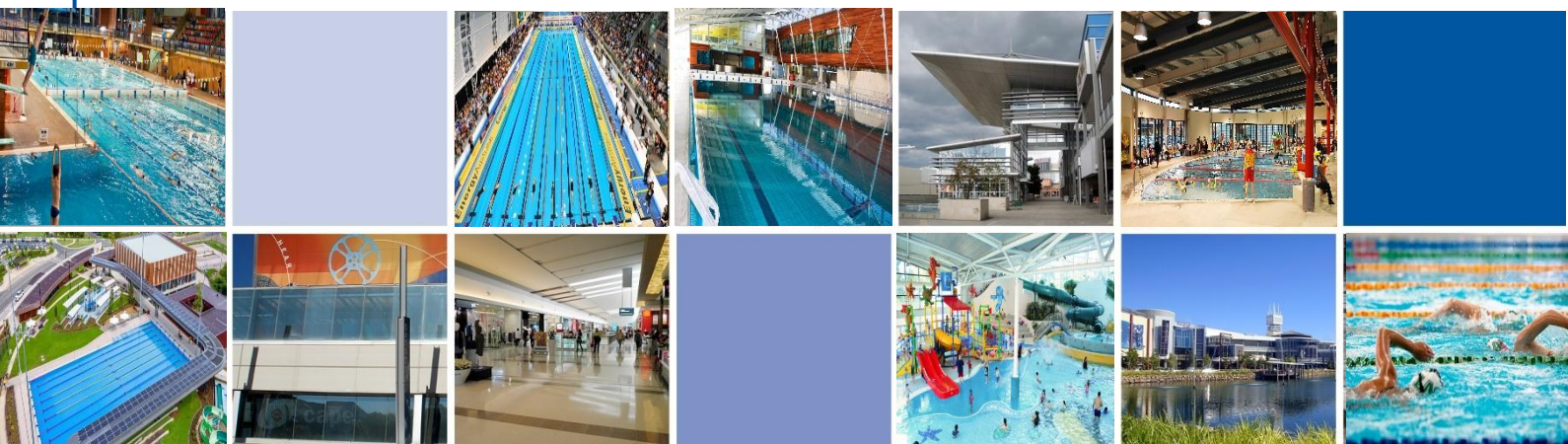


# Boyne Tannum Aquatic Centre Feasibility

Model Results

December 2018



**MacroPlan Dimasi**BRISBANE

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111 Eagle Street  
Brisbane QLD 4000  
(07) 3221 8166

PERTH

Ground Floor  
12 St Georges Terrace  
Perth WA 6000  
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GOLD COAST

Level 2 The Wave  
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Broadbeach QLD 4218  
(07) 3221 8166

ADELAIDE

Ground Floor  
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**Prepared for: Gladstone Regional Council****MacroPlan Dimasi staff responsible for updated report:**

Mark Courtney – General Manager, Queensland

Harry Courtney – Analyst

## 1.0 Introduction

Gladstone Regional Council (GRC) commissioned MacroPlan Dimasi to assess the feasibility of development of an Aquatic Centre in the Boyne Tannum Region. The feasibility was undertaken for the top candidate sites including 3 Hampton Drive, Coronation Drive and 10 Canoe Point Drive. These site were identified in the original study. The key components to be incorporated into the Aquatic Centre included a 25 metre lap pool, an office, a kiosk, an amenities block, a children’s splash pool and waterslide.

The following presents the summary results. Please note that the excel financial feasibility model is also provided for the GRC.

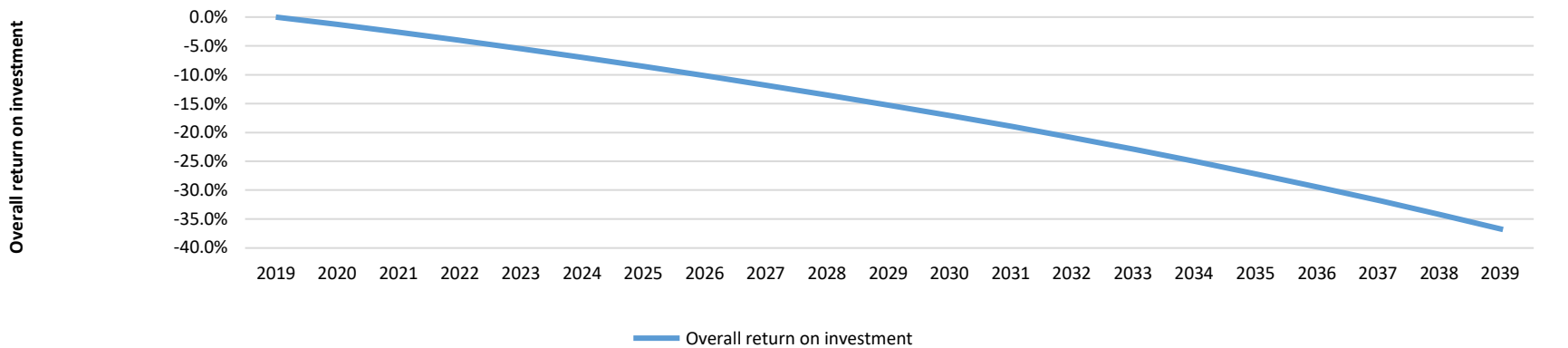
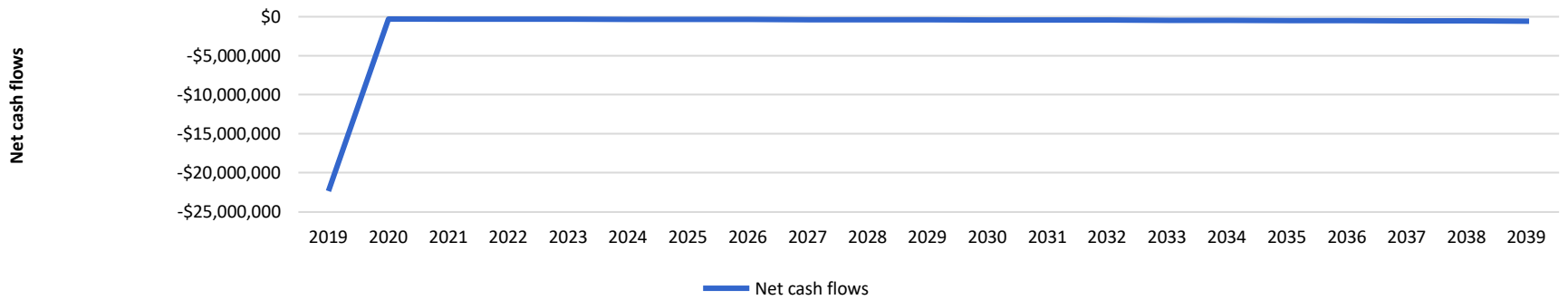
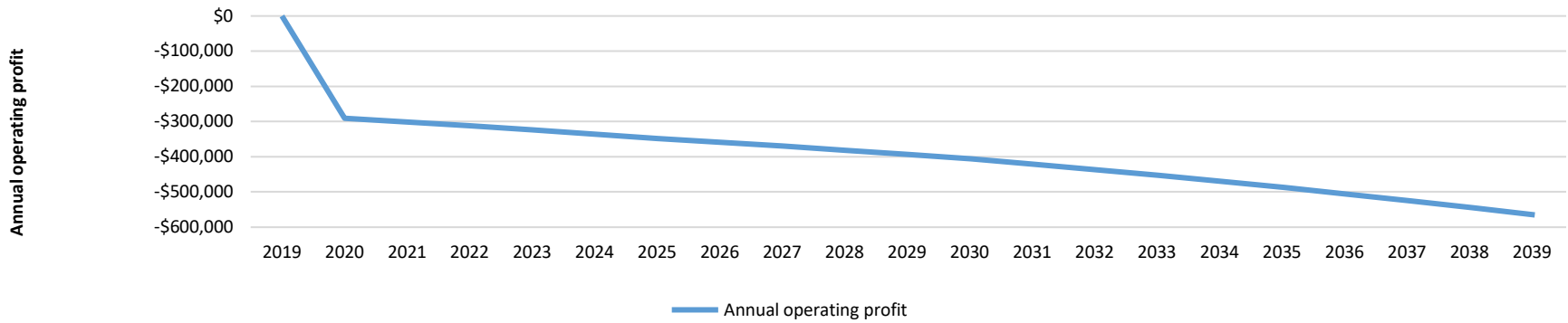
Project	3 Hampton	Coronation Drive	10 Canoe Point
<b>Construction Cost</b>	<b>\$18,444,662</b>	<b>\$17,943,384.00</b>	<b>\$22,362,868.00</b>
<b>NPV</b>	<b>-\$3,775,769</b>	<b>-\$3,775,769</b>	<b>-\$3,775,769</b>
<b>ROI (End of 20 year period)</b>	<b>-44.6%</b>	<b>-45.9%</b>	<b>-36.8%</b>

The model includes the projected operational revenues and expenses over a 20-year time period. It presents the Net-Present-Value (NPV) and the Return-On-Investment results. The NPV result which is the same for each project excludes capital costs. However, the ROI does reflect the capital costs and projected operational revenues and expenses. The cost of construction estimates have been provided by Arcadis and are contained in the Appendices.

## 2.0 Coronation Drive

Net present value                   -\$3,775,769

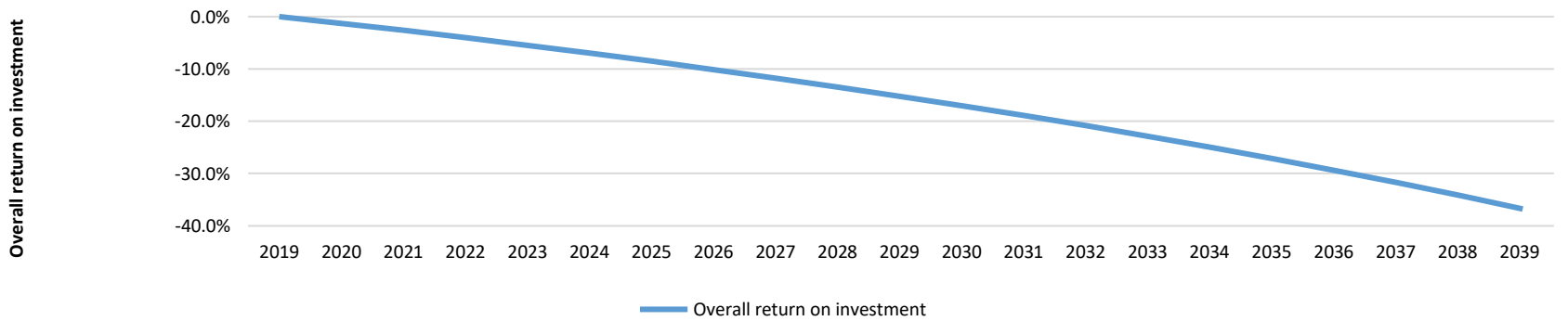
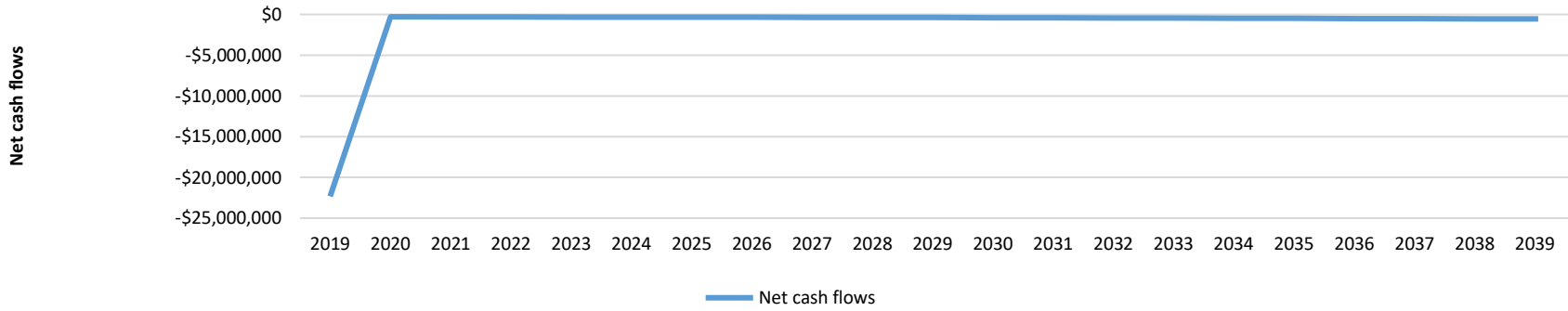
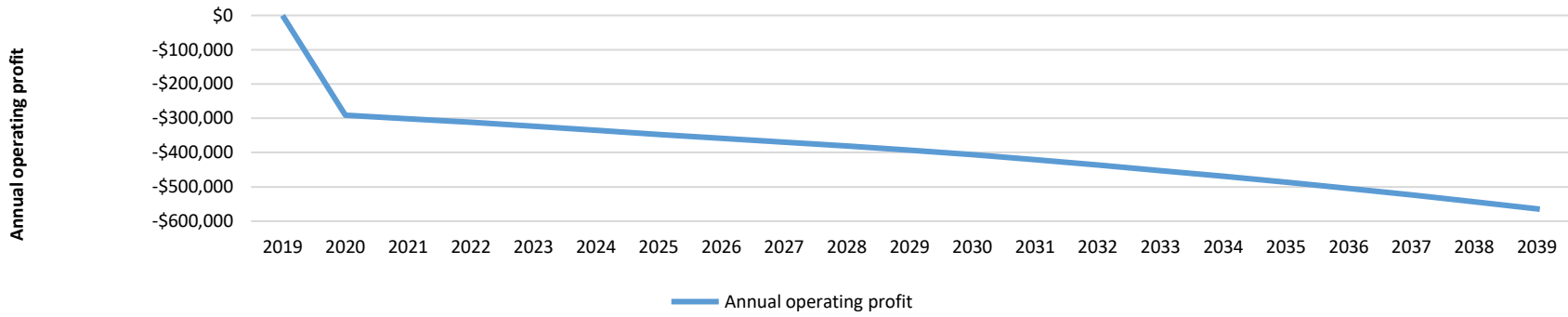
Year	Date	Total revenue	Total operating costs	Total capital cost	Annual operating profit	Cumulative total operating profit	Net cash flows	Total catchment population	Total catchment visitation	Overall return on investment
Year 0	2020	\$0	\$0	\$17,943,384	\$0	\$0	-\$17,943,384	0	0	0.0%
Year 1	2021	\$370,142	\$660,968	\$0	-\$290,826	-\$290,826	-\$290,826	12,295	92,075	-1.6%
Year 2	2022	\$383,556	\$684,922	\$0	-\$301,366	-\$592,191	-\$301,366	12,749	95,412	-3.3%
Year 3	2023	\$397,518	\$709,853	\$0	-\$312,335	-\$904,527	-\$312,335	13,222	98,885	-5.0%
Year 4	2024	\$412,053	\$735,808	\$0	-\$323,756	-\$1,228,283	-\$323,756	13,716	102,501	-6.8%
Year 5	2025	\$427,188	\$762,837	\$0	-\$335,648	-\$1,563,931	-\$335,648	14,230	106,266	-8.7%
Year 6	2026	\$442,954	\$790,989	\$0	-\$348,035	-\$1,911,966	-\$348,035	14,767	110,188	-10.7%
Year 7	2027	\$456,761	\$815,645	\$0	-\$358,884	-\$2,270,850	-\$358,884	15,233	113,622	-12.7%
Year 8	2028	\$471,054	\$841,167	\$0	-\$370,114	-\$2,640,963	-\$370,114	15,717	117,178	-14.7%
Year 9	2029	\$485,852	\$867,593	\$0	-\$381,741	-\$3,022,704	-\$381,741	16,218	120,859	-16.8%
Year 10	2030	\$501,178	\$894,961	\$0	-\$393,783	-\$3,416,487	-\$393,783	16,737	124,671	-19.0%
Year 11	2031	\$517,054	\$923,311	\$0	-\$406,257	-\$3,822,744	-\$406,257	17,276	128,620	-21.3%
Year 12	2032	\$536,209	\$957,515	\$0	-\$421,307	-\$4,244,051	-\$421,307	17,921	133,385	-23.7%
Year 13	2033	\$556,121	\$993,074	\$0	-\$436,952	-\$4,681,003	-\$436,952	18,593	138,339	-26.1%
Year 14	2034	\$576,826	\$1,030,046	\$0	-\$453,220	-\$5,134,223	-\$453,220	19,291	143,489	-28.6%
Year 15	2035	\$598,357	\$1,068,495	\$0	-\$470,138	-\$5,604,361	-\$470,138	20,019	148,845	-31.2%
Year 16	2036	\$620,753	\$1,108,488	\$0	-\$487,735	-\$6,092,096	-\$487,735	20,775	154,416	-34.0%
Year 17	2037	\$644,052	\$1,150,093	\$0	-\$506,041	-\$6,598,137	-\$506,041	21,563	160,212	-36.8%
Year 18	2038	\$668,296	\$1,193,385	\$0	-\$525,089	-\$7,123,226	-\$525,089	22,384	166,243	-39.7%
Year 19	2039	\$693,527	\$1,238,440	\$0	-\$544,914	-\$7,668,140	-\$544,914	23,239	172,519	-42.7%
Year 20	2040	\$719,791	\$1,285,341	\$0	-\$565,550	-\$8,233,690	-\$565,550	24,129	179,052	-45.9%



### 3.0 Hampton Drive

**Net present value**                   -\$3,775,769

Year	Date	Total revenue	Total operating costs	Total capital cost	Annual operating profit	Cumulative total operating profit	Net cash flows	Total catchment population	Total catchment visitation	Overall return on investment
Year 0	2020	\$0	\$0	\$18,444,662	\$0	\$0	-\$18,444,662	0	0	0.0%
Year 1	2021	\$370,142	\$660,968	\$0	-\$290,826	-\$290,826	-\$290,826	12,295	92,075	-1.6%
Year 2	2022	\$383,556	\$684,922	\$0	-\$301,366	-\$592,191	-\$301,366	12,749	95,412	-3.2%
Year 3	2023	\$397,518	\$709,853	\$0	-\$312,335	-\$904,527	-\$312,335	13,222	98,885	-4.9%
Year 4	2024	\$412,053	\$735,808	\$0	-\$323,756	-\$1,228,283	-\$323,756	13,716	102,501	-6.7%
Year 5	2025	\$427,188	\$762,837	\$0	-\$335,648	-\$1,563,931	-\$335,648	14,230	106,266	-8.5%
Year 6	2026	\$442,954	\$790,989	\$0	-\$348,035	-\$1,911,966	-\$348,035	14,767	110,188	-10.4%
Year 7	2027	\$456,761	\$815,645	\$0	-\$358,884	-\$2,270,850	-\$358,884	15,233	113,622	-12.3%
Year 8	2028	\$471,054	\$841,167	\$0	-\$370,114	-\$2,640,963	-\$370,114	15,717	117,178	-14.3%
Year 9	2029	\$485,852	\$867,593	\$0	-\$381,741	-\$3,022,704	-\$381,741	16,218	120,859	-16.4%
Year 10	2030	\$501,178	\$894,961	\$0	-\$393,783	-\$3,416,487	-\$393,783	16,737	124,671	-18.5%
Year 11	2031	\$517,054	\$923,311	\$0	-\$406,257	-\$3,822,744	-\$406,257	17,276	128,620	-20.7%
Year 12	2032	\$536,209	\$957,515	\$0	-\$421,307	-\$4,244,051	-\$421,307	17,921	133,385	-23.0%
Year 13	2033	\$556,121	\$993,074	\$0	-\$436,952	-\$4,681,003	-\$436,952	18,593	138,339	-25.4%
Year 14	2034	\$576,826	\$1,030,046	\$0	-\$453,220	-\$5,134,223	-\$453,220	19,291	143,489	-27.8%
Year 15	2035	\$598,357	\$1,068,495	\$0	-\$470,138	-\$5,604,361	-\$470,138	20,019	148,845	-30.4%
Year 16	2036	\$620,753	\$1,108,488	\$0	-\$487,735	-\$6,092,096	-\$487,735	20,775	154,416	-33.0%
Year 17	2037	\$644,052	\$1,150,093	\$0	-\$506,041	-\$6,598,137	-\$506,041	21,563	160,212	-35.8%
Year 18	2038	\$668,296	\$1,193,385	\$0	-\$525,089	-\$7,123,226	-\$525,089	22,384	166,243	-38.6%
Year 19	2039	\$693,527	\$1,238,440	\$0	-\$544,914	-\$7,668,140	-\$544,914	23,239	172,519	-41.6%
Year 20	2040	\$719,791	\$1,285,341	\$0	-\$565,550	-\$8,233,690	-\$565,550	24,129	179,052	-44.6%

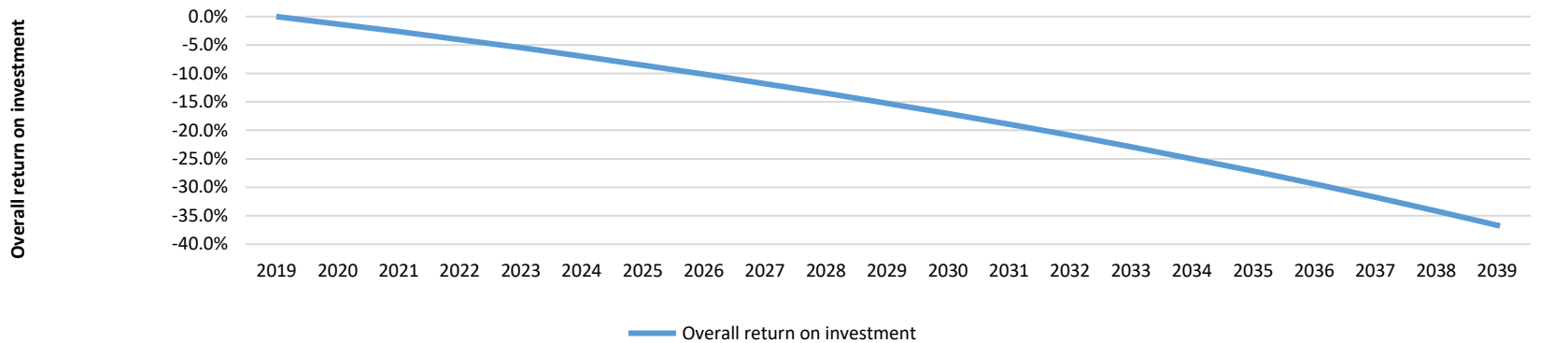
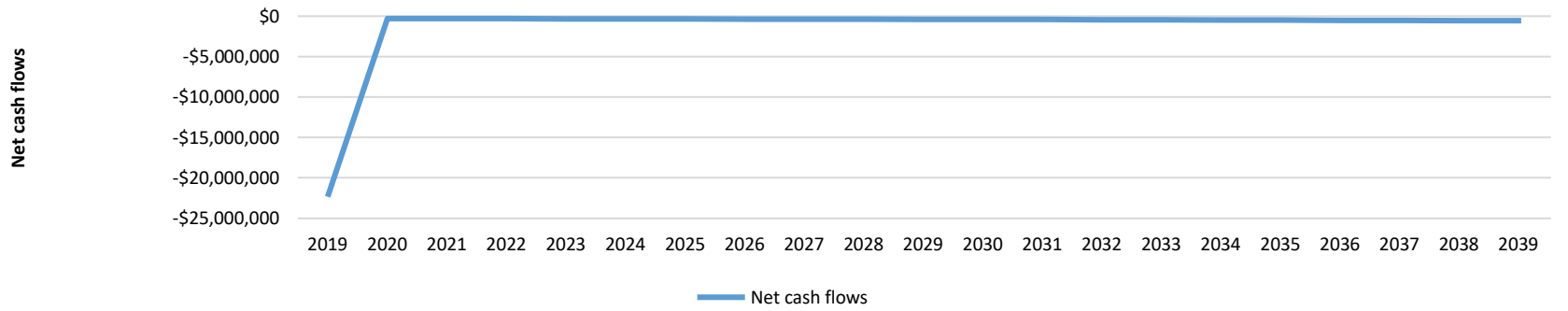
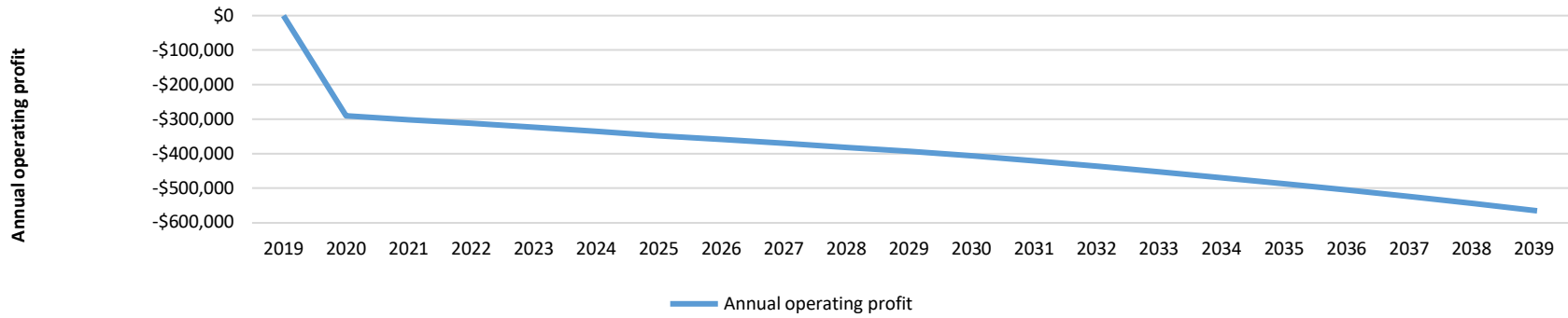


## Canoe Point Drive

**Net present value**                   -\$3,775,769

Year	Date	Total revenue	Total operating costs	Total capital cost	Annual operating profit	Cumulative total operating profit	Net cash flows	Total catchment population	Total catchment visitation	Overall return on investment
Year 0	2020	\$0	\$0	\$22,362,868	\$0	\$0	-\$22,362,868	0	0	0.0%
Year 1	2021	\$370,142	\$660,968	\$0	-\$290,826	-\$290,826	-\$290,826	12,295	92,075	-1.3%
Year 2	2022	\$383,556	\$684,922	\$0	-\$301,366	-\$592,191	-\$301,366	12,749	95,412	-2.6%
Year 3	2023	\$397,518	\$709,853	\$0	-\$312,335	-\$904,527	-\$312,335	13,222	98,885	-4.0%
Year 4	2024	\$412,053	\$735,808	\$0	-\$323,756	-\$1,228,283	-\$323,756	13,716	102,501	-5.5%
Year 5	2025	\$427,188	\$762,837	\$0	-\$335,648	-\$1,563,931	-\$335,648	14,230	106,266	-7.0%
Year 6	2026	\$442,954	\$790,989	\$0	-\$348,035	-\$1,911,966	-\$348,035	14,767	110,188	-8.5%
Year 7	2027	\$456,761	\$815,645	\$0	-\$358,884	-\$2,270,850	-\$358,884	15,233	113,622	-10.2%
Year 8	2028	\$471,054	\$841,167	\$0	-\$370,114	-\$2,640,963	-\$370,114	15,717	117,178	-11.8%
Year 9	2029	\$485,852	\$867,593	\$0	-\$381,741	-\$3,022,704	-\$381,741	16,218	120,859	-13.5%
Year 10	2030	\$501,178	\$894,961	\$0	-\$393,783	-\$3,416,487	-\$393,783	16,737	124,671	-15.3%
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Year 12	2032	\$536,209	\$957,515	\$0	-\$421,307	-\$4,244,051	-\$421,307	17,921	133,385	-19.0%
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Year 17	2037	\$644,052	\$1,150,093	\$0	-\$506,041	-\$6,598,137	-\$506,041	21,563	160,212	-29.5%
Year 18	2038	\$668,296	\$1,193,385	\$0	-\$525,089	-\$7,123,226	-\$525,089	22,384	166,243	-31.9%
Year 19	2039	\$693,527	\$1,238,440	\$0	-\$544,914	-\$7,668,140	-\$544,914	23,239	172,519	-34.3%
Year 20	2040	\$719,791	\$1,285,341	\$0	-\$565,550	-\$8,233,690	-\$565,550	24,129	179,052	-36.8%





## 4.0 Appendices

Arcadis Revised Costing Estimates

## Cost Summary



Project: Boyne Tannum Aquatic Centre  
 Building: Feasibility Cost Plan - Rev 1

Details: Concept 2 - 10 Canoe Point Drive

Description	Quantity	Unit	Rate	Total
<b>Boyne Tannum Aquatic Centre - Concept 2 - 10 Canoe Point Drive</b>				
Demolition	20,909	m2	15	314,965
Bulk Earthworks	20,909	m2	40	836,360
1&2. Entry & Offices	103	m2	2,500	257,500
3. Amenities	323	m2	2,900	937,556
4. Cafe	76	m2	4,000	303,820
5. Gym Sauna & Spa	Excl			0
6. Lifeguard & First Aid Office	77	m2	1,800	138,006
7. Swim Meet Club	54	m2	1,500	80,445
8. Storage & Services	107	m2	800	85,240
9. Beachers	235	m2	850	199,750
10. Pool - 25m - 8 Lane	1	no	2,120,000	2,120,000
11. Waterslide	1	no	1,650,000	1,650,000
12. Hydrotherapy Pool	Excl			0
12. Hydrotherapy Pool Enclosure	Excl			0
13. Kids Pool Splash pad including soft fall surface, fountains, water play equipment, activity tower etc, hydraulic and filtration equipment	314	m2	3,900	1,226,317
14. BBQ Facilities	157	m2	220	34,604
Build new facilities that have been demolished - single storey, standard finishes no air conditioning excluding furniture and fittings	1,024	m2	1,800.00	1,843,236
<b>External works</b>				
Carpark including bitumen, storm water drainage, minimal lighting.	7,485	m2	180	1,347,300
New dropoff	0	m2	220	0
Mesh Fencing and Gates	272	m	180	48,960
Landscaping	1	no	1,575,829	1,575,829
Shading	1	no	1,300,214	1,300,214
External Services including drainage, water supply, electrical services, external lighting etc.	20,909	Prov	46	957,603
Location Factor	10	%	15,257,704	1,525,770
Sub Total				16,783,475
Design Development Contingency/Risk	10	%		1,678,347
Preliminaries	12	%		2,215,419
Margin	5	%		1,034,282
Escalation to mid of construction Oct 2019	3.00	%	21,711,523	651,346
Construction Cost				22,362,868
Consultants Fees	12	%		2,683,544
Client Costs - Excluded	Excl			
Project Contingency	10	%		2,504,587
<b>Project Costs</b>				<b>27,551,000</b>

## Cost Summary



Project: Boyne Tannum Aquatic Centre		Details: Concept 3 - Coronation Drive		
Building: Feasibility Cost Plan - Rev.1				
Description	Quantity	Unit	Rate	Total
<b>Boyne Tannum Aquatic Centre - Concept 3 - Coronation Drive</b>				
Demolition	21,659	m2	9	200,830
Bulk Earthworks	17,155	m2	60	1,029,320
1&2. Entry & Offices	116	m2	2,500	289,763
3.Amenities	264	m2	2,900	766,588
4. Cafe	55	m2	4,500	245,768
5. Gym Sauna & Spa	Excl			
6. Lifeguard & First Aid Office	91	m2	1,800	163,134
7. Swim Meet Club	56	m2	1,500	83,655
8. Storage & Services	98	m2	800	78,696
9. Bleachers	460	m2	850	391,000
10. Pool - 25m - 8 Lane	1	no	2,120,000	2,120,000
11. Waterslides	1	no	1,650,000	1,650,000
12. Hydrotherapy Pool	Excl			
12. Hydrotherapy Pool Enclosure	Excl			
13. Kids Pool Splash pad including soft fall surface, fountains, water play equipment, activity tower etc, hydraulic and filtration equipment	312	m2	3,900	1,215,436
14. BBQ Facilities	154	m2	220	33,804
<b>External works</b>				
Carpark including bitumen, storm water drainage, minimal lighting.	5,493	m2	180	988,740
New dropoff	329	m2	220	72,426
Mesh Fencing and Gates	356	m	180	64,080
Landscaping	1	no	1,126,846	1,126,846
Shading	1	no	936,568	936,568
External Services including drainage, water supply, electrical services, external lighting etc.	17,155	Prov	46	785,675
Location Factor	10	%	12,242,327	1,224,233
<b>Sub Total</b>				<b>13,466,559</b>
Design Development Contingency/Risk	10	%		1,346,656
Preliminaries	12	%		1,777,588
Margin	5	%		829,960
Escalation to mid of construction Oct 2019	3.00	%	17,420,761	522,623
<b>Construction Cost</b>				<b>17,943,384</b>
Consultants Fees	12	%		2,153,206
Client Costs - Excluded	Excl			
Project Contingency	10	%		2,010,410
<b>Project Costs</b>				<b>22,107,000</b>

## Cost Summary



Project: Boyne Tannum Aquatic Centre		Details: Concept 1 - Hampton Drive		
Building: Feasibility Cost Plan - Rev.1				
Description	Quantity	Unit	Rate	Total
<b>Boyne Tannum Aquatic Centre - Concept 1 - 3 Hampton Drive</b>				
Demolition	24,275	m2	9	228,705
Bulk Earthworks	20,743	m2	14	290,400
1&2. Entry & Offices	121	m2	2,500	301,488
3.Amenities	288	m2	2,900	836,244
4. Cafe	68	m2	3,959	267,888
5. Gym Sauna & Spa	Excl			
6. Lifeguard & First Aid Office	67	m2	1,800	119,916
7. Swim Meet Club	64	m2	1,500	96,813
8. Storage & Services	118	m2	800	94,720
9. Bleachers	207	m2	850	175,950
10. Pool - 25m - 8 Lane	1	no	2,120,000	2,120,000
11. Waterslides	1	no	1,650,000	1,650,000
12. Hydrotherapy Pool	Excl			
12. Hydrotherapy Pool Enclosure	Excl			
13. Kids Pool Splash pad including soft fall surface, fountains, water play equipment, activity tower etc, hydraulic and filtration equipment	316	m2	3,900	1,231,114
14. BBQ Facilities	159	m2	220	34,873
<u>External works</u>				
Carpark including bitumen, storm water drainage, minimal lighting.	8,053	m2	180	1,089,540
New dropoff	475	m2	220	104,555
Mesh Fencing and Gates	468	m	180	84,240
Landscaping	1	no	1,619,235	1,619,235
Shading	1	no	1,289,962	1,289,962
External Services including drainage, water supply, electrical services, external lighting etc.	20,743	Prov	46	950,000
Location Factor	10	%	12,584,640	1,258,464
<b>Sub Total</b>				<b>13,843,104</b>
Design Development Contingency/Risk	10	%		1,384,310
Preliminaries	12	%		1,827,290
Margin	5	%		852,735
Escalation to mid of construction Oct 2019	3.00	%	17,907,439	537,223
<b>Construction Cost</b>				<b>18,444,662</b>
Consultants Fees	12	%		2,213,359
Client Costs - Excluded	Excl			
Project Contingency	10	%		2,065,978
<b>Project Costs</b>				<b>22,724,000</b>

# **Boyne Tannum Aquatic Centre**

## Feasibility Study

October 2018



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## Definitions

*ABS* – Australian Bureau of Statistics

*LGA* – Local Government Area

*QLD* – Queensland

*SA* – ABS Defined Statistical Area

*Subject Site* – Boyne Tannum

*GRC* – Gladstone Regional Council

*CERM* – Operational management benchmark for Australia Public Aquatic, recreation and sport center's





## 1.0 Boyne Tannum Aquatic Centre – Executive Summary

This report has been commissioned by the Gladstone Regional Council (GRC) for the purposes of assessing the feasibility of the potential for the development of an Aquatic Centre in the Boyne Tannum region.

### Key Findings

1. Eleven Sites were identified in the Boyne Tannum region during discussions with officers from the GRC and through investigations by MacroPlan.

2. The demographic analysis and population projections highlighted the importance of some facilities that support key groups, including younger and older cohorts. The demographic profile was disaggregated into key cohorts including; 0-9, 10-14, 15-24, 25-54, 55+ age groups to identify service needs and facilities likely to be demanded by particular cohorts. The analysis found that younger visitors (0-14 years old) made up 24.4% of the Tannum Sands catchment. It also found the significance of the aging population within the catchment. This points towards the importance for Hydrotherapy and Rehabilitation facilities to support the older cohort and the potential for the learn to swim opportunity.

3. The analysis of the Aquatic supply in the region and from beyond the study area, identified gaps in facilities and services on offer in the area. Insights regarding entry fees and other charges to participate in activities at these facilities were found to help inform pricing for a potential facility in the Boyne Tannum area.

4. A candidate site selection process was undertaken which assessed eleven candidate sites. Criteria parameters used in the assessment included; Flooding, Environment, Scale of Land Area, Ownership, Road Access, Public Transport, Proximity to Education Facilities, Accessibility by residential population and Potential land use conflict (noise, lights).

Using a multi-criteria assessment approach, each candidate site was tested and the three sites with the best scores were found to include;

1. Tannum Sands Road, Tannum Sands & Coronation Drive as an amalgamated site, 2. 3 Hampton Drive, Tannum Sands; and 3. 10 Canoe Point Road, Tannum Sands.

5. Three Scenarios were then established in line with three types of aquatic facility – community, district (minor) and district (major). 6. A staged approach to development was also adopted. The costs associated with each Scenario for each site is presented in the table adjacent.

### Recommendation

6. On the basis of the findings above which provided key inputs to the feasibility model developed specifically for this project, it is recommended that Scenario 3 is the preferred option. Scenario 3 represents the smallest negative NPV result of - \$244,700 over the twenty year study period and shows no less than -3.1% ROI over the study period.

10 Canoe Point Drive			
Scenario 1	11,528m <sup>2</sup>	\$1,813	\$20,896,685.00
Scenario 2	1,940m <sup>2</sup>	\$4,217	\$8,179,483.00
Scenario 3	7,441m <sup>2</sup>	\$1,595	\$11,871,114.00
	<u>20,908m<sup>2</sup></u>	<u>\$1,958</u>	<u>\$40,947,283.00</u>

Coronation Drive			
Scenario 1	8,207m <sup>2</sup>	\$2,049	\$16,817,783.00
Scenario 2	2,609m <sup>2</sup>	\$3,313	\$8,644,848.00
Scenario 3	6,339m <sup>2</sup>	\$1,782	\$11,296,944.00
	<u>17,155m<sup>2</sup></u>	<u>\$2,143</u>	<u>\$36,759,576.00</u>

3 Hampton Drive			
Scenario 1	9,168m <sup>2</sup>	\$1,724	\$15,805,632.00
Scenario 2	3,191m <sup>2</sup>	\$3,134	\$10,000,594.00
Scenario 3	8,383m <sup>2</sup>	\$1,405	\$11,778,115.00
	<u>20,742m<sup>2</sup></u>	<u>\$1,812</u>	<u>\$37,584,504.00</u>



## 2.0 Boyne Tannum – Introduction and Methodology

- MacroPlan was commissioned by the Gladstone Regional Council to undertake a feasibility assessment of the Boyne Tannum Aquatic Centre.
- The work provides a supply assessment with a description of the existing aquatic facilities in the broader Gladstone region. Features from the supply were examined in the assessment and the proposed aquatic facility were recorded which included the number of pools, length, number of lanes, constructed date, type of management (tenure), presence of wet and dry facilities including gym, café, meeting places, first aid and amenities block. The supply assessment is useful in identifying potential gaps in the services currently provided by aquatic facilities in the region.
- A candidate site list was created through investigations by MacroPlan with discussion with Council representatives. The sites included those owned by Council and/or the and those held privately all of which have potential as an Aquatic Centre in the Boyne Tannum locality. A GIS analysis component was also incorporated to identify the location of all candidate sites, road networks, schools and land uses. A site visit was undertaken to inspect and to provide essential primary data to inform context of the proposed Aquatic Centre.
- Site Selection Parameters for the assessment included;
  - Flood Impact
  - Environment;
  - Scale of land area;
  - Ownership
  - Road access
  - Public Transport (bus stop) availability
  - Proximity to education facilities
  - Proximity to sporting and recreational facilities
  - Accessibility by residential population
  - Potential land use conflict (noise, light)
- A candidate site selection process was used to assess each candidate site on its relative merits in relation to the parameters outlined above. A multi-criteria assessment was created where a score from 1-5 for each attribute was calculated, with 1 = low score and 5 = high rating (desirable) against the criteria.
- To conclude, a return on investment (ROI) analysis for the three best site locations was undertaken. Macroplan incorporated a staged approach to the development timeline. On the basis that the findings form the research and the output of the feasibility assessment and the ROI and NPV results MacroPlan made a recommendation regarding the preferred option.

### 3.0 Boyne Tannum – Study Area

- Gladstone is a city in the Gladstone Region, Queensland. It is approximately 550km by road north of Brisbane and 100km south-east of Rockhampton. Situated between the Calliope and Boyne Rivers, Gladstone is home to Queensland largest multi-commodity shipping port.
- Boyne Island is a town 25 kilometres south of Gladstone and is part of the Gladstone LGA. It’s primarily a residential centre for the nearby Boyne Island aluminum smelter and Gladstone industries. The population of Boyne Island and neighbouring twin town Tannum Sands is approaching 10,000. The two localities are separated only by the Boyne River.
- Tannum Sands is a coastal town located within the Gladstone Region. Tannum Sands is primarily a residential area for the Boyne Island and Gladstone-based industries. It is also a tourist hub with a patrolled beach and is well known for a fishing venue with access to the Great Barrier Reef, Lake Awoonga and The Boyne River.



Image 1: Site Delineation

Image 1, displays the site delineation for the feasibility and the locality for each candidate site. The catchment area for the feasibility study includes the Australian Government defined Local Government Area (LGA) regions of:

- Gladstone Local Government Area

The Gladstone LGA also consists of the following (SA2)

- Boyne Island – Tannum Sands

The Boyne Island – Tannum Sands (SA2) consists of the following major towns

- Boyne Island;
- Calliope;
- Gladstone;
- Mariam Vale;
- Mount Larcom; and
- Tannum Sands.





## 4.0 Boyne Tannum – Feasible Sites

GRC in consultation with MacroPlan identified a number of candidate sites. Each site was reviewed and rated against each other. A scorecard was utilised to quantify each sites potential against a range of metrics. The following details the list of candidate sites.

**GLADSTONE REGIONAL COUNCIL PLANNING SCHEME V2 PROPERTY REPORT**

Property Address: **Coronation Drive TANNUM SANDS**  
 Lot on Plan Number: **900SP152499** Area (SqM): **9.925**  
 Zone: **Emerging Communities** Precinct: **N/A**

**Affected by Overlay Codes**

- Acid Sulphate Soils
- Agricultural Land
- Airport
- Airport Obstacle Limitation Surface
- Airport 5m Obstacle Limitation Surface
- Biodiversity
- Bushfire Hazard
- Building Heights & Frontages
- Coastal Hazard
- Extractive Resources and Minerals
- Flood Hazard
- Heritage
- Historic Mine Sites
- Mining Lease
- Regional Infrastructure
- Scenic Amenities
- Steep Land
- Transport
- Water Resources



This Property Report identifies Gladstone Regional Council Planning Scheme zones and overlays that may affect the property. It is intended that this Report be used as a guide only, as part of the Development Application process. The information contained in the Property Report is not a legal description of the property and should not be relied upon.

Image 2: Coronation Drive, Tannum Sands

**GLADSTONE REGIONAL COUNCIL PLANNING SCHEME V2 PROPERTY REPORT**

Property Address: **Tannum Sands Road TANNUM SANDS**  
 Lot on Plan Number: **500SP215266** Area (SqM): **6.459**  
 Zone: **Emerging Communities** Precinct: **N/A**

**Affected by Overlay Codes**

- Acid Sulphate Soils
- Agricultural Land
- Airport
- Airport Obstacle Limitation Surface
- Airport 5m Obstacle Limitation Surface
- Biodiversity
- Bushfire Hazard
- Building Heights & Frontages
- Coastal Hazard
- Extractive Resources and Minerals
- Flood Hazard
- Heritage
- Historic Mine Sites
- Mining Lease
- Regional Infrastructure
- Scenic Amenities
- Steep Land
- Transport
- Water Resources



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Image 3: Tannum Sands Roads, Tannum Sands

**GLADSTONE REGIONAL COUNCIL PLANNING SCHEME V2 PROPERTY REPORT**

Property Address: **3 Hampton Drive TANNUM SANDS**  
 Lot on Plan Number: **25P182680** Area (SqM): **6.25**  
 Zone: **Medium Density Residential** Precinct: **N/A**

**Affected by Overlay Codes**

- Acid Sulphate Soils
- Agricultural Land
- Airport
- Airport Obstacle Limitation Surface
- Airport 5m Obstacle Limitation Surface
- Biodiversity
- Bushfire Hazard
- Building Heights & Frontages
- Coastal Hazard
- Extractive Resources and Minerals
- Flood Hazard
- Heritage
- Historic Mine Sites
- Mining Lease
- Regional Infrastructure
- Scenic Amenities
- Steep Land
- Transport
- Water Resources



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Image 4: Hampton Drive, Tannum Sands

**GLADSTONE REGIONAL COUNCIL PLANNING SCHEME V2 PROPERTY REPORT**

Property Address: **Arthur Street BOYNE ISLAND**  
 Lot on Plan Number: **5RP620667** Area (SqM): **1.55**  
 Zone: **Centre (level 1 Zone)** Precinct: **N/A**

**Affected by Overlay Codes**

- Acid Sulphate Soils
- Agricultural Land
- Airport
- Airport Obstacle Limitation Surface
- Airport 5m Obstacle Limitation Surface
- Biodiversity
- Bushfire Hazard
- Building Heights & Frontages
- Coastal Hazard
- Extractive Resources and Minerals
- Flood Hazard
- Heritage
- Historic Mine Sites
- Mining Lease
- Regional Infrastructure
- Scenic Amenities
- Steep Land
- Transport
- Water Resources



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Image 5: Arthur Street, Boyne Island

**GLADSTONE REGIONAL COUNCIL PLANNING SCHEME V2 PROPERTY REPORT**

Property Address: **Centenary Drive BOYNE ISLAND**  
 Lot on Plan Number: **1RP619033** Area (SqM): **1.79**  
 Zone: **Centre (level 1 Zone)** Precinct: **N/A**

**Affected by Overlay Codes**

- Acid Sulphate Soils
- Agricultural Land
- Airport
- Airport Obstacle Limitation Surface
- Airport 5m Obstacle Limitation Surface
- Biodiversity
- Bushfire Hazard
- Building Heights & Frontages
- Coastal Hazard
- Extractive Resources and Minerals
- Flood Hazard
- Heritage
- Historic Mine Sites
- Mining Lease
- Regional Infrastructure
- Scenic Amenities
- Steep Land
- Transport
- Water Resources



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Image 6: Centenary Drive, Boyne Island

**GLADSTONE REGIONAL COUNCIL PLANNING SCHEME V2 PROPERTY REPORT**

Property Address: **Malpas Street BOYNE ISLAND**  
 Lot on Plan Number: **48SP231267** Area (SqM): **1.25**  
 Zone: **Mixed Use** Precinct: **N/A**

**Affected by Overlay Codes**

- Acid Sulphate Soils
- Agricultural Land
- Airport
- Airport Obstacle Limitation Surface
- Airport 5m Obstacle Limitation Surface
- Biodiversity
- Bushfire Hazard
- Building Heights & Frontages
- Coastal Hazard
- Extractive Resources and Minerals
- Flood Hazard
- Heritage
- Historic Mine Sites
- Mining Lease
- Regional Infrastructure
- Scenic Amenities
- Steep Land
- Transport
- Water Resources



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Image 7: Malpas Street, Boyne Island



GLADSTONE REGIONAL COUNCIL PLANNING SCHEME V2 PROPERTY REPORT

Property Address: **10 Canoe Point Road TANNUM SANDS**  
 Lot on Plan Number: **51CTN1818** Area (SqM): **8.46**  
 Zone: **Sport And Recreation** Precinct: **N/A**

**Affected by Overlay Codes**

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> <a href="#">Acid Sulphate Soils</a>              | <input type="checkbox"/> <a href="#">Flood Hazard</a>                |
| <input type="checkbox"/> <a href="#">Agricultural Land</a>                           | <input type="checkbox"/> <a href="#">Heritage</a>                    |
| <input type="checkbox"/> <a href="#">Airport</a>                                     | <input type="checkbox"/> <a href="#">Historic Mine Sites</a>         |
| <input type="checkbox"/> <a href="#">Airport Obstacle Limitation Surface</a>         | <input type="checkbox"/> <a href="#">Mining Lease</a>                |
| <input type="checkbox"/> <a href="#">Airport 5m Obstacle Limitation Surface</a>      | <input type="checkbox"/> <a href="#">Regional Infrastructure</a>     |
| <input checked="" type="checkbox"/> <a href="#">Biodiversity</a>                     | <input checked="" type="checkbox"/> <a href="#">Scenic Amenities</a> |
| <input checked="" type="checkbox"/> <a href="#">Bushfire Hazard</a>                  | <input type="checkbox"/> <a href="#">Steep Land</a>                  |
| <input checked="" type="checkbox"/> <a href="#">Building Heights &amp; Frontages</a> | <input type="checkbox"/> <a href="#">Transport</a>                   |
| <input type="checkbox"/> <a href="#">Coastal Hazard</a>                              | <input type="checkbox"/> <a href="#">Water Resources</a>             |
| <input type="checkbox"/> <a href="#">Extractive Resources and Minerals</a>           |  |



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Image 8: Canoe Point Road, Tannum Sands

GLADSTONE REGIONAL COUNCIL PLANNING SCHEME V2 PROPERTY REPORT

Property Address: **Wyndham Avenue BOYNE ISLAND**  
 Lot on Plan Number: **75CTN2129** Area (SqM): **3.66**  
 Zone: **Open Space** Precinct: **N/A**

**Affected by Overlay Codes**

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> <a href="#">Acid Sulphate Soils</a>               | <input checked="" type="checkbox"/> <a href="#">Flood Hazard</a>     |
| <input type="checkbox"/> <a href="#">Agricultural Land</a>                            | <input type="checkbox"/> <a href="#">Heritage</a>                    |
| <input type="checkbox"/> <a href="#">Airport</a>                                      | <input type="checkbox"/> <a href="#">Historic Mine Sites</a>         |
| <input type="checkbox"/> <a href="#">Airport Obstacle Limitation Surface</a>          | <input type="checkbox"/> <a href="#">Mining Lease</a>                |
| <input type="checkbox"/> <a href="#">Airport 5m Obstacle Limitation Surface</a>       | <input type="checkbox"/> <a href="#">Regional Infrastructure</a>     |
| <input type="checkbox"/> <a href="#">Biodiversity</a>                                 | <input checked="" type="checkbox"/> <a href="#">Scenic Amenities</a> |
| <input checked="" type="checkbox"/> <a href="#">Bushfire Hazard</a>                   | <input type="checkbox"/> <a href="#">Steep Land</a>                  |
| <input checked="" type="checkbox"/> <a href="#">Building Heights &amp; Frontages</a>  | <input type="checkbox"/> <a href="#">Transport</a>                   |
| <input type="checkbox"/> <a href="#">Coastal Hazard</a>                               | <input type="checkbox"/> <a href="#">Water Resources</a>             |
| <input checked="" type="checkbox"/> <a href="#">Extractive Resources and Minerals</a> |  |



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Image 9: Wyndham Avenue, Boyne Island

GLADSTONE REGIONAL COUNCIL PLANNING SCHEME V2 PROPERTY REPORT

Property Address: **Blackwell Street TANNUM SANDS**  
 Lot on Plan Number: **118SP293568** Area (SqM): **2.8281**  
 Zone: **Open Space** Precinct: **N/A**

**Affected by Overlay Codes**

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> <a href="#">Acid Sulphate Soils</a>              | <input checked="" type="checkbox"/> <a href="#">Flood Hazard</a> |
| <input type="checkbox"/> <a href="#">Agricultural Land</a>                           | <input type="checkbox"/> <a href="#">Heritage</a>                |
| <input type="checkbox"/> <a href="#">Airport</a>                                     | <input type="checkbox"/> <a href="#">Historic Mine Sites</a>     |
| <input type="checkbox"/> <a href="#">Airport Obstacle Limitation Surface</a>         | <input type="checkbox"/> <a href="#">Mining Lease</a>            |
| <input type="checkbox"/> <a href="#">Airport 5m Obstacle Limitation Surface</a>      | <input type="checkbox"/> <a href="#">Regional Infrastructure</a> |
| <input checked="" type="checkbox"/> <a href="#">Biodiversity</a>                     | <input type="checkbox"/> <a href="#">Scenic Amenities</a>        |
| <input type="checkbox"/> <a href="#">Bushfire Hazard</a>                             | <input type="checkbox"/> <a href="#">Steep Land</a>              |
| <input checked="" type="checkbox"/> <a href="#">Building Heights &amp; Frontages</a> | <input type="checkbox"/> <a href="#">Transport</a>               |
| <input checked="" type="checkbox"/> <a href="#">Coastal Hazard</a>                   | <input type="checkbox"/> <a href="#">Water Resources</a>         |
| <input type="checkbox"/> <a href="#">Extractive Resources and Minerals</a>           |  |



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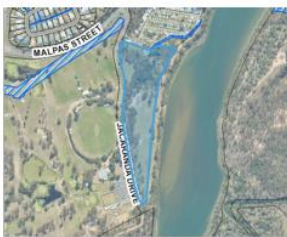
Image 10: Blackwell Street, Tannum Sands

GLADSTONE REGIONAL COUNCIL PLANNING SCHEME V2 PROPERTY REPORT

Property Address: **Jacaranda Drive BOYNE ISLAND**  
 Lot on Plan Number: **10SP171136** Area (SqM): **5.48**  
 Zone: **Low Density Residential** Precinct: **N/A**

**Affected by Overlay Codes**

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> <a href="#">Acid Sulphate Soils</a>              | <input checked="" type="checkbox"/> <a href="#">Flood Hazard</a> |
| <input type="checkbox"/> <a href="#">Agricultural Land</a>                           | <input type="checkbox"/> <a href="#">Heritage</a>                |
| <input type="checkbox"/> <a href="#">Airport</a>                                     | <input type="checkbox"/> <a href="#">Historic Mine Sites</a>     |
| <input type="checkbox"/> <a href="#">Airport Obstacle Limitation Surface</a>         | <input type="checkbox"/> <a href="#">Mining Lease</a>            |
| <input type="checkbox"/> <a href="#">Airport 5m Obstacle Limitation Surface</a>      | <input type="checkbox"/> <a href="#">Regional Infrastructure</a> |
| <input type="checkbox"/> <a href="#">Biodiversity</a>                                | <input type="checkbox"/> <a href="#">Scenic Amenities</a>        |
| <input checked="" type="checkbox"/> <a href="#">Bushfire Hazard</a>                  | <input type="checkbox"/> <a href="#">Steep Land</a>              |
| <input checked="" type="checkbox"/> <a href="#">Building Heights &amp; Frontages</a> | <input checked="" type="checkbox"/> <a href="#">Transport</a>    |
| <input checked="" type="checkbox"/> <a href="#">Coastal Hazard</a>                   | <input type="checkbox"/> <a href="#">Water Resources</a>         |
| <input type="checkbox"/> <a href="#">Extractive Resources and Minerals</a>           |  |



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Image 11: Jacaranda Drive, Boyne Island

GLADSTONE REGIONAL COUNCIL PLANNING SCHEME V2 PROPERTY REPORT

Property Address: **Wild Cattle Creek Road TANNUM SANDS**  
 Lot on Plan Number: **135SP260770** Area (SqM): **7.1**  
 Zone: **Open Space** Precinct: **N/A**

**Affected by Overlay Codes**

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> <a href="#">Acid Sulphate Soils</a>              | <input type="checkbox"/> <a href="#">Flood Hazard</a>                |
| <input type="checkbox"/> <a href="#">Agricultural Land</a>                           | <input type="checkbox"/> <a href="#">Heritage</a>                    |
| <input type="checkbox"/> <a href="#">Airport</a>                                     | <input type="checkbox"/> <a href="#">Historic Mine Sites</a>         |
| <input type="checkbox"/> <a href="#">Airport Obstacle Limitation Surface</a>         | <input type="checkbox"/> <a href="#">Mining Lease</a>                |
| <input type="checkbox"/> <a href="#">Airport 5m Obstacle Limitation Surface</a>      | <input type="checkbox"/> <a href="#">Regional Infrastructure</a>     |
| <input type="checkbox"/> <a href="#">Biodiversity</a>                                | <input checked="" type="checkbox"/> <a href="#">Scenic Amenities</a> |
| <input checked="" type="checkbox"/> <a href="#">Bushfire Hazard</a>                  | <input type="checkbox"/> <a href="#">Steep Land</a>                  |
| <input checked="" type="checkbox"/> <a href="#">Building Heights &amp; Frontages</a> | <input type="checkbox"/> <a href="#">Transport</a>                   |
| <input checked="" type="checkbox"/> <a href="#">Coastal Hazard</a>                   | <input type="checkbox"/> <a href="#">Water Resources</a>             |
| <input type="checkbox"/> <a href="#">Extractive Resources and Minerals</a>           |  |



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Image 12: Wild Cattle Creek Road, Tannum Sands



## 5.0 Catchment Demographic

The demographic profile was disaggregated into multiple age cohorts to identify the needs from each cohort. The first age cohort from 0-9 years identifies the need for a learn to swim and water appreciation, leisure's, social interaction. The 10-14 years cohort focuses more on skill development, participation in competition training, leisure, social interaction and learn to swim. The 15-24 year cohort drivers included fitness, leisure, cross training, injury rehabilitation and performance based training. The 25-54 focuses on the fitness, physical activity, weight management, injury prevention and rehabilitation and social interaction, family and leisure. The over 55 year's cohort drivers included fitness, non-weight bearing activity, water therapy, injury prevention, rehabilitation and social interaction

The analysis helps to gain an understanding of the type of patronage that the aquatic centre may receive which is important in making assumptions surrounding likely visitor numbers. Naturally, insights from the analysis help to inform which type of facilities will be in demand in the proposed aquatic centre.

Figure 1, demonstrates the importance for the centre to have facilities that the younger visitors have access to as the 0-14 year old cohort represents (24.4%) of Boyne Island - Tannum Sands (SA2) and (22%) of Gladstone LGA compared to Queensland (19.8%). It also shows the importance for facilities that satisfy the large proportion of young teenagers. This cohort makes up (15.5%) of the (SA2) in comparison to the LGA (13.5%) and above Queensland (12.8%).

Tannum Sands also has a higher proportion of middle aged adults 35-59 year olds with the cohort making up (37.8%) of the population compared to the LGA (35%) and Queensland (32.9%).

These higher proportions of identified age cohorts in the catchment represent gaps that a new aquatic centre has the opportunity to respond to.

### 0-9 years: Learn to swim and water appreciation, leisure's, social interaction

	Boyne Island - Tannum Island (SA2)	%	Gladstone (LGA)	%	Queensland	%	
Age 10-14 years: Skill development, training, leisure and social	0-4	758	7.4%	5,040	7.2%	323,305	6.7%
	5-9	847	8.3%	5,371	7.7%	324,658	6.7%
	10-14	911	8.9%	4,935	7.1%	312,209	6.4%
	15-19	674	6.6%	4,470	6.4%	312,838	6.4%
Age 15-24 years: Fitness, Leisure, cross training, injury rehabilitation and performance based training	20-24	505	5.0%	4,351	6.2%	328,691	6.8%
	25-29	600	5.9%	5,153	7.4%	337,113	6.9%
	30-34	663	6.5%	5,209	7.5%	343,106	7.1%
	35-39	714	7.0%	4,862	7.0%	321,062	6.6%
	40-44	862	8.5%	5,082	7.3%	333,674	6.9%
	45-49	793	7.8%	5,086	7.3%	330,723	6.8%
	50-54	762	7.5%	4,847	6.9%	314,052	6.5%
	Age 25-54 years: Fitness, physical activity, weight management, injury prevention and rehabilitation, social interaction, family and leisure	55-59	717	7.0%	4,508	6.5%	296,964
60-64		479	4.7%	3,467	5.0%	262,279	5.4%
65-69		380	3.7%	2,841	4.1%	238,621	4.9%
70-74		235	2.3%	1,938	2.8%	180,421	3.7%
75-79		153	1.5%	1,219	1.7%	125,647	2.6%
80-84		71	0.7%	749	1.1%	83,347	1.7%
	85+	70	0.7%	657	0.9%	84,336	1.7%
<b>Total</b>	<b>10,194</b>	<b>100.0%</b>	<b>69,785</b>	<b>100.0%</b>	<b>4,853,046</b>	<b>100.0%</b>	

Figure 1: Catchment Demographic with state comparison

Over 55 years: Fitness, non-weight bearing activity, water therapy, injury prevention and rehabilitation and social interaction



## 6.0 Boyne Island – Tannum Sands (SA2) – Future Projections

Stage 2 beginning

Age	2016	%	2021	%	2026	%	2031	%	2036	%
0-4	758	7.4%	894	7.4%	1,055	7.3%	1,245	7.2%	1,468	7.1%
5-9	847	8.3%	988	8.1%	1,153	7.9%	1,345	7.7%	1,569	7.5%
10-14	911	8.9%	1,052	8.7%	1,214	8.4%	1,401	8.1%	1,618	7.8%
15-19	674	6.6%	800	6.6%	950	6.6%	1,129	6.5%	1,340	6.4%
20-24	505	5.0%	601	5.0%	716	4.9%	853	4.9%	1,016	4.9%
25-29	600	5.9%	717	5.9%	857	5.9%	1,025	5.9%	1,225	5.9%
30-34	663	6.5%	792	6.5%	945	6.5%	1,128	6.5%	1,347	6.5%
35-39	714	7.0%	848	7.0%	1,008	6.9%	1,197	6.9%	1,422	6.8%
40-44	862	8.5%	1,018	8.4%	1,203	8.3%	1,421	8.2%	1,679	8.1%
45-49	793	7.8%	945	7.8%	1,125	7.8%	1,340	7.7%	1,597	7.7%
50-54	762	7.5%	905	7.5%	1,075	7.4%	1,278	7.4%	1,518	7.3%
55-59	717	7.0%	820	6.7%	938	6.5%	1,072	6.2%	1,226	5.9%
60-64	479	4.7%	576	4.7%	691	4.8%	831	4.8%	998	4.8%
65-69	380	3.7%	464	3.8%	567	3.9%	692	4.0%	845	4.1%
70-74	235	2.3%	304	2.5%	392	2.7%	507	2.9%	655	3.1%
75-79	153	1.5%	218	1.8%	312	2.1%	445	2.6%	635	3.0%
80-84	71	0.7%	106	0.9%	158	1.1%	237	1.4%	354	1.7%
85+	70	0.7%	101	0.8%	147	1.0%	212	1.2%	308	1.5%
<b>Total</b>	<b>10,194</b>	<b>100.0%</b>	<b>12,150</b>	<b>100.0%</b>	<b>14,508</b>	<b>100.0%</b>	<b>17,359</b>	<b>100.0%</b>	<b>20,821</b>	<b>100.0%</b>

Stage 1

Figure 2: Boyne Island-Tannum Sands Future Predictions

Figure 2, outlines the demographic profile for the Boyne Island - Tannum Sands (SA2) and future projection to 2036. The population for Tannum Sands is expected to increase from 10,200 to 20,800 residents by 2036. The 25-54 age group of this catchment, outlined in orange, holds a consistent proportion through 2016-2036, specifically in the 25-35 age proportion. This group is an important cohort now and into the future and as it is relatively young it is considered highly likely to frequent the health and fitness centre facilities.

The older cohort outlined in red, 55-85+ shows consistent growth from 2016-2036. This highlights the need for elements to be included in the proposed aquatic centre's facilities for this age cohort. This may include, hydrotherapy and other targeted services and health and fitness equipment.

## 6.1 Gladstone (LGA) – Future Projections

Age	2016		2021		2026		2031		2036	
		%		%		%		%		%
0-4	5,040	7.2%	5,400	6.9%	5,848	6.7%	6,341	6.5%	6,820	6.4%
5-9	5,371	7.7%	5,742	7.3%	6,195	7.1%	6,703	6.9%	7,166	6.7%
10-14	4,935	7.1%	5,754	7.3%	6,218	7.1%	6,714	6.9%	7,201	6.8%
15-19	4,470	6.4%	4,962	6.3%	5,730	6.5%	6,196	6.4%	6,637	6.2%
20-24	4,351	6.2%	4,565	5.8%	5,055	5.8%	5,729	5.9%	6,130	5.8%
25-29	5,153	7.4%	5,418	6.9%	5,823	6.6%	6,376	6.6%	6,997	6.6%
30-34	5,209	7.5%	5,768	7.3%	6,146	7.0%	6,612	6.8%	7,105	6.7%
35-39	4,862	7.0%	5,863	7.5%	6,458	7.4%	6,863	7.1%	7,287	6.9%
40-44	5,082	7.3%	5,351	6.8%	6,388	7.3%	6,993	7.2%	7,352	6.9%
45-49	5,086	7.3%	5,533	7.0%	5,852	6.7%	6,912	7.1%	7,484	7.0%
50-54	4,847	6.9%	5,355	6.8%	5,805	6.6%	6,144	6.3%	7,163	6.7%
55-59	4,508	6.5%	4,887	6.2%	5,388	6.1%	5,825	6.0%	6,137	5.8%
60-64	3,467	5.0%	4,306	5.5%	4,669	5.3%	5,147	5.3%	5,531	5.2%
65-69	2,841	4.1%	3,293	4.2%	4,058	4.6%	4,412	4.5%	4,847	4.6%
70-74	1,938	2.8%	2,657	3.4%	3,087	3.5%	3,803	3.9%	4,141	3.9%
75-79	1,219	1.7%	1,759	2.2%	2,416	2.8%	2,832	2.9%	3,491	3.3%
80-84	749	1.1%	1,021	1.3%	1,479	1.7%	2,051	2.1%	2,432	2.3%
85+	657	0.9%	849	1.1%	1,151	1.3%	1,664	1.7%	2,379	2.2%
<b>Total</b>	<b>69,784</b>	<b>100.0%</b>	<b>78,484</b>	<b>100.0%</b>	<b>87,764</b>	<b>100.0%</b>	<b>97,315</b>	<b>100.0%</b>	<b>106,302</b>	<b>100.0%</b>

Figure 3: Gladstone Future Predictions

Stage 1

The Gladstone (LGA) future projections allows for the analysis of the population into the future to understand the feasibility of the centre. As well as, the certain demographics that need to be satisfied with facilities due to holding a higher proportion in the catchment.

Figure 3, outlines the demographics for the Gladstone (LGA) and future projection to 2036. The 55 to 80+ demographic, outlined in red, has consistent growth into the future projections. This is consistent with trends of Australia's large ageing population.

Specifically, the 35 to 49 age cohort, outlined in orange, has relatively steady growth, which, shows this cohort to be plateauing. This demonstrates that the demand for health and fitness centre's will come from these proportions in the catchment and will require facility specific developments that will attract these age groups, such as a hydrotherapy facilities for the older proportion.



## 6.2 Queensland – Future Projections

Age	2016	%	2021	%	2026	%	2031	%
0-4	323,305	6.7%	337,965	6.4%	362,043	6.3%	387,069	6.2%
5-9	324,658	6.7%	345,223	6.6%	365,860	6.4%	391,908	6.3%
10-14	312,209	6.4%	343,830	6.5%	368,806	6.4%	391,808	6.3%
15-19	312,838	6.4%	332,082	6.3%	367,337	6.4%	394,272	6.3%
20-24	328,691	6.8%	341,687	6.5%	367,961	6.4%	404,704	6.5%
25-29	337,113	6.9%	346,329	6.6%	370,098	6.5%	397,856	6.4%
30-34	343,106	7.1%	356,783	6.8%	375,039	6.5%	399,949	6.4%
35-39	321,062	6.6%	364,025	6.9%	386,249	6.7%	405,868	6.5%
40-44	333,674	6.9%	339,444	6.5%	387,828	6.8%	413,082	6.6%
45-49	330,723	6.8%	344,924	6.6%	355,556	6.2%	405,863	6.5%
50-54	314,052	6.5%	335,855	6.4%	353,163	6.2%	365,948	5.9%
55-59	296,964	6.1%	315,265	6.0%	339,683	5.9%	358,336	5.7%
60-64	262,279	5.4%	295,473	5.6%	316,174	5.5%	341,720	5.5%
65-69	238,621	4.9%	256,877	4.9%	292,035	5.1%	314,008	5.0%
70-74	180,421	3.7%	226,868	4.3%	247,640	4.3%	283,834	4.5%
75-79	125,647	2.6%	164,712	3.1%	210,235	3.7%	232,867	3.7%
80-84	83,347	1.7%	105,588	2.0%	141,553	2.5%	183,955	2.9%
85+	84,336	1.7%	97,362	1.9%	122,803	2.1%	167,497	2.7%
<b>Total</b>	<b>4,853,048</b>	<b>100.0%</b>	<b>5,250,292</b>	<b>100.0%</b>	<b>5,730,062</b>	<b>100.0%</b>	<b>6,240,546</b>	<b>100.0%</b>

Figure 4: Queensland Demographic and Future Projections

Figure 4, outline the future projections for Queensland from 2016-2031.

Figure 6 clearly shows the aging Queensland demographic profile. Note the aging profile across the board in the 55+ cohort, with an increasing representation in the 70+ cohort.

## 7.0 Aquatic Supply

The table opposite shows the aquatic centre supply, learn to swim centre's and public pools in the Gladstone region. Also presented is what is considered to be the relevant supply of centres from beyond.

Included in this group are five centres, some of which are over 100's of kilometers from the region, namely the Yeppoon Aquatic Centre, Yeppoon Lagoon, Cotton Tree, Kings Beach and the Caloundra Aquatic Centre.

They have been included owing to interest expressed by Council and by MacroPlan due to their potential insights in terms of design, use and function.

Figure 5, presents the supply in terms of key details including location, operator and main features. The distance refers to straight line distance from the centrepoint of the location of candidate sites to the listed centres.

Supply (Distance to Boyne Tannum)	Address	Operated	Features
<b>Western Suburbs Swimming Club - John Dahl Swimming Pool (20km)</b>	180 Glenlyon St, Gladstone, 4680	John Dahl Swimming	<ul style="list-style-type: none"> <li>• 25m Pool</li> <li>• Junior sporting clubs Sports</li> <li>• Outdoor Sports</li> </ul>
<b>Gladstone Aquatic Centre (21km)</b>	60 Tank St, West Gladstone, 4680	Lane 4 Aquatics	<ul style="list-style-type: none"> <li>• Outdoor 8 lane 50m Pool</li> <li>• Indoor 6 Lane heated 25m Pool – with ramp access</li> <li>• Outdoor "Splash Zone" – with giant tipping bucket</li> <li>• Electronic Timing</li> <li>• Aqua Café</li> <li>• Reception</li> <li>• Giant Pool Inflatables</li> <li>• Lane 4 suite of programs and services</li> <li>• All year access</li> </ul>
<b>Above and Beyond Swim School (22km)</b>	6 Wyndham Rd, Beecher, 4680	Above and Beyond Swim School	<ul style="list-style-type: none"> <li>• Brand New, purpose built, indoor facilities</li> <li>• Free newborn classes for babies 2-3 months</li> <li>• Uniquely small class sizes</li> </ul>
<b>Mount Larcom Swimming Pool (64km)</b>	15 Narrows Rd, Mount Larcom, 4695	Lane 4 Aquatics	<ul style="list-style-type: none"> <li>• An outdoor 6 lane 25m Swimming Pool</li> <li>• Children's wading pool</li> <li>• Pool kiosk</li> <li>• Plenty of green space for picnicking</li> <li>• Closes for Winter</li> </ul>
<b>Yeppoon Lagoon (171km)</b>	3 Lagoon Pl, Yeppoon, 4703	Livingstone Shire Council	<ul style="list-style-type: none"> <li>• 2500 square meter resort style pool</li> <li>• Swim up infinity edge overlooking the Keppel Islands</li> <li>• Shallow children's play area</li> <li>• Informal lap swimming area</li> <li>• Café on site</li> <li>• Situated right on Yeppoon Main Beach</li> <li>• Surrounded by landscaped gardens with barbecue facilities</li> </ul>
<b>Yeppoon Aquatic Centre (173km)</b>	Matthew Flinders Dr, Yeppoon, 4703	Livingstone Shire Council	<ul style="list-style-type: none"> <li>• 50 Meter outdoor pool and a 17 meter indoor covered and heated pool plus a covered wading pool. Facilities include:                             <ul style="list-style-type: none"> <li>• Fully stocked Canteen with a Coffee Deck</li> <li>• Disability Toilet</li> <li>• Chair Lift into both pools</li> <li>• Hot and Cold Showers</li> <li>• Swim Accessories for sale or hire</li> </ul> </li> </ul>
<b>Cotton Tree (418km)</b>	412 Cotton Tree Pde, Maroochydore, 4558	Swimfit	<ul style="list-style-type: none"> <li>• 50m heated outdoor pool</li> <li>• 25m heated enclosed pool</li> <li>• 12.5m heated enclosed pool</li> <li>• Water Park</li> <li>• Out Door Fitness Equipment</li> <li>• Aqua Aerobics classes</li> <li>• Swim Fit Aqua Café</li> <li>• Child Minding Service</li> <li>• Disabled access facilities and change rooms</li> </ul>
<b>Kings Beach Beachfront Salt Water Pool (431km)</b>	Esplanade, Kings Beach, 4551	Caloundra City Council	<ul style="list-style-type: none"> <li>• Caloundra's \$4 million tidal swimming pool on the Kings Beach foreshore is equipped with shade sails, and has a free 25-metre sea-water lap pool, children's swimming pool and wading area with disable access.</li> </ul>
<b>Caloundra Aquatic Lifestyle Centre (431km)</b>	Central Park Rd, Caloundra, 4551	Caloundra City Council	<ul style="list-style-type: none"> <li>• 50m Heated Lap Pool</li> <li>• 25m Heated Lap Pool</li> <li>• 16m Heated Indoor Pool</li> <li>• 16m Play and Teaching Pool</li> <li>• Adventure Play Pool with slide</li> <li>• Learn to swim</li> <li>• Aqua Fitness</li> <li>• Casual Swimming</li> <li>• Squad training</li> <li>• Gymnasium</li> <li>• Skate park</li> </ul>

Figure 5: Selected Aquatic supply throughout Queensland Region



## 8.0 Boyne Tannum – Patronage Characteristics

Figure 6, outlines the entry charges for the public pools and learn to swims centres in the study area. Notably, both Yeppoon Lagoon and Kings Beach Beachfront Salt Water Pool are free public pools and have free access to use. These pools are used for recreational purposes.

Mount Larcom Swimming Pool had the lowest priced adult ticket of \$4.00 with Gladstone Aquatic Centre the second lowest of \$5.00. Caloundra Aquatic Lifestyle Centre and Cotton Tree had the highest adult ticket with tickets costing \$5.70 and \$5.60 respectively.

Child passes were the lowest at the Yeppoon Aquatic Centre and Mount Larcom Swimming Pool, both at \$3.50. Child passes at the Gladstone Aquatic Centre are \$4.00. The most expensive child passes was at the Caloundra Aquatic Lifestyle Centre and Cotton Tree centres, at \$4.80 and \$5.60 respectively.

<b>Gladstone Aquatic Centre</b>	<b>Price (\$)</b>
Adult	\$5.00
Child	\$4.00
Concession	\$4.00
Annual Pass	\$250.00
Family Pass	\$11.00
Spectator	\$2.70
<b>Mount Larcom Swimming Pool</b>	
Adult	\$4.00
Child	\$3.50
Group Pass	\$2.50
Spectator	\$1.00
<b>Yeppoon Aquatic Centre</b>	
Adult	\$4.50
Child	\$3.50
Family Pass	\$14.00
<b>Yeppoon Lagoon</b>	
Adult	Free
Child	Free
Concession	Free
<b>Kings Beach Beachfront Salt Water Pool</b>	
Adult	Free
Child	Free
Concession	Free
<b>Caloundra Aquatic Lifestyle Centre</b>	
Adult	\$5.70
Child	\$4.80
Family Pass	\$17.90
<b>Cotton Tree</b>	
Adult	\$5.60
Child	\$4.70
Family Pass	\$17.60

Figure 6: Local Supply Patronage Costing

## 9.0 Boyne Tannum - Supply

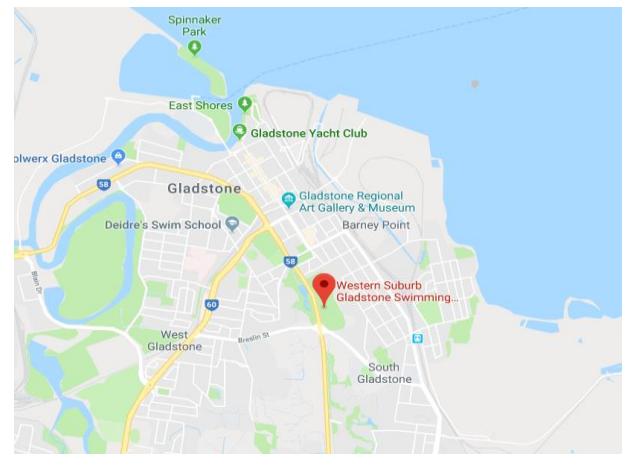
### Gladstone Aquatic Centre

- The Gladstone Aquatic Centre is located at 60 Tank Street West Gladstone, and is managed by Lane 4 Aquatics. It is a 25kms/ 25 minute drive away from the proposed Tannum Sands Aquatic Recreation Centre. It provides the following facilities.
  - Outdoor 8 Lane 50m Pool;
  - Indoor 6 Lane heated 25m Pool – with ramp access;
  - Outdoor “Splash Zone” – with giant tipping bucket;
  - Electronic Timing;
  - Aqua Café;
  - Reception;
  - Giant Pool Inflatables;
  - Lane 4 suite of programs and services; and
  - All year access



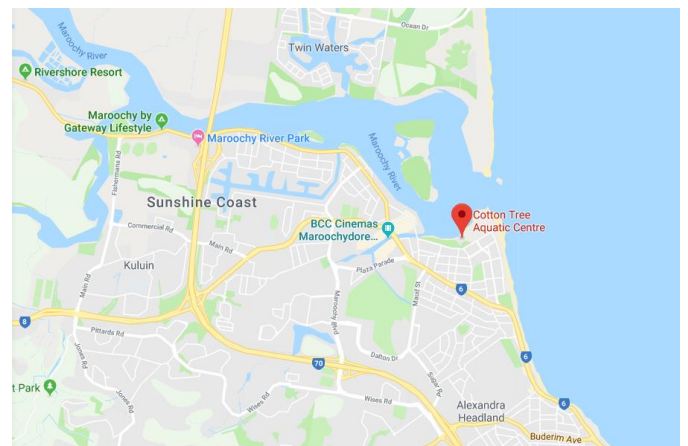
### Western Suburbs Swimming Club – John Dahl Pool

- John Dahl Pool is at 166 Glenlyon Road, South Gladstone, QLD, 4680 and is a 25 metre pool. There does not seem to be other facilities available at the site. It is 24kms/ 23 minute away from the proposed Tannum Sands Aquatic Recreation Centre



### Cotton Tree Aquatic Centre

- Located at 40-50 Cotton Tree Parade, Maroochydore, QLD, 4558
- 50m heated outdoor pool, 1.1m-2m depth, step access with hand railings on one side
- 25m heated enclosed pool, 29 degrees, 1.0-1.5m depth, step access, hoist access available
- 12.5m heated enclosed pool, 32 degrees, .9m-1.2m depth, access to the pool is via four stairs with hand railing on one side only
- Water park – zero depth to 400mm – suitable for all ages
- Out Door Fitness Equipment
- Learn to Swim program – all ages
- Squad programs – all levels
- Aqua Aerobics classes Swim Fit Aqua Café
- Inflatable fun – party hire



- BBQ facility (on request)
- Disabled access facilities and change rooms

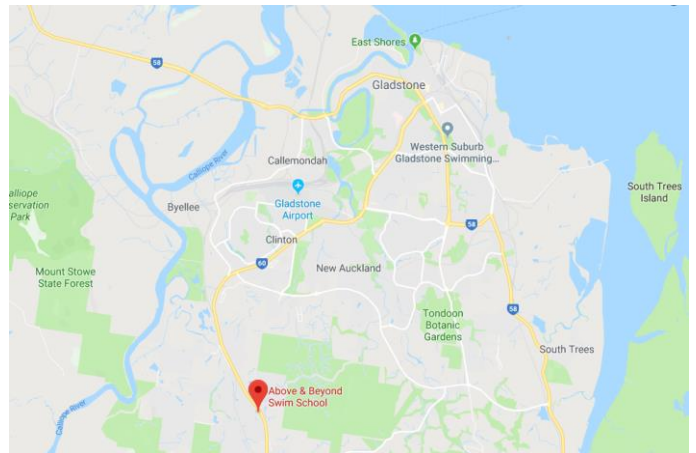
### Mount Larcom Swimming Pool

- Mount Larcom Swimming Pool is at The Narrows Road Mount Larcom, and is managed by Lane 4 Aquatics. It is 62 kms/ 46 minute drive way from the proposed Tannum Sands Aquatic Recreation Centre. It provides the following facilities:
  - An outdoor 6 lane 25m swimming pool
  - Children’s wading pool
  - Pool kiosk
  - Plenty of green space for picnicking
  - Closes for Winter



### Above and Beyond Swim Pool

- Brand new, purpose built, indoor facilities
- Uniquely small class sizes
- Fee newborn classes for babies 2-3 months



### Yeppoon Aquatic Centre

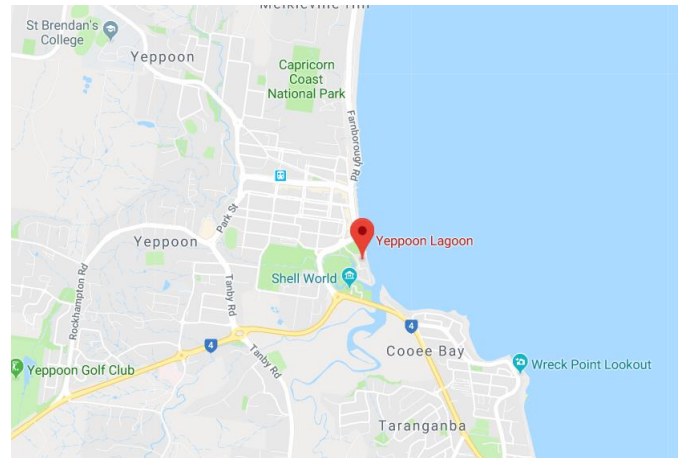
- The Yeppoon Aquatic Centre offers an extensive range of swimming related activities. Located at 150 Matthew Flinders Drive Cooeee Bay, QLD, 4703 with a 50 metre outdoor pool and a 17 metre indoor covered and heated pool plus a covered wading pool:
  - Learn 2 Swim Classes – all aged
  - Aqua Fit / Aqua Aerobics Classes
  - Yeppoon Sharks Swimming Club
  - Intensive School Holiday Lesson
  - Squads for Surf, Pool, Junior and Senior
- Out Facilities Include
  - Fully Stocked Canteen
  - Disability Toilet
  - Chair lift into both pools
  - Swim Accessories and Showers





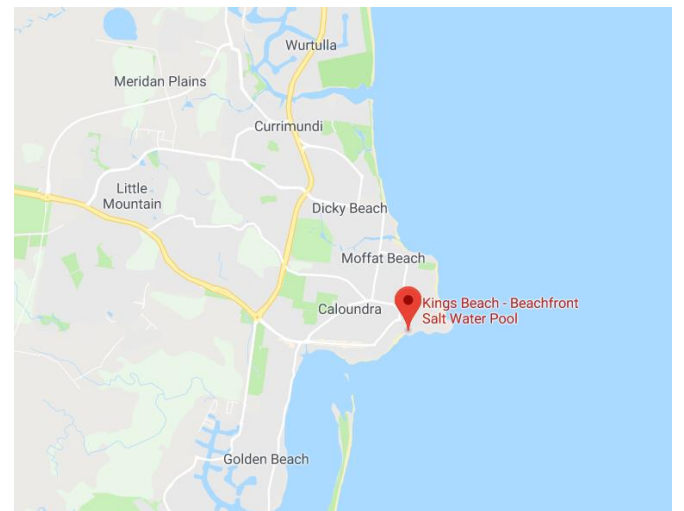
## Yeppoon Lagoon

- Yeppoon Lagoon is set against the Keppels backdrop and is a large public pool that provides sun-lounges, umbrellas, grass area and kiosk for the public
- It consists of a 2,500 square-metres of tropic styled pool that includes informal lap swimming area, shallow children play area and infinity edge to surrounding landscapes



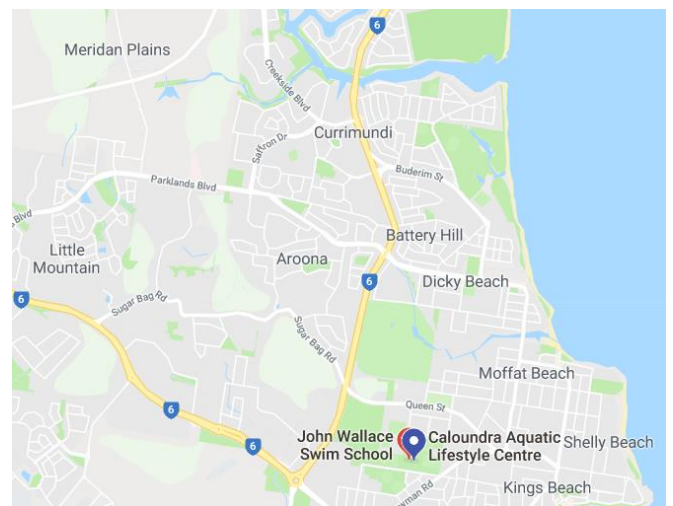
## Kings Beach Beachfront Salt Water Pool

- Caloundra's \$4 million tidal swimming pool on the stunning Kings Beach foreshore is equipped with shade sails, and has a free 25-metre sea-water lap pool, children's swimming pool and wading area with disabled person's access. Located at 1 Spender Lane Kings Beach, QLD, 4551 the pool is easy to access and plenty of parking is available.
  - BBQ Facilities
  - Car Park
  - Pets Allowed, enquire on booking



## Caloundra Aquatic Lifestyle Centre

- The Caloundra Aquatic Lifestyle Centre is located within the Caloundra Central Park Sports Precinct on Arthur Street. The centre offers a flexible aquatic and dry land activities program.
  - 50m Heated Lap Pool
  - 25m Heated Lap Pool
  - 16m Heated Indoor Pool
  - 16m Play & Teaching Pool
  - Adventure Play Pool with slide
  - Learn to swim
  - Aqua Fitness
  - Casual Swimming
  - Squad training
  - Gymnasium



## 10.0 Boyne Tannum – Pipeline

The Gladstone pipeline details the future developments in the catchment that are similar to this feasibility development. It is important to note, that the floating pool development is only for recreational uses only.

### Floating Pool, East Shores, Gladstone Port

- The Gladstone Ports Corporation is proposing a floating pool as part of a \$29.5 million foreshore redevelopment at East Shores, Port of Gladstone. It is 27kms/ 29 minute drive way from the proposed Tannum Sands Aquatic Recreational Centre



Image 13: East Shores Floating pool in the pipeline

## 11.0 Boyne Tannum – Candidate Site Selection Criteria

The following criteria were established to facilitate a selection process. Through the use of this criteria and using data from the GRC’s Interactive Map the candidate sites were assessed through a scoring system, with scores ranging from 1-5. The higher the score the more attractive the candidate site is regarded as being a strong candidate for the potential development of an aquatic centre.

Candidate assessment areas								
Flooding Impacts	Environment	Scale of Land Area	Ownership	Road Access	Public Transport	Proximity to Education Facilities	Accessibility by residential population	Potential land use conflict (noise, lights)
This criteria was sourced from the Gladstone Interactive Mapping and was scored off the percentage of the site that is at risk of becoming effected by the flood waters. Sites that have had a higher area of possible flooding on their site received scores closer to 1, while sites with less flooding risk scored closer to 5	Environmental assessment involved observations of the subject site map and the environment impacts that developing the site would involve. This looked at whether the site had been developed at all and the possible negative effects that site could contribute to the surrounding environment. Sites that would have little to no environmental impacts was score high (5) while sites that had high probability of environmental impacts score low (1).	This criteria was used to assess the size of the project compared against the size of lot. Sites with between 0-1 hectares were deemed problematic and had scores that were low (1). Sites with between 3-4 hectares were deemed more appropriate and scored medium (2-4) while anything above 7 hectares scored a 5.	The ownership criteria assess the title holder of the site and how easily the site could be transferred to the council for the development. Properties that were owned by the council received high scores (5) while sites that were owned by the Department of Natural Resources, Mines and Energy received a medium-low scores of (3-2). Any privately owned sites received the lowest score (1)	Access was observed from the site maps and was scored off the accessibility to the road or street. This involved looking at whether the site had direct access to the surrounding streets and roads, as well as, how easily the access can be used and whether it links to a road/street	Public Transport was assessed by an assessment of the local bus stops and public transport options surrounding the subject site. Further analysis looked at the public transport timetable and travel times. These were scored off the proximity of the site to the public transport with sites that were close to Public Transport links received scores between 4-5 and sites that did not have any local public transport scoring a 1.	Proximity to sporting and recreational facilities was another important criteria. Sites that had these facilities which included; skate parks and indoor rock climbing, within a 300m radius of the site received a (5), within a 500m radius received a (3), while sites that had these facilities over 1km away received a (1).	This criteria was used to assess the residential population density surrounding the site. Sites with significant population density surrounding the site received a score of 5. While sites with minimal population density surrounding the site scored 1-2.	Potential land use conflict (noise, lights) was also assessed. Candidate sites were scored in terms of the expected land use conflict potential land conflicts that the development could bring into the immediate area.

Figure 7: Candidate Site Selection Criteria



## 12.0 Boyne Tannum – Candidate Site Selection Score Card

Through the filtering of the candidate sites by the selection process the top three sites were identified and included:

- Tannum Sands Road, Tannum & Coronation Drive as an amalgamated site;
- 3 Hampton Drive, Tannum Sands; and
- 10 Canoe Point Road, Tannum Sands
- It is notable that a score of one (highlighted in red) is regarded as a fatal flaw, and negates the further consideration of the site a candidate.

Sites	Flooding Impact	Environment	Scale of land area	Ownership	Road access	Public transport (bus stop)	Proximity to educational facilities	Proximity to sporting and recreational facilities	Accessibility by residential population	Potential land use conflict (noise, lights)	Total
<b>Tannum Sands Road, Tannum Sands &amp; Coronation Drive as an amalgamated site</b>	5	3	5	5	5	5	4	4	5	4	<b>45</b>
<b>3 Hampton Drive, Tannum Sands</b>	5	2	3	3	4	4	5	4	5	4	<b>39</b>
<b>10 Canoe Point Road, Tannum Sands</b>	5	4	4	2	3	2	3	5	4	3	<b>35</b>
Centenary Drive, Boyne Island	4	5	1	2	4	4	4	3	4	4	<b>35</b>
Jacaranda Drive, Boyne Island	1	5	4	5	3	3	2	5	3	3	<b>34</b>
Arthur Street, Boyne Island	5	5	1	2	4	3	4	3	4	3	<b>34</b>
Malpas Street, Boyne Island'	5	2	1	3	2	3	5	4	4	5	<b>34</b>
Wyndham Avenue, Boyne Island	2	3	3	3	4	4	2	3	4	3	<b>31</b>
Blackwell Street, Tannum Sands	1	1	3	3	3	3	4	4	5	2	<b>29</b>
Wild Cattle Creek Road, Tannum Sands	1	1	4	2	3	2	2	2	2	5	<b>24</b>

Figure 8: Candidate Site Selection

### 13.0 Boyne Tannum – Top Three Candidate Sites

The top scoring sites from the criteria are shown below:



Figure 9: 3 HAMPTON DRIVE, Tannum Sands

MacroPlanDimasi



Figure 10: 10 CANOE POINT ROAD, Tannum Sands

MacroPlanDimasi







Figure 11: TANNUM SANDS ROAD & CORONATION DRIVE, Tannum Sands



## 14.0 Boyne Tannum – Scenario's and recommended stages

The elements for inclusion for the top three considered sites are presented in the table below. These scenarios were developed on the basis of supply analysis and provides the stages of development. Stage 1 is due for completion by 2020 and Stage 2 is due for completion in 2025. Scenario 1 responds well to the demands of a local or community catchment whereas the Stage 2 and 3 refer to the opportunity for accommodating growth and a larger district type catchment over the next twenty years. Both Scenario 1 and 2 require an additional stage of development.

<b>Boyne Tannum Aquatic Centre Scenarios</b>	<b>Stage 1 Suggested Included Elements (to be PC by 2020)</b>	<b>Stage 2 Suggested Additional Elements (pc by 2025)</b>
<b>Scenario 1. Community Aquatic Centre</b>	50 m lap pool	
	Amenity Block/Change Room (small)	
	Kiosk	
	Car parking capacity up to 50.	
	Admin/Office/Entry	
<b>Scenario 2 Minor District Aquatic Centre</b>	50 m lap pool	
	Amenity Block/Change Room (medium)	
	Kiosk	
	Learn to swim pool	
	Admin/Office/Entry	Gym
	Car parking up to 50	increased car parking capacity up to 100
<b>Scenario 3. Major District Aquatic Centre</b>	50 m lap pool	
	Amenity Block/Change Room (Large)	Gym (larger)
	Café (kiosk replaced by café)	Indoor Hydrotherapy
	Indoor learn to swim pool	Outdoor Water Playground
	Life Guards office/first aid room	Expanded car parking up to capacity 200
	Admin/office/Entry	Terraced seating
	Car parking up to 100	BBQ area

Figure 12: Scenario's and Recommended Stages

## 15.0 Boyne Tannum – Recommendations

Based off the results from the feasibility models outputs for Net Present Value and ROI of the project for each of the suggested scenarios, MacroPlan recommends that Scenario 3 is the most preferred option. Below are the summary outputs which are derived from the feasibility model of the analysis. Scenario 3 represents the smallest

Scenario analysis				
Select measure from drop down list below				
Overall return on investment	Percentage	Currency	Number	
Year	Date	Scenario 1	Scenario 2	Scenario 3
<b>Net present value</b>	<b>2021 to 2040</b>	<b>-\$2,336,488</b>	<b>-\$739,482</b>	<b>-\$244,669</b>
Year 0	2020	0.0%	0.0%	0.0%
Year 1	2021	-1.1%	-0.8%	-0.6%
Year 2	2022	-2.3%	-1.6%	-1.2%
Year 3	2023	-3.6%	-2.4%	-1.8%
Year 4	2024	-4.8%	-3.3%	-2.5%
Year 5	2025	-6.2%	-4.2%	-3.1%
Year 6	2026	-7.5%	-4.7%	-2.6%
Year 7	2027	-8.9%	-5.3%	-2.6%
Year 8	2028	-10.4%	-5.8%	-2.5%
Year 9	2029	-11.9%	-6.4%	-2.4%
Year 10	2030	-13.4%	-7.1%	-2.4%
Year 11	2031	-15.0%	-7.7%	-2.3%
Year 12	2032	-16.7%	-8.4%	-2.3%
Year 13	2033	-18.4%	-9.2%	-2.3%
Year 14	2034	-20.1%	-9.8%	-2.2%
Year 15	2035	-22.0%	-10.5%	-2.2%
Year 16	2036	-23.9%	-11.5%	-2.2%
Year 17	2037	-25.8%	-12.3%	-2.2%
Year 18	2038	-27.9%	-13.1%	-2.2%
Year 19	2039	-30.0%	-14.2%	-2.2%
Year 20	2040	-32.2%	-15.1%	-2.2%

Figure 13: Scenario's performance table over time

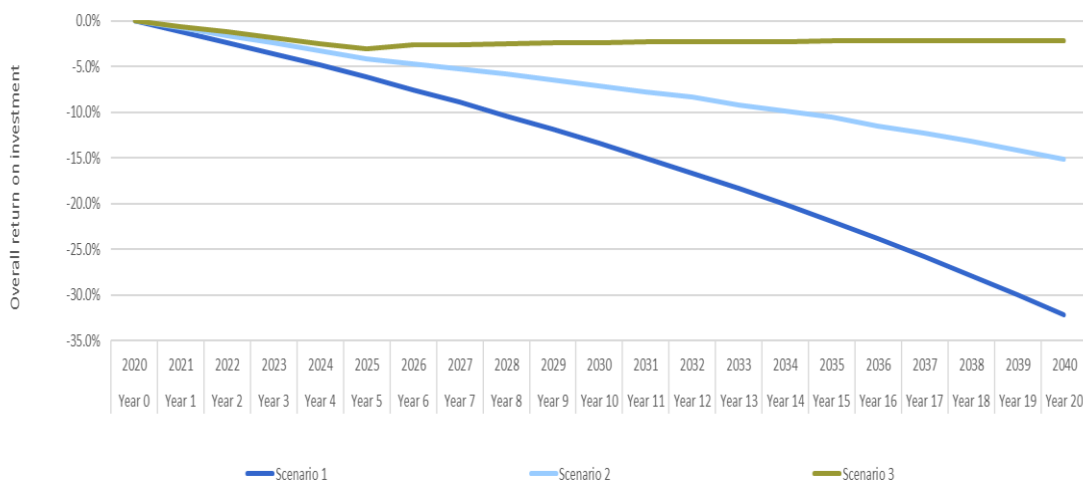


Figure 14: Scenario's performance chart over time



## 16.0 Boyne Tannum Aquatic Centre Feasibility Assumptions

The income and expenditure assumptions for the following are based on the 2012-14 CERM PI Aquatic Centre benchmarks for total revenue per visitor and broken-down in detail based on the 2008-09 CERM PI Aquatic Centre benchmarks into the following categories.

### Income (per visit)

- Pool usage/activities – general admission, learn to swim and squad
- Secondary spend and other revenue – this refers to sales revenue from the kiosk/café
- Fitness Revenue – this refers to gym memberships and personal training

### Expenditure (per visit)

- Water
- Electricity and gas
- Repairs and maintenance
- Marketing
- Other expenditure
- Fitness operating costs
- Scenario 1 uses the Group 5 category of Aquatic centres – aquatic centres with outdoor pools only, and Scenarios 2 and 3 use the Group 6 category – aquatic centres with indoor and outdoor pools
- The estimate for fitness membership of 1% of the catchment population is based on the 2009-09 CERM PI Group 6 benchmark of 2% adjusted to be more conservative and reflect the existing supply in the catchment area
- The estimate for maximum members at the gym is based on MacroPlan's experience and consultation with industry
  - Income and expenditure assumptions

## 17.0 Boyne Tannum Aquatic Centre Feasibility Assumptions

Assumptions	Scenario 1	Scenario 2	Scenario 3
<b>Pool</b>			
General admission revenue per visit	\$2.40	\$3.82	\$3.82
Learn to swim revenue per visit	\$1.36	\$2.16	\$2.16
Squad revenue per visit	\$0.26	\$0.42	\$0.42
Secondary spend revenue per visit			
Stage 1	\$0.00	\$0.83	\$0.83
Stage 2	\$0.00	\$0.83	\$1.00
Other revenue per visit	\$0.00	\$0.02	\$0.02
<b>Gym</b>			
Fitness membership as a proportion of population	NA	1.0%	1.0%
Maximum members at gym	NA	200	200
Fitness revenue per person	NA	\$1,041.50	\$1,041.50
<b>Expenditure (per visitor)</b>			
<b>Pool</b>			
Wages	\$4.39	\$4.61	\$4.61
Water	\$0.10	\$0.10	\$0.10
Electricity and gas	\$0.52	\$0.55	\$0.55
Repairs and maintenance	\$0.55	\$0.57	\$0.57
Marketing	\$0.13	\$0.14	\$0.14
Other expenditure	\$1.49	\$1.56	\$1.56
<b>Gym</b>			
Operating cost per visitor (includes all operating costs)	NA	\$774.24	\$774.24

Figure 15: Aquatic Centre Feasibility Assumptions

# 17.0 Appendices



## Cost Summary

Project: Boyne Tannum Aquatic Centre		Details: Feasibility Cost Plan		
Building: Concept 1 - Hampton Drive				
Description	Quantity	Unit	Rate	Total
<b>Boyne Tannum Aquatic Centre - Concept 1 - 3 Hampton Drive</b>				
Scenario 1 (PC by 2020)	9,168		1,724	15,800,962
Scenario 2 (PC by 2020)	3,191		3,134	10,001,183
Scenario 3 (PC by 2025)	8,383		1,405	11,781,827
<b>Project Costs</b>	<b>20,742</b>	<b>m2</b>	<b>1,812</b>	<b>37,583,973</b>
<b>Assumptions</b>				
- We assume the project will be procured using a competitive tender process				
- we have assumed ceiling fans throughout with limited split units to only to office and gym area				
- We have assumed service connections are at the boundary of the site.				
- The scope and extent of architectural finishes and engineering services have largely been assumed as no specifications have been submitted.				
- We have assumed all excavations will be reused on site.				
<b>Exclusions</b>				
- Aluminum seating to seating tiers				
- Gym equipment				
- Wave machine				
- Road or intersection upgrades				
- Client direct costs				
- abnormal ground conditions not listed				
- contaminated land				
- removal of hazardous materials				
- Works outside the boundary of the site				
- Legal costs				
- Operation and maintenance costs are excluded.				
- Stamp duties on leases are excluded.				
- Council fees and charges are excluded				
- Marketing and advertising costs are excluded.				
- Goods and Service Tax is excluded.				
- Arborist Consultant Fees are excluded				
- Tenant fit-out works such as equipment, AV and IT are excluded.				
- Art works are excluded.				
- Surgery to existing trees/flora are excluded				
<b>Exclusions</b>				
- Aluminum seating to seating tiers				



## Cost Summary

Project: Boyne Tannum Aquatic Centre		Details: Feasibility Cost Plan		
Building: Concept 1 - Hampton Drive				
Description	Quantity	Unit	Rate	Total
- Wave machine				
- Road or intersection upgrades				
- Client direct costs				
- abnormal ground conditions not listed				
- contaminated land				
- removal of hazardous materials				
- Works outside the boundary of the site				
- GST				





Detailed Breakdown

Project: Boyne Tannum Aquatic Centre		Details: Feasibility Cost Plan			
Building: Concept 1 - Hampton Drive					
Code	Description	Quantity	Unit	Rate	Total
<b>Scenario 1 (PC by 2020)</b>					
A	<b>Boyne Tannum Aquatic Centre - Concept 1 - 3 Hampton Drive</b>				
B	Demolition	13,095	m2	9	112,015
C	Bulk Earthworks	9,168	m2	14	128,360
D	1&2. Entry & Offices	241	m2	2,500	602,975
E	3.Amenities	577	m2	2,900	1,672,488
F	4. Cafe	135	m2	2,500	338,325
G	5. Gym Sauna & Spa	0	m2	2,802	0
H	6. Lifeguard & First Aid Office	0	m2	1,800	0
I	7. Swim Meet Club	0	m2	1,500	0
J	8. Storage & Services	0	m2	800	0
K	9. Bleachers	88	m2	850	74,800
L	10.Pool - 25m - 6 Lane	0	no	1,600,000	0
M	11. Pool - 50m - 8 Lane	1	no	4,000,000	4,000,000
N	12. Hydrotherapy Pool	0	no	618,000	0
O	12. Hydrotherapy Pool Enclosure	0	m2	2,000	0
P	13. Kids Pool Splash pad including softfall surface, fountains, water play equipment, activity tower etc, hydraulic and filtration equipment	0	m2	3,900	0
Q	14. BBQ Facilities	0	m2	220	0
R	<u>External works</u>				
S	Carpark including bitumen, storm water drainage, minimal lighting.	3,546	m2	180	638,280
T	New dropoff	475	m2	220	104,555
U	Mesh Fencing and Gates	263	m	180	47,340
V	Landscaping	1	no	445,626	445,626
W	Shading	1	no	165,551	165,551
X	External Services including drainage, water supply, electrical services, external lighting etc.	9,168	Prov	46	419,881
Y	Location Factor	10	%	8,750,197	875,020
	<b>Sub Total</b>				<b>9,625,216</b>
Z	Design Development Contingency/Risk	10	%		962,522
AA	Preliminaries	12	%		1,270,529
AB	Margin	5	%		593,333
AC	Escalation to mid of construction Oct 2019	3.00	%	12,451,600	373,548
	<b>Construction Cost</b>				<b>12,825,148</b>
AD	Consultants Fees	12	%		1,539,018
AE	Client Costs - Excluded		Excl		
AF	Project Contingency	10	%		1,436,797
	<b>Project Costs</b>				<b>15,800,962</b>

Detailed Breakdown

Project: Boyne Tannum Aquatic Centre		Details: Feasibility Cost Plan			
Building: Concept 1 - Hampton Drive					
Code	Description	Quantity	Unit	Rate	Total
<b>Scenario 1 (PC by 2020)</b>					
					<i>(Continued)</i>
<b>Subtotal Scenario 1 (PC by 2020)</b>					<b>15,800,962</b>
<b>Scenario 2 (PC by 2020)</b>					
A	<b>Boyne Tannum Aquatic Centre - Concept 1 - 3 Hampton Drive</b>				
B	Demolition	4,292	m2	54	232,310
C	Bulk Earthworks	3,192	m2	14	44,680
D	1&2. Entry & Offices	0	m2	2,500	0
E	3.Amenities	0	m2	2,900	0
F	4. Cafe	0	m2	3,200	0
G	5. Gym Sauna & Spa	580	m2	2,802	1,625,028
H	6. Lifeguard & First Aid Office	133	m2	1,800	239,832
I	7. Swim Meet Club	128	m2	1,500	191,625
J	8. Storage & Services	237	m2	800	189,440
K	9. Bleachers	120	m2	850	102,000
L	10.Pool - 25m - 6 Lane	1	no	1,600,000	1,600,000
M	11. Pool - 50m - 8 Lane	0	no	4,000,000	0
N	12. Hydrotherapy Pool	0	no	618,000	0
O	12. Hydrotherapy Pool Enclosure	0	m2	2,000	0
P	13. Kids Pool Splash pad including softfall surface, fountains, water play equipment, activity tower etc, hydraulic and filtration equipment	0	m2	3,900	0
Q	14. BBQ Facilities	0	m2	220	0
R	<u>External works</u>				
S	Carpark including bitumen, storm water drainage, minimal lighting.	1,403	m2	180	252,540
T	New dropoff	0	m2	220	0
U	Mesh Fencing	146	m	180	26,280
V	Landscaping	1	no	283,600	283,600
W	Shading	1	no	555,565	555,565
X	External Services including drainage, water supply, electrical services, external lighting etc.	3,192	Prov	46	146,189
Y	Location Factor	10	%	5,489,088	548,909
	<b>Sub Total</b>				<b>6,037,997</b>
Z	Design Development Contingency/Risk	10	%		603,800
AA	Preliminaries	13	%		863,434
AB	Margin	5	%		375,682
AC	Escalation	3	%	7,880,912	236,427
	<b>Construction Cost</b>				<b>8,117,339</b>
AD	Consultants Fees	12	%		974,081
AE	Client Costs - Excluded		Excl		



**Detailed Breakdown**

<b>Project:</b> Boyne Tannum Aquatic Centre	<b>Details:</b> Feasibility Cost Plan
<b>Building:</b> Concept 1 - Hampton Drive	

Code	Description	Quantity	Unit	Rate	Total
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**Scenario 2 (PC by 2020)** *(Continued)*

AF	Project Contingency	10	%		909,763
	<b>Project Costs</b>				<b>10,001,183</b>
	<b>Subtotal Scenario 2 (PC by 2020)</b>				<b>10,001,183</b>

**Scenario 3 (PC by 2025)**

<b>A Boyne Tannum Aquatic Centre - Concept 1 - 3 Hampton Drive</b>					
B	Demolition	10,210	m2	9	96,420
C	Bulk Earthworks	8,384	m2	14	117,400
D	1&2. Entry & Offices	0	m2	2,500	0
E	3.Amenities	0	m2	2,900	0
F	4. Cafe (Install kitchen)	135	m2	741	100,244
G	5. Gym Sauna & Spa	0	m2	2,802	0
H	6. Lifeguard & First Aid Office	0	m2	1,800	0
I	7. Swim Meet Club	0	m2	1,500	0
J	8. Storage & Services	0	m2	800	0
K	9. Bleachers	0	m2	850	0
L	10.Pool - 25m - 6 Lane	0	no	1,600,000	0
M	11. Pool - 50m - 8 Lane	0	no	4,000,000	0
N	12. Hydrotherapy Pool	1	no	618,000	618,000
O	12. Hydrotherapy Pool Enclosure	641	m2	2,000	1,282,400
P	13. Kids Pool Splash pad including softfall surface, fountains, water play equipment, activity tower etc, hydraulic and filtration equipment	316	m2	3,900	1,231,114
Q	14. BBQ Facilities	159	m2	220	34,873
R	<b>External works</b>				
S	Carpark	2,507	m2	180	451,260
T	New dropoff	0	m2	220	0
U	mesh fencing and Gates	128	m	180	23,040
V	Landscaping	1	no	838,159	838,159
W	Shading	1	no	568,846	568,846
X	External Services including drainage, water supply, electrical services, external lighting etc.	8,384	Prov	46	383,975
Y	Location Factor	10	%	5,745,732	574,573
	<b>Sub Total</b>				<b>6,320,305</b>
Z	Design Development Contingency/Risk	10	%		632,031
AA	Preliminaries	13	%		903,804
AB	Margin	5	%		393,227
AC	Escalation (3% per year for 5 years)	1	Item	1,313,910	1,313,910
	<b>Construction Cost</b>				<b>9,563,277</b>

**Detailed Breakdown**

<b>Project:</b> Boyne Tannum Aquatic Centre	<b>Details:</b> Feasibility Cost Plan
<b>Building:</b> Concept 1 - Hampton Drive	

Code	Description	Quantity	Unit	Rate	Total
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**Scenario 3 (PC by 2025)** *(Continued)*

AD	Consultants Fees		12	%	1,147,593
AE	Client Costs - Excluded			Excl	
AF	Project Contingency		10	%	1,070,957
	<b>Project Costs</b>				<b>11,781,827</b>
	<b>Subtotal Scenario 3 (PC by 2025)</b>				<b>11,781,827</b>



Cost Summary



Project: Boyne Tannum Aquatic Centre		Details: Feasibility Cost Plan		
Building: Concept2 - 10 Canoe Point Drive				
Description	Quantity	Unit	Rate	Total
<b>Boyne Tannum Aquatic Centre - Concept 2 - 10 Canoe Point Drive</b>				
Scenario 1 (PC by 2020)	11,528		1,813	20,896,685
Scenario 2 (PC by 2020)	1,940		4,217	8,179,483
Scenario 3 (PC by 2025)	7,441		1,595	11,871,114
<b>Project Costs</b>	<b>20,908</b>	<b>m2</b>	<b>1,958</b>	<b>40,947,283</b>
<b>Assumptions</b>				
- We assume the project will be procured using a competitive tender process				
- we have assumed ceiling fans throughout with limited split units to only to office and gym area				
- we have allowed for demolitions of the existing buildings and building new in close vicinity. Costs do not included land costs				
- We have assumed service connections are at the boundary of the site.				
- The scope and extent of architectural finishes and engineering services have largely been assumed as no specifications have been submitted.				
- We have assumed all excavations will be reused on site.				
<b>Exclusions</b>				
- Aluminum seating to seating tiers				
- Gym equipment				
- Wave machine				
- Road or intersection upgrades				
- Client direct costs				
- abnormal ground conditions not listed				
- contaminated land				
- removal of hazardous materials				
- Works outside the boundary of the site				
- Legal costs				
- Operation and maintenance costs are excluded.				
- Stamp duties on leases are excluded.				
- Council fees and charges are excluded				
- Marketing and advertising costs are excluded.				
- Goods and Service Tax is excluded.				
- Arborist Consultant Fees are excluded				
- Tenant fit-out works such as equipment, AV and IT are excluded.				
- Art works are excluded.				
- Surgery to existing trees/flora are excluded				
<b>Exclusions</b>				

Cost Summary



Project: Boyne Tannum Aquatic Centre		Details: Feasibility Cost Plan		
Building: Concept2 - 10 Canoe Point Drive				
Description	Quantity	Unit	Rate	Total
- Gym equipment				
- Wave machine				
- Road or intersection upgrades				
- Client direct costs				
- abnormal ground conditions not listed				
- contaminated land				
- removal of hazardous materials				
- Works outside the boundary of the site				
- GST				



**Detailed Breakdown**


Project: Boyne Tannum Aquatic Centre		Details: Feasibility Cost Plan			
Building: Concept 2 - 10 Canoe Point Drive					
Code	Description	Quantity	Unit	Rate	Total
<b>Scenario 1 (PC by 2020)</b>					
A	<b>Boyne Tannum Aquatic Centre - Concept 2 - 10 Canoe Point Drive</b>				
B	Demolition	11,528	m2	19	216,317
C	Bulk Earthworks	11,528	m2	40	461,120
D	1&2. Entry & Offices	133	m2	2,500	332,150
E	3.Amenities	647	m2	2,900	1,875,111
F	4. Cafe	152	m2	2,500	379,775
G	5. Gym Sauna & Spa	0	m2	2,802	0
H	6. Lifeguard & First Aid Office	0	m2	1,800	0
I	7. Swim Meet Club	0	m2	1,500	0
J	8. Storage & Services	0	m2	800	0
K	9. Bleachers	131	m2	850	111,350
L	10.Pool - 25m - 6 Lane	0	no	1,600,000	0
M	11. Pool - 50m - 8 Lane	1	no	4,000,000	4,000,000
N	12. Hydrotherapy Pool	0	no	618,000	0
O	12. Hydrotherapy Pool Enclosure	0	no	2,000	0
P	13. Kids Pool Splash pad including soft fall surface, fountains, water play equipment, activity tower etc, hydraulic and filtration equipment	0	m2	3,900	0
Q	14. BBQ Facilities	0	m2	220	0
R	Build new facilities that have been demolished - single storey, standard finishes no air conditioning excluding furniture and fittings	1,024	m2	1,800.00	1,843,236
S	<b>External works</b>				
T	Carpark including bitumen, storm water drainage, minimal lighting.	4,111	m2	180	739,926
U	New dropoff	0	m2	220	0
V	Mesh Fencing and Gates	243	m	180	43,740
W	Landscaping	1	no	706,792	706,792
X	Shading	1	no	334,766	334,766
Y	External Services including drainage, water supply, electrical services, external lighting etc.	11,528	Prov	46	527,966
Z	Location Factor	10	%	11,572,250	1,157,225
	Sub Total				12,729,475
AA	Design Development Contingency/Risk	10	%		1,272,947
AB	Preliminaries	12	%		1,680,291
AC	Margin	5	%		784,556
AD	Escalation to mid of construction Oct 2019	3.00	%	16,467,269	494,018
	Construction Cost				16,961,287
AE	Consultants Fees	12	%		2,055,354
AF	Client Costs - Excluded		Excl		

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**Detailed Breakdown**


Project: Boyne Tannum Aquatic Centre		Details: Feasibility Cost Plan			
Building: Concept 2 - 10 Canoe Point Drive					
Code	Description	Quantity	Unit	Rate	Total
<b>Scenario 1 (PC by 2020)</b>					
AG	Project Contingency	10	%		1,900,044
	Project Costs				20,896,685
	Subtotal Scenario 1 (PC by 2020)				20,896,685
<b>Scenario 2 (PC by 2020)</b>					
<b>Boyne Tannum Aquatic Centre - Concept 2 - 10 Canoe Point Drive</b>					
B	Demolition	1,940	m2	14	28,027
C	Bulk Earthworks	1,940	m2	40	77,600
D	1&2. Entry & Offices	71	m2	2,500	178,100
E	3.Amenities	0	m2	2,900	0
F	4. Cafe	0	m2	3,200	0
G	5. Gym Sauna & Spa	502	m2	2,802	1,406,353
H	6. Lifeguard & First Aid Office	77	m2	1,800	138,006
I	7. Swim Meet Club	107	m2	1,500	160,890
J	8. Storage & Services	213	m2	800	170,480
K	9. Bleachers	105	m2	850	89,250
L	10.Pool - 25m - 6 Lane	1	no	1,600,000	1,600,000
M	11. Pool - 50m - 8 Lane	0	no	4,000,000	0
N	12. Hydrotherapy Pool	0	no	618,000	0
O	12. Hydrotherapy Pool Enclosure	0	m2	2,000	0
P	13. Kids Pool Splash pad including soft fall surface, fountains, water play equipment, activity tower etc, hydraulic and filtration equipment	0	m2	3,900	0
Q	14. BBQ Facilities	0	m2	220	0
R	<b>External works</b>				
S	Carpark	256	m2	180	46,048
T	New dropoff	0	m2	220	0
U	Mesh Fencing	73	m	180	13,124
V	Landscaping	1	no	138,814	138,814
W	Shading	1	no	353,618	353,618
X	External Services including drainage, water supply, electrical services, external lighting etc.	1,940	Prov	46	88,834
Y	Location Factor	10	%	4,489,144	448,914
	Sub Total				4,938,058
Z	Design Development Contingency/Risk	10	%		493,806
AA	Preliminaries	13	%		706,142
AB	Margin	5	%		307,320
AC	Escalation	3	%	6,445,327	193,360
	Construction Cost				6,638,686

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## Detailed Breakdown



Project: Boyne Tannum Aquatic Centre		Details: Feasibility Cost Plan			
Building: Concept 2 - 10 Canoe Point Drive					
Code	Description	Quantity	Unit	Rate	Total
Scenario 2 (PC by 2020)					(Continued)
AD	Consultants Fees	12	%		796,642
AE	Client Costs - Excluded		Excl		
AF	Project Contingency	10	%		744,154
	Project Costs				8,179,483
	Subtotal Scenario 2 (PC by 2020)				8,179,483
Scenario 3 (PC by 2025)					
<b>A Boyne Tannum Aquatic Centre - Concept 2 - 10 Canoe Point Drive</b>					
B	Demolition	7,441	m2	11	83,849
C	Bulk Earthworks	7,441	m2	40	297,640
D	1&2. Entry & Offices	0	m2	2,500	0
E	3.Amenities	0	m2	2,900	0
F	4. Cafe (Install kitchen)	152	m2	658	99,941
G	5. Gym Sauna & Spa	0	m2	2,802	0
H	6. Lifeguard & First Aid Office	0	m2	1,800	0
I	7. Swim Meet Club	0	m2	1,500	0
J	8. Storage & Services	0	m2	800	0
K	9. Bleachers	0	m2	850	0
L	10.Pool - 25m - 6 Lane	0	no	1,600,000	0
M	11. Pool - 50m - 8 Lane	0	no	4,000,000	0
N	12. Hydrotherapy Pool	1	no	618,000	618,000
O	12. Hydrotherapy Pool Enclosure	607	m2	2,000	1,214,160
P	13. Kids Pool Splash pad including soft fall surface, fountains, water play equipment, activity tower etc, hydraulic and filtration equipment	314	m2	3,900	1,226,317
Q	14. BBQ Facilities	157	m2	220	34,604
<b>External works</b>					
R					
S	Carpark	3,118	m2	180	561,159
T	New dropoff	0	m2	220	0
U	Boundary Walls, Fencing and Gates	159	m	180	28,627
V	Landscaping	1	no	672,373	672,373
W	Shading	1	no	611,829	611,829
X	External Services including drainage, water supply, electrical services, external lighting etc.	7,441	Prov	46	340,777
Y	Location Factor	10	%	5,789,277	578,928
	Sub Total				6,368,205
Z	Design Development Contingency/Risk	10	%		636,820
AA	Preliminaries	13	%		910,653
AB	Margin	5	%		396,204

## Detailed Breakdown



Project: Boyne Tannum Aquatic Centre		Details: Feasibility Cost Plan			
Building: Concept 2 - 10 Canoe Point Drive					
Code	Description	Quantity	Unit	Rate	Total
Scenario 3 (PC by 2025)					(Continued)
AC	Escalation (3% per year for 5 years)	1	item	1,323,867	1,323,867
	Construction Cost				9,635,750
AD	Consultants Fees	12	%		1,156,290
AE	Client Costs - Excluded		Excl		
AF	Project Contingency	10	%		1,079,074
	Project Costs				11,871,114
	Subtotal Scenario 3 (PC by 2025)				11,871,114



Cost Summary



Project: Boyne Tannum Aquatic Centre		Details: Feasibility Cost Plan		
Building: Concept 3 - Coronation Drive				
Description	Quantity	Unit	Rate	Total
<b>Boyne Tannum Aquatic Centre - Concept 3 - Coronation Drive</b>				
Scenario 1 (PC by 2020)	8,207	m2	2,049	16,817,783
Scenario 2 (PC by 2020)	2,609	m2	3,313	8,644,848
Scenario 3 (PC by 2025)	6,339	m2	1,782	11,296,944
<b>Project Costs</b>	<b>17,155</b>	<b>m2</b>	<b>2,143</b>	<b>36,759,576</b>
<b>Assumptions</b>				
- We assume the project will be procured using a competitive tender process				
- we have assumed ceiling fans throughout with limited split units to only to office and gym area				
- we have allowed for demolitions of the existing buildings and building new in close vicinity. Costs do not included land costs				
- We have assumed service connections are at the boundary of the site.				
- The scope and extent of architectural finishes and engineering services have largely been assumed as no specifications have been submitted.				
- We have assumed all excavations will be reused on site.				
<b>Exclusions</b>				
- Aluminum seating to seating tiers				
- Gym equipment				
- Wave machine				
- Road or intersection upgrades				
- Client direct costs				
- abnormal ground conditions not listed				
- contaminated land				
- removal of hazardous materials				
- Works outside the boundary of the site				
- Legal costs				
- Operation and maintenance costs are excluded.				
- Stamp duties on leases are excluded.				
- Council fees and charges are excluded				
- Marketing and advertising costs are excluded.				
- Goods and Service Tax is excluded.				
- Arborist Consultant Fees are excluded				
- Tenant fit-out works such as equipment, AV and IT are excluded.				
- Art works are excluded.				
- Surgery to existing trees/flora are excluded				

Detailed Breakdown



Project: Boyne Tannum Aquatic Centre		Details: Feasibility Cost Plan			
Building: Concept 3 - Coronation Drive					
Code	Description	Quantity	Unit	Rate	Total
<b>Scenario 1 (PC by 2020)</b>					
A	<b>Boyne Tannum Aquatic Centre - Concept 3 - Coronation Drive</b>				
B	Demolition	12,382	m2	8	104,463
C	Bulk Earthworks	8,207	m2	60	492,400
D	1&2. Entry & Offices	232	m2	2,500	579,525
E	3.Amenities	529	m2	2,900	1,533,172
F	4. Cafe	109	m2	2,500	273,075
G	5. Gym Sauna & Spa	0	m2	2,802	0
H	6. Lifeguard & First Aid Office	0	m2	1,800	0
I	7. Swim Meet Club	0	m2	1,500	0
J	8. Storage & Services	0	m2	800	0
K	9. Bleachers	354	m2	850	300,900
L	10.Pool - 25m - 6 Lane	0	no	1,600,000	0
M	11. Pool - 50m - 8 Lane	1	no	4,000,000	4,000,000
N	12. Hydrotherapy Pool	0	no	618,000	0
O	12. Hydrotherapy Pool Enclosure	0	m2	2,000	0
P	13. Kids Pool Splash pad including soft fall surface, fountains, water play equipment, activity tower etc, hydraulic and filtration equipment	0	m2	3,900	0
Q	14. BBQ Facilities	0	m2	220	0
R	<b>External works</b>				
S	Carpark including bitumen, storm water drainage, minimal lighting.	2,514	m2	180	452,524
T	New dropoff	329	m2	220	72,426
U	Mesh Fencing and Gates	338	m	180	60,871
V	Landscaping	1	no	825,527	825,527
W	Shading	1	no	242,569	242,569
X	External Services including drainage, water supply, electrical services, external lighting etc.	8,207	Prov	46	375,869
Y	Location Factor	10	%	9,313,320	931,332
	<b>Sub Total</b>				<b>10,244,652</b>
Z	Design Development Contingency/Risk	10	%		1,024,465
AA	Preliminaries	12	%		1,352,294
AB	Margin	5	%		631,491
AC	Escalation to mid of construction Oct 2019	3.00	%	13,252,902	397,587
	<b>Construction Cost</b>				<b>13,650,489</b>
AD	Consultants Fees	12	%		1,638,059
AE	Client Costs - Excluded		Excl		
AF	Project Contingency	10	%		1,529,235
	<b>Project Costs</b>				<b>16,817,783</b>





**Detailed Breakdown**

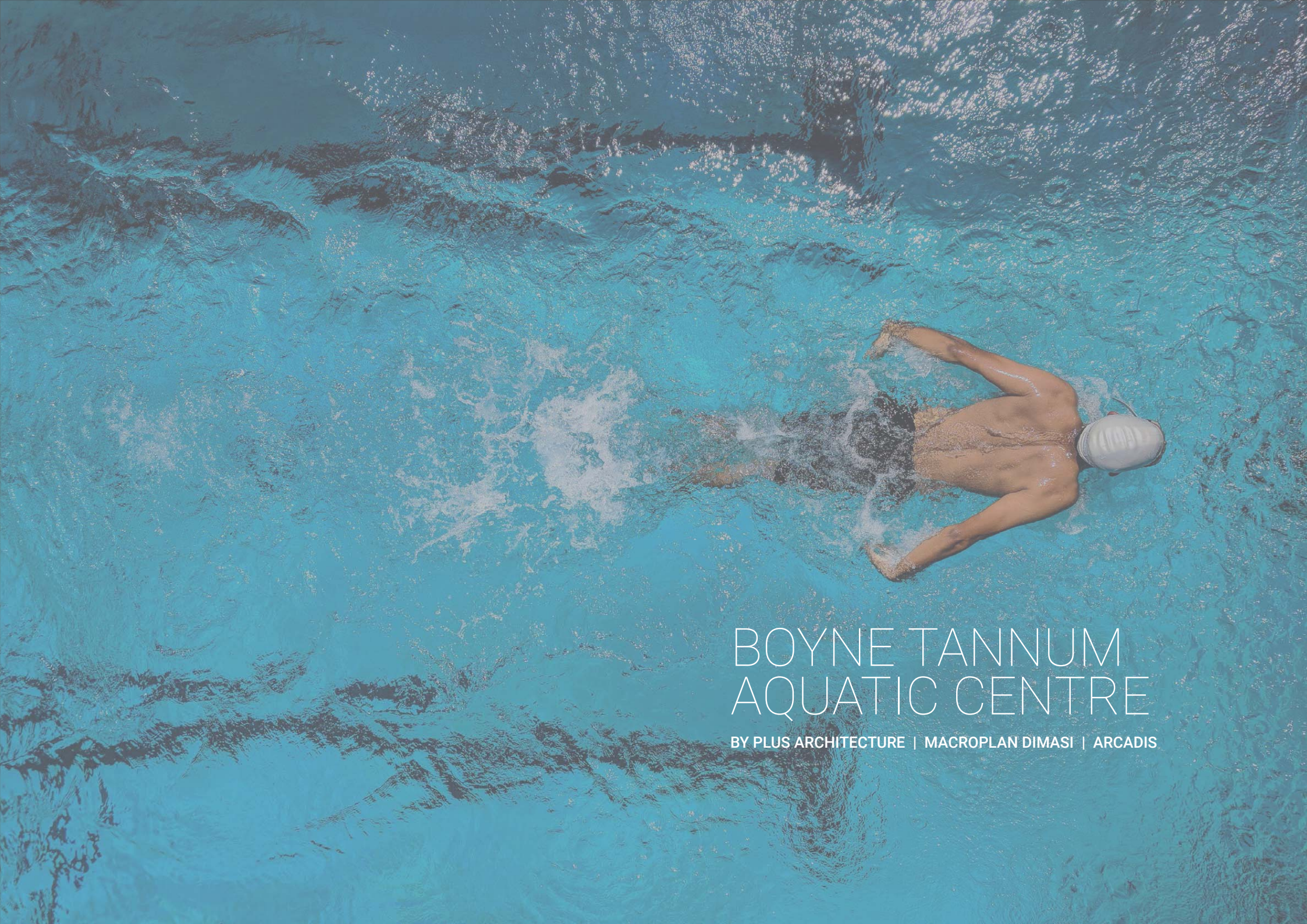

Project: Boyne Tannum Aquatic Centre		Details: Feasibility Cost Plan			
Building: Concept 3 - Coronation Drive					
Code	Description	Quantity	Unit	Rate	Total
<b>Scenario 1 (PC by 2020)</b>					<i>(Continued)</i>
Subtotal Scenario 1 (PC by 2020)					<b>16,817,783</b>
<b>Scenario 2 (PC by 2020)</b>					
<b>A Boyne Tannum Aquatic Centre - Concept 3 - Coronation Drive</b>					
B	Demolition	4,068	m2	13	51,044
C	Bulk Earthworks	2,610	m2	60	156,600
D	1&2. Entry & Offices	0	m2	2,500	0
E	3.Amenities	0	m2	2,900	0
F	4. Cafe	0	m2	3,200	0
G	5. Gym Sauna & Spa	604	m2	2,802	1,691,457
H	6. Lifeguard & First Aid Office	91	m2	1,800	163,134
I	7. Swim Meet Club	56	m2	1,500	83,655
J	8. Storage & Services	98	m2	800	78,696
K	9. Bleachers	106	m2	850	90,100
L	10.Pool - 25m - 6 Lane	1	no	1,600,000	1,600,000
M	11. Pool - 50m - 8 Lane	0	no	4,000,000	0
N	12. Hydrotherapy Pool	0	no	618,000	0
O	12. Hydrotherapy Pool Enclosure	0	m2	2,000	0
P	13. Kids Pool Splash pad including softfall surface, fountains, water play equipment, activity tower etc, hydraulic and filtration equipment	0	m2	3,900	0
Q	14. BBQ Facilities	0	m2	220	0
<b>External works</b>					
R					
S	Carpark A	0	m2	180	0
T	New dropoff	0	m2	220	0
U	Mesh Fencing	154	m	180	27,680
V	Landscaping	1	no	334,195	334,195
W	Shading	1	no	348,518	348,518
X	External Services including drainage, water supply, electrical services, external lighting etc.	2,609	Prov	46	119,508
Y	Location Factor	10	%	4,744,586	474,459
<b>Sub Total</b>					<b>5,219,045</b>
Z	Design Development Contingency/Risk	10	%		521,905
AA	Preliminaries	13	%		746,323
AB	Margin	5	%		324,784
AC	Escalation	3	%	6,812,057	204,362
<b>Construction Cost</b>					<b>7,016,418</b>
AD	Consultants Fees	12	%		841,970
AE	Client Costs - Excluded		Excl		

**Detailed Breakdown**


Project: Boyne Tannum Aquatic Centre		Details: Feasibility Cost Plan			
Building: Concept 3 - Coronation Drive					
Code	Description	Quantity	Unit	Rate	Total
<b>Scenario 2 (PC by 2020)</b>					<i>(Continued)</i>
AF	Project Contingency	10	%		786,460
<b>Project Costs</b>					<b>8,644,848</b>
<b>Subtotal Scenario 2 (PC by 2020)</b>					<b>8,644,848</b>
<b>Scenario 3 (PC by 2025)</b>					
<b>A Boyne Tannum Aquatic Centre - Concept 3 - Coronation Drive</b>					
B	Demolition	9,733	m2	9	88,266
C	Bulk Earthworks	6,339	m2	60	380,360
D	1&2. Entry & Offices	0	m2	2,500	0
E	3.Amenities	0	m2	2,900	0
F	4. Cafe (Install kitchen)	109	m2	917	100,211
G	5. Gym Sauna & Spa	0	m2	2,802	0
H	6. Lifeguard & First Aid Office	0	m2	1,800	0
I	7. Swim Meet Club	0	m2	1,500	0
J	8. Storage & Services	0	m2	800	0
K	9. Bleachers	0	m2	850	0
L	10.Pool - 25m - 6 Lane	0	no	1,600,000	0
M	11. Pool - 50m - 8 Lane	0	no	4,000,000	0
N	12. Hydrotherapy Pool	1	no	618,000	618,000
O	12. Hydrotherapy Pool Enclosure	706	m2	2,000	1,412,820
P	13. Kids Pool Splash pad including softfall surface, fountains, water play equipment, activity tower etc, hydraulic and filtration equipment	312	m2	3,900	1,215,436
Q	14. BBQ Facilities	154	m2	220	33,804
<b>External works</b>					
R					
S	Carpark	2,978	m2	180	536,105
T	New dropoff	0	m2	220	0
U	Mesh fencing and Gates	174	m	180	31,252
V	Landscaping	1	no	457,214	457,214
W	Shading	1	no	345,481	345,481
X	External Services including drainage, water supply, electrical services, external lighting etc.	6,339	Prov	46	290,307
Y	Location Factor	10	%	5,509,256	550,926
<b>Sub Total</b>					<b>6,060,182</b>
Z	Design Development Contingency/Risk	10	%		606,018
AA	Preliminaries	13	%		866,606
AB	Margin	5	%		377,060
AC	Escalation (3% per year for 5 years)	1	Item	1,259,837	1,259,837
<b>Construction Cost</b>					<b>9,169,703</b>







# BOYNE TANNUM AQUATIC CENTRE

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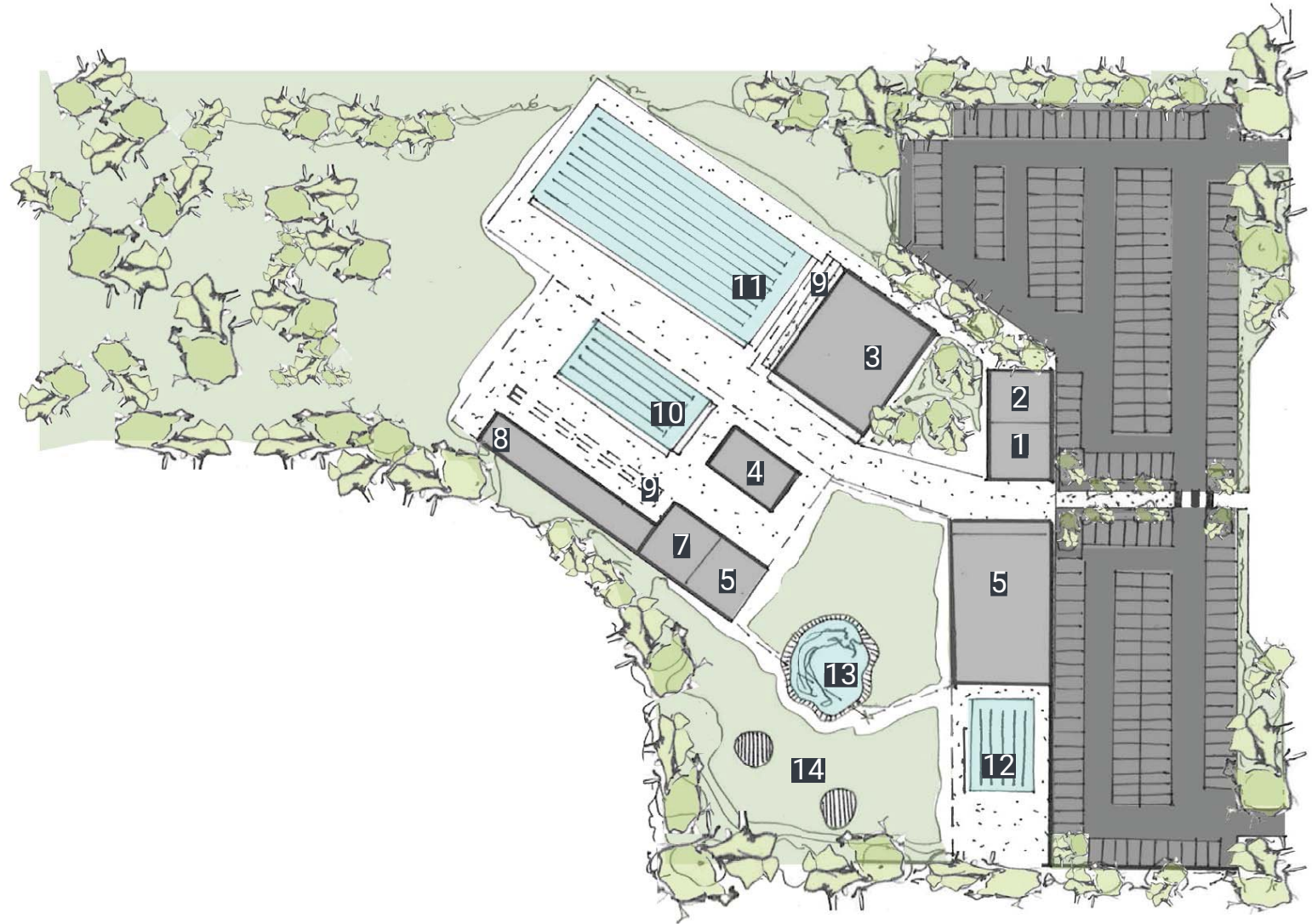


# MASTERPLAN

## CONCEPT SKETCH

### LEGEND

1. ENTRY
2. ENTRY OFFICES
3. AMENITIES
4. CAFE
5. GYM, SAUNA AND SPA
6. LIFEGUARD AND FIRST AID OFFICE
7. SWIM MEET CLUB
8. STORAGE AND SERVICES
9. BLEACHERS
10. 25M LEARN TO SWIM POOL
11. 50M SWIMMING POOL
12. HYDROTHERAPY POOL
13. KIDS POOL
14. BBQ FACILITIES

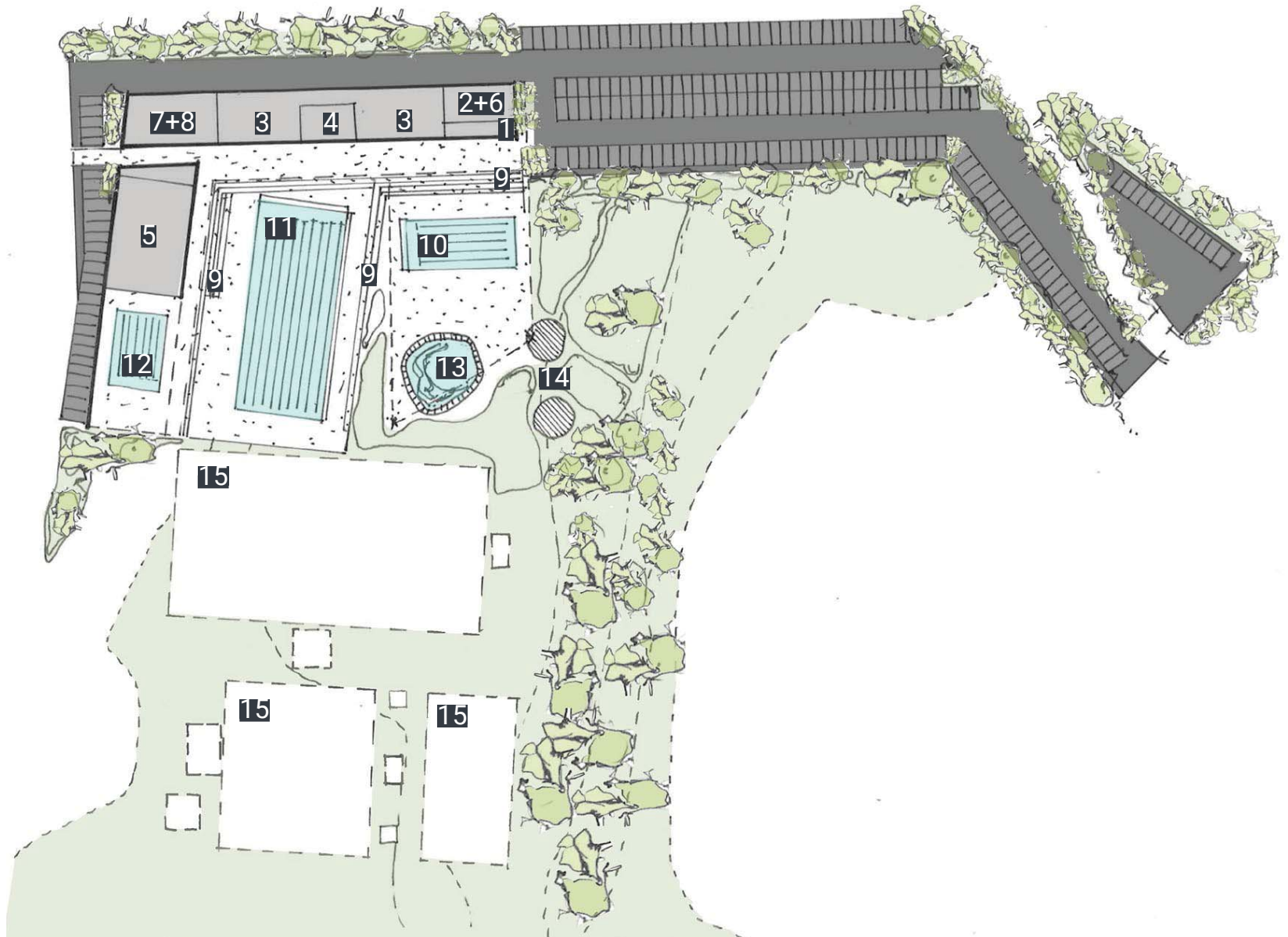


# MASTERPLAN

## CONCEPT SKETCH

### LEGEND

- 1. ENTRY
- 2. ADMIN OFFICES
- 3. AMENITIES
- 4. CAFE
- 5. GYM, SAUNA AND SPA
- 6. LIFEGUARD AND FIRST AID OFFICE
- 7. SWIM MEET CLUB
- 8. STORAGE AND SERVICES
- 9. BLEACHERS
- 10. 25M LEARN TO SWIM POOL
- 11. 50M SWIMMING POOL
- 12. HYDROTHERAPY POOL
- 13. KIDS POOL
- 14. BBQ FACILITIES
- 15. EXISTING SPORTING FACILITIES



SCALE 1:2000 @ A4

BOYNE TANNUM AQUATIC CENTRE | OCTOBER 2018



# MASTERPLAN

## CONCEPT SKETCH

### LEGEND

1. ENTRY
2. ENTRY OFFICES
3. AMENITIES
4. CAFE
5. GYM, SAUNA AND SPA
6. LIFEGUARD AND FIRST AID OFFICE
7. SWIM MEET CLUB
8. STORAGE AND SERVICES
9. TERRACED BLEACHERS
10. 25M LEARN TO SWIM POOL
11. 50M SWIMMING POOL
12. HYDROTHERAPY POOL
13. KIDS POOL
14. BBQ FACILITIES



SCALE 1:2000 @ A4  
BOYNE TANNUM AQUATIC CENTRE | OCTOBER 2018





# BOYNE TANNUM AQUATIC CENTRE

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