeholders for review. Following analysis of this feedback, the final detailed recommended Nambour Aquatic Centre Precinct Development Plan is listed in section 6.2 and the recommended Nambour Aquatic Centre Precinct Landscape Plan is listed in section 6.3. A summary of the scope of works that have guided the development and landscape plans includes:

1. Proposed NAC Precinct Improvement Works

These include all works proposed to develop the new water play area and improvements to car parking, access and landscape including:

- **Site Preparation and Services:** Includes demolition of skate park, existing toddler and program pool, clear landscape areas (as per the landscape plan) and complete site preparation/earthworks, retaining walls and site fencing replacement.
- **Car Parks and Roads:** Includes new PWD ramp and pedestrian stairs between upper and lower car parks, construction of lower car park, new bus drop off zone, upper car park modification for more disabled and family parking, realignment of access driveway and new car drop off zone.
- **Water Play and Slide:** Includes construction of a zero-depth splash deck with two linked zones of water play equipment including zone 1 (Toddler age group) with toddler slides and ground sprays/fountains and zone 2 (5 years+) with combination unit play fort with slide, sprays and fountains and tipping bucket. The development also includes an older child/youth adventure area enclosed flume waterslide and tower that utilises the adjoining bank and is linked by stairs to a slide take off tower and platform. The enclosed flume winds its way down to pool concourse ground level and includes a run out/exit open flume.
- **Landscape Improvements:** Incudes remodelled public forecourt with new hard landscaping, new planting areas, new shelters/shading, new fully accessible pathways, new shade trees and lighting.

2. Potential Future NAC Precinct Improvement Works

These include other potential future works that were identified as non-essential to the redevelopment but would improve customer services and experience and attract more users. These include:

- **Future Building Development:** Includes upgrades to entry building and kiosk/wet lounge areas.
- **Additional Waterslide:** Allowance has been made in the design for a second waterslide to be added to attract more users and generate more operating income.

6.1.1 Alternative Car Park Option

There were mixed views from some business units of Council on the positioning and design of the proposed lower level car park in consideration of:

- The need to relocate the lower carpark to the west to enable greater consolidation of recreational space; and
- Whilst some business units of Council had a preference for no lower car park, others suggested increasing the capacity or reducing the footprint.

The proposed positon of the lower car park has been designed to maximise accessibility outcomes and is consistent with current accessibility legislative, regulatory and Council policy requirements. The proposed carpark provides a balance between the need for extra car parking, the need to maximise the use of recreational open space and safe and accessible pedestrian pathways. Given the former skatepark is already a hardstand area, this area was identified as the location that would have least impact on existing greenspace. In order to support and enable greater consolidation of recreational space, the final Nambour Aquatic Centre Precinct Concept Plan incorporates the spatial requirements of the lower car park to the west as a second option (refer to Section 6.2 below). Options for long term bus parking adjacent to the Nambour Aquatic Centre Precinct are also considered within the final Concept Plan order to better support school carnivals and other major swimming events.

6.2 Recommended NAC Precinct Development and Landscape Plans

The recommended NAC Precinct Development and Landscape Plans are listed on the following six pages:

Sunshine Coast COUNCIL

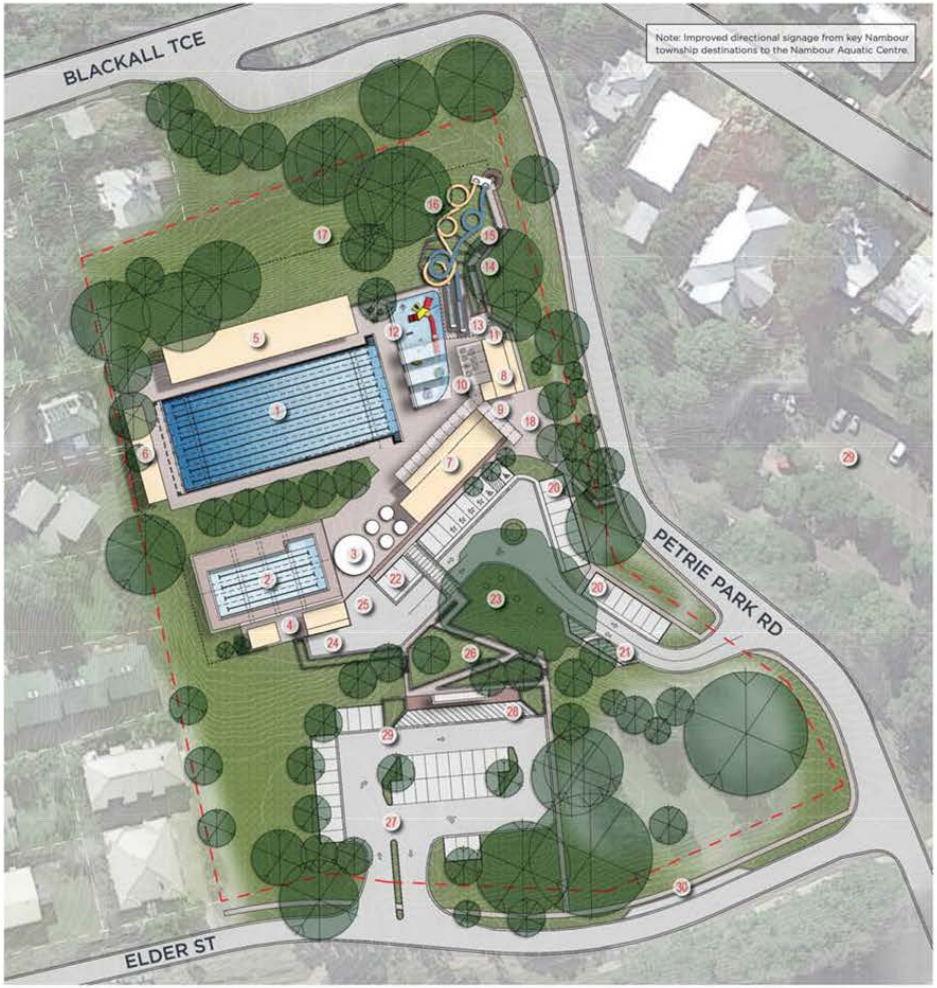
LEGEND

1. Existing Heated 50m Pool
2. Existing Heated Enclosed Program Pool
3. Existing Service Compound
4. Existing Storage Sheds and Rain Water Tanks
5. Existing Sheltered Grandstand
6. Existing Shade Structure
7. Existing Amenities and Plant Room Building
   - Proposed Screen or Cladding System to Facade (car park side)
   - New Centre Signage
8. Existing Administration Building
   - Proposed Screen or Cladding System to Facade (Petrie Park Road side)
   - Upgrade to Kiosk and Serving Area
9. Existing Facility Entry
   - New Access Control and Entry Awning
10. New Covered Seating/Dining Area
11. New Wet Play Plant Room & Manifold
12. New 250m² Zero-Depth Splash
    - Designed into Age Group Zones
    - Seating Hob to Length of Splashpad to act as a Barrier to 50m Pool
    - Shading to cover portion of splashpad
13. New Waterslide Run-Out with Pool Fence Surround
14. New Waterslide Access via Landscaped Terrace Stairs & Flume Tower Staircase
15. New Waterslide (Enclosed Flume Design)
16. Future Waterslide (Enclosed Flume Design) or subject to budget availability
17. New Site Fence Line
18. Existing Public Forecourt
    - New Hardscaping, Landscaping and Cyclist Storage
19. Upgrade Upper Car Park - Car Turncircle + Trafficable Island for Service Vehicle Maneuvering
20. Existing Upper Car Park - Existing Car Parks
21. New Upper Car Park - Car Drop-Off Zone
22. New Upper Car Park - Staff Car Parks
23. Existing Fig Trees
    - Northern Fig Trees to be Removed (shown dashed)
    - Southern Fig Trees to be Retained
24. Existing Service Yard
25. New Service Vehicle Turn-Around Space
26. New PWD Ramp and Pedestrian Stair Access from Lower Car Park
27. New Lower Car Park
28. New Lower Car Park - Bus Drop-Off Zone
29. Additional Aquatic Centre car parking via existing upper car park off Petrie Park Rd
30. New designated bus parking space on Elder Street

CAR PARKS

Upper Level Car Parks		
Existing Car Park	=	15
New Car Parks	=	5
New Staff Car Park	=	3
New Person with Disability Car Parks (PWD)	=	2
New Parents with Prams Car Parks (PWP)	=	4
Lower Level Car Parks		
New Car Parks	=	34
Total Proposed Car Parks	=	**61***

*Note: Overflow car parking via existing upper car park off Petrie Park Rd.



Presented by Otium Planning group + LIQUID BLU

NAMBOUR AQUATIC PRECINCT - FEASIBILITY STUDY
CONCEPT MASTERPLAN

MP-100
16.02.2017 - REV C

Sunshine Coast COUNCIL

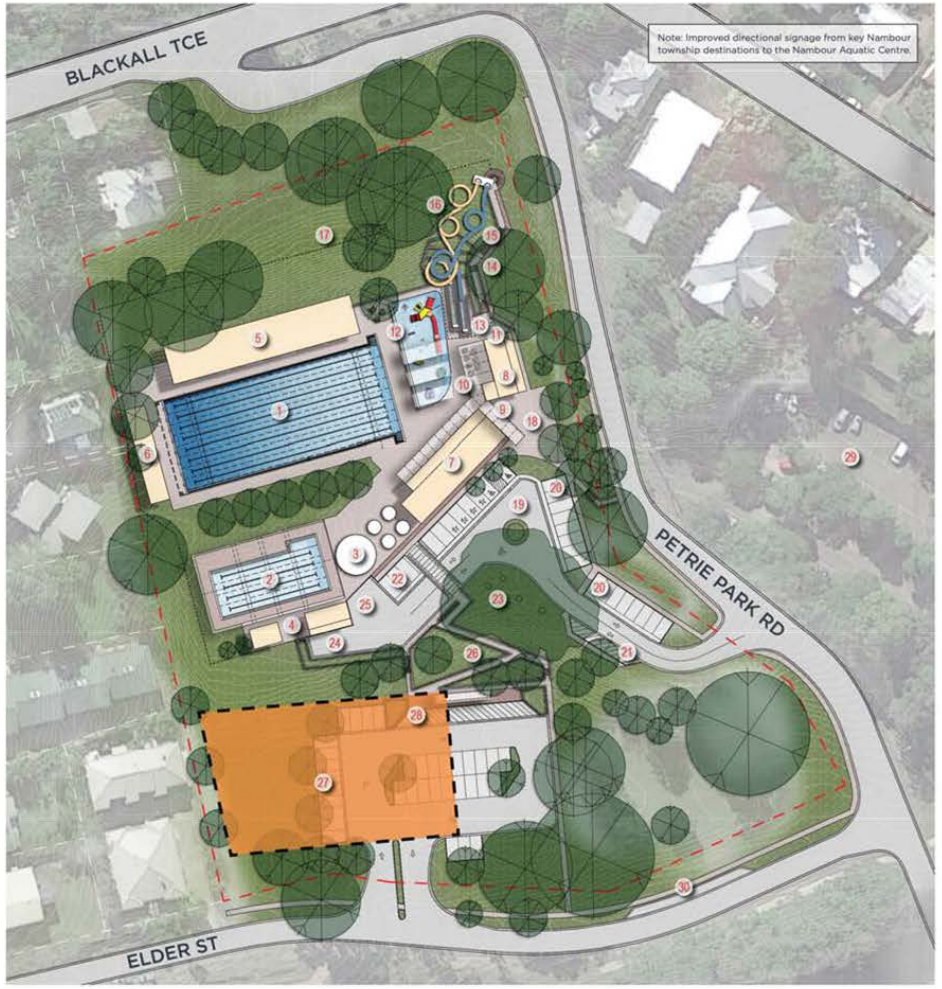
LEGEND

1. Existing Heated 50m Pool
2. Existing Heated Enclosed Program Pool
3. Existing Service Compound
4. Existing Storage Sheds and Rain Water Tanks
5. Existing Sheltered Grandstand
6. Existing Shade Structure
7. Existing Amenities and Plant Room Building
   - Proposed Screen or Cladding System to Facade (car park side)
   - New Centre Signage
8. Existing Administration Building
   - Proposed Screen or Cladding System to Facade (Petrie Park Road side)
   - Upgrade to Kiosk and Serving Area
9. Existing Facility Entry
   - New Access Control and Entry Awning
10. New Covered Seating/Dining Area
11. New Wet Play Plant Room & Manifold
12. New 250m² Zero-Depth Splash
    - Designed into Age Group Zones
    - Seating Hob to Length of Splashpad to act as a Barrier to 50m Pool
    - Shading to cover portion of splashpad
13. New Waterslide Run-Out with Pool Fence Surround
14. New Waterslide Access via Landscaped Terrace Stairs & Flume Tower Staircase
15. New Waterslide (Enclosed Flume Design)
16. Future Waterslide (Enclosed Flume Design) or subject to budget availability
17. New Site Fence Line
18. Existing Public Forecourt
    - New Hardscaping, Landscaping and Cyclist Storage
19. Upgrade Upper Car Park - Car Turncircle + Trafficable Island for Service Vehicle Maneuvering
20. Existing Upper Car Park - Existing Car Parks
21. New Upper Car Park - Car Drop-Off Zone
22. New Upper Car Park - Staff Car Parks
23. Existing Fig Trees
    - Northern Fig Trees to be Removed (shown dashed)
    - Southern Fig Trees to be Retained
24. Existing Service Yard
25. New Service Vehicle Turn-Around Space
26. New PWD Ramp and Pedestrian Stair Access from Lower Car Park
27. Potential alternative location for Lower Car Park in order to maximise connected green space. (Subject to further detailed investigation, design and costings)
28. Potential alternative location for Lower Car Park - Bus Drop-Off Zone
29. Additional Aquatic Centre car parking via existing upper car park off Petrie Park Rd
30. New designated bus parking space on Elder Street

CAR PARKS

Upper Level Car Parks		
Existing Car Park	=	15
New Car Parks	=	5
New Staff Car Park	=	3
New Person with Disability Car Parks (PWD)	=	2
New Parents with Prams Car Parks (PWP)	=	4
Lower Level Car Parks		
New Car Parks	=	34
Total Proposed Car Parks	=	**61***

*Note: Overflow car parking via existing upper car park off Petrie Park Rd.



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NAMBOUR AQUATIC PRECINCT - FEASIBILITY STUDY
CONCEPT MASTERPLAN (ALTERNATIVE CAR PARK OPTION)

MP-101
16.02.2017 - REV C

Sunshine Coast COUNCIL

LEGEND

Site
S1. Existing Large Canopy Trees to Remain
S2. New Covered Seating/Dining Area
S3. New Stepped Retaining Walls to Reduce Impact of Excavation
S4. Landscaped Terrace Stairs (Access to Waterslide Tower)
S5. Existing Retaining Wall
S6. Existing Site Fence Line
S7. New Site Fence Line
S8. Existing Administration Building (Kiosk, Servery, Office & Club Room)

Waterslides
W1. New Waterslide (Enclosed Flume Design)
W2. Future Waterslide (Enclosed Flume Design) or subject to budget availability
W3. New Waterslide Tower - Platform
W4. New Stair Access to Waterslide Platform
W5. New Waterslide Run-Out Area
W6. New Pool fence

Wet Play Area
Z1. Toddler Age Group Zone (e.g. 3-4 Years)
Z2. Splashdeck Zone (e.g. 5+ Years)
Z3. Seating Hob to Length of Splashpad (acts as a barrier to 50m pool)
Z4. Shading to Cover Portion of Splashdeck
Z5. Wetplay Plant Room & Manifold

WET PLAY FEATURES

*Potential selection of wet play features for the zero-depth splashpad:


Play Fort - Slide, Spray Guns & Bucket


Feature 01

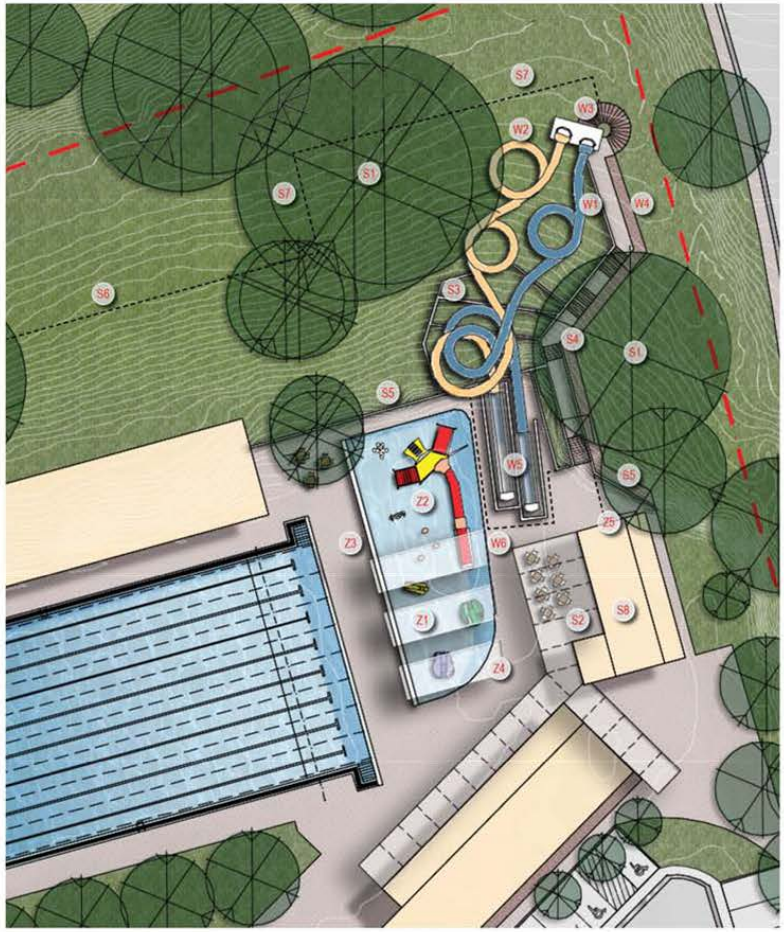

Feature 02


Swing Set


Toddler Slide 01


T. Slide 02


Gr. Sprays



0 1 2 3 5 7.5 10 20m
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Wet Play Examples

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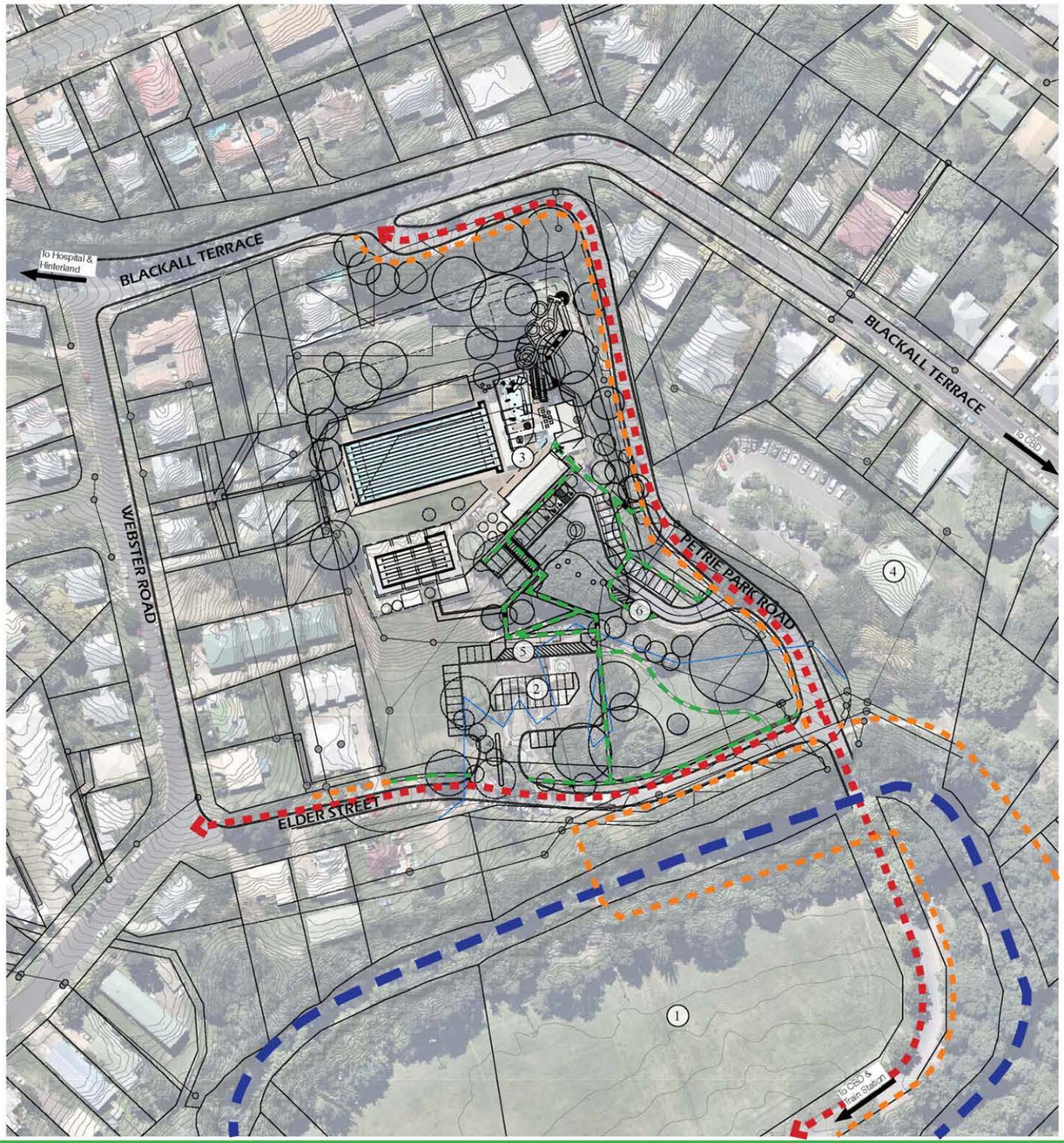
NAMBOUR AQUATIC PRECINCT - FEASIBILITY STUDY
CONCEPT LAYOUT - WATER PLAY AREA

MP-200
16.02.17 - REV C



OPEN SPACE MASTER PLAN EXTRACTS

Sunshine Coast Council - Petrie Creek Parklands MP

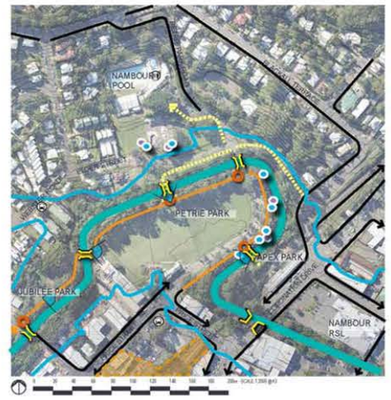
AREA 3 - PETRIE PARK

PARK USERS
Land Tenure: Council
Petrie Park leases:
- Lease A on Lot 3 RP104603 (building parcel only) - Sunshine Coast Historical and Genealogical Resource Centre Inc.
- Lease F on Lot 3 RP104604 and Lots 9 and 20 RP26586 - Nambour Blue Demons Hockey Club Inc.
- Lease G on Lot 3 RP104604 and Lots 9 and 20 RP26586 - Nambour Blue Demons Hockey Club Inc.- Nambour Aquatic Centre (part Lot SP214354) - Sport in Action P/L (Sunshine Coast)

Mixed users including:
- Local and visiting families
- Dog owners
- Adjacent residents
- School children
- Swimmers
- Local and visiting sporting clubs/groups

LOCAL VERNACULAR
- Tree lined creek-side walkways with remnant gallery rainforest and attractive water views
- Large *Araucaria* and *Grevillea robusta* trees at picnic area (to be protected)
- Flora and fauna viewing
- Primary pathway - 1.5m wide grey concrete
- Jubilee Park - informal leafy character
- Petrie Park - active recreation (organised and informal sporting activities)
- Apex Park - industrial / railway character

CONSTRAINTS
- Constrained narrow corridor inhibits buffer revegetation capacity
- Gradual removal of large weed trees required
- Regular flooding
- Apex Park - CPTED issues
- Awkward pedestrian access under Ann Street and Coronation Avenue bridges - CPTED issues



SITE ANALYSIS
- Petrie Creek
- Landsborough to Nambour Rail Project future rail corridor expansion area (OR)
- Existing primary pathway
- Existing secondary pathway
- Existing on street path
- Flood prone area - 100 year ARI (Q100)
- Pedestrian node/ junction
- Scenic vistas
- Seating
- Picnic area
- Bus stop
- Toilet facilities

Sunshine Coast. COUNCIL — PETRIE CREEK PARKLANDS — OPEN SPACE MASTER PLAN (DRAFT) — Issued 07/07/2016 — Project no. 9184 — 46 REV D

4.4 AREA 4 & 5 - PETRIE & APEX PARK

LEGEND
1. Proposed upgrade to principal cycle / primary pedestrian pathway to 3m wide where possible (min 2.5m) with equal access
2. Proposed link path to Webster Road
3. Exercise equipment stations
4. Proposed community splash park (Subject to feasibility study)
5. Improve pathway link to swimming pool
6. Proposed formalised car parking
7. Improve pathway link to Historical and Genealogical Resource Centre
8. Formalised parking areas with timber vehicle barriers, creekside revegetation and picnic settings
9. Proposed multi purpose community building above Q100 with public toilet block. Large Poinciana tree to be retained and protected
10. Grassed terrace
11. Existing hockey field
12. Link path and table and chair facilities around edge of Petrie Park
13. Formalised pedestrian crossing point and entry into community precinct from Price Street / Hospital Road (trail marker)
14. Decommission and remove playground and replace with sculptural art garden inspired by Nambour industry (e.g., mill and/or rail artefacts)
15. Proposed flood resilient principal cycle / primary pedestrian boardwalk 3m wide where possible (min 2.5m) with equal access
16. Picnic tables in grassed area
17. Proposed Apex Park extension via lease of QR land (includes removal of buildings)
18. Bridge to be raised to eliminate stairs
19. Activate the creekline on potenial commercial development
20. Investigate carpark expansion at Nambour Aquatic Centre

PETRIE PARK - District
Possible embellishments:
Tree planting, weeding, signage, public art, paths, picnic tables, shelters, drinking fountain, BBQ's, bench seating, rubbish bins, vehicle access (emergency/ maintenance), car park, bike racks, toilets, lighting, landscaping.

Outcome: Prepare landscape plan for park

NAMBOUR AQUATIC CENTRE - Community facility
Sport uses & Pool & Splash Park
Refer Sunshine Coast Aquatic Plan and Splash Park feasibility study

APEX PARK - Amenity
Possible embellishments:
Tree planting, weeding, signage, public art, paths, bench seating, landscaping, rubbish bins.

KEY
- Art/ Sculpture
- Heritage interpretive sign
- Wayfinding sign
- Environmental interpretive sign

Sunshine Coast. COUNCIL — PETRIE CREEK PARKLANDS — OPEN SPACE MASTER PLAN (DRAFT) — Issued 07/07/2016 — Project no. 9184 — 37 REV D

KEY
1. Petrie park.
2. Proposed new carpark.
3. Existing Aquatic Centre.
4. Historical & Geneological Resource Centre. (Currently patrons share this carpark)
5. Proposed bus dropoff point.
6. Proposed car dropoff point.

LEGEND
- Existing Pedestrian Footpaths
- Proposed Pedestrian Footpaths
- Vehicular Movement
- Petrie Creek
- Aquatic Centre Entry

This drawing is to be read in conjunction with the Aquatic Concept Plan by Liquid Blu

NAMBOUR AQUATIC FEASIBILITY STUDY

BROADER CONTEXTUAL PLAN

4/19 Premier Circuit, Warana, Sunshine Coast, QLD 4575 T: 07 5493 4677 & 07 3151 2541 E: admin@greenedgedesign.com.au
www.greenedgedesign.com.au

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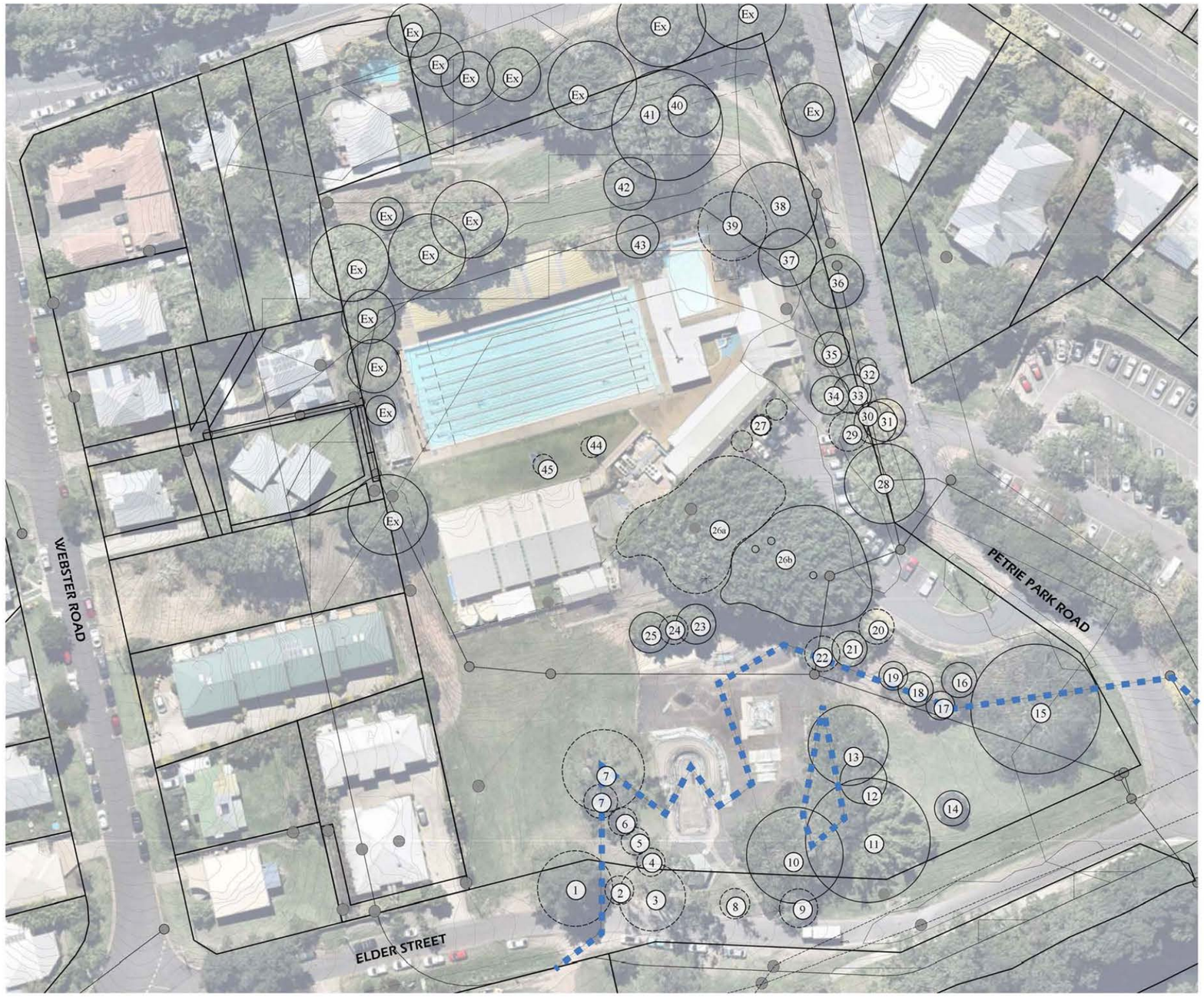
SCALE: 1:750 @A1, 1:1500@A3
DRAWING: LC-01 [B]
PROJECT: 16047
DATE: 05.01.2017

LEAD CONSULTANT: OTIUM Planning group WITH LIQUID BLU & PTT PKKOL TRAFFIC & TRANSPORT

DRAFT

GREENEDGE DESIGN
creative thinking | design edge
Landscape Architecture | Urban design | Master Planning | Environmental



EXISTING TREE SCHEDULE

No.	Botanical Name (Common Name)	Current Condition	To Be Removed
1	Pinus elliottii (Slash Pine)	Good	Yes
2	Eucalyptus tereticornis	Poor	Yes
3	Eucalyptus tereticornis	Poor	Yes
4	Calistemon viminalis	Fair	Yes
5	Calistemon viminalis	Fair	Yes
6	Calistemon viminalis	Poor	Yes
7	Eucalyptus tereticornis	Poor	Yes
8	Eucalyptus tereticornis	Poor	Yes
9	Calistemon viminalis	Fair	Yes
10	Ficus microcarpa	Good	No
11	Ficus microcarpa	Good	No
12	Ficus microcarpa	Good	No
13	Ficus microcarpa	Good	No
14	Ficus microcarpa	Good	No
15	Peltophorum pterocarpum	Good	No
16	Aphananthe philippinensis	Good	No
17	Melaleuca bracteata	Good	No
18	Brachychiton acerifolius	Good	No
19	Callistemon viminallis	Fair	No
20	Cypress	Fair	Yes
21	Melaleuca bracteata	Fair	No
22	Melaleuca bracteata	Fair	Yes
23	Harpullia pendula	Good	No
24	Harpullia pendula	Good	Yes
25	Harpullia pendula	Good	No
26a	Ficus benjamina (Group)	Good	Yes
26b	Ficus benjamina (Group)	Good	No
27	Royal Palms (Group)	Good	Yes
28	Cinnamomum camphora	Good	No
29	Xanthostemon chrysanthus	Good	Yes
30	Jacaranda mimosifolia	Fair	No
31	Backhousia citriodra	Good	No
32	Backhousia myrtifolia	Good	No
33	Brachychiton acerfolius	Good	No
34	Elaeocarpus grandis	Good	No
35	Elaeocarpus grandis	Good	No
36	Elaeocarpus grandis	Good	No
37	Jacaranda mimosifolia	Fair	No
38	Corymbia torelliana	Good	No
39	Peltophorum pterocarpum	Fair	Yes
40	Eucalyptus microcorys	Good	No
41	Cocos Palm	Good	No
42	Unknown	Fair	No
43	Unknown	Fair	No
44	Alexandra Palm	Fair	Yes
45	Alexandra Palm	Fair	Yes

LEGEND

(Ex) Existing tree to be retained and not surveyed as not impacted by works

Q100 Flood line

This drawing is to be read in conjunction with the Aquatic Concept Plan by Liquid Blu

NAMBOUR AQUATIC FEASIBILITY STUDY

VEGETATION SURVEY WITH FLOOD LINE

4/19 Premier Circuit, Warana, Sunshine Coast, QLD 4575 T: 07 5493 4677 & 07 3151 2541 E: admin@greenedgedesign.com.au
www.greenedgedesign.com.au

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SCALE: 1:400 @A1, 1:800@A3
DRAWING: LC-02 [B]
PROJECT: 16047
DATE: 05.01.2017

LEAD CONSULTANT
OTIUM Planning group
WITH
LIQUID BLU & PTT PEKOL TRAFFIC & TRANSPORT

DRAFT
GREENEDGE DESIGN
creative thinking | design edge
Landscape Architecture | Urban design | Master Planning | Environmental

KEY

1. New shelter structure to replace existing shelter in skate park, placement above Q100 flood zone, may require some earthworks modifications.
2. New pedestrian paths.
3. New ramp and stair access connecting lower carpark to aquatic centre.
4. New lower carpark located over existing reduntant skate park.
5. Service yard with new retaining wall and garden to restrict access and address height differences.
6. Upper Level Parking:
   - 6a Existing parking bays retained
   - 6b New/Adjusted parking bays
   - 6c Staff parking bays
   - 6d Car drop-off zone (2 cars)
7. Public forecourt hardstand with robust seating under tree shade.
8. Existing heated enclosed pool
9. Existing heated 50m pool
10. New shade trees within aquatic lawn area. To future setout allowing carnival canopies to be placed infront.
11. Proposed pedestrian pram ramp crossing location - to future engineer approval.
12. Bus drop off/loading zone.

INTENT

The new carpark is to be positioned over the exisitng skate park to utilise the hardstand area already existing over the area and reduce impact on trees and grassed areas. There is a PWD compliant footpath providing access to the aquatic centre from the lower carpark and bus drop off.

The existing shade structure in the skate park is to be decommisioned and a new one installed preferably outside of the flood zone beside the carpark/in the park.

Pedestrians can also access the aquatic centre via the existing footpath that runs along Petrie Park Road that will connect to a new formalised path along the rear of the carparks in the upper carpark.

New shade trees will aid in shading cars and some screening to neighbouring houses on west boundary. Large shade trees are proposed in the grassed area of the aquatic centre, with allowance for school carnivals and shade structures required.

LEGEND

- Existing Trees Retained
- Exisiting Trees Removed
- Proposed Trees

This drawing is to be read in conjunction with the Aquatic Concept Plan by Liquid Blu

NAMBOUR AQUATIC FEASIBILITY STUDY

LANDSCAPE CONCEPT FOR OPEN SPACE PARK

4/19 Premier Circuit, Warana, Sunshine Coast, QLD 4575 T: 07 5493 4677 & 07 3151 2541 E: admin@greenedgedesign.com.au
www.greenedgedesign.com.au

N

SCALE: 1:250 @A1; 1:500@A3
DRAWING: LC-03 [B]
PROJECT: 16047
DATE: 05.01.2017

LEAD CONSULTANT: OTIUM Planning group
WITH: LIQUID BLU & PEKOL TRAFFIC & TRANSPORT

DRAFT

GREENEDGE DESIGN
creative thinking | design edge
Landscape Architecture | Urban design | Master Planning | Environmental

6.3 Indicative Capital Cost Plan

It is difficult at this early design phase to identify final capital costs as there is a phase of detailed design and construction, works and equipment specifications that need to be completed in association with site services reviews and geotechnical surveys.

As a guide to the indicative capital costs of the proposed works OPG have used a two-stage cost estimate process that has involved the following companies and advice:

Stage One: Specialist Water Play and Water Slide Cost Advice

Swimplex Aquatics: Are an experienced Australian company designer and supplier of water play equipment. They have provided detailed input into the type of water play equipment and water slides available and their likely cost. They have also provided detailed information on the project requirements in relation to:

- Design and Engineering Preliminaries and Project Management Costs.
- Water Slide Tower, water features and water slide costs including also costs for supply, install, freight and crane erection requirements.
- Recommended pumps, plant modification equipment, splash pad tanks and hydraulic services cost estimates.
- Recommended electrical services
- Required earth works/concrete works
- Services connections
- Contingencies.

Swimplex have worked closely with OPG and Liquid Blu in the development of the recommended water play and slides concept plan and their cost estimate for the proposed works is listed as follows:

Table 12 Water Play/Slides Development Indicative Cost

Recommended Water Play/Slides Development Plan items	Estimated Cost
Design and Engineering/Prelims/project Management	$118,160
Slide and Tower and Water Features (incl. deliver/install).	$377,086
Pumps/Equipment/Tank/Hydraulics	$118,860
Electrical Works	$51,480
Earth Works/Concrete Works	$295,000
Services Connection	$20,150
Materials/Contingencies	$18,785
Sub-total (1 Slide)	**$999,521**
Second Future Waterslide	$181,356
Total Estimated Project Cost	**$1,180,877**

Both slides are incorporated within the above costing, however the second future waterslide is subject to budget availability.

These costs are based on the works being tendered out under a design, supply and construct process for a fixed price contract (refer to

Table 13 statement below, "Splashdeck and Slides to be Separate contract direct to supplier / installer").

Stage Two: Independent Quantity Surveyor Indicative Cost Plan

Turner Townsend experienced quantity surveyors were commissioned to review the recommended precinct development and landscape plans and develop an independent indicative cost plan for the various components of work.

This has been completed under the works schedules as listed in section 6.1 of this report and the indicative cost schedule is listed on the next page.

Turner & Townsend

Sunshine Coast Council

Nambour Aquatic Centre - Precinct Masterplan

Preliminary Cost Plan

QS REF: me25013
Date: 16/02/2017

Function	area m2	rate $/m2	Carpark & Roads cost $	Water Play & Slide cost $	Future Building Redevelopment cost $
Building Works					
Existing Amenities and Plant Room Building					
- Proposed screen or cladding system to façade (carpark side)	Allow				$ 30,000
- New centre signage	Allow				$ 15,000
Existing Administration Building					
- Proposed screen or cladding system to façade (Petre Park Rd side)	Allow				$ 20,000
- Upgrade to Kiosk and serving area	Allow				$ 30,000
Existing Facility Entry					
- New access control (manual)	Allow				$ 20,000
- New entry awning	Allow				$ 100,000
External covered dining area	Allow				$ 70,000
Wet play plant room and manifold - reuse existing	Note				EXCLUDED
Allowance for ESD initiatives	Allow	2%			$ 6,000
Total Building Works					**$ 291,000**
External Aquatics					
Zero depth splashdeck	Allow			Splashdeck and Slides to be Separate contract direct to supplier / installer	
- Features	Allow				
- Seating hob	Allow				
Waterslide					
- Waterslide run-out					
- Waterslide access - flume tower staircase	Allow				
- Enclosed flume design waterslides	Allow			$ 1,180,877	
Allowance for BWIC incl excavation, trenching, grates etc	Allow			$ 20,000	
Total Aquatic Works				**$ 1,200,877**	
External Works & Services					
Demolish existing skate park	Allow		$ 100,000		
Demolish existing LTS pool and Leisure /fountains/ play area	Allow			$ 80,000	
Demolish existing shade structure / building adjacent toddler pool	Allow			$ 40,000	
Remove existing trees	Allow		$ 11,500		
Site Preparation / Earthworks	Allow		$ 20,000	$ 30,000	Included
Adjusted site fencing	Allow			$ 15,000	
Retaining wall incl full protection fence on top	Allow			$ 123,000	
Stepped retaining walls	Allow			$ 51,000	
Shading to Zero depth splashdeck	Allow			$ 28,800	
Waterslides - Pool fence surround	Allow			$ 25,600	
- Waterslide access via landscaped terrace stairs	Allow			$ 30,600	
Public Forecourt - New hardscaping, landscaping and Cyclist storage	Allow		$ 77,900		
PWD ramp and pedestrian stair access from lower carpark	Allow		$ 103,680		
Lower carpark	Allow		$ 336,000		
Lower carpark - bus drop off zone	Allow		$ 28,000		
Upper carpark - new / modified existing bays	Allow		$ 36,000		
Access Driveway - realign sections			$ 46,410		
New car drop off zone	Allow		$ 13,500		
New designated bus parking spae on Elder St	Allow		$ 20,000		
Service yard modifications with new retaining wall and garden	Allow		$ 52,800		
External works and landscaping	Allow		$ 20,000	$ 20,000	
New shelter structure	Allow		$ 30,000		
New pedestrian paths	Allow		$ 59,400		
Proposed pedestrian pram ramp crossings	Allow		$ 8,000		
New shade trees	Allow		$ 55,000		
Landscape lighting	Allow		$ 30,000		
Allowance for external services	Allow		$ 80,000	$ 80,000	Included
Total External Works & Services			**$ 1,128,190**	**$ 524,000**	**$ -**
Construction Cost			**$ 1,128,190**	**$ 1,724,877**	**$ 291,000**
Design Contingency	5%		$ 57,000	$ 28,000	$ 15,000
Construction Contingency	5%		$ 59,000	$ 28,000	$ 15,000
Sub Total			**$ 116,000**	**$ 56,000**	**$ 30,000**
Professional Fee Allowance	10%		$ 125,000	$ 59,000	$ 33,000
Authority Fees & Charges	Allow		$ 12,000	$ 7,000	$ 3,000
Sub Total			**$ 137,000**	**$ 66,000**	**$ 36,000**
Total Project Cost			**$ 1,381,190**	**$ 1,846,877**	**$ 357,000**

Exclusions:

GST	Cost Escalation beyond January 2017
No allowance for fire sprinklers	Office Equipment costs
Upgrade or provision of authority services infrastructure external to the site	Public Art
Land, legal, marketing and finance costs	Asbestos & other hazardous materials removal
Relocation / Decanting Costs	Council internal costs
Contribution / upgrade of site substation or power supply	Stormwater detention / retention on site
Adverse soil conditions incl. excavation in rock, contaminated soil, soft spots	equipment, window furnishings
Piling or bored pier foundations	Active IT and telephone equipment
Audio Visual requirements	Diversion / relocation of existing in ground services
Pool equipment incl blankets, anti-drowning software etc.	Staging Costs
Works to existing buildings and shade structures	Landscaping outside works zones
Works to existing 50m outdoor and 25m indoor pools	Works to boundary fence other than for waterslides
Shade trees - allowance for only 1.5-2m high in pots; no allowance for mature trees	Works to adjoining roads
Water play / slides is a Design & Construct separate contract direct to the supplier / installer. No allowance for any additional head contractor, design fees or contingencies	

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6.3.1 Recommended Works Indicative Capital Cost Plan Summary

The following table summarises the projected works and associated costs for the proposed works

Table 14 NAC Precinct Recommended Development Indicative Cost Summary

NAC Precinct Development Works	Indicative Cost
Car Park and Roads	$1,381,190
Water Play and Slides	$1,846,877
Future Building Redevelopment	$357,000
Total Estimated Project Cost	**$3,585,067**

The total indicative cost of the recommended development works is estimated at $3.585M. The second waterslide is incorporated within the above cost and has been identified by Council for future provision or subject to budget availability.

6.3.2 Alternative Car Park Option

Turner Townsend estimate an additional cost allowance of $259,000 should Council progress with the alternative lower car park option further to the west in consideration of:

- Adjusting paths / ramp access;
- Landscape former skate park area;
- Earthworks; and
- Stormwater.

6.4 NAC Development Usage and Business Projections

OPG has completed a review of the likely increased visitations (usage) and increased revenue and expenditure projections for the recommended new development.

The key project assumptions are listed below and have been used to develop a 10-year base case financial model to assist in highlighting the usage and financial projections for the project. The models have also been developed for conservative and optimistic business cases as well so Council can review the likely range of visits and financial impacts.

6.4.1 NAC Future Visitation Projections Year 1

Industry trend reviews as well as OPG direct project experience indicate that the development of major water play and waterslide facilities at existing aquatic facilities can have a two-fold effect on centre visits.

These are:

- **New user visitations:** The new children, youth and family spaces can be expected to attract up to 15% more child and youth visits and up to 5% more adult visits.
- **More frequent visitations from existing users:** The new children, youth and family spaces can be expected to attract between 5% for adults and 15% for children more visitations from current users.

Based on these ranges the following future visitation estimates listed in table 15 on the next page are assumed for the proposed redevelopment financial models.

Table 15 NAC Precinct Water Play/Slides Projected Visitation Summary

User Category	2015/16 Visits	% Increase by Category for New/Increased Use	Future Base Case Total
Adult Multi-Pass#	5,300	+10%	5,888
Child Multi-Pass#	9,832	+25%	13,109
Adult Entry#	8,100	+10%	9,000
Child Entry#	15,000	+25%	20,000
Members	413	+10%	458
Aerobics	2,972	N/A	2,972
Learn to Swim	18,258	+5%	19,218
School Swimming	15,143	+5%	15,940
Swim School	7,311	+10%	8,123
Swim Squad	4,263	+5%	4,487
Misc. - Other	400	+5%	421
Total	86,992	N/A	99,616

Note: # based on estimated split of adult (35%) and child (65%) of total visits as listed in section 2.3.1

The NAC Precinct water play/slides development visitation review indicates that annual visitations are assumed to increase from 86,992 (2015/16) to 99,616 in year one of the new redevelopment. This is an estimated increase in visitations of 12,624.

The waterslide is assumed to operate at peak use times based on 2 hour sessions and industry trends indicate the likely take up of users is around 15% of children and 10% of adults. Based on the projected new visitation rates of say 99,600 visits this would see the following waterslide visitation estimates:

- Adult visits: 3,486 sessional tickets say 3,500
- Child visits: 9,713 sessional tickets say 9,800
- Total estimated water slide ticket sales year 1 = 13,300 tickets

6.4.2 NAC Future Income Projections Year 1

A review of future charges by OPG has indicated that Council would not put on a new increased casual entry fee if the new water play elements were developed. This is because the new area would be an upgrade/replacement of the existing leisure/program pool water.

Currently all Council aquatic facility charges are the same so an increase at NAC would not be considered above normal annual price increases.

As the waterslide is a new activity area OPG recommend that a new sessional charge plus entry fee is adopted to help meet the projected operating costs of staffing and energy and maintenance. For financial modelling purposes, we have used a sessional fee of $5.00 for a child and $9.50 for an adult. These assumptions have been formulated using data from several aquatic facilities with slides throughout Australia. The assumptions have also considered the potential for price sensitivity within the catchment due to the higher level of disadvantage, higher unemployment and higher proportion of low income earners.

This gives them 2 hours use of the waterslide and could be controlled by a colour wristband system with slide supervisors checking them as users enter the stairs to the slide.

Based on these assumptions OPG have used the 2015/16 average user spend by entry category with the projected new visitation assumptions to develop up the first-year revenue impacts of the water play/slide development.

This is listed in the table 16 as follows on the next page.

Table 16 NAC Precinct Water Play/Slides Projected Income Summary

User Category	Future Year 1 Base Case Total	Average Revenue Per Visit Based on 2015/16 Avg.	Projected Year One Revenue
Adult Multi-Pass#	5,888	$1.40	$8,243
Child Multi-Pass#	13,109	$1.40	$18,352
Adult Entry#	9,000	$4.40	$39,600
Child Entry#	20,000	$4.40	$88,000
Members	458	$109	$49,922
Aerobics	2,972	$9.82	$29,185
Learn to Swim	19,218	$19.90	$382,438
School Swimming	15,940	$5.42	$86,394
Swim School	8,123	$4.02	$32,654
Swim Squad	4,487	$9.70	$43,523
Misc. - Other	421	$4.15	$1,747
Total Visitation/ Income	99,616	N/A	$780,058
Retail Spend	99,616	$1.38	$137,470
Total Income	N/A	N/A	$917,528
Waterslide Adult Tickets#	3,500	$9.50/session	$33,250
Waterslide Child Tickets#	9,800	$5,00/session	$66,500
Total Waterslide Visitation/Income	**13,300**	**N/A**	**$99,750**
Combined projected Visitations/ Income	**112,916**	**N/A**	**$1,017,278**

Note: # Assumes that new users are covered in the visitation projections already

The new development income review indicates the centre with 86,992 visits recorded a total income including retail spend of $837,089. Table 16 results indicate the redeveloped facilities are projected to record a year one income of $1,017,278 which is an increased annual income of $180,189.

6.4.3 NAC Future New Operating Expenditure Projections Year 1

OPG do not have any detailed operational expenditure on staffing for past NAC years as the centre is contracted out and this information is not available. We have reviewed information for NAC services costs and maintenance expenditure.

For the purposes of financial modelling OPG have made the following expenditure assumptions:

- **Water Play Area Staffing:** As the contractor currently supervises the program and leisure pools we have assumed the staff cost is already covered in current budget allowances but we have added in an allowance of $21,112 for extra staff at busy times (based on average of 14 hours/week @ $29/hour ($25 plus on-cost of 15%) x 52 weeks.
- **Water Slide Staffing:** The new area has been designed to be supervised by two pool attendants during all operational sessions. We have assumed the slides will operate:
  - 2 hours a weekday during school terms = 42 weeks x 5 days x 2 hours/day = 420 hours/year x $29/hour = $12,180.
  - 6 hours each Saturday and Sunday = 104 days x 6 hours = 624 hours/year x $29/hour = $18,096.
  - 6 hours/day in school holidays = 10 weeks x 5 days x 6 hours = 300 hours x $29/hour = $8,700.
  - Allowance of staffing contingency of 10% for busy days so 1,344 hrs year x 10% = 134 hours x $29/hour = $3,886.
  - Total waterslide staff costs assumed year 1 = $42,862/year.

- **Energy Costs:** There will be energy cost savings from the demolished program and leisure pool but also there will be extra energy costs for operating water play and slide pumps. We have assumed an increase in energy use of 10%. In 2015/16 the energy costs were $100,330 so we have allowed for $10,000 in extra energy costs.
- **Water and Sewerage Charges:** In 2015/16 this was $46,991 so we have allowed for a 10% increase which would be $4,700.
- **Maintenance Costs:** We have assumed the current maintenance allowances for the leisure and program pool will partly meet the requirements of the water play/slide development areas but have allowed for an extra annual cost of $10,000 due to moving parts and high wear areas.
- **Retail Product and Staff Expenditure:** We do not have any information on the profitability of the kiosk so we have used industry averages for operating expenditure for new visit revenue at 70% costs for staff and product and 30% profit. Based on new visitations retail income of $17,421 we have allowed $12,194 to cover staffing and product costs.
- **Miscellaneous:** Allowed for $5,000 of other expenditure to cover chemicals and other items not costed.
- **Depreciation and Renewals:** As we are developing an operational budget we have not allowed for any depreciation or renewals allowances in this financial modelling.

Based on these assumptions the estimated year one operating expenditure is listed in table 17.

Table 17 NAC Precinct Water Play/Slides Projected Additional Expenditure

Expenditure Category	Future Year 1 Extra Expenditure Allowances
Water Play Extra Lifeguards	$21,112
Waterslide Lifeguards	$42,862
Extra Energy Costs	$10,000
Extra Water & Sewerage Charges	$4,700
Maintenance Cost Allowances	$10,000
Retail Product Expenditure	$12,194
Miscellaneous Expenditure Allowance	$5,000
Total Estimated New Expenditure Year 1	**$105,868**

Based on the range of expenditure assumptions made the estimated extra cost to operate the new developments is estimated at $105,868 for year 1.

6.4.4 NAC Future New Operating Budget Year 1

Based on the visitation, income and expenditure projections as detailed in 5.3.1 to 5.3.3 the net year one operating performance for the water play/slides is detailed as follows:

- Estimated New Visitations: 12,624 visits
- Estimated Total New Income: $180,189
- Estimated Total New Expenditure: $105,868
- Estimated Net Operating Profit/(Loss): $74,321

The visitation and operating financial review indicates that based on all assumptions the proposed development will generate up to 12,600 more visits and after operating savings and new costs are met the development is projected to record an operating surplus of just under $75,000 in year 1.

7. Warranties and Disclaimers

The information contained in this report is provided in good faith. While Otium Planning Group has applied their own experience to the task, they have relied upon information supplied to them by other persons and organisations.

We have not conducted an audit of the information provided by others but have accepted it in good faith. Some of the information may have been provided 'commercial in confidence' and as such these venues or sources of information are not specifically identified. Readers should be aware that the preparation of this report may have necessitated projections of the future that are inherently uncertain and that our opinion is based on the underlying representations, assumptions and projections detailed in this report.

There will be differences between projected and actual results, because events and circumstances frequently do not occur as expected and those differences may be material. We do not express an opinion as to whether actual results will approximate projected results, nor can we confirm, underwrite or guarantee the achievability of the projections as it is not possible to substantiate assumptions which are based on future events.

Accordingly, neither Otium Planning Group, nor any member or employee of Otium Planning Group, undertakes responsibility arising in any way whatsoever to any persons other than client in respect of this report, for any errors or omissions herein, arising through negligence or otherwise however caused.