Project Report for Redevelopment of Ballina and Alstonville Swimming Pool Complexes

November 2015

Ballina Shire Council

Ballina and Alstonville Swimming Pool Complexes

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1.0 Background

The Ballina and Alstonville swimming pools were constructed in the early 1970s. As the existing infrastructure is ageing, the operating costs are rapidly increasing. Much of the existing plant and equipment also now needs replacing.

Council is in the process of planning for the renewal of the existing infrastructure and in undertaking this renewal, is considering whether the range of facilities available at the swimming pools should be enhanced. Council's preliminary budget for any redevelopment works is approximately $4 million per pool, with the Ballina upgrade works planned for 2015/16 and Alstonville for 2016/17.

To assist Council's decision making, independent consulting advice has been sought to examine, amongst other things, options for redevelopment, likely costs and delivery method.

Submissions from appropriately qualified consultants were called in August 2014 with the subsequent appointment of Ridgemill Project Management.

The requirements for the study are as follows:

- Assessment of the current state of pool complexes
- Undertake consultation with key stakeholders
- Understand the medium term demographic trends for the Ballina Shire
- Identify contemporary trends for swimming complexes and how they relate to the Ballina Shire
- Understand and identify procurement options available to Council to provide best value outcomes to the community
- Conduct workshops with Councillors as required through the process
- Evaluate existing contractual relationships and impact of redevelopment on those contracts
- Produce a Redevelopment Plan, for reporting to Council, which includes as a minimum, the following elements:
    - Preferred aquatic facility mix for both swimming complexes
    - Preliminary concept and layout plans for the two facilities
    - Financial plans identifying both operating and capital estimates
    - A procurement plan identifying the preferred procurement processes and the timetable for implementation

2.0 Current Condition – Assessment

Following appointment, Ridgemill has undertaken an inspection of both centres to assess their condition. In addition, previous reports prepared by Council have been reviewed along with discussion with contract managers at Alstonville and Ballina.
Observations are as follows:

- Both pools are 40 years old and nearing the end of their design life. In some respects the pools are now beyond their “use by date” due to leaks.
- These leaks appear to be in both the concrete shell and water supply/return lines
- With respect to Ballina, it is understood that prior water usage on an annual basis reflected 7 times the pool capacity indicating a serious issue. More recent figures indicate water usage of 92,000 litres per day reflecting total pool capacity of 1.3 million litres being lost every 2 weeks. This is a major concern.
- Coping to pools showing significant cracking with underside render failing on previous occasions and showing signs of further deterioration.
- Filtration systems are showing significant corrosion and require upgrading.
- Electrical switchboards require replacement
- Handling of filter backwash is problematic at both facilities with Alstonville discharging over adjacent soccer fields. Backwash management will require a new filtration approach.
- Pool heating at Ballina is outdated, in poor condition and requiring upgrade
- Pool lighting has shown impact of concrete cancer to poles and is unlikely to meet current requirements of the Australian Standards.
- The overall layout of both existing facilities do not reflect current contemporary design nor do they meet FINA standards for competition
- Both pools are 7 lanes with FINA standard requiring a minimum of 8 lanes x 2.5 wide for 50m pools.
- Disabled access is by way of “Oxford Dipper” a mechanical crane that is at best archaic and not accessibility friendly. Modern design reflects either beach entry or access ramps to the pool (s).
- Pool depths are non-compliant in some respects limiting diving starts to only the deep end.
- Leisure water facilities at both facilities do not reflect contemporary, active participation and as such are considered outdated.

With respect to the existing maintenance regime we note that Council has been in a “holding pattern”, undertaking only critical repairs to ensure ongoing operation. If a more proactive approach was to be actioned then significant costs would be incurred.

Based on inspection, Ridgemill is of the view that the pools are at their life end and from an economic view point should be replaced.

3.0 Stakeholder Consultation

3.1 Overview

There has been extensive and detailed consultation with key stakeholders such as swimming and water polo clients, swimming instructors and schools, and also the general community.

Part of the consultation process included the seeking of responses to specific targeted questions relating to current use and future visions.

With respect to key stakeholders discussion group meetings were held at Ballina and Alstonville on 29th January 2015.

Representatives from the following groups were in attendance at these meetings:

Ballina

Ballina Marine Discovery Centre – Mick O'Connor
Ballina High School – Belinda Fleming / Lynda Hourigan
Retiree representative – Anne Marchment
Swimming Coach – Francis Quinn
Pool Operator – Lee Fitzgerald
Far North Coast Water Polo*
Biala Special School**

*Subsequent to the meeting Far North Coast Water Polo president Jasmine Collins made contact noting preference to maintain 50m pool with minimum depth of 1.8m for water polo
**Biala Special School could not attend, but made comment concerning disability access.

Alstonville

Alstonville Junior Water Polo – Greg Whittle
Alstonville Water Polo – Ian Ford
Alstonville Swimming Club – Andrew Dostine
Alstonville Swimming Club – Eoin Johnston
Alstonville Swimming Club – Greg Kershaw
Alstonville Senior Water Polo – Tom and Veronica Silver
Alstonville High School – Chris Hill

Community consultation was undertaken through manned booths at Ballina Pool 11:00am – 4:00pm Saturday, 28th February 2015 and Alstonville 11:00am – 4:00pm Sunday, 1st March 2015.

In addition, facilitated sessions for interested parties were held 3rd March 2015 at Richmond Room, Regatta Ave in Ballina, and Alstonville Plateau Bowls and Sport Club, Alstonville on 4th March 2015.

3.2 Form of Consultation

Each session commenced with a general discussion and outline of project briefing relative to the degradation of the pool facilities and Councils intention to upgrade the venues.

Specific discussion was targeted relative to stakeholder needs and preferences through prepared question sheets.

Questions raised included:

Ballina Pool

What is important?

50m Pool

- Extra Lane to 50m
- Lane Widths Comply with FINA 2.5m
- Wet Deck
- Depth to Comply with FINA (2.0)
- Ramp Access
- Heating

25m Pool

- 8 Lane
- Enclosed
- Heated
- Depth – 1.0m
- 1.35m diving
- Ramp Access

Other Works

- Perimeter Fencing
- Grandstand Seating
- Children's Water Play
- Learn to Swim
- Hydrotherapy
- BBQ / Picnic
- Lighting

Alstonville Pool

What is important?

50m Pool

- Extra Lane to 50m
- Lane Widths Comply with FINA 2.5m
- Wet Deck
- Depth to Comply with FINA (2.0)
- Ramp Access
- Heating
- Enclosed Pool

25m Pool

- Is it needed
- Number of Lanes
- Enclosed
- Heated
- FINA Compliance for Depth and Width

Other Works

- Grandstand Seating
- Children's Water Play
- Learn to Swim
- Hydrotherapy
- BBQ
- Lighting

Responders were requested to rank each response as:

- Absolute / Essential
- If Possible
- Wish List

3.3 Responses

Details of the response numbers received are as follows:

Ballina Key Stakeholders	4
Ballina Community	37
Alstonville Key Stakeholders	8
Alstonville Community	51

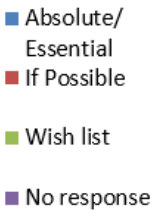
In addition, other responses were received from a number of other individuals / entities. Details of these and comments raised are as follows:

Ballina Special School – double hand rail in middle size pools and non-slip surface on steps to middle pool.

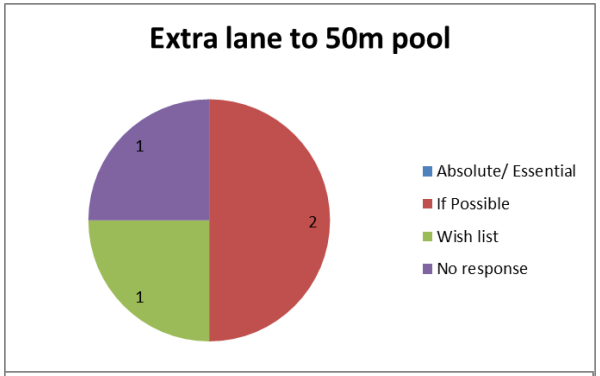
Far North Coast Water Polo – Maintain 50m pool and provide 1.8m minimum depth

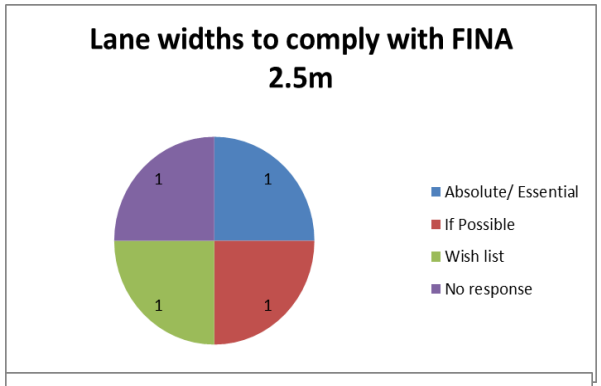
3.4 Results of Questionnaire

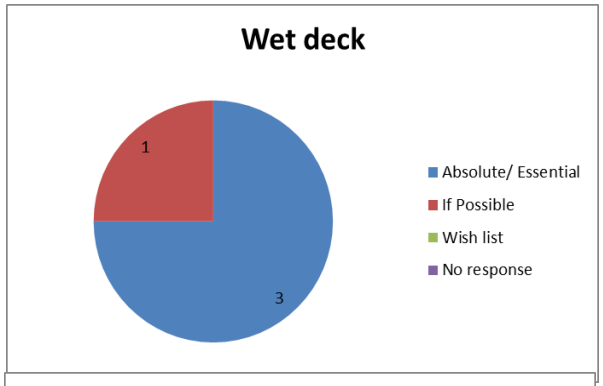
Responses to the listed questions are shown on the following graphical representation.
Key:

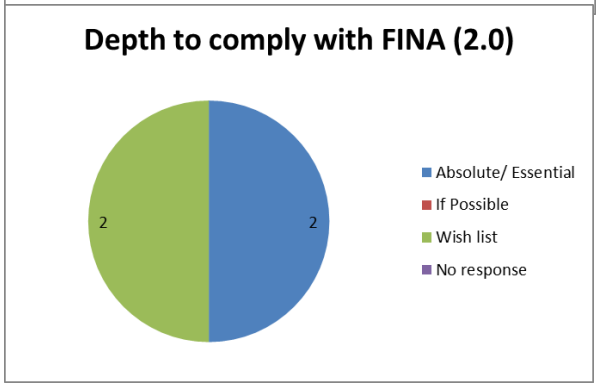


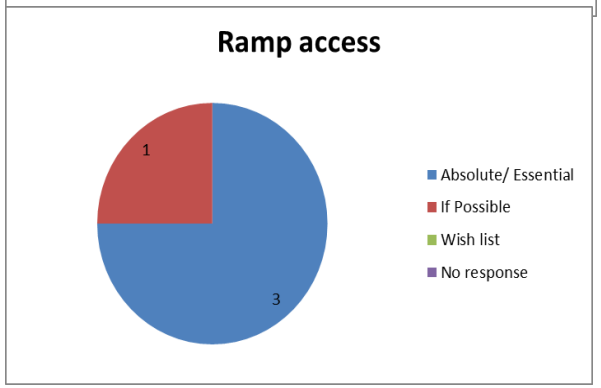
Ballina Key Stakeholders - 50m Pool

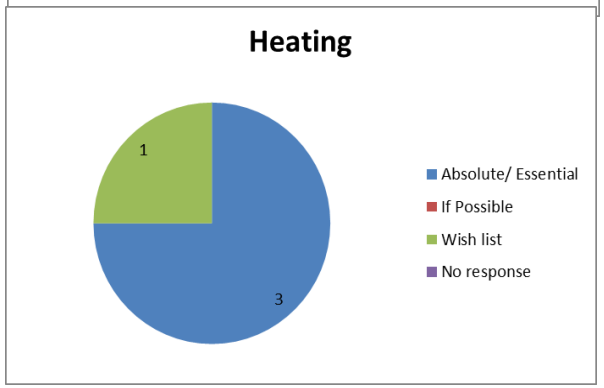




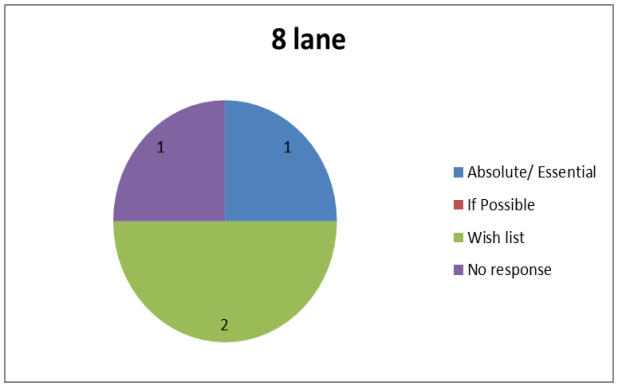


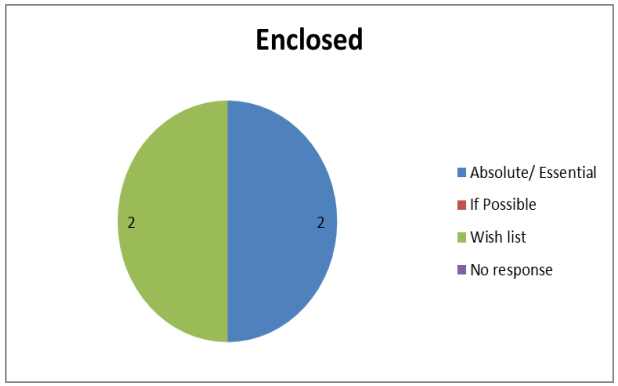


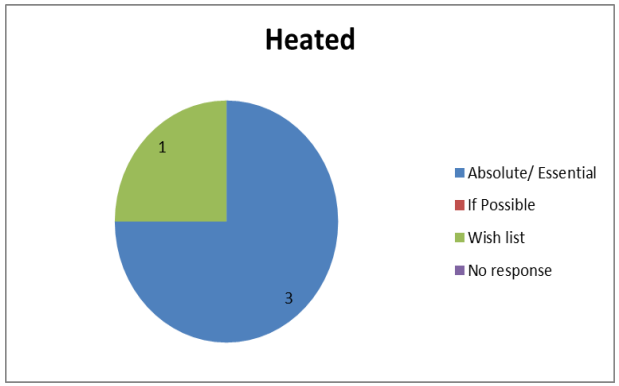


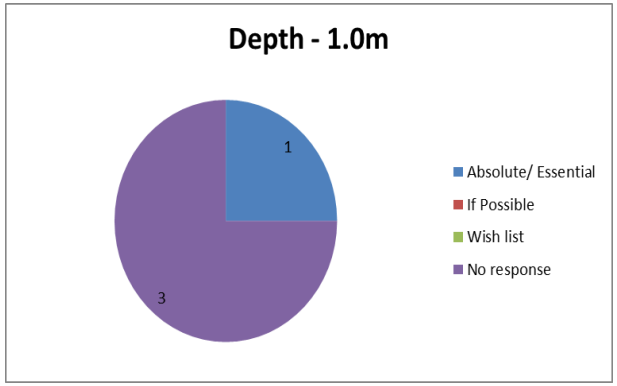


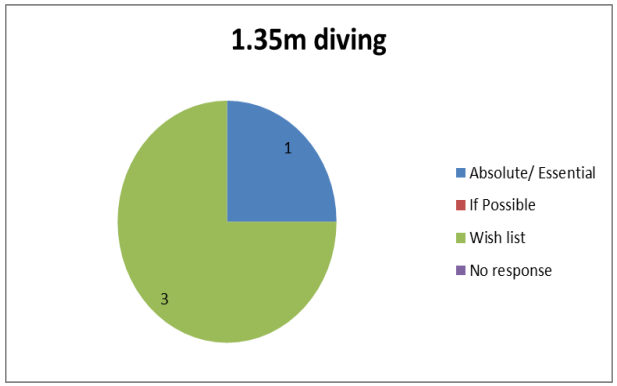
Ballina Key Stakeholders - 25m Pool



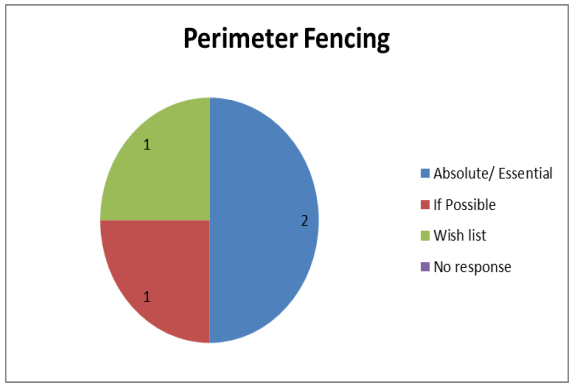


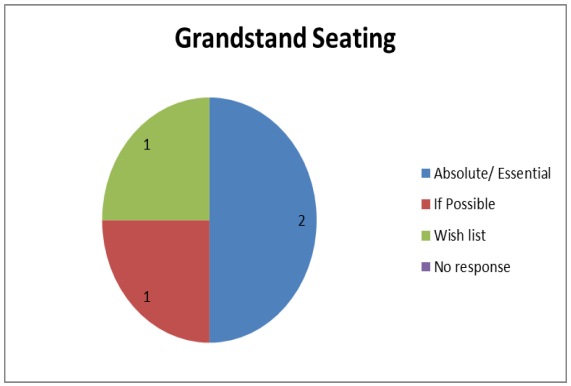


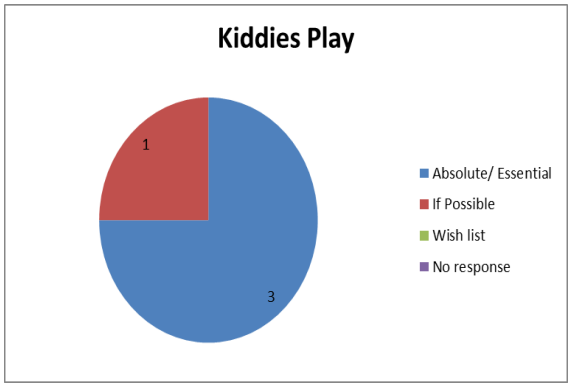


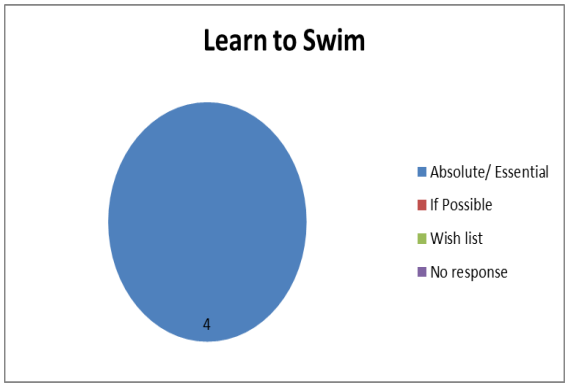


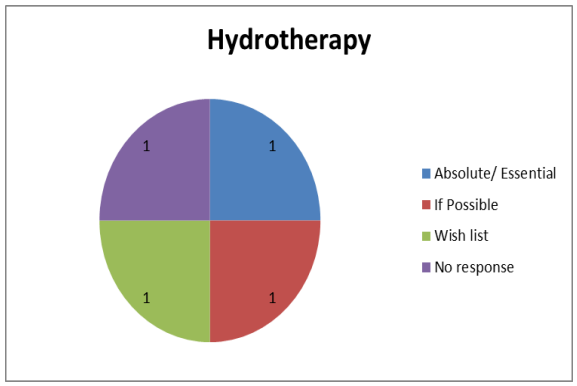
Ballina Key Stakeholders - Other Works

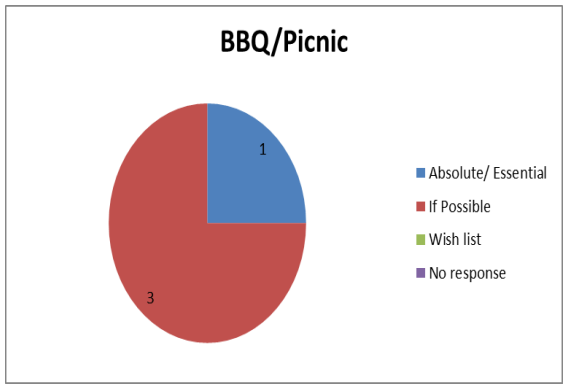




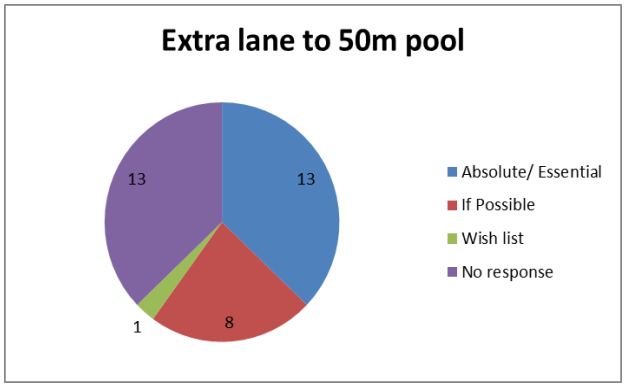


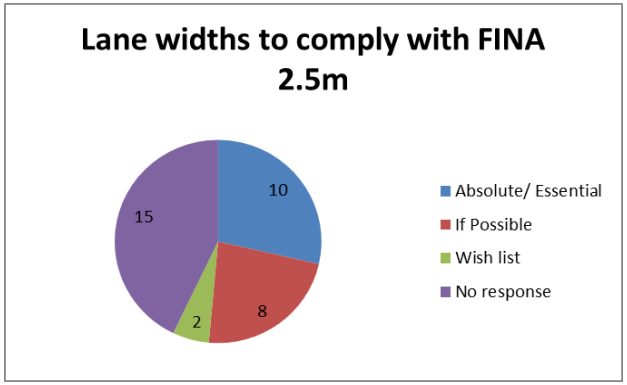


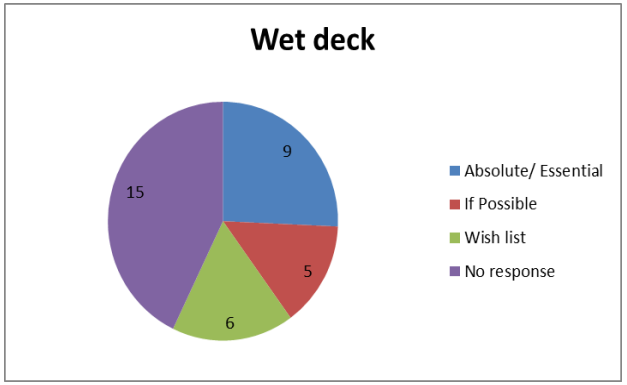


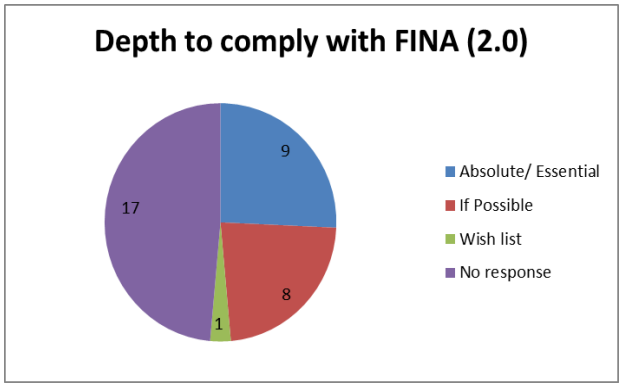


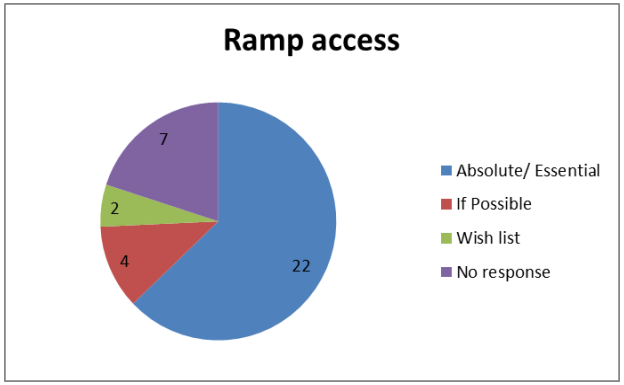
Ballina Community - 50m Pool

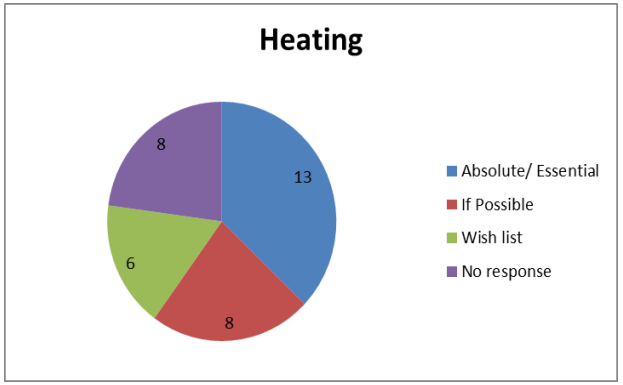




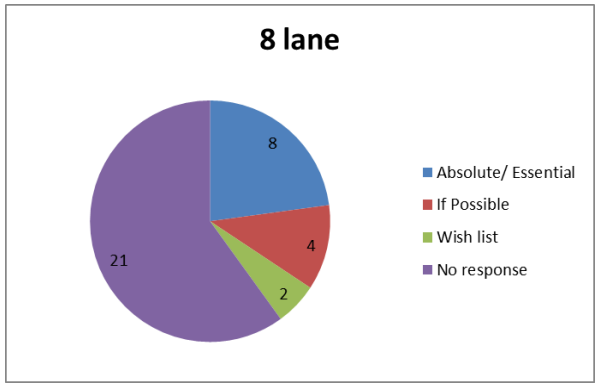


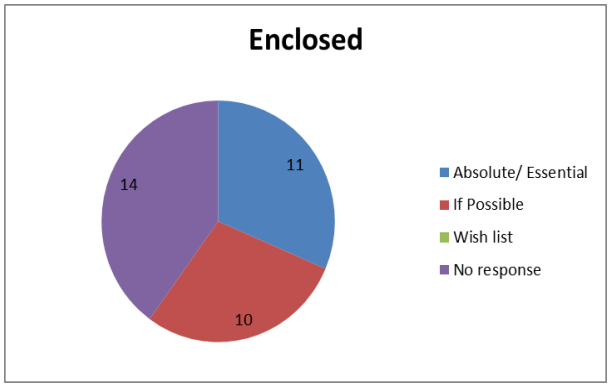


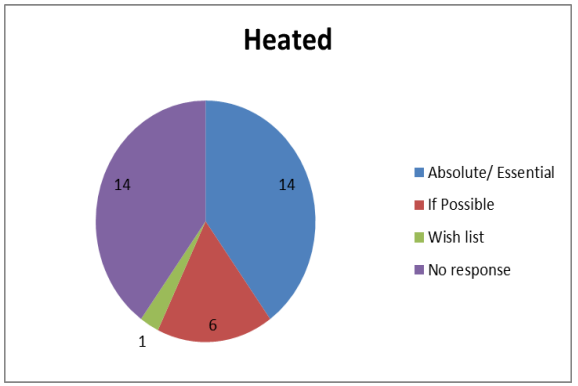


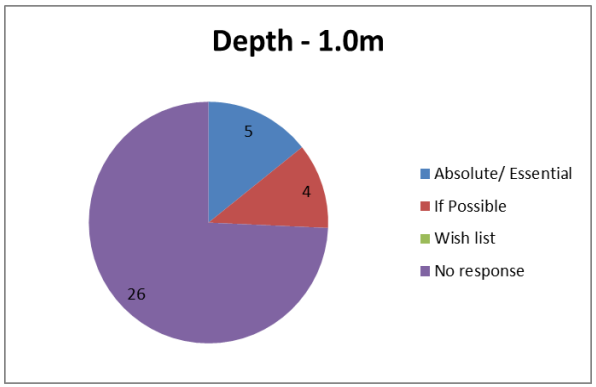


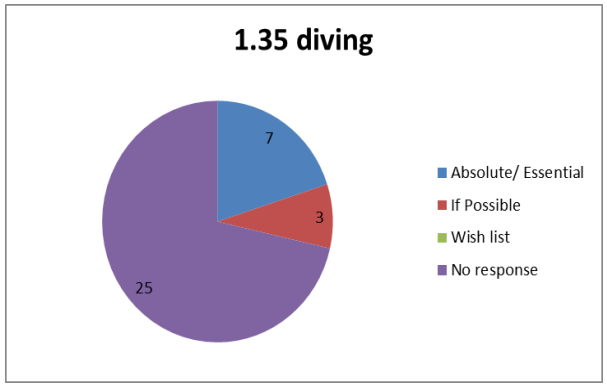
Ballina Community - 25m Pool

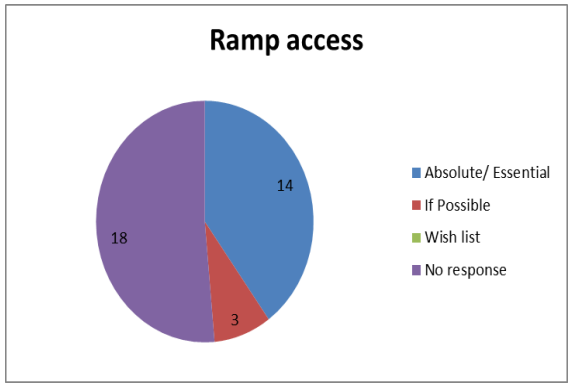




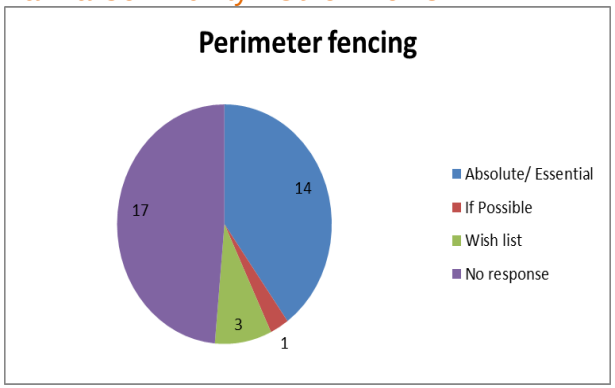


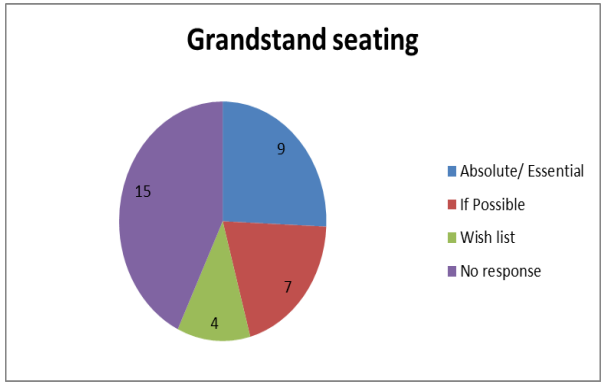


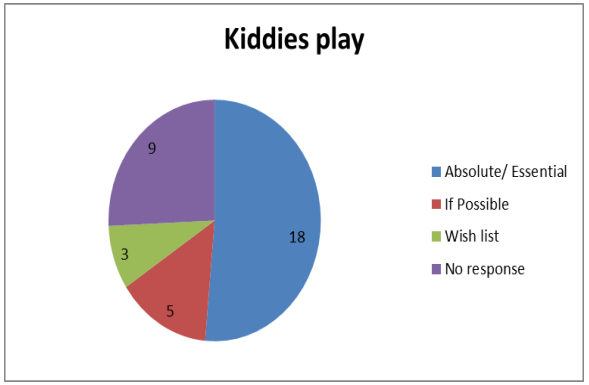


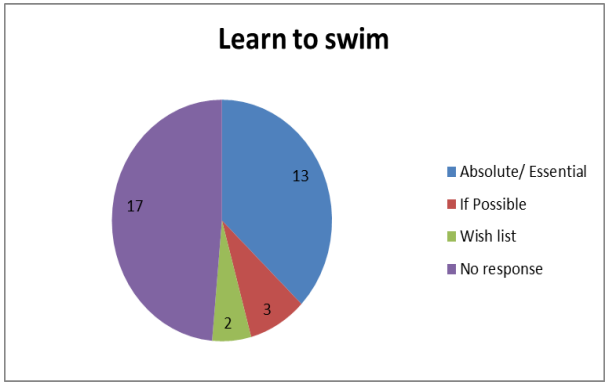


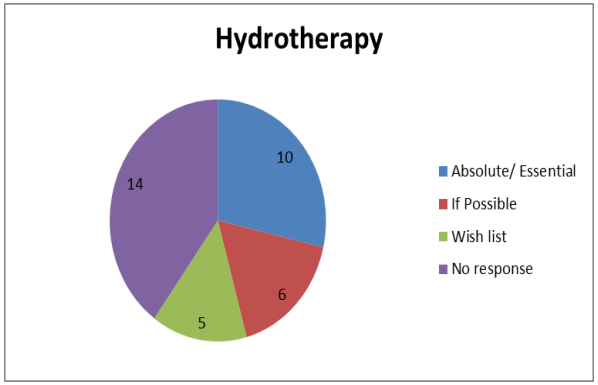
Ballina Community - Other Works

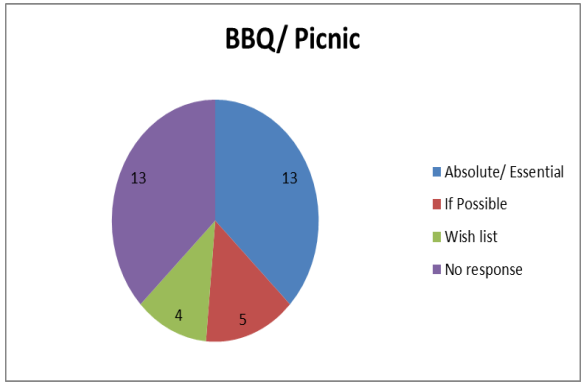


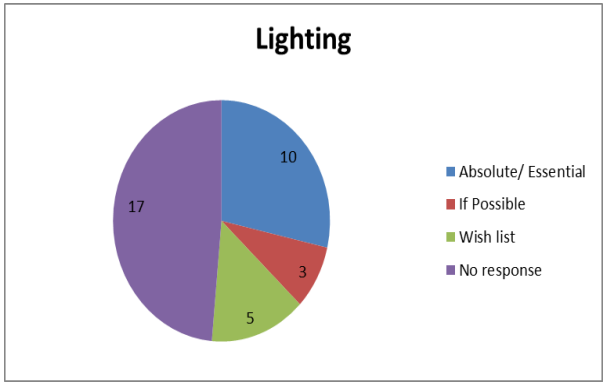




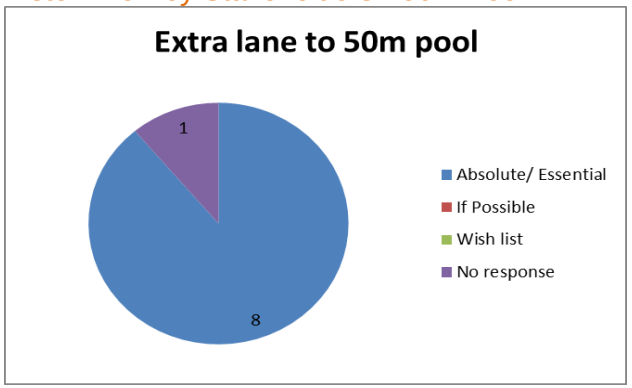


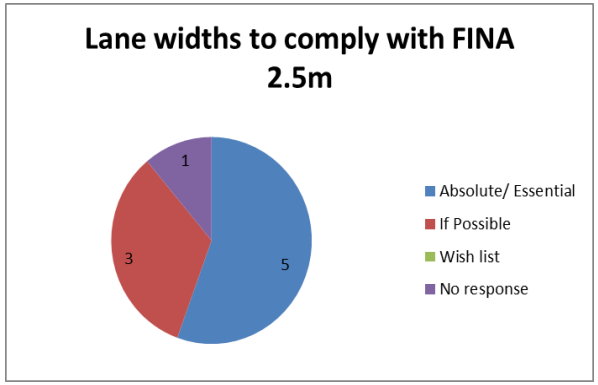


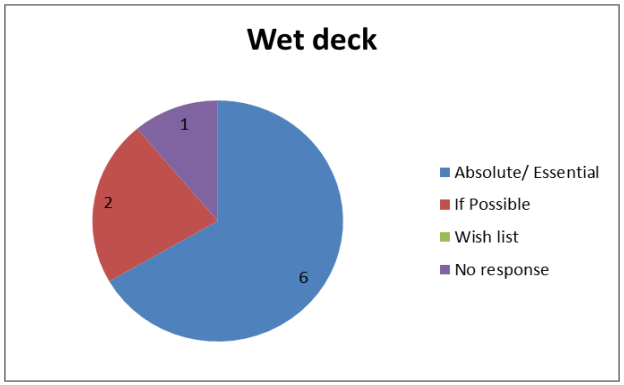


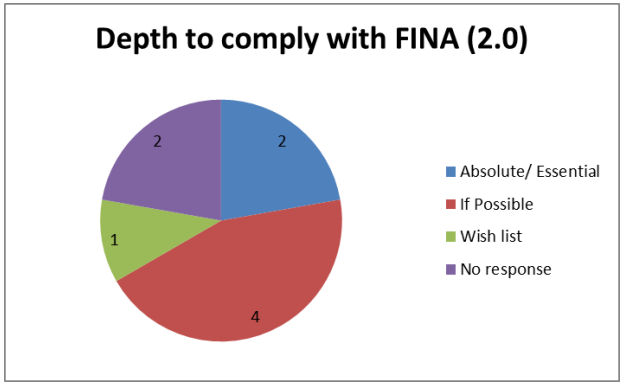


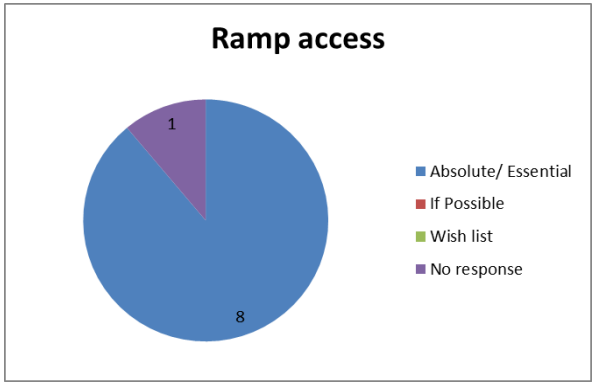
Alstonville Key Stakeholders - 50m Pool

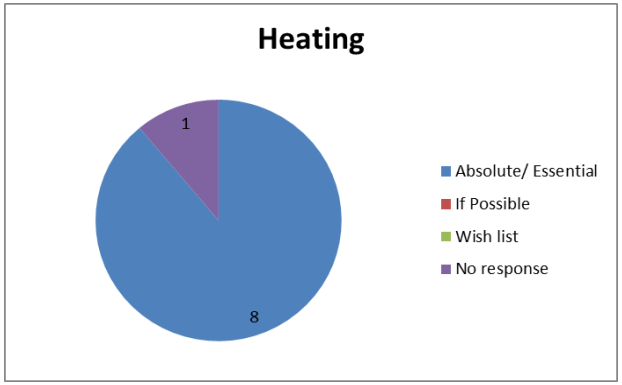


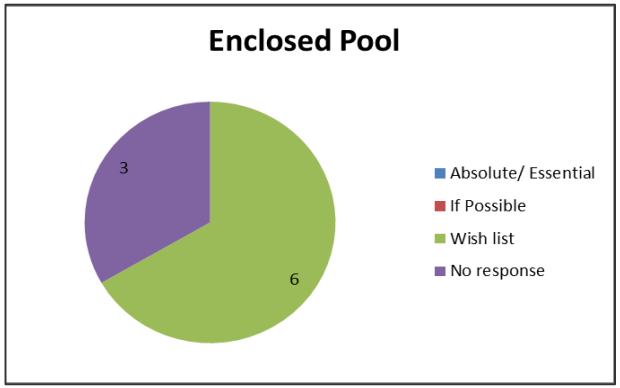




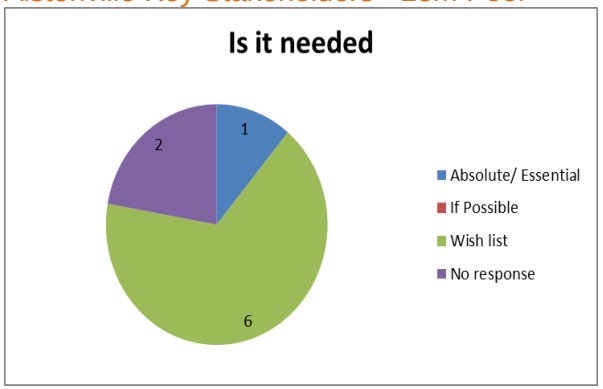


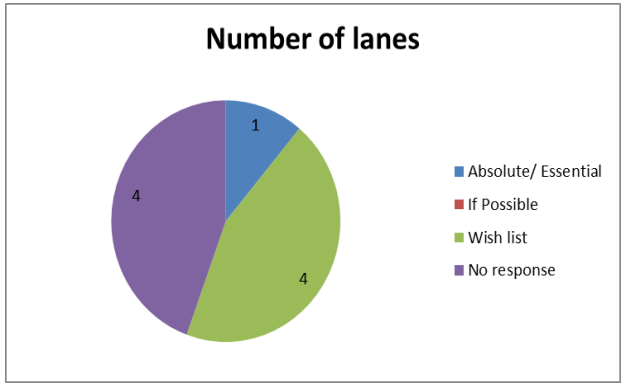


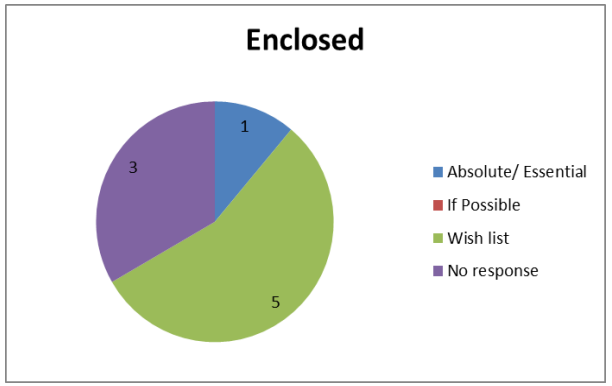


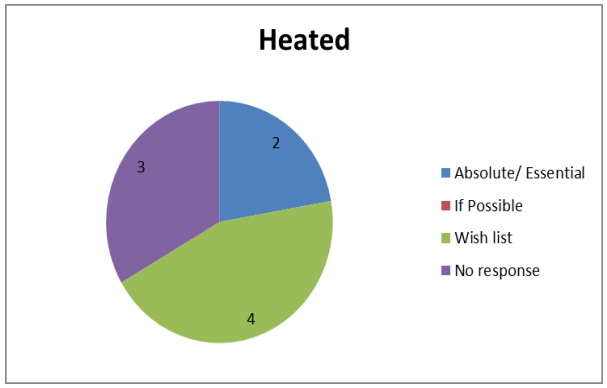


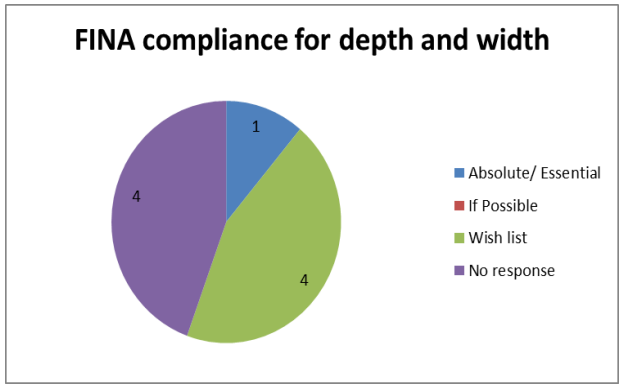
Alstonville Key Stakeholders - 25m Pool



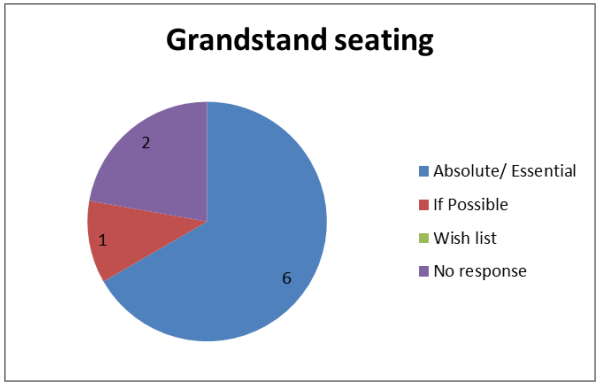


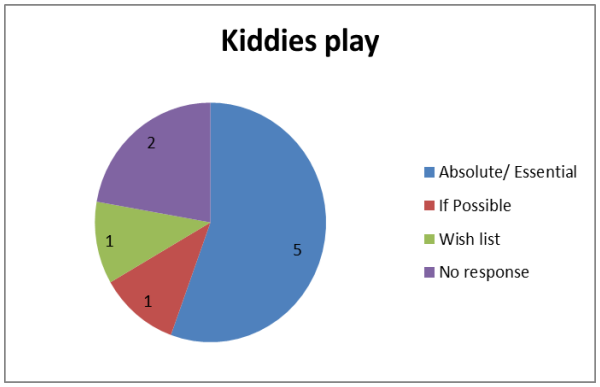


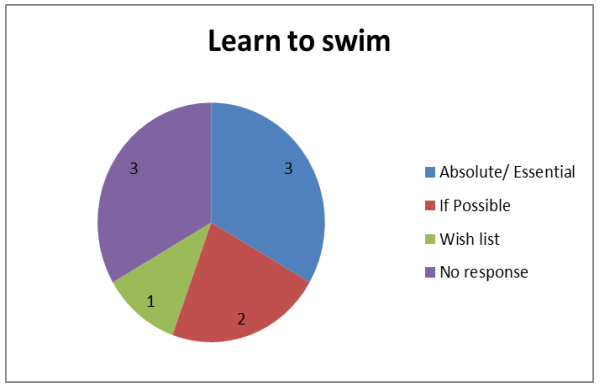


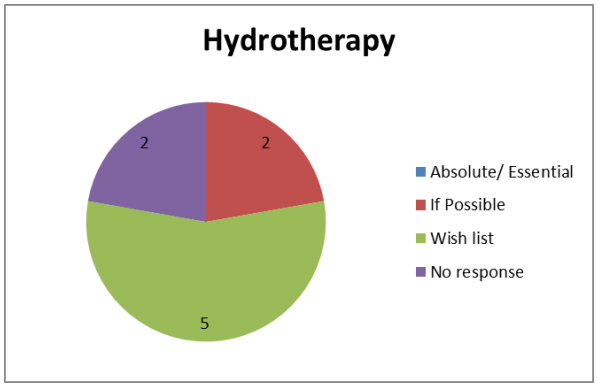


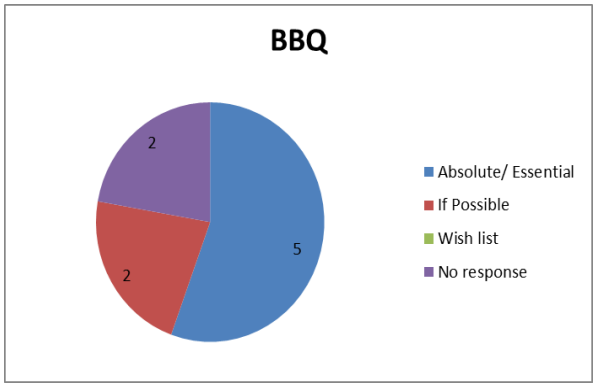
Alstonville Key Stakeholders - Other Works

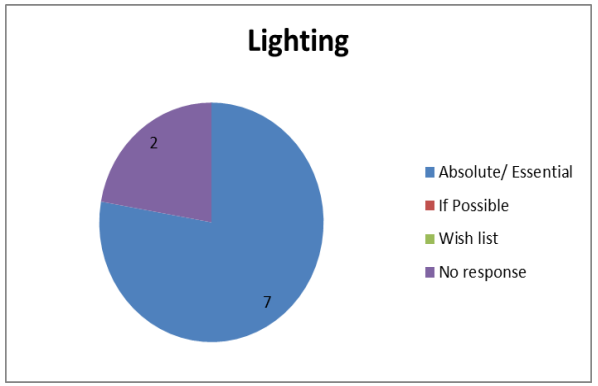




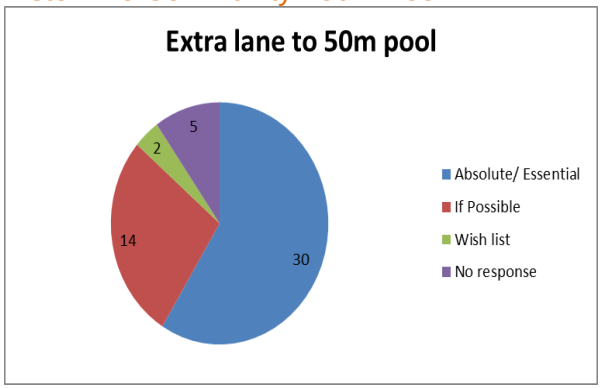


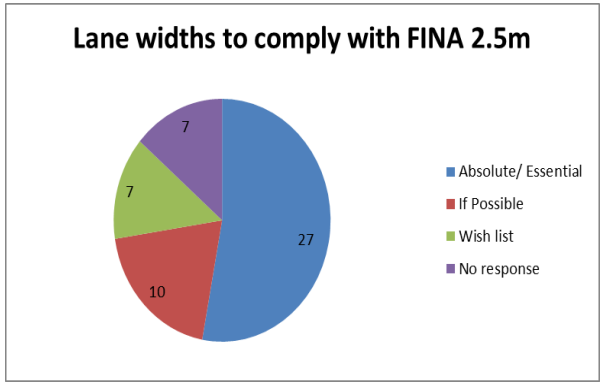


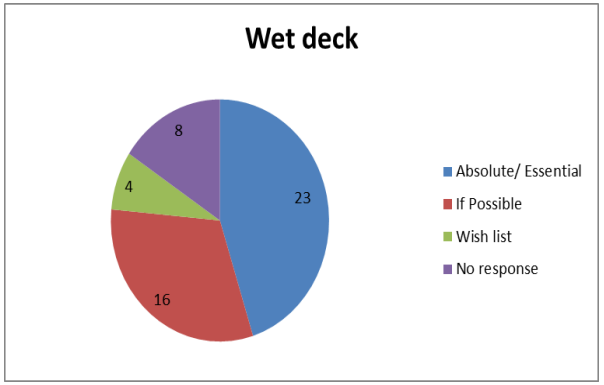


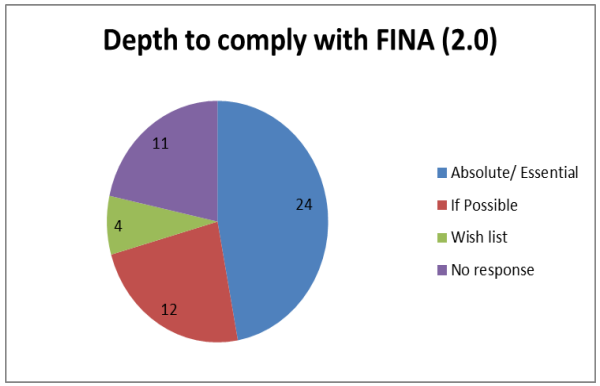


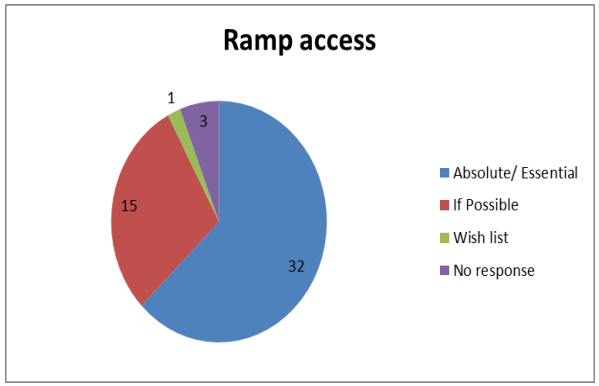
Alstonville Community - 50m Pool

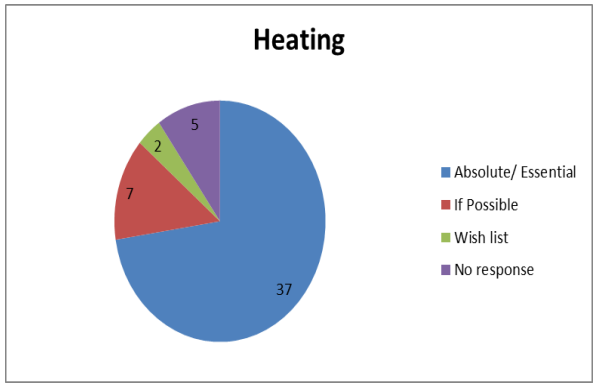


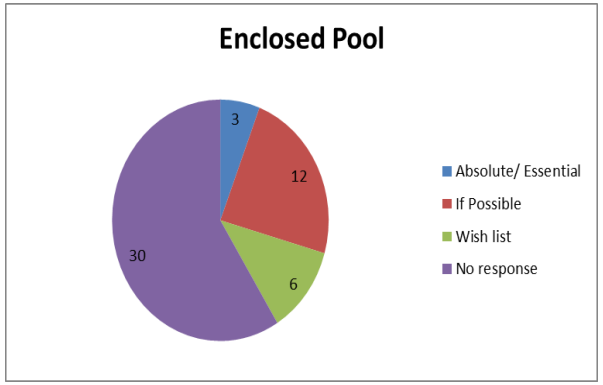




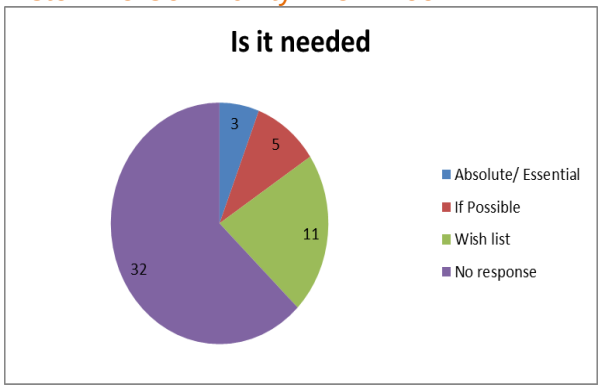


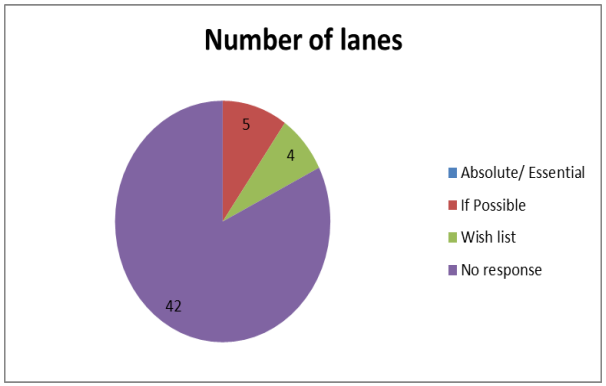


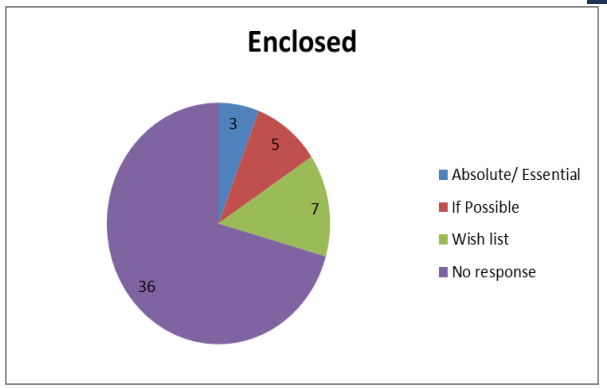


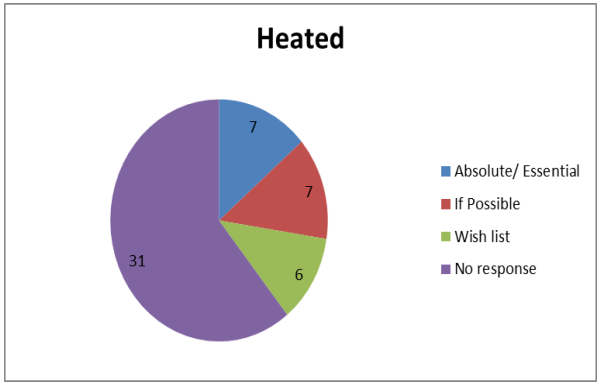


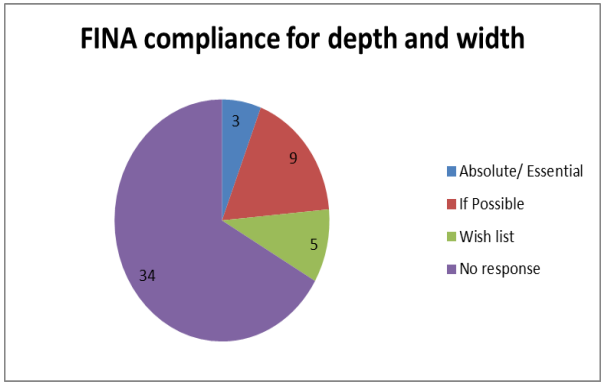
Alstonville Community - 25m Pool



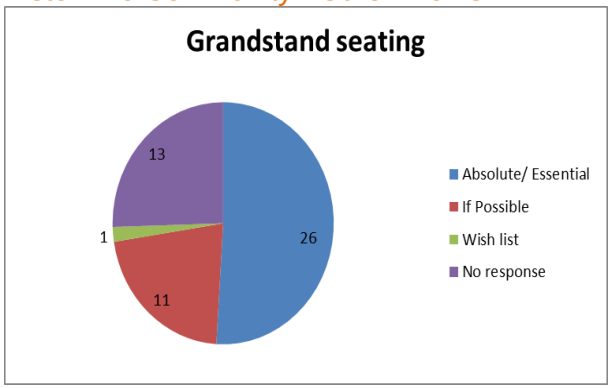


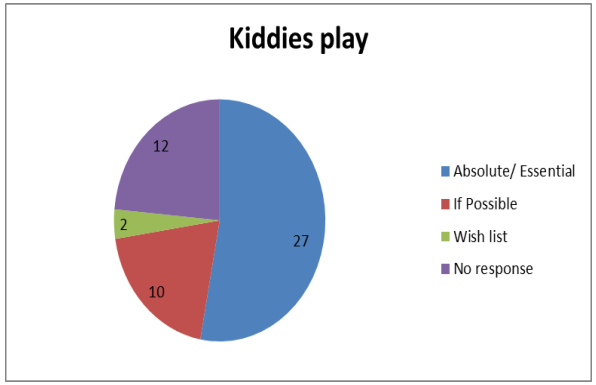


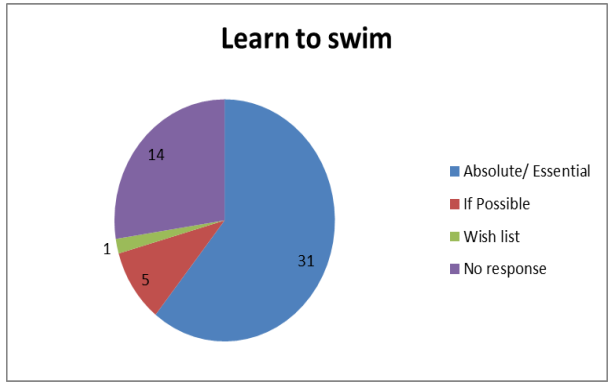


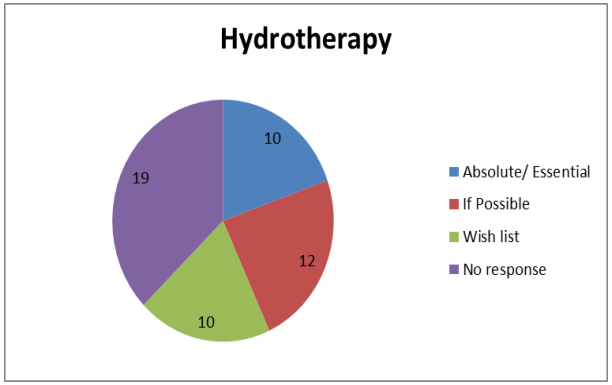


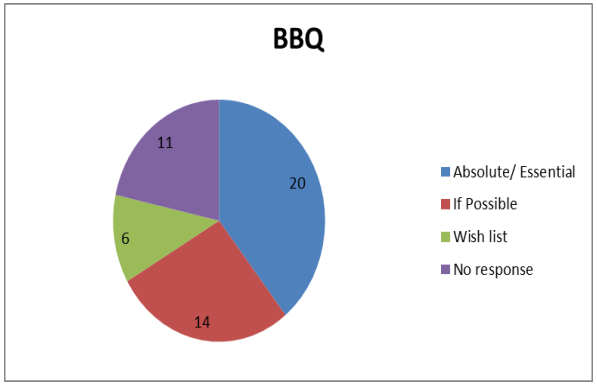
Alstonville Community - Other Works

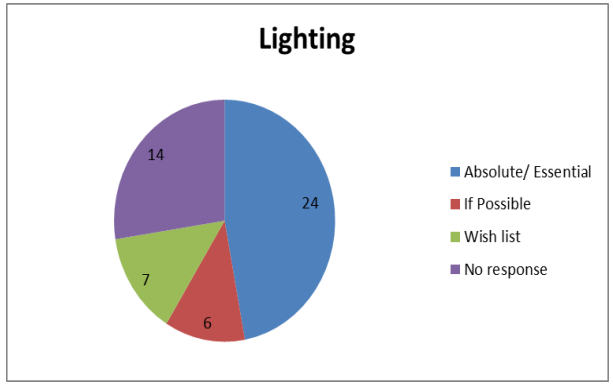












3.5 Summary of Results

3.5.1 Ballina

The results received plus comments recorded at the consultation indicate that the overwhelming majority of stakeholders wish to retain a 50m pool rather than develop a 25m pool facility. Notwithstanding this, comments relating to Learn to Swim options targeted enclosed and heated water.

Analysis of the results notes the following preferences:

	Key Stakeholders (4)			Community Stakeholders (37)		
50m Pool	**Absolute**	**If possible**	**Total**	**Absolute**	**If possible**	**Total**
Extra Lane (8 Lane)	-	2	2	13	8	21
FINA Compliant Width	1	1	2	10	8	18
Wet Deck	3	1	4	9	5	14
FINA Compliant Depth (2m)	2	-	2	9	8	17
Ramp Access	3	1	4	22	4	26
Heating	3	-	3	13	8	21
Other Works						
Perimeter Fencing	2	1	3	14	1	15
Grandstand Seating	2	1	3	9	7	16
Children's Water Play	3	1	4	18	5	23
Learn to Swim	4	-	4	13	3	16
Hydrotherapy	1	1	2	10	6	16
BBQ	1	3	4	13	5	18
Lighting	1	2	3	10	3	13

In summary, the priority issues appear to be:

50m Pool

- Extra Lane (8)
- FINA compliant lane width
- Wet deck construction
- FINA compliant depth
- Ramp access
- Heating

Other Works

- Perimeter fencing
- Grandstand seating
- Children's water play
- Learn to Swim facility
- BBQ facility

3.5.2 Alstonville

As with Ballina, the overwhelming view of both key stakeholders and community based input was that the 50m pool must be retained rather than developing a 25m facility. Similarly, a heated and enclosed Learn to Swim pool was targeted.

Analysis of the results notes the following preference:

	Key Stakeholders (8)			Community Stakeholders (51)		
50m Pool	**Absolute**	**If possible**	**Total**	**Absolute**	**If possible**	**Total**
Extra Lane (8 Lane)	8	-	8	30	14	44
FINA Compliant Width	5	3	8	27	10	37
Wet Deck	6	2	8	23	16	39
FINA Compliant Depth (2m)	2	4	6	24	12	36
Ramp Access	8	-	8	32	15	47
Heating	8	-	8	37	7	44
Enclosed Pool	-	-	-	3	12	15
Other Works						
Grandstand Seating	6	1	7	26	11	37
Children's Water Play	5	1	6	27	10	37
Learn to Swim	3	2	5	31	5	36
Hydrotherapy	-	2	2	10	12	22
BBQ	5	2	7	20	14	34
Lighting	7	-	7	24	6	30

Note: It is noted that responses relative to 50m lane numbers targeted the addition of 3 lanes to permit water polo to be played across the width, thereby permitting lap swimming across the pool (25m) at the same time.

Other comments related to request for upgrading of amenities – particularly females.

In summary, the priority issues appear to be:

50m pool

- Extra lanes (1-3)
- FINA compliant width
- Wet deck
- FINA compliant depth
- Ramp Access
- Heating

Other Works

- Grandstand seating
- Children's water play
- Learn to Swim water
- BBQ
- Lighting

4.0 Medium Term Demographic Trends for the Ballina Shire

In order to provide an overview of the potential demographic trends for the Ballina Shire Council a number of documents and information sources have been reviewed. These include published documents from various sources and data from the Australian Bureau of Statistics. Whilst this information provides informed opinions or statistical data it is important to note that these are being used to provide forecasts for trends. Actual demographic changes over the next 25 years may be influenced by socio-economic changes or government policies both local and international.

In addition to the research information there have been many recent media and government statements regarding the Australian population. These include statements that the life expectancy of Australians will be 100 in 2050 and that the number of people over 65 will double. There have also been many reports into the Obesity Crisis in Australia and the potential impact on life expectancy and health care costs associated with obesity.
Below are some excerpts from some of the information sources used by this report to provide an understanding of the medium term demographic trends for the Ballina Shire.

4.1 Ballina Shire Economic profile October 2014

- The 2013 Population for the Shire was 41,335, indicating an annual growth of 0.8%.
- Population growth over the past 5 years was 1,315 persons which indicates an average annual growth of 0.6%. This is significantly below the NSW average of 1.4% per year.
- The estimated number of employed persons grew by 2.7% in the 2013 December quarter. With an unemployment rate in December 2013 of 4.8% the Shire is below the NSW average of 5.6%.
- The June 2014 quarter also showed a significant growth in dwelling approvals.
- Healthcare and Social Assistance were the largest, 9.2%, contributor to Gross Regional Product.
- The proportion of residents over 15 years old in the labour force was 61.9%, lower than the year before and lower than the State average.
- The Average age of Ballina Shire residents was 43.3 years in 2013, and increase of 1.4 years since 2008.
- The dependency ratio for Ballina Shire increased by 4.7%, higher than the state average.

4.2 Aging Plan 2015

- The NSW Northern Rivers Regional Plan notes that the number of people aged 65 years and over expected to double in the next 25 years.
- The Aging Plan also references population projections for Ballina Shire Council from the New South Wales Department of Planning & Environment, which shows the population aged 64+ increasing from 8,650 in 2011 to 13,300 in 2031. This indicates a growth of 54% over 20 years.
- The Ballina Shire Council Aging Plan references data from the 2011 Census which covered the changes between 2006 and 2011. It notes that in 2001 the average age of residents was 41.

4.3 Australia: The Healthiest Country by 2020 (Federal Govertment – Preventative Health Taskforce)

- In a survey conducted in 1999-2000 60% of Australians aged 25 years and over were overweight or obese.
- Obesity causes a quarter of type 2 diabetes and osteoarthritis, around one-fifth of cardiovascular disease and colorectal, breast, uterine and kidney cancer.
- Assuming a constant increase in obesity prevalence the report indicates there will be 6.9m obese Australians by 2025 from 3.8m in 2008.

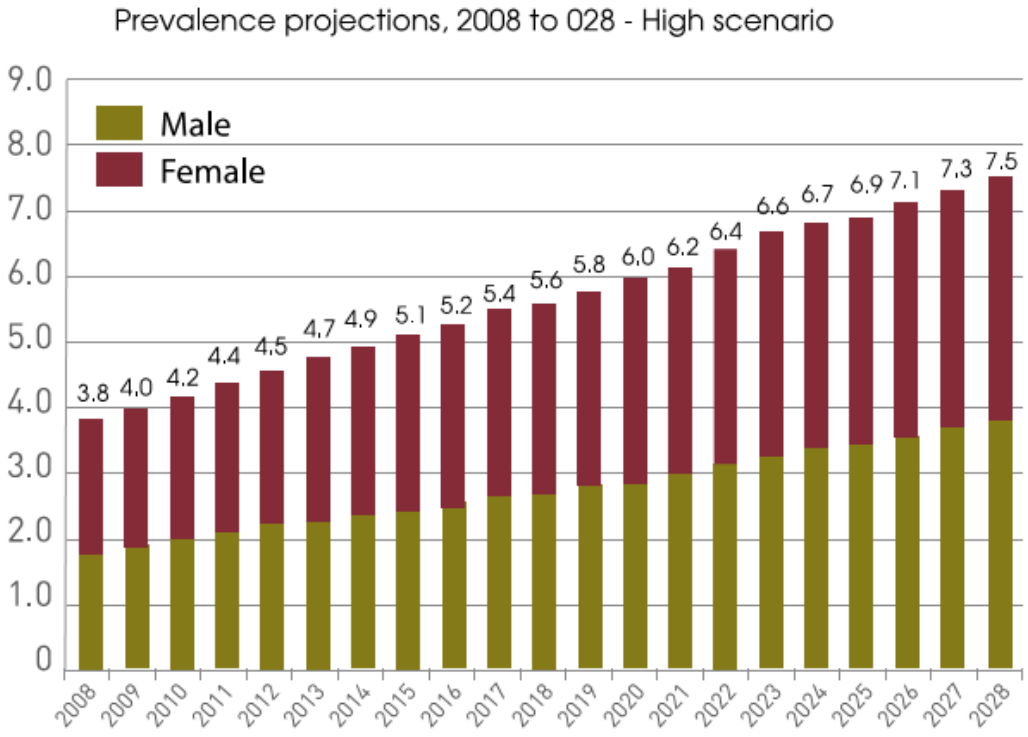


Figure 3: Population obesity prevalence projections, Australia, 2008-2028 (assuming current trends continue)

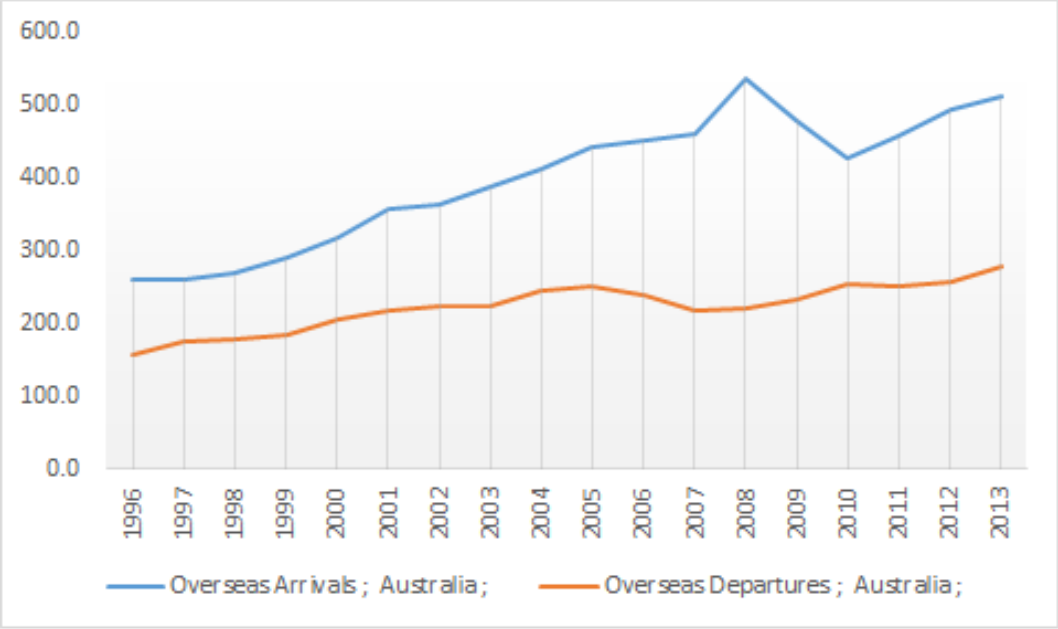
Source: Access Economics 2008(13)

4.4 Australian Bureau of Statistics

- The population growth in Ballina Shire from 2005 to 2009 was 2,575 or 6.46%, which indicates an annual growth of 1.29%.
- In 2012 the median age of the population was 45.7 years old.
- In 2012 21.8% of the population was aged 65 years and older, up from 19.9% in 2008.
- 1996 Census indicates Ballina population was 34,702, with 78% aged 15 years or older
- In 2015 Preliminary population for the Shire is 41,644 for 2014, based on ABS statistics, which indicates a population growth of 0.75%.
- ABS indicates NSW life expectancy for males increased from 77.7 to 80.0, 2.3 years, between 2003 and 2013. For females the increase was from 82.9 to 84.3. Review of the data indicates that from the 2009 the increases were typically minor 0.1 and 0.2 increases. Note this is for persons born in that year.
- For males and females aged 50 the increase was 1.7 and 1.2 years, respectively, which is significantly less than the increase to the 65+ age group. This indicates that life expectancy for those in their fifties, who will be in the 65+ age group in 25 years is not increasing at the same rate.
- The Australian Census information for 1996, 2001, 2006 and 2011 by age group is provided in the table below. Comparison of the change to the age group totals between 2001 and 2011 shows that when the 45-54 age group reach 65-75 in 20 years' time the growth of that age group will be 181%. This assumes a constant for the current population.

Australian Population by Age Group								
		1996		2001		2006		2011
Age Group	0-4 years	1,264,906	99%	1,248,388	101%	1,264,826	113%	1,425,548
Age Group	5-14 years	2,573,026	104%	2,685,623	100%	2,693,000	102%	2,736,452
Age Group	15-19 years	1,249,688	108%	1,348,255	102%	1,377,772	103%	1,425,498
Age Group	20-24 years	1,322,457	97%	1,276,680	108%	1,382,313	108%	1,498,464
Age Group	25-34 years	2,743,327	101%	2,764,440	98%	2,716,606	111%	3,011,127
Age Group	35-44 years	2,727,291	106%	2,891,934	102%	2,962,256	104%	3,085,834
Age Group	45-54 years	2,237,424	116%	2,591,479	108%	2,786,531	107%	2,976,487
Age Group	55-64 years	1,483,815	120%	1,776,988	125%	2,214,477	114%	2,532,604
Age Group	65-74 years	1,258,195	103%	1,292,497	107%	1,387,102	119%	1,644,046
Age Group	75-84 years			832,474	114%	953,131	104%	987,572
Age Group	85 years and over			263,592	123%	323,632	125%	403,533
Total		**16,860,129**		**18,972,350**		**20,061,646**		**21,727,165**

- The table above also highlights a few other key demographic points. The rate of population growth in the 0-4 age group increased between 2006 and 2011. There was significant growth in the 25-34 and 55-64 age groups which may be due to migration due to Australia's economic conditions. The increase to the 55-64 between 2001 and 2006 was significant.
- The preliminary estimate of net overseas migration (NOM) recorded for the year ended 30 September 2014 (203,900 people) was 12.8%, or 30,000 people lower than the net overseas migration recorded for the year ended 30 September 2013 (233,900 people).
- The graph below shows the NOM overseas migration between 1996 and 2013.



4.5 2011 Financial Plan Discussion paper

- Ballina pool patronage benefits from a water slide, which is used by families. Total entries 41,458 at 20th Feb 2011. High number of child entries, particularly over Christmas holidays.
- Alstonville has LPG heating which is more effective so is open longer. Total entries 38,276 at 20th Feb 2011. High participation of season ticket entries, both adult and children.

4.6 Potential Medium Term Demographic Trends

The information provided above indicates that the rate of population growth in Ballina Shire was at 0.8% in 2013, lower than the 1.29% average from 2005 to 2009. This is also lower than the NSW average of 1.4% over the past 5 years. Preliminary data for 2015 indicates a growth rate of 0.75%, showing a slowing of the overall population growth in Ballina Shire. It can also be noted that the population in Ballina Shire is growing but at a rate slower than the State average.

The average age of Ballina Shire residents is increasing from 41 in 2001 to 41.9 in 2008 and 43.3 in 2013. The rate of increase in the average age of Ballina Shire residents is increasing. At the same time the dependency ration increased by 4.7%. These figures correlate with the national data for population growth from the ABS which shows significant increases in the 0-4 age group and increases in the age groups 55 and over.

The rate of population increase may reduce as a result of adjustments to the net overseas migration which has seen significant fluctuations in recent years and may continue to do so due to changes in the economic environment.

Australian life expectancy has increased to 80.0 for males and 84.3 for females between 2003 and 2013. This represents an increase of 2.3 increase for persons born in that year, whilst the increase for those aged 50 has been 1.7 (males) and 1.2 (females) years. This indicates that life expectancy for those that will be 65+ in the medium term is not expected to adjust significantly. It is not apparent if the impacts of obesity have been considered in the life expectancy assessment but based on reports published it has the potential to have a significant impact.

The trend is for significant growth in the proportion of the population in the older age groups based on the ABS data. This could be as high as 181% through straight extrapolation from the ABS data but mortality and migration factors are likely to reduce this. The NSW Department of Planning and Environment indicates a trend of 54% growth over 20 years, whilst the growth over the past 10 years has been 42%.

There is likely to be significant growth in the 65+ age group in the medium term, which is likely to be through ageing of the population not migration as the total population growth for Ballina Shire is low. The growth in dependants has increased which may reflect the recent increase in the 0-4 age group on a national level, this will mean that in the medium term the age groups below 20 will need consideration. Another medium term demographic consideration is obesity and the potential benefits that pool facilities may have for this portion of the population.

4.7 Facility Considerations

The key considerations for pool facilities in the Ballina Shire Council based on the information detailed above are:

- The facility should cater for both youth and elderly pool related programs as these two portions of the population show the highest growth rate.
- Currently the 65+ population is currently 37% smaller than the 14 and under population. These two portions of the population combined make up 39.7% of the population in the Shire. These two demographics have similar requirements with regards to pool facilities.
- Standard pool and specialist pools within a facility provide the broadest coverage for use by all demographics and allow for cross over in use. For example 65+ patrons who are strong swimmers may utilise the standard pool whilst obese young adults or those recovering from an injury may utilise the specialist pool.
- Patronage of the facility is greatly impacted on by the period the pool is open and the heating provided. This provides a stronger base of season ticket holders showing an increased use by local inhabitants rather than visitors to the region.
- The provision of a water slide facility will increase patronage over holiday periods but needs to be considered with regards to operational and maintenance requirements. The provision of pool play features such as fountains, drenchers and spitters may activate in much the same way with reduced operational and maintenance requirements.

5.0 Contemporary Trends for Aquatic Facilities

Development of aquatic facilities has changed over the last two decades with the focus strengthening on organised programs for activities such as aqua aerobics, children's water play area and general fun based activity. The intent of this diversification is to increase revenue opportunities and maximise visitation across multiple segments. At the same time, the cost to build internationally standard facilities complying with Federation Internationale de Natation (FINA) requirements has been ever increasing.

Rigid standards of pool depth, lane numbers and widths have all increased leading to additional costs. There are currently 2 regulation pool sizes in world competitive swimming being short course (25m) and long course (50m).

Current long course standards are:

- Length 50m (plus allowance for touch pads)
- Lane number – 10
- Depth 2.0m (when used for championships)
- Lane width 2.5m
- Water polo – depth – greater than 1.8m
- Water polo length 20-30m (men), 20-25m (women)
- Water polo width 10-20m
- Water polo boundary: 0.3m behind goal line

Based on these ever increasing standards and the resultant costs, the trend for local authorities is to develop short course (25m) facilities with additional components such as heating, dedicated "Learn to Swim", hydrotherapy, children's water play, gym etc. New long course facilities are being restricted to capital cities, sport academies and universities.

Notwithstanding this trend, the overwhelming conclusions for both Ballina and Alstonville has been to continue with 50m pools as the main facility with rejection of the 25m short course facility as an inferior option.

5.1 Learn to Swim

Learn to swim facilities are important components of aquatic centres and the trend is for these to be purpose built in terms of depths and features such as rest ledges, cover for shade and enclosure for heating efficiency permitting year round use.

It is considered that a depth of 1.0m is desirable for learn to swim pools with access ramps or beach entry design.

5.2 Children's Water Play

The most significant development over the last 20 years has been the proliferation of water features / activities for younger children. These facilities present as zero water profile around water features/play with adjacent, generally shallow (300-400mm), pools with beach entry access. Magic Mushroom, Frog Slides and Water Cannons are common. In some instances "white water rapids" are incorporated.

5.3 Hydrotherapy Pools

The provision of "true" hydrotherapy pools is rarely seen in Municipal facilities. These specialist pools require higher water temperatures and highly efficient deep bed filtration. General use for older users and physical therapy patients is satisfied through provision of heated, enclosed pools with appropriate ramp access.

5.4 Sterilization

A technical development relating to pool operation has been the increasing change from liquid chlorine sterilization to alternate methods, primarily granular chlorine and low salt sterilization. The change is largely related to reducing WHS risk in handling highly volatile liquid chlorine and the cost associated with bunding requirements to delivery areas.

6.0 Development Options

As part of this study, a review of existing infrastructure has been undertaken to assess current and future useability. The result of this assessment is that the aquatic facilities are generally at the limit of their useable life with ever increasing maintenance requirements. In addition, elements of the existing design no longer reflect contemporary aquatic centre design eg. toddler pools and access provision to all pools.

Based on this assessment and the output from the stakeholder consultation preliminary concept, layout plans have been prepared for both Alstonville and Ballina.

Details of the concepts are provided on the following drawings.

6.1 Ballina

The Ballina site is prime real estate on the bank of the Richmond River. The views across the river are stunning but are currently blocked by a timber fence along the southern boundary. This fence is in a poor state of repair and must be replaced. Replacement with a transparent product is recommended. Whilst expensive, the enhancement of views will be a major benefit to the centre.

Level Difference

The site is currently terraced with the 50m pool approximately 1 metre higher than the entry and amenities blocks. This level difference makes observation of the main pool difficult from the entry / office.

Water Slide

The water slide currently on site is privately owned and operated, As such, the redevelopment options have not considered any aspect of the slide site.

Options

The proposed option 1 replaces all pools in their current locations. Consideration could be given to lowering the upper terrace to give better vision over the site.

Options 2 & 3 provide for a complete reconfiguration of the site which entails repositioning the entry and amenities building to the south west corner of the site. This position takes advantage of the views, gains better parking access for pool and presents a safer arrival point for pool patrons. Further, the location is immediately adjacent to the pedestrian / bicycle path and as such presents a very attractive opportunity for a food and beverage outlet eg. Coffee bar.

Options 2 & 3 have different pool orientations with option 3 necessitating the lowering of the upper terrace. However both options incorporate:

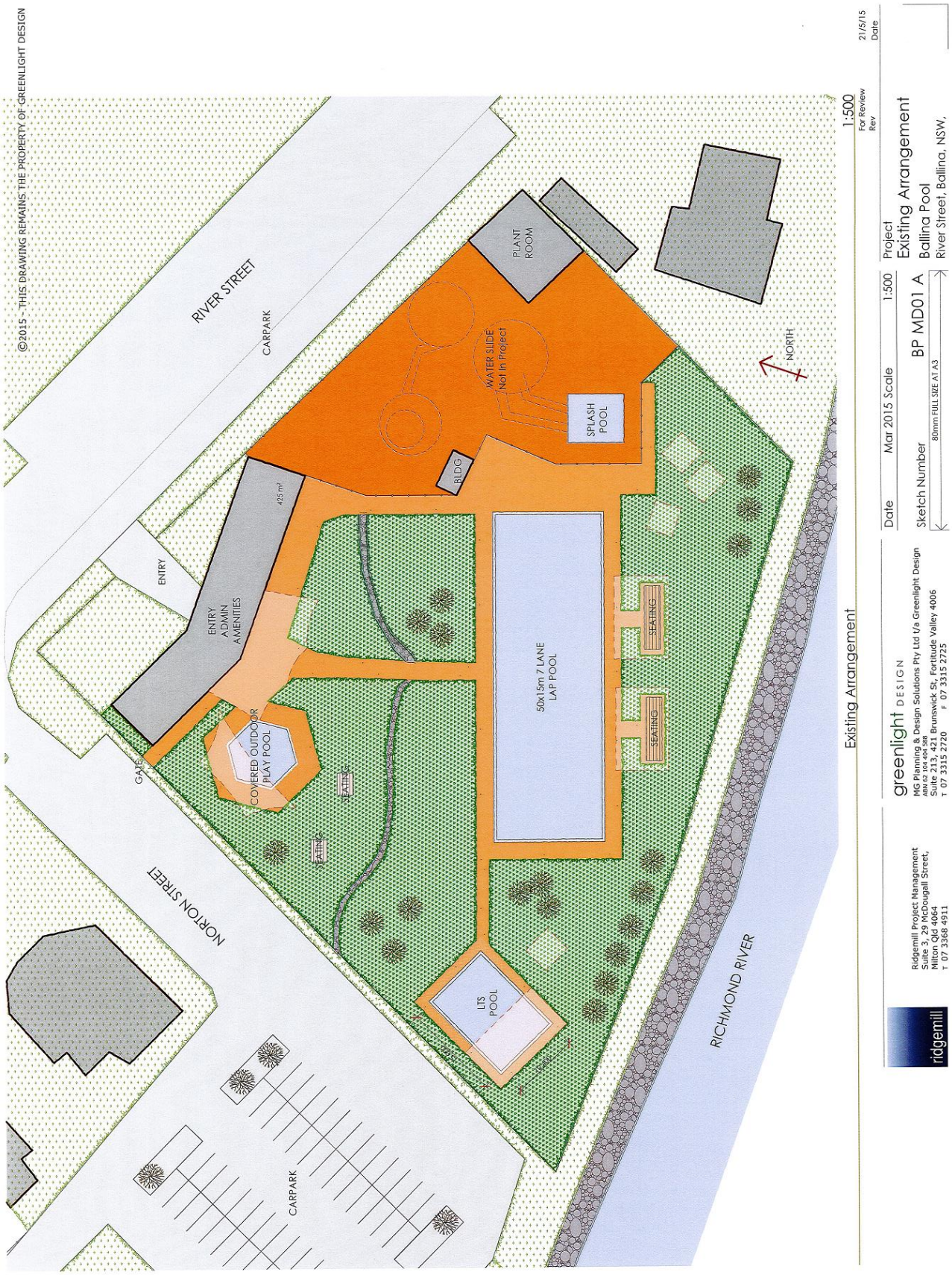
- 50m pool incorporating
  - 10 x 2.5m lanes
  - Access ramp
  - Depth 1.35m to 2.0m
- Learn to swim pool
  - 16m x 10m x 1m deep
  - Roof and drop blinds to sides
  - Beach or ramp entry
- Wet Play Pool
  - Approx. 150m² of wet play area
  - Beach entry
  - Fountains / water cannon / mushroom / slide
  - Sun shade

The estimated cost for each option is shown in Appendix 1. The cost is scheduled below based on the use of prefabricated pools.

Option 1	$5,175,000 + GST
Option 2	$6,450,000 + GST
Option 3	$6,400,000 + GST

These costs include an allowance of $250,000 for piling. It is noted that the Geotechnical Report is not conclusive but suggests piles be allowed at concept stage.

Ballina – Existing Arrangement



Ballina – Option 1

Ballina – Option 2

Ballina – Option 3

6.2 Alstonville

The Alstonville site is tight given boundary locations and the emphatic message from all stakeholders is to maintain the green space currently enjoyed.

Three options have been prepared to assess site utilisation with each option comprising:

- 50m pool incorporating
  - 10 x 2.5m lanes
  - Access ramp
  - Depth 1.35m to 2.0m
- Learn to swim pool
  - 16m x 10m x 1m deep
  - Roof and drop blinds to sides
  - Beach or ramp entry
- Wet Play Pool
  - Approx. 150m² of wet play area
  - Beach entry
  - Fountains / water cannon / mushroom / slide
  - Sun shade

The three options examined impact on the orientation of the main pool with Option 1 retaining the current location.

Option 2 relocates the main pool to the current grassed area but with a north-south orientation.

Option 3 also relocates the main pool and provides an east-west orientation.

The estimated cost of the 3 options is detailed in Appendix 2 and summarized below:

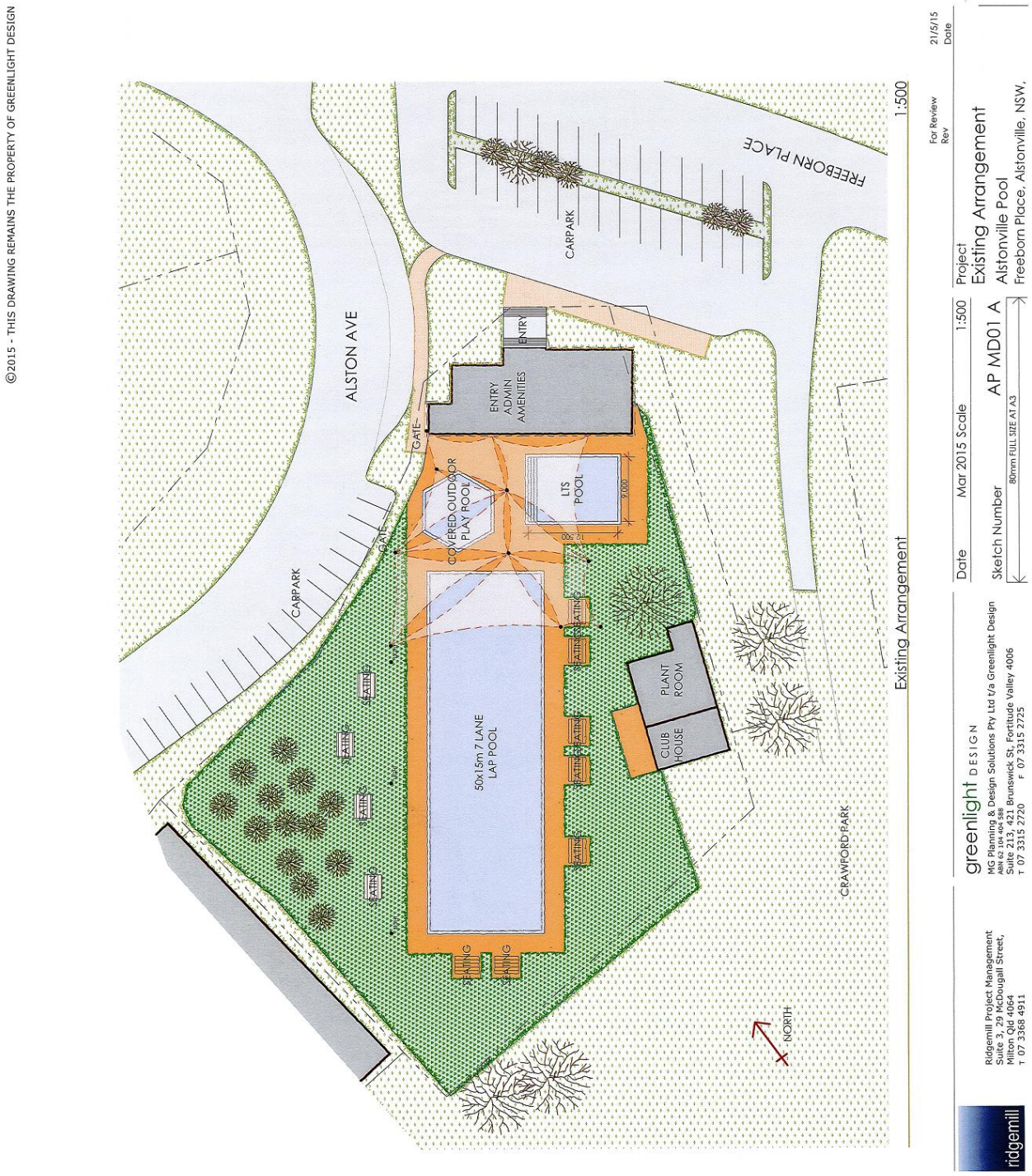
Option 1	$4,575,000
Option 2	$4,650,000
Option 3	$4,650,000

The above costs are based on the use of a prefabricated pool system.

Fence Alignment

The current fence line encroaches onto adjoining property which is being developed as a kindergarten. This encroachment compromises Option 1 in terms of circulation of foot traffic, whilst option 2 becomes unworkable. Option 3 is the only option not compromised by the fence issue.

Alstonville – Existing Arrangement



Alstonville – Option 1

Alstonville – Option 2

Alstonville – Option 3

6.3 Preferred Option

The developed options were presented to Council on 2nd of September 2015, and the Ballina and Alstonville pool communities on 23rd and 24th of September 2015 respectively. The stakeholders for both venues were generally very positive regarding the options and complimentary of Council and the consultation process in arriving at the options proposed. Details of the recommended options are provided below.

6.3.1 Ballina

Option 2 was a clear preference for the stakeholders with 100 percent of attendees nominating this option. In particular the attendees noted the very positive change to location of amenities and entry structure which will provide a much safer arrival point.

Comments also suggested the lengthening of the amenities building and interchanging the learn to swim facility and children's water play. These changes will provide greater wind protection to the main pool and reduce heat loss. Further advantage is seen in locating the children's water play closer to the street corner to provide a highly active frontage.

A revised concept plan for preferred option 2 is provided as BP SK02 B, and is shown on the following page.

This development is estimated at a cost of $6.45 million + GST for a prefabricated panel construction such as Myrtha or Astral.

Ballina – Option 2 (REVISED)

6.3.2 Alstonville

A total of 34 attendees were recorded for the Alstonville presentation with 28 noting preference for Option 1.

As noted previously the site is extremely tight and the recent realignment of the southern boundary has restricted access around the pool. Notwithstanding this, a minimum 3 metre walkway has been maintained throughout.

Options to increase the site area by realigning the eastern boundary may provide opportunities to increase the size and orientation of the Learn to Swim pool but this would necessitate removal of the existing mature "fig tree". Further, encroachment over the existing boundary appears to require realignment of existing sewer line and the construction of a retaining wall. With respect to the possible boundary realignment, it is understood that there is no technical objection to this.

Refinement of the concept design would also relocate the proposed filtration equipment to the south of the existing club house thereby freeing up the main pool area.

A revised concept plan for the preferred Option 1 is provided as AP SK04 A.

This development is estimated at a cost of $4.95 million for a prefabricated construction.

6.3.3 Prefabricated Construction

The costings make reference to savings associated with the use of prefabricated construction.

In this regard, we note that there are currently 2 major suppliers of this product:

- Myrtha – Italian Origin
- Astral Pool – Spanish Origin

6.3.3a Myrtha

Myrtha utilises stainless steel wall panels with a hard PVC membrane hot laminated to the panels. A reinforced PCV membrane is used for the floor. Warranty details are:

- Steel structure – 25 years
- PVC membrane – 10 years

6.3.3b Astral Pool – Skypool Commercial Pool

Astral utilise 2mm hot galvanised steel sheets doubled over for strength, and reinforced with corner and rib strengtheners. Panels allow pressures up to 5m depth.

The structure is fully lined with reinforced PVC-P liner.

Warranty on the pool components is 20 years pro-rata.

It is noted that a recent inspection of a Skypool in Townsville noted minor non-structural rusting of the pool structure after 8 years operation.

6.3.3c General

In terms of warranty and liner replacement, it is noted that replacement could be anticipated every 15 years. Current cost for replacement is $170,000 + GST.

Alstonville – Option 1 (REVISED)

6.4 External Showers

External showers have been added to both sites following comments from stakeholders.

6.5 Depth Considerations

It is noted that the overall consensus for both pools was for FINA compliant depths, being a minimum of 1.35 metres where diving platforms are in use. Some concern was expressed at the presentation that this depth may be too great for younger swimmers. Accordingly we have reviewed various publications/standards relating to depth. The outcome of this review is as follows:

- FINA – a minimum depth of 1.35 metres where starting blocks are installed
- Royal Life Saving/NSW Department of Education – 1000 to 1200 allows dive start from maximum of 400 mm above water level
- Swimming NSW – 1000 to 1200 allows dive start from maximum of 400 mm above water level
- Department of Education Qld – 900 to <1000 allows dive start from maximum of 200 mm above water level
- Department of Education Qld – 1000 to <1200 allows dive start from maximum of 400 mm above water level

Based on the foregoing, consideration could be given to reducing pool depth to 1 metre provided dive entry (height above water level) is restricted to level or less than 400 metres above water level. However, Swimming Australia strongly recommend 1.35 metres as a new facility and accordingly 1.35m depth is recommended.

6.6 Alternative Site

As part of the study Ridgemill reviewed the opportunity to combine the facilities of both Ballina and Alstonville and construct a completely new major facility at a central site in close proximity. It is understood that Council has a significant area of appropriately zoned land at Gallans Road, approximately 5 kilometres from Ballina and 15 kilometres from Alstonville. Should this option be considered then major advantages would result including the ability to construct a 10 lane 50 metre pool, an 8 lane indoor 25 metre pool, indoor Learn to Swim amenities and extensive children's water play area.

The budget estimate for these works in $9.25 million with a $1 million saving if a prefabricated pool was utilized for the 50 metre facility.

7.0 Existing Management Contracts

Service agreements are in place for:

- Ballina Pool - Good Hydration Pty Ltd
- Alstonville Pool - G&K Fettell Pty Ltd

7.1 Ballina Pool

The service agreement commenced 15th September 2008, with expiry 30th April 2013. A further 5 year option period (which appears to have been exercised) extends the service to 30th April 2018.

The period of service for each season is 15th September – 30th April. Whilst not defined in the Agreement, there appears to be a provision for pre and post season maintenance. However this appears to be a provisional sum item with no commitment for payment if works are not undertaken.

Details of actual services to be provided by the operation are not detailed eg. Water testing, mowing, cleaning, collection of entry fees. Similarly, there are no details of items to be provided by Council eg. Power, chemicals, water.

7.2 Alstonville Pool

The service agreement commenced 15th September 2008, with expiry 30th April 2013. A further 5 year option period (which appears to have been exercised) extends the service to 30th April 2018.

The period of service for each season is 15th September – 30th April. Whilst not defined in the Agreement, there appears to be a provision for pre and post season maintenance. However this appears to be a provisional sum item with no commitment for payment if works are not undertaken.

Details of actual services to be provided by the operation are not detailed eg. Water testing, mowing, cleaning, collection of entry fees. Similarly, there are no details of items to be provided by Council eg. Power, chemicals, water.

7.3 Impact of Redevelopment

The current service agreements do not contemplate any redevelopment of the facilities. It will therefore be necessary to consider the impact of any new works on the operational aspects of the pool complexes. In this regard, it is recommended that once the preferred option is identified then negotiations are held with each operator to finalise any changes that may impact on operations.

With regard to the actual redevelopment works, it is noted that the closed season for Ballina is 1st May – 15th September and Alstonville is 15th May – 1st September.

It is not considered feasible to undertake the works within the closed season. Rather, we envisage that pool closures from mid-March to end September will be required.

It is not considered that there will be significant cost impact to the project for reducing the season. However negotiations will be required to finalise any impact.

7.4 Ballina Water Slide

Council is aware of tenure issues relating to the existing slide at Ballina and the complications that this has for ongoing management of the Ballina facility. Based on discussion with Council and advice that the Crown will require vacant position on expiry of any existing lease, we have reviewed the site layout and future planning. The following sketch indicates the position for a new slide for future consideration.

8. Project Delivery/ Procurement

Project delivery is generally considered in two forms, being Traditional and Non Traditional.

Traditional delivery is where the Principal engages professional consultants to fully document the works. Traditional is usually adopted where time constraints are not imperative and quality is important. This delivery is potentially the least time efficient as all activities are sequential. There is a high potential for extension of time claims because of design errors. Traditional is potentially the most cost efficient where 'new' technologies are not part of consideration. However, major risk relates to design errors and subsequent variation claims from the Contractor.

Non-Traditional delivery is where the project requirements are briefed by the client generally on a performance basis. Responsibility for the actual design then flows to the Contractor to prepare developed design and construction documentation. This delivery process is referred to as Design and Construct (D &C) and provides the highest time efficiency as design, documentation and construction can be concurrent. As the contractor is responsible for design, there is minimal potential for extensions of time claims and variations. The D&C process provides high cost efficiency where the "risk" is priced by the Contractor in his fixed lump sum contract.

8.1 Recommended Procurement Method

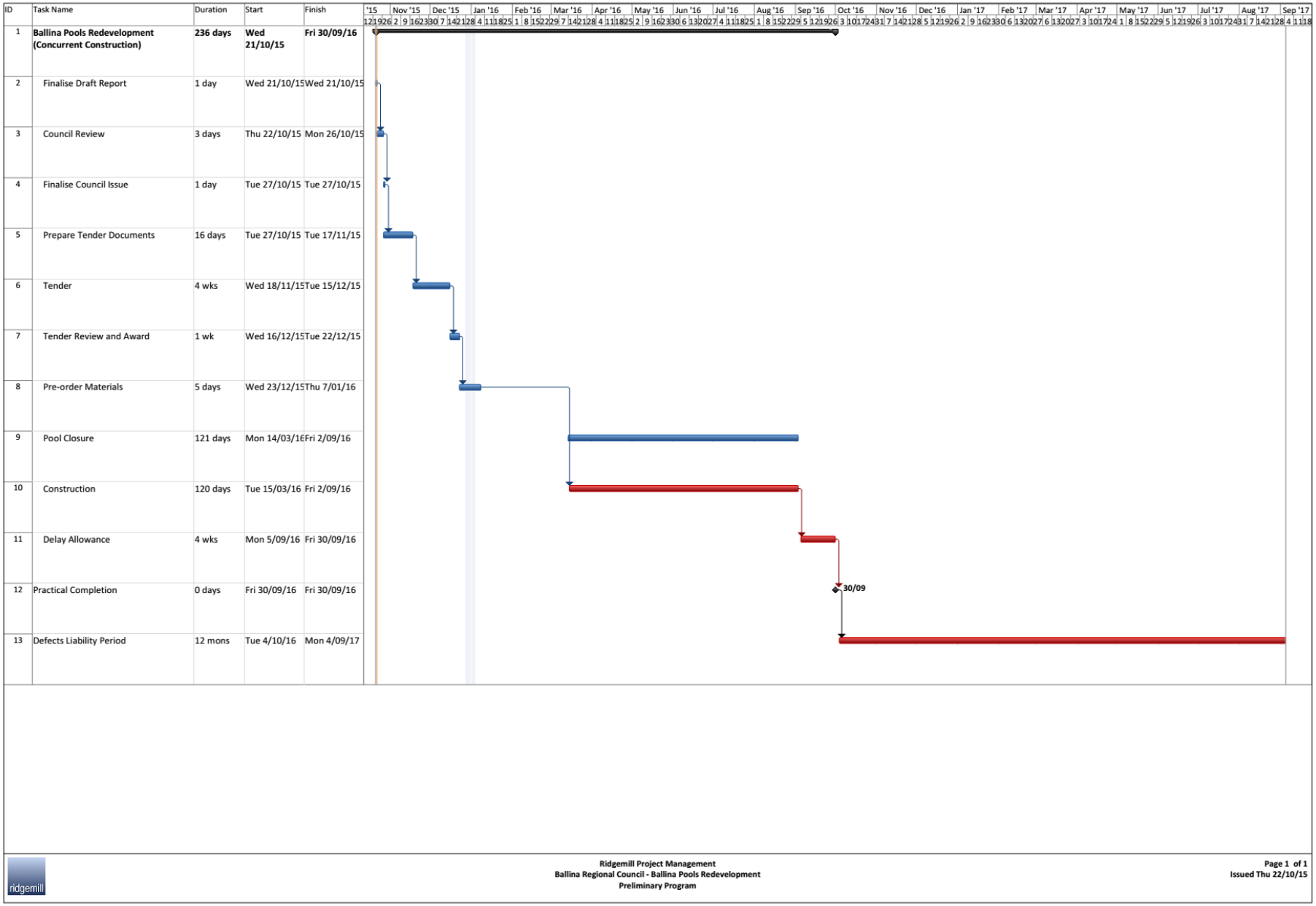
The project comprises two sites with almost identical facilities to be built in what is considered to be a tight timeframe. Prior experience on aquatic facility projects recommends that there are considerable savings to be made through the use of a prefabricated pool structure, such as Myrtha or Astral. However, we should not seek to limit competition to the preferred suppliers/installers of those products. Accordingly, we recommend going to the market with a performance specification stipulating Council's requirements Eg. 10 lane, 2m depth, FINA compliant pool with filtration to Australian Standards etc. Based on this specification, the market will respond in accordance with each organisations experience and capability, in the most cost advantageous way. On this basis we recommend proceeding with a Design and Construction (D&C) tender whereby tenderers use their own design expertise to deliver the project.

With respect to competition we note that with both pools being offered for construction that savings of approximately 10% will be realised, and potentially 15% for the pre-fabricated option. We are however conscious of Council's funding, but note that expenditure will be spread over two financial years, being 2015-2016 and 2016-2017. Assuming construction costs of $12.6 million (as detailed in section 6 of this report) we consider cash flow requirements for 2015-2016 will total $3.5 - $4 million with the balance to be expended by October 2016. A detailed cash flow is included as Annexure 3.

It is recommended that Council tender the works both as individual pools or as a package comprising both pools. This approach will enable a detailed assessment of the best cost option at the time of tender.

8.2 Procurement program

The following program details the timeline for procurement and construction.


ID
Task Name
Duration
Start
Finish
1 Ballina Pools Redevelopment (Concurrent Construction) 236 days Wed 21/10/15 Fri 30/09/16
2 Finalise Draft Report 1 day Wed 21/10/15 Wed 21/10/15
3 Council Review 3 days Thu 22/10/15 Mon 26/10/15
4 Finalise Council Issue 1 day Tue 27/10/15 Tue 27/10/15
5 Prepare Tender Documents 16 days Tue 27/10/15 Tue 17/11/15
6 Tender 4 wks Wed 18/11/15 Tue 15/12/15
7 Tender Review and Award 1 wk Wed 16/12/15 Tue 22/12/15
8 Pre-order Materials 5 days Wed 23/12/15 Thu 7/01/16
9 Pool Closure 121 days Mon 14/03/16 Fri 2/09/16
10 Construction 120 days Tue 15/03/16 Fri 2/09/16
11 Delay Allowance 4 wks Mon 5/09/16 Fri 30/09/16
12 Practical Completion 0 days Fri 30/09/16 Fri 30/09/16
13 Defects Liability Period 12 mons Tue 4/10/16 Mon 4/09/17
'15 Nov '15 Dec '15 Jan '16 Feb '16 Mar '16 Apr '16 May '16 Jun '16 Jul '16 Aug '16 Sep '16 Oct '16 Nov '16 Dec '16 Jan '17 Feb '17 Mar '17 Apr '17 May '17 Jun '17 Jul '17 Aug '17 Sep '17
30/09
ridgemill
Ridgemill Project Management
Ballina Regional Council - Ballina Pools Redevelopment
Preliminary Program
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Issued Thu 22/10/15

8.3 Cashflow

The following cashflows show each pool individually, and then combined.

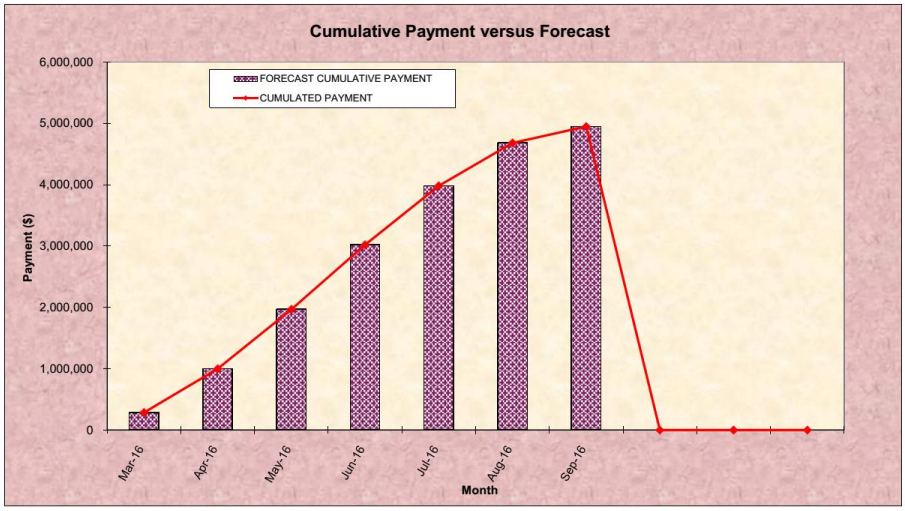
Job Name	Alstonville Pool
Job No.	
Total Value	$ 4,950,000
Start Date	1 Mar 16
Finish Date	30 Sep 16
Months	7

ALSTONVILLE POOL — **Job Ref:**

CASHFLOW — **27 October 2015**

Single Stage

	MONTH	NET PAYMENT $	CUMULATIVE PAYMENT $	ACTUAL PAYMENT $	FORECAST PAYMENT $	FORECAST CUMULATIVE $	ACTUAL PAYMENT $	ACT./F'CAST PAYMENT $
1	Mar-16	287,000	287,000		287,000	287,000		287,000
2	Apr-16	714,000	1,001,000		714,000	1,001,000		714,000
3	May-16	968,000	1,969,000		968,000	1,969,000		968,000
4	Jun-16	1,051,000	3,020,000		1,051,000	3,020,000		1,051,000
5	Jul-16	962,000	3,982,000		962,000	3,982,000		962,000
6	Aug-16	700,000	4,682,000		700,000	4,682,000		700,000
7	Sep-16	268,000	4,950,000		268,000	4,950,000		268,000
		4,950,000			4,950,000			4,950,000



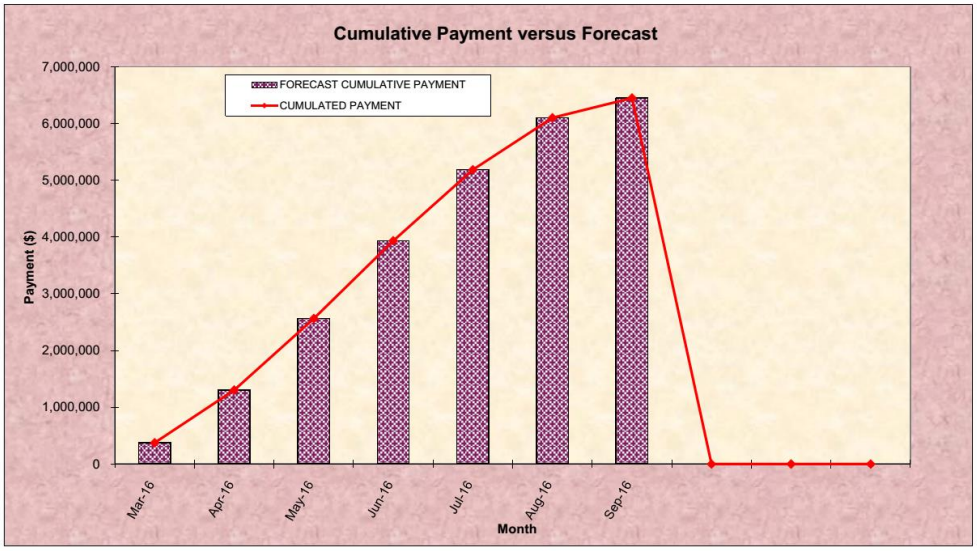
Job Name	Ballina Pool
Job No.	
Total Value	$ 6,450,000
Start Date	1 Mar 16
Finish Date	30 Sep 16
Months	7

BALLINA POOL **Job Ref:**

CASHFLOW **27 October 2015**

Single Stage

	MONTH	NET PAYMENT $	CUMULATIVE PAYMENT $	ACTUAL PAYMENT $	FORECAST PAYMENT $	FORECAST CUMULATIVE $	ACTUAL PAYMENT $	ACT./F'CAST PAYMENT $
1	Mar-16	374,000	374,000		374,000	374,000		374,000
2	Apr-16	930,000	1,304,000		930,000	1,304,000		930,000
3	May-16	1,261,000	2,565,000		1,261,000	2,565,000		1,261,000
4	Jun-16	1,370,000	3,935,000		1,370,000	3,935,000		1,370,000
5	Jul-16	1,253,000	5,188,000		1,253,000	5,188,000		1,253,000
6	Aug-16	913,000	6,101,000		913,000	6,101,000		913,000
7	Sep-16	349,000	6,450,000		349,000	6,450,000		349,000
		6,450,000			6,450,000			6,450,000



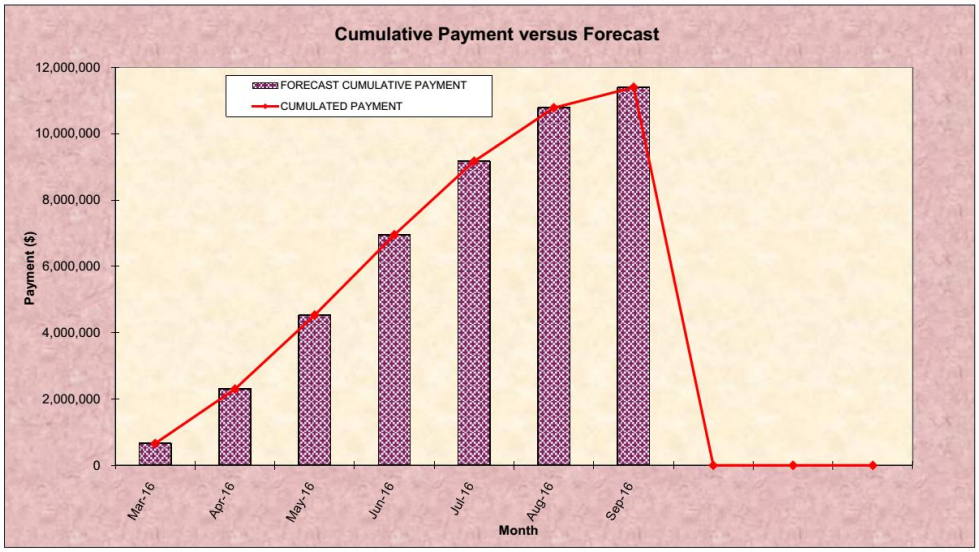
Job Name	Ballina & Alstonville Pool
Job No.	
Total Value	$ 11,400,000
Start Date	1 Mar 16
Finish Date	30 Sep 16
Months	7

BALLINA & ALSTONVILLE POOL — **Job Ref:**

CASHFLOW — **27 October 2015**

Single Stage

	MONTH	NET PAYMENT $	CUMULATIVE PAYMENT $	ACTUAL PAYMENT $	FORECAST PAYMENT $	FORECAST CUMULATIVE $	ACTUAL PAYMENT $	ACT./F'CAST PAYMENT $
1	Mar-16	661,000	661,000		661,000	661,000		661,000
2	Apr-16	1,643,000	2,304,000		1,643,000	2,304,000		1,643,000
3	May-16	2,230,000	4,534,000		2,230,000	4,534,000		2,230,000
4	Jun-16	2,421,000	6,955,000		2,421,000	6,955,000		2,421,000
5	Jul-16	2,215,000	9,170,000		2,215,000	9,170,000		2,215,000
6	Aug-16	1,614,000	10,784,000		1,614,000	10,784,000		1,614,000
7	Sep-16	616,000	11,400,000		616,000	11,400,000		616,000
		11,400,000			11,400,000			11,400,000



9. Operating Budget

9.1 Expense

Ballina and Alstonville pools are essentially the same configuration. Hence the following operating budget is considered appropriate for both. The only areas of difference are likely to be heating and floodlighting costs, with Ballina heating potentially more and Alstonville lighting costs more than Ballina.

In assessing costs for the budget, a number of factors should be noted, these being:

- Electrical costs applicable, reflecting Council's current tariff
  - Off Peak 14.16c per kWh
  - Peak 25.44c per kWh
  - Shoulder 25.44c per kWh
- Water Usage
  - First 350kL @ $2.08/kL
  - Excess over 350kL @ $3.13/kL
- Contract Management
  - The existing management contracts have been utilised to assess costs for this item. The base rate at September 2008 has been escalated at 3% p.a. to provide cost for 2016/17 year. Similarly lifeguard rates have been escalated from the base rate (Sept 2008). With respect to lifeguard calculations have assumed an average of 4 no. lifeguards for 4 hours per day, 7 days per week for 12 weeks. This figure is considered conservative.

Based on the foregoing, the following operational cost is estimated for the 2016/17 season. The costs exclude GST.

Operating Expenses

1. Services				
1.1 Electricity				
1.1.1 Filtration / Backwash - allow	120,000	kWh		
1.1.2 Heating Sept / April / May - allow	70,000	kWh		
1.1.3 Lighting - allow	50,000	kWh		
1.1.4 Miscellaneous - allow	10,000	kWh		
	250,000	**kWh**	**$**	**63,600.00**
2. Water				
2.1 Initial Fill	2,300	kL		
2.2 Evaporation (Nett)	1,300	kL		
2.3 Backwash	2,300	kL		
2.4 Miscellaneous	500	kL		
	6,400	**kL**	**$**	**20,000.00**
Return to sewer @2.19/kL	5,100	kL	**$**	**11,000.00**
3. Chemicals				
3.1 Calcium Hypochlorite	2,500	kg	**$**	**11,250.00**
3.2 Co2 Buffer etc			**$**	**1,250.00**
4. Cleaning / Rubbish			**$**	**2,500.00**
5. Labour				
5.1 Management Contract			**$**	**164,000.00**
5.2 Lifeguards			**$**	**52,500.00**
6. Repairs & Maintenance (Note: First 12 months defect liability period)				**Nil**
7. Insurance			**$**	**8,000.00**
8. Miscellaneous Charges**			**$**	**20,000.00**
	SUBTOTAL		**$**	**354,100.00**
7. Contingency			**$**	**35,410.00**
	TOTAL		**$**	**389,510.00**
				(plus GST)

Note: For years subsequent to 2016/17 an allowance for R&M should be added. Allow 10% of operating costs.

*Assumes pool cover in use.

** Includes miscellaneous charges for printing, advertising and based on previous years expenditure

10. Revenue Model

10.1 Overview

The redevelopment of Ballina and Alstonville pools should lead to increased utilization.

This increase will be based on the enhanced facility with increases in lane numbers, covered and enclosed Learn to Swim, provision of child play areas, heating to extend the period.

With respect to lane numbers, it is noted that the 10 x 2.5m lane configuration will enable water polo to be played across the pool, thereby leaving the equivalent of 10 x 2.5 x 25m lanes available for swimming across the pool whilst water polo is in action. This is particularly important at Alstonville where water polo leads to regular complaints relative to lap swimmers.

In addition, the additional lanes will enable significant increase in capacity of lap swimmers, swimming club use etc. However, realizing any increase will require additional marketing and program development / upgrade.

It is anticipated that the largest potential increase will be in attracting carnivals – both swimming and water polo to the FINA compliant facilities.

Finally, it is anticipated that the significantly enhanced child play facility will attract substantial increases in visitation from parents with young children.

10.2 Revenue Projection

To assess anticipated revenue Councils records of attendance for 2014/15 and charges for 2015/16 have been utilized as the basis for projections.

With respect to attendance, the 2014/15 figures have been increased as per the percentages shown in the following table.

Similarly, charges have been escalated as shown.

Separate tables are provided for Ballina and Alstonville.

Season tickets – with respect to season tickets, the report combines full and half season tickets. Similarly, family season tickets include for sales adding adult and children to the base family season ticket.

Projected revenue for the redeveloped facilities for 2016/17 season are:

Ballina	$346,575
Alstonville	$266,765

Ballina

	Attendace			Charges		Revenue
Item	**2014/15**	**2016/17**	**Increase**	**2015/16**	**2016/17**	
Adult Single Entry	9,129	10,500	10%	4.50	5.00	52,500
Child Single Entry	24,698	27,700	12%	3.00	3.50	96,950
Spectators	3,314	3,650	10%	3.00	3.00	10,950
Carnival	4,262	4,670	10%	3.50	3.50	16,345
School	1,085	1,200	10%	3.00	3.00	3,600
Spec Swim School	12,288	13,500	10%	2.50	2.50	33,750
Season Ticket – Adult	28	30	7%	195.00	210.00	6,300
Season Ticket – Child	6	10	50%	165.00	180.00	1,800
Season Ticket - Senior	15	20	33%	175.00	190.00	3,800
Season Ticket – Family	112	120	7%	345.00	380.00	45,600
Misc – Showers / 10 Ticket						15,000
Coffee Shop Lease						15,000
					TOTAL	**301,595**

*With respect to season tickets, the increase reflects the longer season associated with heating.

The increased usage reflects longer season associated with heating, new enhanced amenities and opportunities associated with carnivals. In addition, we note the imminent redevelopment of Ballina HS and consider that significant opportunities exist to increase school entries. Due to the uncertainty in timing, no increase has been considered.

Alstonville

	Attendance			Charges		Revenue
Item	**2014/15**	**2016/17**	**Increase**	**2015/16**	**2016/17**	
Adult Single Entry	5,454	6,000	10%	4.50	5.00	30,000
Child Single Entry	5,125	5,740	12%	3.00	3.50	20,090
Spectators	1,154	1,270	10%	3.00	3.00	3,810
Carnival	6,195	6,800	10%	3.50	3.50	23,800
School	4,958	5,540	10%	3.00	3.00	16,620
Spec Swim School	5,429	6,250	15%	2.50	2.50	15,625
Season Ticket – Adult	43	50	16%	195.00	210.00	10,500
Season Ticket – Child	14	16	10%	165.00	180.00	2,880
Season Ticket - Senior	23	25	10%	175.00	190.00	4,750
Season Ticket – Family	189	210	10%	345.00	380.00	79,800
Misc – Showers / 10 Ticket						15,000
					TOTAL	**222,875**

*With respect to season tickets, the increase reflects the longer season associated with heating. Also note that season tickets combine full and half seasons.

The increased usage reflects longer season associated with heating, new enhanced amenities and opportunities associated with carnivals.

Appendix 1

Cost Estimates - Ballina

Elemental Summary

Project: Ballina Shire Council
Building: Ballina Pool SK01 - No Admin
Details: Ballina Pool - SK01 - Same Amenties

Code	Description	% BC	Cost/m2	Quantity	Unit	Rate	SubTotal	Factor	Total
	Building Works								
	Piling (Provisional Allowance)	1.54			Item		250,000		250,000
	Pool Deck	0.71		1,439	m2	80.00	115,120		115,120
	BBQ Gazebos	0.55		144	m2	613.89	88,400		88,400
	Landscaping	0.49		3,173	m2	25.00	79,325		79,325
	LTS enclosure, Shade Structures & seating	1.57					255,605		255,605
	Transparent Fencing; 1.80m high	1.04		141	m	1,200.00	169,200		169,200
	Flood lighting	0.31		1	Item	50,000.00	50,000		50,000
	Pool Works								
	Demolish existing pool	0.31		1	No		50,000		50,000
	50m x 10 lane Pool structure, filtration and heating	17.16		1	No		2,801,000		2,801,000
	LTS 20mx12m pool structure, filtration and heating	4.17		1	No		680,000		680,000
	Free-form Kids Play pool, structure, filtration	1.54		1	No		250,000		250,000
	On-Costs								
	Preliminaries	2.94		10	%		478,865		478,865
	Margin	1.30		4	%		210,701		210,701
	Design Contingency	1.68		5	%		273,911		273,911
	PM and Design Fees	0.71		2	%		115,043		115,043
	Project Contingency	1.89		5	%		307,831		307,831
	Full Works Total	**37.83**							**6,175,000**
	Notes:								
	Outdoor 50m Prefabricated pool in lieu of 50m concrete pool	-6.12					-1,000,000		-1,000,000
	Saving for reduction of 50m pool to 8 lanes	-0.61					-100,000		-100,000
	Adjusted Total	**31.09**							**5,075,000**
		100.00	**0.00**						

Elemental Summary

Project: Ballina Shire Council
Building: Ballina Pool - SK02
Details: Ballina Pool - SK02 - New Amenties

Code	Description	% BC	Cost/m2	Quantity	Unit	Rate	SubTotal	Factor	Total
	Building Works								
	Piling (Provisional Allowance)	1.25			Item		250,000		250,000
	Demolish existing Admin/Amenities	0.12		475	m2	50.00	23,750		23,750
	Admin/Amenities Building	3.34		240	m2	2,800.00	672,000		672,000
	Coffee Shop	0.36		40	m2	1,800.00	72,000		72,000
	Paving	0.90		819	m2	220.00	180,180		180,180
	Pool Deck	0.78		1,953	m2	80.00	156,240		156,240
	BBQ Gazebos	0.44		144	m2	613.89	88,400		88,400
	Landscaping	0.36		2,854	m2	25.00	71,350		71,350
	LTS enclosure, Shade Structures & seating	1.44					288,485		288,485
	Transparent Fencing; 1.80m high	0.70		116	m	1,200.00	139,200		139,200
	Flood lighting	0.25		1	Item	50,000.00	50,000		50,000
	Pool Works								
	Demolish existing pool	0.25		1	No		50,000		50,000
	50m Pool structure, filtration and heating	13.91		1	No		2,801,000		2,801,000
	LTS 20mx12m pool structure, filtration and heating	3.38		1	No		680,000		680,000
	Free-form Kids Play pool, structure, filtration	1.25		1	No		250,000		250,000
	On-Costs								
	Preliminaries	2.87		10	%		577,261		577,261
	Margin	1.27		4	%		253,995		253,995
	Design Contingency	1.64		5	%		330,193		330,193
	PM and Design Fees	0.69		2	%		138,681		138,681
	Project Contingency	1.88		5	%		377,266		377,266
	Full Works Total	**36.98**							**7,450,000**
	Notes:								
	Outdoor 50m Prefabricated Pool in lieu of 50m concrete pool	-4.96					-1,000,000		-1,000,000
	Saving for reduction of 50m pool to 8 lanes	-0.49					-100,000		-100,000
	Adjusted Total	**31.52**							**6,350,000**
		100.00	**0.00**						

Elemental Summary

Project: Ballina Shire Council
Building: Ballina Pool SK03 - New Admin
Details: Ballina Pool - SK03 - New Amenties

Code	Description	% BC	Cost/m2	Quantity	Unit	Rate	SubTotal	Factor	Total
	Building Works								
	Piling (Provisional Allowance)	1.25			Item		250,000		250,000
	Demolish existing Admin/Amenities	0.12		475	m2	50.00	23,750		23,750
	Admin/Amenities Building	3.36		240	m2	2,800.00	672,000		672,000
	Coffee Shop	0.36		40	m2	1,800.00	72,000		72,000
	Paving	0.48		429	m2	220.00	94,380		94,380
	Pool Deck	0.87		2,165	m2	80.00	173,200		173,200
	BBQ Gazebos	0.44		143	m2	614.86	87,925		87,925
	Landscaping	0.34		2,693	m2	25.00	67,325		67,325
	LTS enclosure, Shade Structures & seating	1.41					281,090		281,090
	Transparent Fencing; 1.80m high	0.85		141	m	1,200.00	169,200		169,200
	Flood lighting	0.25		1	Item	50,000.00	50,000		50,000
	Pool Works								
	Demolish existing pool	0.25		1	No		50,000		50,000
	50m Pool structure, filtration and heating	14.01		1	No		2,801,000		2,801,000
	LTS 20mx12m pool structure, filtration and heating	3.40		1	No		680,000		680,000
	Free-form Kids Play pool, structure, filtration	1.25		1	No		250,000		250,000
	On-Costs								
	Preliminaries	2.87		10	%		572,187		572,187
	Margin	1.26		4	%		251,762		251,762
	Design Contingency	1.64		5	%		327,291		327,291
	PM and Design Fees	0.69		2	%		137,462		137,462
	Project Contingency	1.95		5	%		389,428		389,428
	Full Works Total	**37.00**							**7,400,000**
	Notes:								
	Outdoor 50m PRefabricated pool in lieu of 50m concrete pool	-4.99					-1,000,000		-1,000,000
	Saving for reduction of 50m pool to 8 lanes	-0.49					-100,000		-100,000
	Adjusted Total	**31.50**							**6,300,000**
		100.00	**0.00**						

Appendix 2

Cost Estimates - Alstonville

Elemental Summary

Project: Ballina Shire Council
Building: Astonville Pool - SK01

Details: Astonville Pool - SK01 - Same Amenties

Code	Description	% BC	Cost/m2	Quantity	Unit	Rate	SubTotal	Factor	Total
	Building Works								
	Pool Deck	0.32		1,126	m2	80.00	90,080		90,080
	BBQ Gazebos	0.31		143	m2	614.86	87,925		87,925
	Landscaping	0.13		1,406	m2	25.00	35,150		35,150
	LTS enclosure, Shade Structures & seating	0.91					262,070		262,070
	Flood Lighting	0.18		1	Item	50,000.00	50,000		50,000
	Ramp	0.07		32	m2	600.00	19,200		19,200
	Pool Works								
	Demolish existing pool	0.18		1	No		50,000		50,000
	50m Pool structure, filtration and heating	9.67		1	No		2,801,000		2,801,000
	LTS 16mx12m pool structure, filtration and heating	2.35		1	No		680,000		680,000
	Free-form Kids Play pool, structure, filtration	0.87		1	No		250,000		250,000
	On-Costs								
	Preliminaries	1.50		10	%		432,543		432,543
	Margin	0.66		4	%		190,319		190,319
	Design Contingency	0.86		5	%		247,414		247,414
	PM and Design Fees	0.36		2	%		103,914		103,914
	Project Contingency	0.96		5	%		275,386		275,386
	Full Works Total	**19.25**							**5,575,000**
	Notes:								
	Outdoor 50m Prefabricated pool in lieu of 50m concrete pool	-3.45					-1,000,000		-1,000,000
	Adjusted Total	**15.79**							**4,575,000**
	Exclusions								
	No allowance for piling under pool structures	0.00							Excluded
	Extra Over Costs For other Options								
	SK02 - Pool Deck	16.05					4,650,000		4,650,000
	SK03 - Pool Deck	16.05					4,650,000		4,650,000
	SK04 - Pool Deck, Larger LTS pool & Retaining Wall	17.09					4,950,000		4,950,000
		100.00	**0.00**						