



FINAL REPORT

BUSINESS CASE FOR A NEW AQUATIC FACILITY Part Two: The Business Case



April 2021





TABLE OF CONTENTS

1.	STUDY OBJECTIVES	6
2.	VISION	7
3.	OPTIONS	9
4.	OPTIONS ANALYSIS	9
5.	POOL HEATING	19
6.	DESIGN BRIEF	20
7.	CONCEPT DESIGN	23
8.	PROPOSED FEES AND CHARGES	27
9.	CAPITAL COST	28
10.	OPERATING COST	32
11.	OPTIONS ANALYSIS	43
12.	LIFECYCLE COST	45
13.	RISK ASSESSMENT	46
14.	IMPLEMENTATION	53
15.	FUNDING	54
16.	RECOMMENDATIONS	59

FIGURES

Figure 1	Strategic Asset Management Framework	6
Figure 2	Kalamunda Foothills - Area Not Serviced by Aquatic Centre	8
Figure 3	Preliminary Options Analysis for a New Aquatic Centre	9
Figure 4	Hills vs Foothills Age Profile Over Time	10
Figure 5	Hills vs Foothills Population Growth	16
Figure 6	KWP Option 1 a)	24
Figure 7	KWP Option 1 b)	25
Figure 8	Foothill's Community Hub - Indicative Layout	26
Figure 9	Metropolitan Leisure Centre Utilisation and Subsidy Trends	34
Figure 10	Metropolitan Leisure Centre Operational Subsidy Trends	34
Figure 11	Risk Matrix	46



TABLES

Table 1 Community Support for a New Aquatic Centre.....	7
Table 2 Pool Operating Conditions.....	20
Table 3 Order of Probable Cost for Pool Heating.....	20
Table 4 Indicative Design Brief.....	22
Table 5 Indicative Fees and Charges.....	27
Table 6 KWP Option 1 a) Order of Probable Cost.....	28
Table 7 KWP Option 1 b) Order of Probable Cost.....	29
Table 8 Foothill's Aquatic and Fitness Centre Order of Probable Cost.....	30
Table 9 Foothill's Community Hub Order of Probable Cost.....	31
Table 10 Benchmark Facility Provision Perth Metropolitan Facilities.....	32
Table 11 Benchmark and Performance Indicators Perth Metropolitan Facilities.....	33
Table 12 Aquatic Centre Operating Performance Summary.....	36
Table 13 Operating Assumptions.....	38
Table 14 Operating Income Projections.....	39
Table 15 Operating Expenditure Projections.....	40
Table 16 Lifecycle Cost Projections.....	45
Table 17 Development Risks.....	47
Table 18 Operational Risks.....	49
Table 19 Implementation Program for KWP.....	53
Table 20 Implementation Program for the Foothill's Facility.....	54
Table 21 Potential Infrastructure Capital Works Funding sources.....	55
Table 22 Potential Operating Cost Funding Sources.....	56
Table 23 Funding Source Case Study Venues.....	56
Table 24 Typical Funding Source Contributions.....	57



EXECUTIVE SUMMARY

The City of Kalamunda commissioned CCS Strategic in association with Gresley Abas Architects, Geoff Ninnes Fong and Partners Aquatic Engineers and NBQSS Quantity Surveyors to prepare a business case for a new Aquatic Facility in the City of Kalamunda.

This BUSINESS CASE report accompanies an earlier NEEDS ASSESSMENT report outlining the need for a new aquatic facility in the City of Kalamunda when the existing Kalamunda Water Park (KWP) ceases to be of service to the community. The needs assessment report reveals an emphatic case for new provision demonstrated by:

- Overwhelming community sentiment lending support for a new aquatic facility.
- Alignment with the City's Strategic Community Plan.
- Proven Health and Wellbeing benefits from aquatic facility use.
- Minimal competition and limited alternatives affecting the City residents.
- Community facility planning guidelines indicating Kalamunda (foothills) is underserved.

The study also identified a series of key elements to be embraced by the provision of a new aquatic facility including:

- It must have heated water.
- It must be open all year round.
- It must be indoors.
- It must be accessible to all.

Design considerations were also identified from stakeholder feedback which revealed the following priorities:

Priority function		Example activity
1	Fitness	Lap swim and gym
2	Safety	Learn to Swim, RLSS Qualls
3	Sport	Swimming, Water Polo, Diving, Synchro, UWH
4	Recreation	Water play, cooling off
5	Entertainment	Rides and slides

Recognition of the need for aquatic facilities identified in the Needs Assessment report, especially the need for access for all and the underservicing of the foothills area has triggered the study to consider the development of two aquatic facilities.

One facility is proposed for the residents of the Hills suburbs, to replace the ageing Kalamunda Water Park facilities, of which various options are explored throughout this report.

A second facility is proposed for the residents of the foothills, offering indoor heated water and year-round operations, situated opposite the new High Wycombe Train Station.

There is an opportunity for the foothills aquatic centre to be included as part of a Community Hub in High Wycombe. This Hub concept proposes the development of a fitness centre supported by a crèche and kiosk / merchandise outlet, a full service library, a community centre with an arts and cultural bias offering main and lesser halls, artists' studios and workshop spaces, a radio studio and an outdoor performance space, a child care centre, co-working office spaces and



some tenantable areas. These elements are consistent with infrastructure planning for the High Wycombe South area, though the exact scale and timing of facilities has yet to be established by the Council.

There is an opportunity for the Hub project to be initiated as soon as possible noting that the opening of the train station is scheduled for 2022. Development of the Hub, with a projected opening as soon as 2025, would provide a significant attraction and incentive for potential residents and business owners to establish in the High Wycombe South area. This would help spur sales to achieve Development WA's objectives, activate the TOD to achieve METRONET'S objectives and provide the City of Kalamunda with a larger and earlier population and rate base serviced by high quality community facilities.

The focus of this report is, however, restricted to the Aquatic and Fitness Centre components.

A separate business case and master plan for the foothills Community Hub is currently being prepared by METRONET as a key activator in the transit oriented development (TOD) surrounding the station. The project working party for this master planning study includes DevelopmentWA and the City of Kalamunda.

The recommended approach is to prioritise the development of the foothills aquatic centre facility and to develop the proposed Hub in full as this will service the largest portion of the City's residents now and into the future. The redevelopment of the KWP site is recommended to be restricted to refurbishment of the amenity buildings and the provision of a new outdoor 50m pool and learn to swim pools, heated and operated seasonally. This would reduce the financial burden on the City and its rate payers in comparison to a full year operation. Closing the pool in the coldest months when patronage is lowest and operating costs are highest, provides large operating cost savings.

The order of probable cost for this approach is as follows:

Recommended Development	Kalamunda Water Park Option 1 a)	Foothills Aquatic Centre Option 2 b)
Construction cost	\$7,555,946	\$31,907,585
Anticipated opening	*2024	*2025
Projected Annual operating loss (range)	\$579,186 - \$719,129	\$771,838 - \$1,327,953
Projected Annual attendance	45,000 – 60,000	370,000 – 415,000

*Timeframes are dependent on the City receiving grants and advocacy funding. (Refer sect.14 Implementation and sect.15 Funding)

If the two facility model shown above is not deemed feasible for the City, then the City should pursue the foothills aquatic facility option only.



1. STUDY OBJECTIVES

Kalamunda Water Park (KWP), comprising outdoor seasonal swimming pools and water slides, is owned by the City of Kalamunda and operated under a management agreement by Belgravia Leisure. The facility is nearing the end of its useful life and the management agreement with Belgravia Leisure (the operator of the facility) expires in 2022.

Accordingly, the City of Kalamunda is seeking to determine the appropriate location, level of amenity and cost to service the current and future aquatic needs of the community with a view to providing a replacement facility¹.

Part One of this study produced a NEEDS ASSESSMENT report which identified high need, strong demand and clearly expressed community expectations and aspirations for aquatic facility provision in the City of Kalamunda.

The Needs Assessment report recommended the City proceed with a replacement of facilities (seasonal outdoor heated, indoor heated and tourist attraction) on the Kalamunda Water Park site and to explore the development of an aquatic centre in the foothills as part of a suite of community facilities in the vicinity of the High Wycombe Train Station.

This report articulates the business case behind the proposed two facility development. The format used in this report makes reference to the WA Government's Department of Treasury Strategic Asset Management Framework (SAMF) for Business Case preparation.

¹ Council resolution OCM23/2013

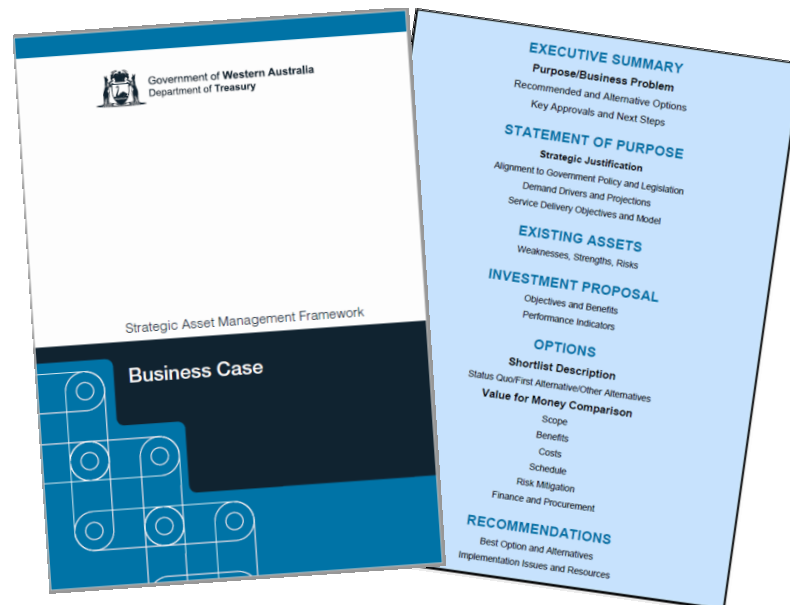


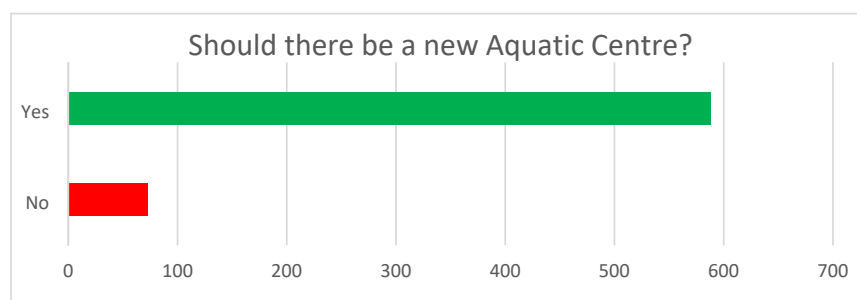
Figure 1 Strategic Asset Management Framework

2. VISION

In the context of a failing facility at KWP, the needs assessment report delivered an emphatic statement confirming community need for a new aquatic facility in the City. It reported five clear measures:

1. Overwhelming community sentiment – survey and workshops

Table 1 Community Support for a New Aquatic Centre



2. Alignment with the City's Strategic Community Plan

- To invest in recreation facilities and community hubs to connect and maximise the wellbeing of the community
- Marketing activities, targeting recreation, agribusiness and tourism, proposed for the hills

3. Proven Health and Wellbeing benefits



- Physical activity improves physical and mental health
- Swimming is a whole-body exercise, suitable for all ages
- Swimming is useful for rehabilitation
- Swimming is fun and affordable
- Swimming is an essential life-skill in Australia

4. Minimal competition - Limited Alternatives other than KWP

The nearest public facility (Bilgoman) is 15km distant and only open seasonally. The nearest indoor heated year-round facilities (Belmont Oasis and Cannington Leisureplex) are roughly 18km away, a journey which will routinely take more than 20 minutes. This is generally unattractive unless the aquatic centre is a way point on a longer journey, such as travelling to and from work or school.

The following map prepared using the PLA WA² Community Facility Guidelines 2020 Mapping Portal for Perth and Peel, shows that the foothills area of the City of Kalamunda is both geographically isolated and underserved by aquatic facilities. The blue/grey shaded areas show the population catchments of existing facilities (represented by blue dots).

The residential areas of Maida Vale, High Wycombe, Forrestfield and Wattle Grove are all without ready access to an aquatic centre (within the red outline). This area represents the largest population within the City and area of greatest need for aquatic facilities.

² <https://uwa.maps.arcgis.com/apps/webappviewer/index.html?id=057e427ac6054d1d8a7bdefdfc066c10>

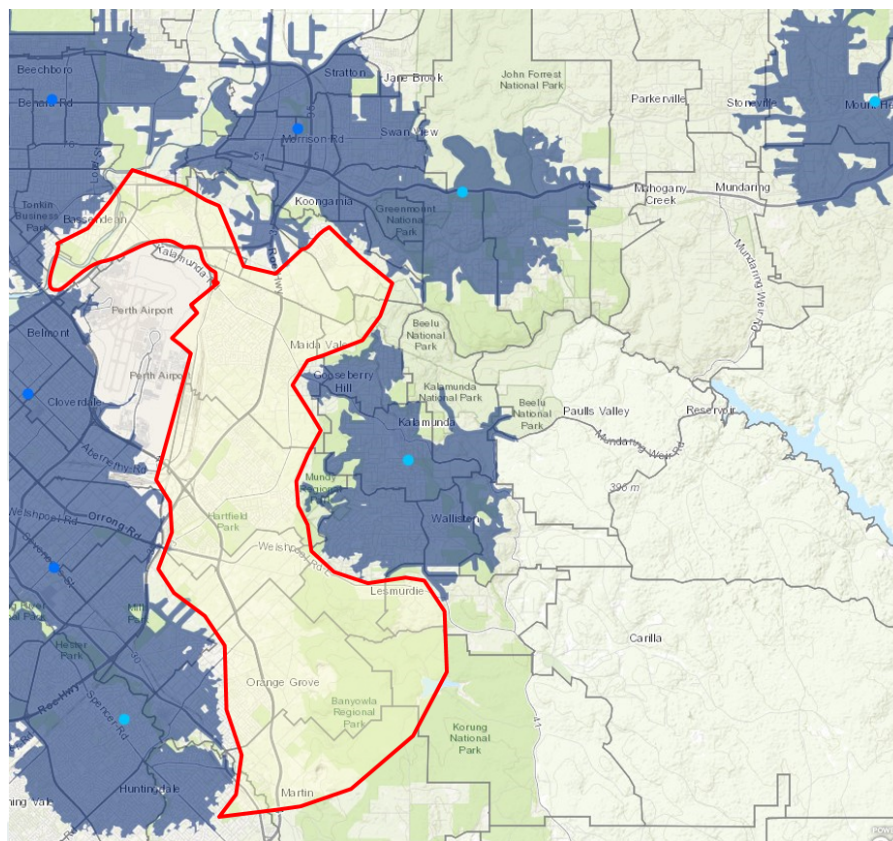


Figure 2 Kalamunda Foothills - Area Not Serviced by Aquatic Centre.

Conversely, if a replacement aquatic facility was not provided in the hills area, that population would become under-served. It is noted that residents already make use of alternative aquatic facilities in the City such as Maida Vale Swimming Pool, St Brigid's College Pool and Darling Range Sports College Pool. These are however, private facilities not available to the general public which require users to become a club member or program participant to gain entry.

If only one facility was provided in Kalamunda, part of the City would be underserved. An aquatic facility in the foothills would, by its very nature, be a new, modern facility offering contemporary amenities to the community 12 months of the year.

The recommended solution proposes two aquatic facilities for the City - one in the hills and one in the foothills.

This reflects both the changing population distribution within the City, with the foothills area projected to accommodate more than two thirds of the City's residents, and the desire to retain services and draw visitors to the hills area, identified as a strategic and economic driver for the City.

3. OPTIONS



With a focus on improved service delivery the needs assessment report reveals that Kalamunda residents were keen to achieve:

- Ready access to an aquatic facility in close proximity to home.
- Heated water calling for the provision of heated indoor facilities for learn to swim, hydrotherapy, water play and fitness swimming.
- Year-round access and extended operating hours to accommodate before and after work swimming.

The following graphic was prepared and presented for consideration of the options to provide a new aquatic facility.

Criterion	Development Options		
Scale	Neighbourhood	District	Regional
Location	Hills	Foothills	Both
50m pool	Indoor	Outdoor	Seasonal
Gym + fitness	None	Minor	Major
Water polo	No	In 50m	Separate
Diving	No	1m only	1m + 3m
Unique Attraction	None	Minor	Major
Project budget	\$15m-\$25m	\$30-45m	\$50m+

Legend: City Wide Hills Area Foothills Area

Figure 3 Preliminary Options Analysis for a New Aquatic Centre

These development options were workshopped internally, and the selected outcome is shown as applied in a city-wide context in orange, to the Hills in blue and to the Foothills in green. It is noted that these options were presented in a theoretical or philosophical context without reference to concept plans or financial implications.

The options are discussed more fully below.

4. OPTIONS ANALYSIS

4.1. Ready access - One or Two Facilities

The provision of only one aquatic centre, as is the current situation, was the first option to be fully explored. When the KWP was built in the mid 1960's the Kalamunda population was proportionally higher in the hills area. By 2041, there will be more than double the population living in the foothills to that living in the hills.

Additionally, the hills area has a much lower proportion of the population in the young adult (19-39) cohort and a significantly higher representation of older adults aged 65 plus. There are, and will continue to be, significantly more children in the foothills area.

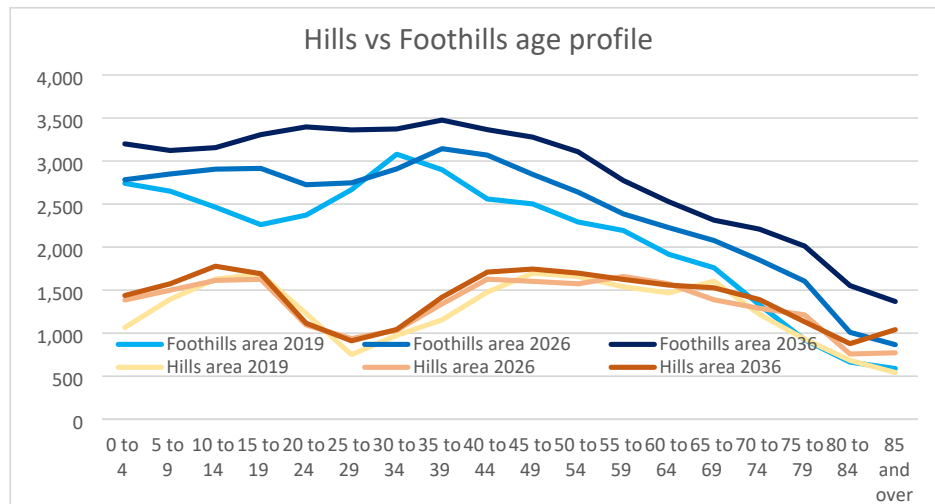


Figure 4 Hills vs Foothills Age Profile Over Time

Further public transport linking the hills and the foothills is limited to Transperth bus services. Current routes are fragmented, and timetables are infrequent making ready access difficult and time consuming. It is anticipated that there will be additional services linking the hills to the new train station (and return) and this will assist access to facilities throughout the community.

Noting the history of provision and the expectation within the hills community that they will continue to have access to a readily accessible 'local' aquatic facility, the recommended approach was to provide two facilities, one in the hills and one in the foothills.

4.2. Pool Only or Pool within a Community Hub

Key considerations in facility provision are how to best meet community need and optimise utilisation, viability and sustainability. Multi-purpose facilities and those adjacent to or integrated with other facilities often perform better, have higher foot traffic and reduced operating costs than stand-alone facilities. This aligns with government policy that favours multipurpose and multifunctional facility development.

In the case of the foothills facility there is the opportunity to combine the aquatic centre with a fitness centre, library, community centre and other community service facilities. A new community centre is proposed in the Community Infrastructure Strategy for Forrestfield North, now known as High Wycombe South.

The City's community facilities planning process proposes changes to the Forrestfield and High Wycombe Library operations and provision of a new facility in Forrestfield North. Both the proposed community centre and library are identified within the community purposes site of the Forrestfield North District Structure Plan (FNDSP). Combining Aquatic, Fitness, Library and Community Centre facilities together with Childcare and



other services will create a Community Hub in High Wycombe that is both multifunctional and multipurpose.

In the hills, the existing KWP facility is somewhat stand-alone, although an independent gymnastics training centre is located on the same site and a privately operated fitness centre is located immediately across the road. The need for the fitness centre as part of the KWP redevelopment is not evident due to the community already being serviced via a private provider in close proximity. The lack of a fitness centre as part of the aquatic centre operation significantly reduces its financial viability.

Performing Arts, Library and Community Centres are already provided in and around the Kalamunda town centre and there no plans afoot to relocate them. On this basis it is logical that the hills facility will remain largely stand-alone noting the ultimate tourist attraction element was proposed as a stage three development.

4.3. Facility Location

The second consideration was location. The site analysis is covered in Report One which identified nineteen (19) potential sites.

Seven (7) sites are held in private ownership and all were discounted due to the impost of land acquisition on the project budget and potential delays due to a land acquisition program. Only five (5) sites were deemed worthy of further consideration.

Those listed in darker font were recommended for further investigation.

- | | | |
|-----|------------|--|
| 1. | Hills | Kalamunda Water Park, Kalamunda |
| 2. | Hills | Kalamunda Sporting Precinct, Kalamunda |
| 3. | Hills | Ray Owen Reserve, Lesmurdie |
| 4. | Hills | Pickering Brook Sports Club, Pickering Brook |
| 5. | Hills | Heidelberg Reserve, Lesmurdie |
| 6. | Foothills | Maida Vale Reserve, Maida Vale |
| 7. | Foothills | Scott Reserve, High Wycombe |
| 8. | Foothills | Hartfield Park Recreation Centre, Forrestfield |
| 9. | Foothills | Pioneer Park, Forrestfield |
| 10. | Foothills | Woodlupine Community Centre, Forrestfield |
| 11. | Foothills | Forrestfield North Sporting Precinct, High Wycombe |
| 12. | Foothills | Forrestfield North (TOD) Precinct |
| 13. | Foothills* | 584 Kalamunda Road, High Wycombe |
| 14. | Foothills* | Hillview Golf Course and 332 Kalamunda Road, Maida Vale |
| 15. | Foothills* | 332 Kalamunda Road, Maida Vale |
| 16. | Foothills* | Seventh Day Adventist site, 345 Kalamunda Road, Maida Vale |
| 17. | Foothills* | Abruzzo Molise Club, Brook Road, Wattle Grove |



- 18. Foothills* 655 Welshpool Road East, Wattle Grove
- 19. Foothills* Altona Hatchery Site, 344 Hawtin Road, Forrestfield.

* These sites are held in private ownership.

As indicated above, the only viable Hills' location is the existing KWP site (1). Any replacement aquatic facility development in the hills is to occur on that site.

As discussions progressed during this study, and coincidentally with planning for Forrestfield North (High Wycombe South) and the Forrestfield Airport Link (part of the METRONET project), an opportunity arose for the community purposes site within the FNDSP to be relocated to a new community purposes site within the Transit Oriented Development (TOD) precinct (site 12 in the list above) which is adjacent to the new railway station. The relocation of the community purposes site will be considered as part of the approval processes for the FNDSP. This site was somewhat self-selected as the preferred location due to the numerous benefits. This community purposes site is of sufficient size and previously earmarked for the provision of library, community centre and market square. By adding an aquatic centre and other community facilities, the opportunity exists to develop an ideal multifunctional community hub adjacent to the train station.

All other sites were rejected from further consideration for a variety of reasons including existing or planned utilisation, proximity to other facilities and services or development constraints. For example, Hartfield Park (8) adjacent to the recreation centre is constrained by Bush Forever and Threatened Ecological Communities (TECs) significantly reducing the available area for development. The Woodlupine Family and Community Centre site (10) is similarly constrained and considered too small, plus there are planning processes in place are seeking to rationalise this centre's operations. The Sporting precinct within Forrestfield North (13) is an attractive option in terms of location, however, priority for this site must be focused on active sporting fields which are more suitable for development across the old waste disposal site.

It was noted during the Needs Assessment phase of the study that the owners of the former Altona Hatchery (site 19) were exploring the development of aquatic facilities. A proposal for both indoor Learn to Swim and gym facilities plus an outdoor 50m pool was developed. This development would be privately operated and focused on club member and student bookings rather than public access.

The Covid-19 Pandemic disrupted the proponent's planning process. The most recent advice is that should the development proceed it will most likely focus on the Learn to Swim and gym initially and postpone the 50m pool to a subsequent stage. Should that venture prove successful, they would then further explore the 50m pool option.

The potential impact of this development has been assessed in developing options for City of Kalamunda facilities. The development is unlikely to significantly detract from the development of the foothill's aquatic and fitness facilities.



4.4. Pool Design

Year round indoor heated aquatic facilities to meet the expressed needs of the community must include diversity and inclusion considerations in the design, beyond standard universal access compliance required by the Building Code of Australia.

Noting the design intent, these needs are most efficiently met through the provision of:

- 25m lap lanes for fitness and club/school level competitive swimming with universal access.
- A water play space, usually with a zero beach / disabled entry and water features.
- A program pool space for swimming lessons and exercise classes.

These fundamental components are often supplemented by:

- A hydrotherapy pool
- A spa, sauna and steam room suite

These components have been repeatedly proven in the market place and can be found in various formats and combinations at venues such as Wanneroo Aquamotion, Gosnells Leisureworld, Leisurepark Balga, Cannington Leisureplex, Kwinana Recquatic and at the Swan Active facilities at Midland, Ballajura and Beechboro.

Further variations in facility provision relate to outdoor swimming pools, most often in the form of a 50m lap pool. These can be found in addition to the indoor facilities at Beatty Park, Bold Park, Terry Tyzack, Craigie, Bayswater and Fremantle.

Relatively few facilities provide indoor 50m pools. These are limited to the state-run facilities at HBF Stadium and Joondalup Arena and regional scale complexes such as Cockburn ARC, Riverton Leisureplex and Leisurefit Booragoon and Belmont Oasis. Two regional scale aquatic complexes are currently being planned for Collier Park in South Perth and Sutherlands Park in Gosnells, both of which are likely to include a 50m indoor pool.

For Kalamunda, the age and deteriorating condition of the existing pools at Kalamunda Water Park (KWP) will eventually render the facility unserviceable. Maintaining a level of service to the community by ensuring a new aquatic facility is on-line when the existing facilities fail requires consideration.

This could be done by:

- Commencing development of a new facility prior to the forced closure of the existing facility. This would allow an easy transition from the existing facility to the new.
Note that this is not possible if a new 50m pool is to replace the existing, however it may be achievable if the stage two development (refer to the concept drawings) was to be brought forward and developed in lieu. A new concept plan would be required to demonstrate if and how this could be achieved.
- Undertaking a fast-tracked development between the end of one season and the commencement of the next summer season. This may be possible but even a successfully fast-tracked program is likely to have some impact on the ensuing summer season.



4.5. Original Development Proposal

4.5.1. Kalamunda Water Park

Consultation during the study originally proposed a staged redevelopment of the existing site with contemporary standard district level facilities. This was in the context of maintaining a service to the community and increasing uncertainty related to Covid-19 impacting potential funding opportunities.

Stage one proposed a new 50m pool outdoor pool and refurbishment of the existing changerooms including full enclosure and provision of heated showers. The outdoor pool was to be heated, allowing it to be operated for an extended season although not necessarily all year-round. The new season would nominally be from 1 October to 30 April. It was originally anticipated that this stage could be funded by the City on its own if external funding were unavailable.

The second stage of development on the KWP site was to construct an indoor heated swimming facility comprising a 6 lane x 25m lap pool and water play area with learn to swim and hydrotherapy pools. This development was to be located adjacent to the new 50m pool which had been moved further north in stage one to allow the stage two development. The development of the indoor complex would also include new administration, club and kiosk facilities. Water spaces in this enclosure would be heated and operated all year round. The access ramp to the existing slides would need to be modified to allow for the stage two construction of the indoor pool complex. The slides will also need to be replaced. This stage two development would be subject to securing external grant funding.

The third stage of development on the KWP Hills site provided for a visitor or tourist attraction to be included on site. At present the KWP water slides provide a visitor attraction, which when originally introduced were a significant draw card for patrons from across the metropolitan area. The needs assessment and community consultation processes in Part One of this study revealed an appetite for a visitor attraction in the hills to take advantage of the elevation of the site offering potential views to the City (and perhaps the coast) and a continuation of water play opportunities. As one workshop participant suggested - a very tall water slide with the ladder to the take off point also serving as access to a viewing platform in or above the tree canopy. The exact attractions and water features are yet to be scoped. The timeline places this development is post 2035 and will require external funding. A provisional sum has been included in the forecast costs.

This staged approach maintained an immediate and priority focus on aquatic facility provision in the hills. This approach was ultimately determined to be no longer viable as outlined in section 4.6 of this report.



4.5.2. Foothills Aquatic Centre

The foothills facility is proposed to be part of a community hub located opposite the new High Wycombe Train Station that forms part of the Forrestfield Airport Link. The aquatic facility is proposed to be co-located with a library, community centre and other community service offerings on a site within the TOD adjacent to the train station.

A staged development could also be considered for the foothills site, initially introducing an indoor heated aquatic facility with a fitness centre and subsequently adding a 50m outdoor pool. The addition of a fitness centre within the proposal is considered a key component of modern aquatic and recreation facility provision, designed to attract a larger and more diverse user base and improve the operational viability of the facility.

The development of the library, community centre, childcare centre and other elements proposed for the hub could also be staged. These facilities will all be dependent upon the City securing external funding.

Under this original scenario, with aquatic facilities in both the hills and the foothills, the City could have two indoor swimming complexes and potentially two outdoor 50m pools, one on the KWP site and one in the foothills. In addition the Hub was originally forecast as being a long term development option for the City over the next 15-20 years in line with population growth.

The financial burden of operating and maintaining two large scale aquatic facilities is highly unlikely to be a viable solution for the City, which led the study to considering a revised development proposal.

4.6. Revised Development Proposal

Since the original development proposal was mapped in Section 4.5.1. and 4.5.2., there has been further planning work undertaken by the State Government (via METRONET) into the activation of the Transit Oriented Development (TOD) adjacent the new High Wycombe Train Station. This work suggests the City's aquatic centre development strategy may benefit from adjustment considering the following:

1. The population distribution of the City increasingly favours the foothills. By 2036 it is forecast that more than two thirds of the population will live 'down the hill'.

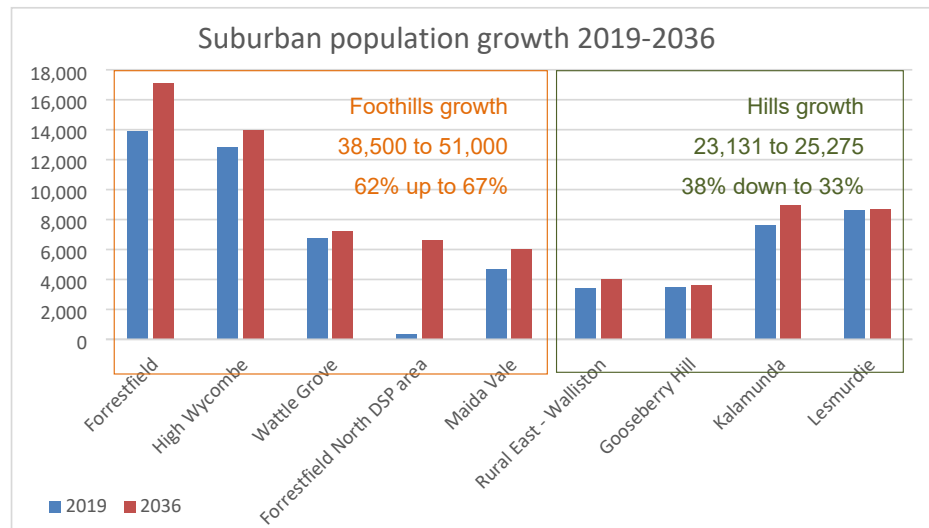


Figure 5 Hills vs Foothills population growth

2. The City understands that the opportunity for a foothills aquatic centre to be included within the TOD in the FNDSP surrounding the High Wycombe Train Station is being strongly considered by the State Government. A positive outcome of these consideration to activate the TOD precinct would call for the foothills aquatic centre to be developed earlier than initially proposed (originally forecast to be a long term development).
3. Consequently, and subject to external funding being available, it may be appropriate to amend the strategy and for the foothills aquatic facility to become a priority to be service the community now and into the future. This would require the approach to redeveloping KWP to be revised.

Two alternatives emerged:

a) **Like for like redevelopment of KWP with heated water**

This approach would replace the existing outdoor seasonal 50m pool, the Learn to Swim and toddlers' pools with new outdoor heated pools. This would respond to the community's single largest concern that KWP is too cold.

No indoor facilities would be provided, however upgrades to changeroom, entry and administration facilities would be required. The existing slides would be replaced, potentially as part of a staged approach.

Underpinning this approach is a heightened priority to develop the facilities at High Wycombe and the deferral and abandonment of a multiple stage development at KWP.

As reflected in the original strategy proposed, this option is the most likely to be able to be funded by the City if external funding is not forthcoming. The City could



potentially proceed immediately noting that some disruption to aquatic services is likely during the construction period.

It is also apparent that the annual operating costs of an outdoor seasonally operated facility will be considerably less than an indoor centre open year round, which makes this proposal more attractive from a financial operating perspective.

b) Redevelopment of KWP with indoor heated pools only

A second option for KWP is for the City to abandon the replacement of the existing pools at KWP and immediately move to the construction of an indoor pool complex. This alternative is predicated on being able to secure immediate external funding for what was originally conceived as the second stage of development for the KWP site. There would be some loss of continuity of services in a works program to replace the existing 50m pool at KWP and move to an indoor 25m facility.

This approach, subject to external funding, would allow the move to year-round indoor heated water provision in the hills with the development of a similar style indoor aquatic facility in the foothills, potentially at an earlier date than originally proposed.

A new concept plan would be required to optimise redevelopment of the site.

Note that this approach would require the City to operate and maintain two indoor heated aquatic centres, which will require carefully consideration moving forward.

The subsequent provision of a 50m pool for the Kalamunda community would then most appropriately be located in the foothills, where the majority of the City's population resides, although a decision on 50m pool provision could be taken at a later date.

Summary

The City faces a development conundrum for its new aquatic facilities. The municipality is arguably split into two discrete catchments, the hills area and the foothills area. Population forecasts show that over the next 15-20 years the hills area will grow only marginally to around 25,000 people with an estimated aquatic facility catchment of less than 40,000.

By contrast, the foothills area is forecast to grow to more than 50,000 with an estimated aquatic facility catchment more than 75,000.

The City's existing facilities at KWP are at the end of their useful life. Contemporary aquatic facility provision at local and district scale has moved dramatically away from outdoor seasonal 50m pools to indoor heated complexes. 50m pools tend to be a legacy issue and new 50m pools tend to be restricted to larger district and regional scale developments.

Both the hills and foothills communities have expressed a desire for an indoor, heated, year-round and 50m swimming experience. The challenge is how to satisfy this demand at the least possible (or achievable) capital and operating costs, noting the City has a



limited and narrow rates base as the locality is predominately rural and residential areas with only limited industrial and commercial areas.

Earlier discussions have lent some support for aquatic centres being provided in both the foothills and hills areas. The first question is “what should be provided in each location?”

Site selection and concept designs show that an indoor complex with 25m lap lanes, water play, hydrotherapy and learn to swim pools is possible for both locations. Population forecasts and the age profile of the community indicate that larger facilities part of a multifunctional community hub should be provided in the foothills, as the catchment contains double the population of the hills and a demographic profile that indicates higher age-based usage rates.

The second question is “does the City wish to, and can it afford to provide an outdoor 50m pool experience in both locations?”

Note: *An indoor 50m pool has been expressly excluded from consideration due to both capital and ongoing operational costs.*

Stage one of the original KWP redevelopment proposed the replacement of the existing outdoor 50m pool with a new heated outdoor 50m pool and retention of the existing water slides. The existing water slides will require replacement. The addition of an outdoor 50m pool and water slides also feature in the design of the foothill's facility.

It would seem logical that KWP is redeveloped to serve the hill's population as a complementary facility to foothill's facility. In this sense then KWP would offer either:

- An outdoor seasonal heated 50m pool as described in a); or
- An indoor 25m lap pool with smaller hydrotherapy, learn to swim and water play areas as described in b).

The notion of providing two indoor complexes, two 50m pools and two sets of water slides in the City seems excessive, expensive, and unsustainable for the City.

Decisions must be made about the approach and scale of development for each location. The intention would be for the two facilities to service different community need and offer a complementary facility mix to avoid the two centres competing against each other, thus reducing their operational efficiencies and affordability for the City.

Accordingly, the recommended approach is to prioritise the development of the foothill's aquatic centre as part of the proposed community hub in full in High Wycombe as this will service the largest portion of the City's residents now and into the future. The redevelopment of the KWP site should be restricted to the provision of a new outdoor 50m pool, heated and operated seasonally, which meets the basic needs for access to an aquatic facility in the hills area. This would reduce the financial burden on the City and its rate payers in comparison to a full year operation which would include the coldest months where patronage is lowest and operating costs are highest.



Note: The option of providing an indoor 25m pool only on the KWP site has been considered and discounted. This is far from contemporary and is not considered a viable option without a fitness centre to support the operation of the indoor pool. Research reveals that Swan Active - Ballajura is the only 25m indoor pool in the metropolitan area without a gym. It is understood that a fitness centre is now being progressed for this facility to bolster operations.

5. POOL HEATING

The source of pool water heating is a critical component of the heated aquatic facility solution. There are various heating methods for aquatic facilities including but not limited to:

- Gas fired boilers
- Solar - collector panels / evacuated solar tubes / photovoltaic thermal systems
- Heat pumps (electric)
- Geothermal heating - requiring extraction and injection bores
- Reclaimed heat from nearby industry (if available)

With technological improvements to many of these systems, particularly heat pumps and solar driven systems such as evacuated tubes and photovoltaics (PVs), it is common for a combination of systems to be used. Some systems such as solar panels and evacuated tubes can only contribute heat energy during daylight hours and accordingly cannot be relied upon to meet a predetermined set point. They are frequently paired with gas boilers or heat pumps to meet the solar deficit.

For example, Bilgoman Aquatic Centre, anecdotally regarded as the coldest pool in Perth, is now heated using a combination of gas boiler and solar panels. Bilgoman, like KWP, remains seasonal and the pool temperature is allowed to fluctuate dependent upon prevailing conditions. The heating system is used to extend the season and improve water temperature rather than maintain a set temperature. While solar is relied upon for the bulk of the season the gas boiler is used in the shoulder months. Annual gas costs are just under \$20,000.

Once the City determines the site(s) and pool(s) size, it is recommended that an independent heating study be commissioned to resolve the preferred heating system.

CCS Strategic has adopted a combination of heat pump and photovoltaic thermal (PVT) solar technologies for the pools at KWP and in the foothills for the purpose of forecasting capital and operating costs.

Indicative capital and operating costs have been developed with assistance from Supreme Heating using the following parameters.



Table 2 Pool Operating Conditions

Pool temperature set points:	°C	Pool opening hours	
50m and 25m lap pools	27	5.30am to 8.00pm	Monday - Friday
Learn to swim and leisure pool	28	6.00am to 6.00pm	Saturday
Hydrotherapy pool	32	8.00am to 5.00pm	Sunday
Spa	35	8.00am to 5.00pm	Public Holidays.

The forecast costs are as follows:

Table 3 Order of probable cost for pool heating

KWP Stage 1 only New 50m pool + new LTS + existing slides	KWP Stage 2 only New indoor 25m +LTS +Hydro + existing slides	Foothills Stage 1 - Indoor 25m + LTS +Hydro	Foothills complete - Indoor complex +Outdoor 50m + Slides
Year round	Year round	Year round	Year round
CapEx	CapEx	CapEx	CapEx
\$455,000	\$396,500	\$455,000	\$494,000
Seasonal			
357,500	n/a	n/a	n/a
OpEx	OpEx	OpEx	OpEx
Year round	Year round	Year round	Year round
\$31,850	\$42,502	\$48,902	\$80,752
Seasonal			
\$15,952	n/a	n/a	n/a

6. DESIGN BRIEF

The design principles underpinning the architect's interpretation of the brief are summarised as follows:

1. Context and Character

Respond to and enhance the distinctive characteristics of a local area, contributing to a sense of place.

2. Landscape Quality

Landscape and buildings operate together as an integrated and sustainable system, within a broader ecological context. The designs will, wherever possible:



- create connection to broader landscaped areas including drainage and precinct wide water sensitive urban design initiatives
 - protect and enhance the existing vegetation and landforms
3. Built Form and Scale
Ensure that the massing and height of development is appropriate to its setting and successfully negotiates between existing built form and the intended future character of the local area.
 4. Functionality and Build Quality
Meet the needs of users efficiently and effectively, balancing functional requirements to perform well and deliver optimum benefit over the full life cycle whilst acknowledging:
 - Participation rates and trends in facility usage
 - The need for flexibility and adaptability of spaces
 - Opportunities for collaboration and co-location of services
 5. Sustainability
Optimise the sustainability of the built environment through delivering positive environmental, social and economic outcomes including commercial revenue raising opportunities that are compatible to the proposed amenities (e.g., Allied Health Services).
 6. Amenity
Good design provides successful places that offer a variety of uses and activities while optimising internal and external amenity for occupants, visitors and neighbours, providing environments that are comfortable, productive and healthy. Inherent in the provision of amenity are the requirements for inclusion and accessibility for all users.
 7. Legibility
The buildings and places will be legible, with clear connections and easily identifiable elements to help people find their way around.
 8. Safety
Optimise safety and security, minimising the risk of personal harm and supporting safe behaviour and use.
 9. Community
Respond to local community needs as well as the wider social context, providing environments that support a diverse range of people and facilitate social interaction. The designs will assist the City of Kalamunda to “build a stronger community” through activation, interaction, and inclusion catering to a diverse community. Contemporary disability access design features (i.e., beach entry and pool access ramps) will ensure access for the whole community.
 10. Aesthetics
Good design is the product of a skilled, judicious design process that results in attractive and inviting buildings and places that engage the senses.



The following design brief was prepared to guide the architect and the quantity surveyor.

Table 4 Indicative Design Brief

Indoor Facilities	KWP Refurbishment Option 1 a)	Foothills New facilities Option 2 b)
Component	Area (m ²)	Area (m ²)
Indoor 25m x 8 lane pool	-	500
Learn to swim - program pool	-	120
Hydro Pool	-	70
Leisure water	-	250
Changerooms	176	160
Reception / lobby	20	20
Admin area	61	150
Kiosk	45	60
Plantroom	145	170
Storage areas	50	120
Spa Steam Sauna	-	45
Crèche indoor	-	80
Clubhouse	-	80
Circulation	-	456
Internal built area	497	2,281
Crèche outdoor	160	160
Service yard	50	50
Total area	707	2,491
Outdoor Facilities	KWP New facilities	Foothills New facilities
50m x 8 lane pool + ramp access	1,040	1,040
Learn to Swim - program pool	175	-
Diving bowl (KWP only if required)	58	-
Concourse	800	800
Seating bay	192	192
Lifeguard centre	48	48
Aquatic equipment store	35	35
Grounds' equipment store	55	55
Plantroom	125	125
Total built area	2,528	2,295
Landscaped area	4,000	4,000
Service yard	75	75
Total	6,603	6,370



	KWP	Foothills
Water slides	Existing Slides replaced	
Splash pool		30
Plantroom		40
Access tower		25
Support tower		18
Slides		Suspended
Total		113

The area allocations are indicative except for regulated dimensions of the 50m and 25m pools and the associated mandated 2.5m lane widths.

7. CONCEPT DESIGN

A series of design options were considered for each site and modified as alternative development proposal were considered (refer section 4). The prevailing concepts are shown on the following pages.

7.1. Kalamunda Water Park

Option 1 a)

- New outdoor heated 50m pool and learn to swim pool.
- Refurbished changerooms and administration facilities.
- Replaced water slides.
- New half-court basketball and picnic area.
- New plant room.
- Seasonal operation.

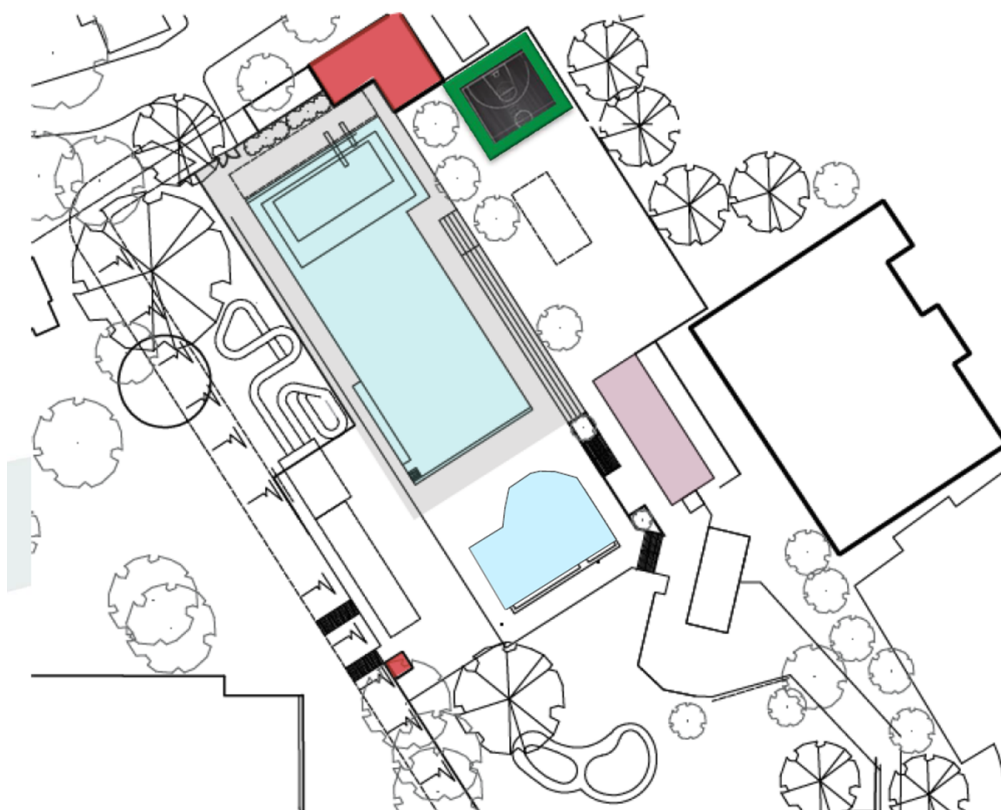


Figure 6 KWP Option 1 a)

Option 1 b)

- New indoor heated 25m pool with learn to swim, water play and hydrotherapy pools.
- Refurbished changerooms and administration facilities.
- Replaced water slides.
- New half-court basketball and picnic area.
- New plant room.
- Full year operation.

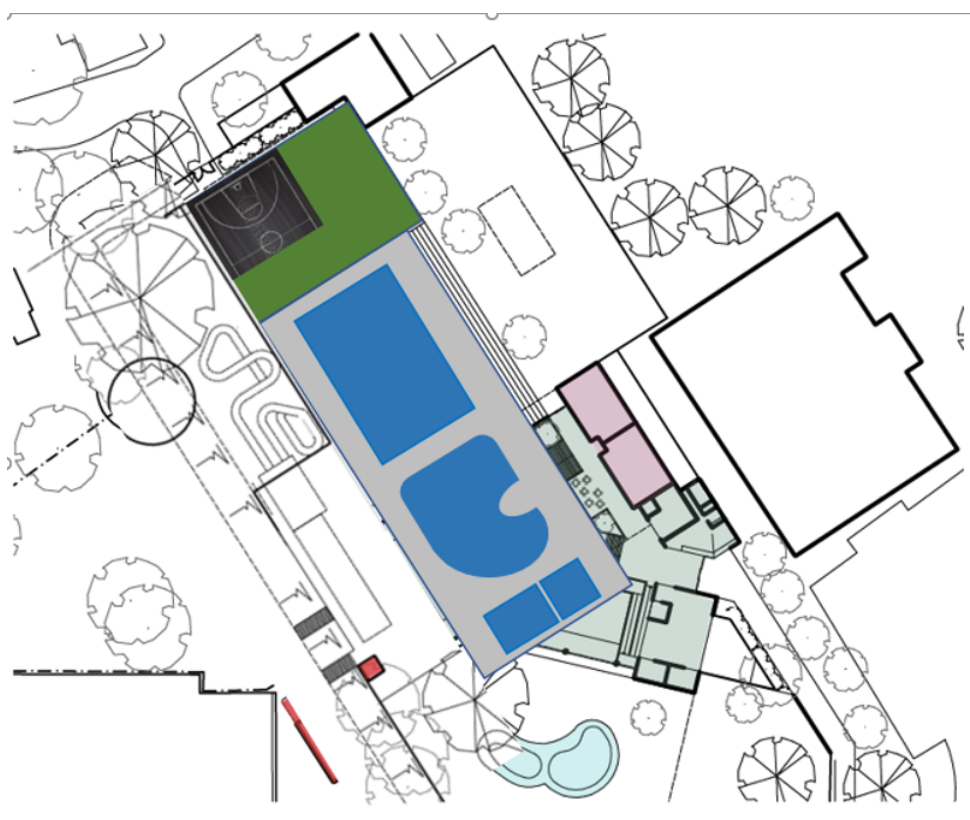


Figure 7 KWP Option 1 b)

Note: New concept designs for KWP option 1a and 1b will need to be developed once preference known.

7.2. Foothills Aquatic Centre

The foothills aquatic centre is conceived as a central component within the foothill's community hub. The aquatic centre comprises an 8 lane indoor 25m pool with separate water play and learn to swim pools and a splash pool for a series of water slides to allow year round use. A 50m outdoor pool is also proposed to meet competitive and fitness swimming needs. A comprehensive fitness centre is to be located above the indoor pool complex. Its highly likely that the various components proposed for the Hub will need to be developed across multiple levels, due spatial limitations.

The other elements of the hub include a community centre, library, child care and crèche facilities. Careful consideration should also be given to incorporating a range of commercial opportunities into the Hub which can further explored during the detailed design stage including: Allied Health Services, leased café's, restaurants, office and retail (sports store) spaces, rock climbing and nature playgrounds.

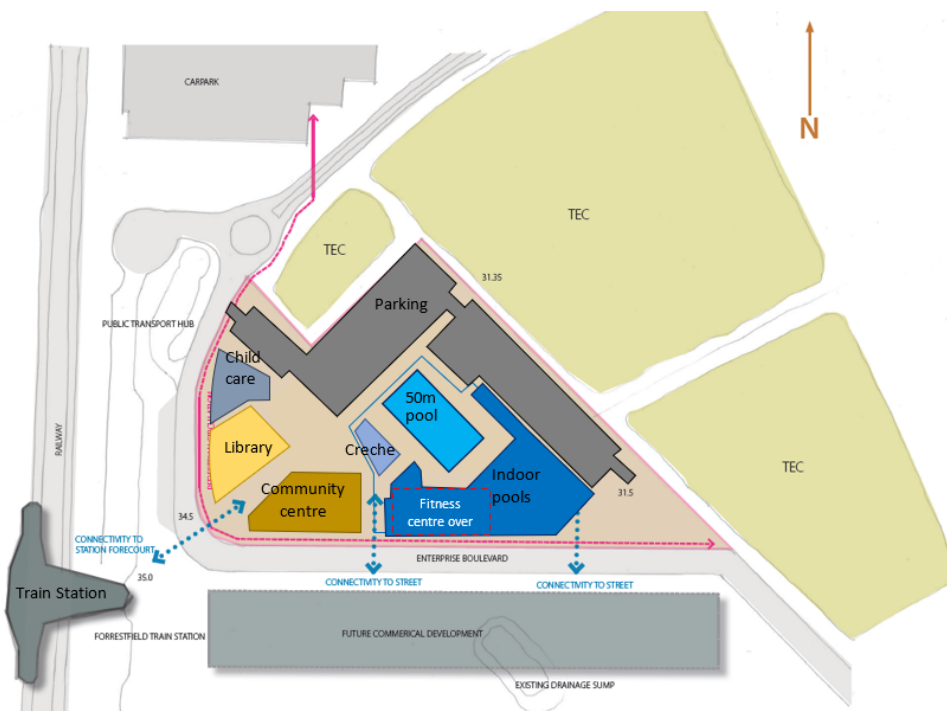


Figure 8 Foothill's community hub - indicative layout



8. PROPOSED FEES AND CHARGES

Aquatic and Fitness Centre fees and charges are proposed to be in line with metropolitan benchmarks. Below are the principal fees and charges that have been used to forecast operating income and are applicable to both centres. Note that there may be additional fees and charges applicable within each centre based on programming variations and regular patron needs. All prices include GST.

Table 5 Indicative Fees and Charges

Details	Basis of Charge	2021
Aquatics - Swimming Pool Entry		
Adult Entry (16 Years +) (Pool or Sauna/Spa Entry)	Per Visit	\$7.00
Children Entry (5 - 15 Years)	Per Visit	\$5.00
Children Entry (4 years and under)	Per Visit	\$3.00
Group Booking Adult Entry (10 to 19 people)	Per Person	\$6.00
Spectator Entry	Per Visit	\$2.00
Family Swim (2 adults/2 children or 1 adult/3 children)	Per Visit	\$20.00
Public Hydrotherapy Session	Per Person, Per Hour	\$12.50
School Lessons	Per Child	\$3.75
Club - Adult	Per Person	\$6.00
Club - Children	Per Child	\$4.50
Vacation Swimming Lessons	Per Visit	\$4.00
Water slide	Per Visit	\$7.00
Aquatics - Pool & Facility Bookings		
Program Pool - Exclusive Pool Space	Per Hour	\$85.00
Program Pool - Half Pool Space	Per Hour	\$50.00
50m Pool Exclusive (plus pool entry)	Per Hour	\$150.00
25m Pool in or out (plus pool entry)	Per Hour	\$80.00
Pool Inflatable - Exclusive Hire	Per Hour	\$100.00
25m Lane Hire - Standard	Per Hour Per Lane	\$15.00
25m Lane Hire - Clubs	Per Hour Per Lane	\$7.50
Lap Pool Exclusive Hire (Swimming Carnivals)	Per Hour (plus staff costs)	\$300.00
50m Lane Hire - Standard	Per Hour Per Lane	\$20.00
50m Lane Hire - Clubs	Per Hour Per Lane	\$12.50
Meeting Room Hire	Per Hour	\$30.00
Group Fitness Room Hire - Standard	Per Hour	\$40.00
Crèche Room Hire - Standard	Per Hour	\$45.00
Aquatics - Learn To Swim		
Swimming Lessons (Per Lesson Fee)	Per person	\$18.00
Swimming Lessons (Per Lesson Fee) second family member	Per person	\$15.00
Crèche		
One Child	Per Hour	\$3.00
Second Child	Per Hour	\$2.00
Fitness Centre - Gymnasium		
Standard Entry	Each Visit	\$20.00
Fitness Appraisal and Workout Program	Per Person	\$60.00
Personal Training Casual One on One Session	Per Session	\$65.00
Group Fitness Entry	Per Visit	\$25.00
Membership Packages		
Up front Cash Payment	12 Months	\$950.00
Direct Debit Ongoing No Minimum Contract		
Monthly	Per Month	\$75.00
Fortnightly	Per Fortnight	\$38.00
Weekly	Per Week	\$20.00



9. CAPITAL COST

Detailed estimates of probable cost have been prepared by quantity surveyors NBQSS based on the concept designs prepared by Gresley Abas Architects in response to the design brief. They have been provided under separate cover and are summarised below.

9.1. Kalamunda Water Park - Option 1 a)

Table 6 KWP Option 1 a) Order of Probable Cost

Description	Option 1 a)
Demolitions	132,960
Building works and refurb	378,800
New heated 50m Swimming pool	2,937,000
New heated 250m2 Learn to Swim pool	695,000
Concourse paving	156,280
Water slide refurbishment	439,920
Half-court basketball	44,830
External works	55,000
External services	95,000
TOTAL CONSTRUCTION COST	4,934,790
Project Costs	2,013,206
GROSS PROJECT COST	6,947,996
Year of construction	2024
Escalation @ 2.5% pa	607,950
ESTIMATED TOTAL COMMITMENT	7,555,946
Goods and Services Tax	755,595
TOTAL COST INCLUDING GST	8,311,540

Project costs include

- Design Contingency - 10%
- Construction Contingency - 7.5%
- Furniture Fittings & Equipment - 1%
- Public Art - 1%
- Professional Fees - 12%
- City of Kalamunda Recoverable costs - 5%



9.2. Kalamunda Water Park - Option 1 b)

Table 7 KWP Option 1 b) Order of Probable Cost

Description	Option 1 b)
Demolitions	\$333,620
Existing Building works and refurbishments	\$378,800
New indoor pool building and foyer	\$2,752,699
New 6 lane 25m Swimming pool	\$787,500
New 175m2 Learn to Swim pool	\$366,450
New hydrotherapy pool 63m2	\$131,922
Allowance for pool hall and water heating	\$105,000
Pool blankets all pools	\$45,000
Allowance for lane ropes	\$50,000
Concourse paving and drainage	\$110,340
Water slide refurbishment	\$439,920
Half-court basketball	\$44,830
External works	\$309,350
External services	\$59,000
TOTAL CONSTRUCTION COST	\$5,914,431
Project Costs	\$2,222,549
GROSS PROJECT COST	\$8,136,980
Year of construction	2024
Escalation @ 2.5% pa	\$711,986
ESTIMATED TOTAL COMMITMENT	\$8,848,965
Goods and Services Tax	\$884,897
TOTAL COST INCLUDING GST	\$9,733,862

Project costs include

- Design Contingency - 10%
- Construction Contingency - 7.5%
- Furniture Fittings & Equipment - 1%
- Public Art - 1%
- Professional Fees - 12%
- City of Kalamunda Recoverable costs - 5%



9.3. Foothill's Aquatic and Fitness Centre Components

Table 8 Foothill's Aquatic and Fitness Centre Order of Probable Cost

Description	Option 2b
Indoor Swimming Pool Construction	\$ 3,753,500
Swimming Pool Hall	\$ 7,007,719
External areas	\$ 181,800
Fitness Centre	\$ 2,794,048
Lifts and Stairs	\$ 162,193
Outdoor Heated Swimming Pool	\$ 3,952,515
Water Slide Facility	\$ 1,135,000
Car Park (150 bays)	\$ 509,503
External Works	\$ 920,464
External Services	\$ 315,945
TOTAL CONSTRUCTION COST	\$20,732,687
Project Costs	\$ 8,274,208
GROSS PROJECT COST - Current Costs	\$29,006,895
Year of construction	2027
Escalation to 2027 @ 3% pa	\$ 2,900,690
ESTIMATED TOTAL COMMITMENT	\$31,907,585
Goods and Services Tax	\$ 3,190,758
TOTAL COST INCLUDING GST	\$35,098,343

Project costs include

- Design Contingency - 10%
- Construction Contingency - 7.5%
- Furniture Fittings & Equipment - 1%
- Public Art - 1%
- Professional Fees - 12%
- City of Kalamunda Recoverable costs - 5%



9.4. Foothill's Community Hub as a Complete Package

While the table above relates to the aquatic and fitness centre components of the foothill's facility, they are not intended to be developed as stand-alone elements. Rather they form part of the hub of facilities to be developed opposite the High Wycombe Train Station as part of the transit oriented development.

The full cost of the foothill's community hub is summarised below for reference purposes.

Table 9 Foothill's Community Hub Order of Probable Cost

	Elemental delivery costs	TOTAL
1.0	Childcare Centre	\$ 1,715,733
2.0	Library	\$ 7,112,304
3.0	Community Centre	\$ 7,570,040
4.0	Indoor Heated Aquatic Facility and Fitness Centre	\$ 23,345,641
5.0	Outdoor Heated Swimming Pools	\$ 6,649,470
6.0	Water Slide Facility	\$ 1,915,474
	TOTAL PROJECT COST	\$ 48,305,661



10. OPERATING COST

Parks and Leisure Australia WA region coordinates a voluntary benchmarking exercise that involves 22 metropolitan aquatic and leisure centres. Of these, 14 centres are similar in size and scale to the facilities being proposed for Kalamunda.

All have 25m indoor pools (6 or 8 lanes) except Bold Park which has a 4 lane 20m pool, and all have additional indoor water space in the form of water play, program space or hydrotherapy pools. All except Swan Active in Ballajura have a gym; and 6 also have an outdoor 50m pool. The below information is provided as an industry guide for WA to inform a detailed operational cost analysis.

Table 10 Benchmark facility provision Perth Metropolitan Facilities

Facility	Catchment population	Overall facility size	Annual Attendance	Water area ex-concourse	Gym area	Outdoor pool	Spa, Sauna Steam suite
Beechboro - Swan	75,576	1,328	384,719	650	678	Nil	Spa
Aqualife Vic Park	136,216	2,325	367,000	1,525	800	8 x 50	Spa
Ballajura - Swan	79,451	545	95,872	545	0	Nil	Spa
Bayswater Waves	160,575	3,559	604,948	2,770	789	8 x 50	Yes
Beatty Park Leisure	167,390	4,264	889,000	2,944	1,320	10 x 50	Yes
Bold Park	98,752	1,834	247,641	1,670	164	10 x 50	No
Cannington	76,075	1,654	409,058	1,254	400	Nil	No
Fremantle Aquatic	68,250	2,135	502,257	1,885	250	8 x 50	No
Gosnells Leisureworld	80,000	1,536	407,189	1,081	455	splash	Yes
Kwinana Recquatic	30,000	1,446	303,915	871	575	Nil	Sp, St
Leisurepark - Balga	129,363	1,171	271,812	816	355	splash	No
Swan Active Midland	38,815	1,439	393,021	944	495	Nil	Sp, Sa
Terry Tyzack Aquatic	150,276	3,351	476,898	2,606	745	8 x 50	Sp, Sa
Wanneroo	38,519	1,358	116,357*	858	500	10mx10m	Yes
Median	79,726	1,594		1168	498	7 of 14	10 of 14

* Wanneroo Aquamotion was closed for 8 months for extensive refurbishment works

Of the 14 facilities listed above only two (Beatty Park and Terry Tyzack) operate at break even or better - excluding corporate allocations. With the exception of Bayswater Waves, these are largest facilities with the largest gyms and the largest catchment populations.



The following indicative criteria are drawn from the PLA WA benchmarking data.

Table 11 Benchmark and Performance Indicators Perth Metropolitan Facilities

	Unit	Highest 2018-19	Lowest 2018-19	Median 2018-19	*Median 2019-20
Attendance	patrons	889,000	95,872	388,870	355,523
Total operating revenue	\$	7,564,000	759,887	4,090,000	2,268,660
Income per visit	\$	9.36	5.12	6.54	6.75
Total operating expense	\$	7,389,000	55,301	3,587,710	3,602,956
Overheads & depreciation	\$	3,141,000	167,736	840,579	815,077
Operating subsidy	\$	4,352,936	+175,000	872,060	2,197,855
Subsidy per visit	\$	37.41	+1.13	2.62	2.82
Cost recovery	%	114	20	71	71
Labour costs	\$	4,393,000	957,525	2,566,201	2,503,700
Full time equivalent staff	No.	64	18.5	32.32	33.63
Marketing costs	\$	35,000	6,500	11,253	32,056
Gas consumption	GJ	14,449		7,961	5,923
Electricity consumption	kWh	6,897,957	669,938	1,106,007	972,210
Water consumption	kL	29,359	5,800	14,515	14,665
Learn to Swim (LTS)	enrolments	8,650	1,126	5,310	4,317
LTS Enrolments	per m ²	10.9	0.8	3.73	2.76
Members	total	3400	206	1,425	1,588
Members	per m ²	5.4	1.8	3.13	3.2
Fitness centre size	m ²	1,320	-	498	621
Aquatic centre size	m ²	4,264	545	1,595	1,622

*Note Median figures impacted by COVID-19

The following charts show the operating trend over the past 8 years revealing lower patronage (Covid-19 impact) leading to higher user subsidies (Figure 10), while overall operating subsidies are trending down (Figure 11) perhaps as a result of closures and savings on staff and heating costs.

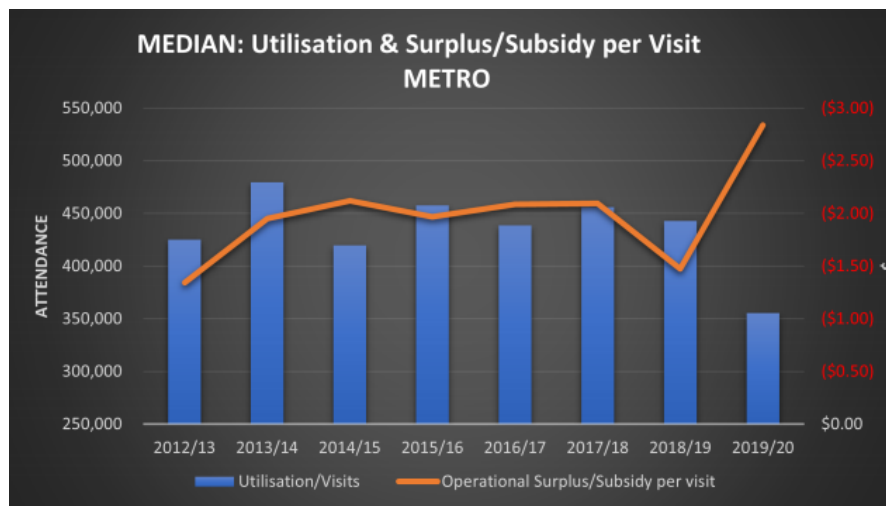


Figure 9 Metropolitan Leisure Centre utilisation and subsidy trends

(Source: PLA WA benchmarking 2020 release)

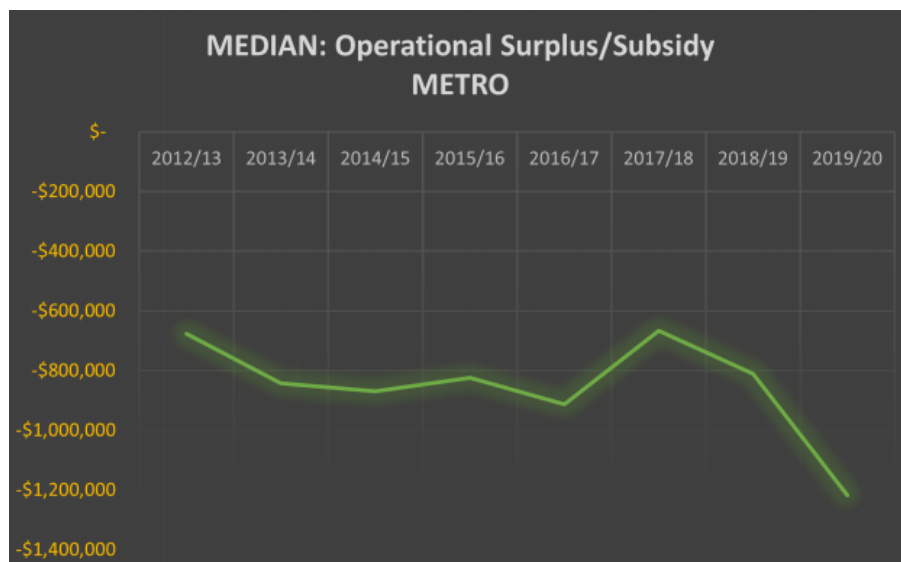


Figure 10 Metropolitan Leisure Centre Operational Subsidy Trends

(Source: PLA WA benchmarking 2020 release)



These benchmarks, together with a current operating budget format from several contemporary centres, have been used to help align and formulate revenue and expenditure projections for the proposed facilities within the City.

The budgets shown below forecast both conservative and optimistic income and expenditure projections for what would be considered a new to maturing centre. Note that the foothill's facility will not achieve maturity for a number of years post construction, potentially around 2030.

The budgets are in 2020 dollars.

A variety of options have been forecast as follows:

10.1. KWP

- 1a) Provision of new pools only on a like for like basis with upgrades to changeroom and administration facilities and replacement of the water slides.
- 1b) A new indoor swimming complex comprising 25m lap lanes, water play area, learn to swim pools and hydrotherapy pool and the refurbishment or replacement of the water slides. There are no outdoor pools. The existing outdoor pool area is converted to a play area with picnic facilities, play equipment and half-court basketball.

10.2. Foothill's Facility

- 2a) Indoor facilities only at the foothill's facility comprising 25m lap lanes, water play area, learn to swim and hydrotherapy pools. The aquatic centre is supported by a 1200m² fitness centre.
- 2b) All of option 2a plus an outdoor heated 50m pool and waterslides discharging into the indoor complex.



10.3. Forecast Operational Model – Two Facilities in City

The following table summarises the projected performance of the various options presented in this report.

Table 12 Aquatic Centre Operating Performance Summary

Forecasted OPEX Model for Two Facilities operating at same time								
	Option 1a		Option 1b		Option 2a		Option 2b	
Key components	KWP Stage 1 only Outdoor 50m pool		KWP stage 2 only Indoor pools		HWCH Stage 1 - 900m2 fitness		HWCH complete - 900m2 fitness + indoor 25m + LTS + Hydro	
	+ LTS + new slides		+ LTS + Hydro + new slides		Indoor 25m + LTS +Hydro		+ Slides + Outdoor 50m	
CAPEX	\$7,555,946		\$8,848,965		\$23,345,641		\$31,907,585	
OPEX Scenarios	Conservative	Optimistic	Conservative	Optimistic	Conservative	Optimistic	Conservative	Optimistic
Attendance	45,000	60,000	125,000	150,000	235,000	280,000	370,000	415,000
OPEX Income	\$ 361,985	\$ 509,378	\$ 723,296	\$ 974,056	\$ 2,575,550	\$ 2,945,640	\$ 3,387,930	\$ 3,953,510
Opex Expenditure	\$ 1,081,114	\$ 1,088,564	\$ 2,599,048	\$ 2,635,792	\$ 3,785,322	\$ 3,804,806	\$ 4,715,883	\$ 4,725,348
Corporate O'heads	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Operating loss	\$ 719,129	\$ 579,186	\$ 1,875,751	\$ 1,661,737	\$ 1,209,772	\$ 859,166	\$ 1,327,953	\$ 771,838
Total net cost	\$ 719,129	\$ 579,186	\$ 1,875,751	\$ 1,661,737	\$ 1,209,772	\$ 859,166	\$ 1,327,953	\$ 771,838
User subsidy	\$ 15.98	\$ 9.65	\$ 15.01	\$ 11.08	\$ 5.15	\$ 3.07	\$ 3.59	\$ 1.86

A variety of assumptions have been developed to help derive the income and expenditure projections:

- The City is operating a two-facility model: Note: If only one facility was to proceed, then that facility's operational subsidy would be reduced as outlined in Section 10.4.
- Centre management operations include management and reception / customer service staff.
- Kiosk products and merchandise is sold by a dedicated staff member at peak times and supported by reception staff in off-peak times.
- The health and fitness operations provide for a supervisor at all times and gym instructor for 75% of operating hours.
- Group fitness provides for a coordinator and an instructor for each of the 25 classes per week at the foothill's facility. No group fitness classes at KWP.



- Aquatics staff includes 1 supervisor (duty manager) at all times and 1 lifeguard on duty for each water space (indoor pools, 50m pool and water slides) plus an additional lifeguard during busier periods at the ratio of 1 lifeguard per 100 patrons.
- Swim school operations have one full time coordination and an assistant for am and pm sessions. Lessons have an average of 3 students.
- Electricity costs are based on benchmark data and an estimated kilowatt/hour load at 25c per kW/hr.
- Water and communication costs are benchmark based.
- Figures do not include corporate overheads and depreciation.
- Corporate overheads are based on a benchmark apportionment.
- Insurance is calculated at \$2,000 per \$1 million asset value.

In addition to the assumptions described above the following operating guides have been used.



Table 13 Operating Assumptions

	Option 1a		Option 1b		Option 2a		Option 2b	
Key components	KWP Stage 1 only Outdoor 50m pool		KWP stage 2 only Indoor pools		HWCH Stage 1 - 900m2 fitness		HWCH complete - 900m2 fitness + indoor 25m + LTS + Hydro	
	+ LTS + new slides		+ LTS + Hydro + new slides		Indoor 25m + LTS +Hydro		+ Slides + Outdoor 50m	
Assumptions								
Season	01/10 - 30/04	01/09 - 30/04	all year	all year	all year	all year	all year	all year
Annual attendance	45,000	60,000	125,000	150,000	235,000	280,000	370,000	415,000
Average entry fee	\$4.00	\$4.00	\$4.00	\$4.00	\$4.00	\$4.00	\$4.00	\$4.00
Patrons using slides	20%	25%	10%	15%	n/a	n/a	6%	8%
Average slide fee	\$10.00	\$10.00	\$10.00	\$10.00	n/a	n/a	\$10.00	\$10.00
Staffing - Manager	\$88,000	\$88,000	\$110,000	\$110,000	\$120,000	\$120,000	\$120,000	\$120,000
Staffing - Aquatic Coord	n/a	n/a	n/a	n/a	\$80,000	\$80,000	\$80,000	\$80,000
Staffing - Lifeguard	\$43,400	\$62,000	\$62,000	\$62,000	\$62,000	\$62,000	\$62,000	\$62,000
Staffing - Admin Super	\$52,500	\$70,000	\$52,500	\$52,500	\$52,500	\$52,500	\$52,500	\$52,500
Staffing - Reception	\$43,400	\$62,000	\$62,000	\$62,000	\$62,000	\$62,000	\$62,000	\$62,000
Staffing - LTS Coord			\$95,000	\$95,000	\$95,000	\$95,000	\$95,000	\$95,000
Staffing - LTS Super	\$56,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000
LTS teacher per lesson	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00
Staffing - Fitness Coord	n/a	n/a	n/a	n/a	\$70,000	\$70,000	\$70,000	\$70,000
Fit instruct per class	\$60	\$60	\$60	\$60	\$60	\$60	\$60	\$60
Staff on-costs / O'heads	0%	0%	0%	0%	0%	0%	0%	0%
Per person kiosk sales	\$1.20	\$1.20	\$1.20	\$1.20	\$0.80	\$0.80	\$0.80	\$0.80
Kiosk mark-up	100%	80%	80%	80%	80%	80%	80%	80%
Per person merch sales	\$0.10	\$0.10	\$0.10	\$0.10	\$0.10	\$0.10	\$0.10	\$0.10
Merchandise mark-up	100%	100%	100%	100%	100%	100%	100%	100%
Fitness members	n/a	n/a	n/a	n/a	2,790	2,970	2,970	3,420
Average annual member fee	n/a	n/a	n/a	n/a	\$900	\$900	\$900	\$900
Crèche use	n/a	n/a	4%	4%	4%	4%	4%	4%
Crèche fee	n/a	n/a	\$3.00	\$3.00	\$3.00	\$3.00	\$3.00	\$3.00
Swim school enrolments	350	450	800	1,200	2,438	3,371	3,020	3,517
Swim class fee (30min)	\$18.00	\$18.00	\$18.00	\$18.00	\$18.00	\$18.00	\$18.00	\$18.00



Table 14 Operating Income Projections

Income	KWP Stage 1 new 50m pool and LTS + existing slides		KWP stage 2 only indoor 25m +LTS +Hydro + slides		HWCH Stage 1 - 900m2 fitness Indoor 25m + LTS +Hydro		HWCH complete -900m2 fitness Indoor + Slides + Outdoor 50m	
	Conservative	Optimistic	Conservative	Optimistic	Conservative	Optimistic	Conservative	Optimistic
OPEX Scenarios								
MEMBERSHIPS	7,685	10,278	46,296	55,556	1,506,600	1,603,800	1,603,800	1,846,800
CASUAL GYM / GF ENTRY	-	-	4,000	4,000	8,000	9,600	12,000	14,400
SWIM SCHOOL	63,000	81,000	144,000	216,000	438,750	606,780	543,510	632,970
CRECHE	-	-	15,000	18,000	28,200	33,600	44,400	49,800
POOL ENTRY	136,800	183,600	218,000	252,000	372,500	425,160	619,220	689,340
EQUIP HIRE	1,000	1,000	1,000	1,000	1,000	1,200	1,000	1,200
FACILITY HIRE	5,000	5,500	7,500	7,500	9,000	13,500	9,000	13,500
KIOSK SALES	54,000	72,000	150,000	180,000	188,000	224,000	296,000	332,000
MERCH SALES	4,500	6,000	12,500	15,000	23,500	28,000	37,000	41,500
WATER SLIDES	90,000	150,000	125,000	225,000	-	-	222,000	332,000
Total Income	361,985	509,378	723,296	974,056	2,575,550	2,945,640	3,387,930	3,953,510
Income comparison against \$7.00 per entry PLA benchmark								
Income via benchmark	315,000	420,000	875,000	1,050,000	1,645,000	1,960,000	2,590,000	2,905,000
Variation	13%	18%	-21%	-8%	36%	33%	24%	27%
Forecast per entry income	\$8.04	\$8.49	\$5.79	\$6.49	\$10.96	\$10.52	\$9.16	\$9.53



Table 15 Operating Expenditure Projections

Expenditure	KWP Stage 1 new 50m pool and LTS + existing slides		KWP stage 2 only indoor 25m +LTS +Hydro + slides		HWCH Stage 1 - 900m2 fitness Indoor 25m + LTS +Hydro		HWCH complete -900m2 fitness Indoor + Slides + Outdoor 50m	
	Conservative	Optimistic	Conservative	Optimistic	Conservative	Optimistic	Conservative	Optimistic
Centre Management								
SALARY NORMAL	188,600.0	188,600.0	366,000	366,000	366,000	366,000	366,000	366,000
SALARY ON-COSTS	64,973	64,973	126,087	126,087	126,087	126,087	126,087	126,087
LICENSE	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
CONTRACT SERVICES	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
MATERIALS GEN	20,000	20,000	40,000	42,500	40,000	42,500	40,000	42,500
ADVERTISING	20,500	20,500	70,000	70,000	70,000	70,000	70,000	70,000
ADMIN PRINT POST	5,000	5,000	7,500	7,500	7,500	7,500	7,500	7,500
STAFF AMENITIES	1,000	1,000	2,000	2,000	2,200	2,200	2,600	2,600
VEHICLE	-	-	17,500	17,500	17,500	17,500	17,500	17,500
SUBSCRIPTIONS	5,000	5,000	10,000	10,000	15,000	15,000	20,000	20,000
INSURANCE	15,112	15,112	17,698	17,698	46,691	46,691	63,815	63,815
Total Centre Management	327,185	327,185	663,785	666,285	697,978	700,478	720,502	723,002
Crèche								
			23	28	44	53	69	78
SALARY NORMAL	-	-	74,400	74,400	167,400	167,400	229,400	229,400
SALARY ON-COSTS	-	-	25,631	25,631	57,669	57,669	79,028	79,028
MATERIALS GEN	-	-	2,500	2,200	2,600	2,500	2,800	2,600
MINOR EQUIP	-	-	1,000	1,000	1,200	1,200	1,500	1,500
Total Creche	-	-	103,531	103,231	228,869	228,769	312,728	312,528
Health and Fitness								
SALARY NORMAL	-	-	-	-	327,000	327,000	327,000	327,000
SALARY ON-COSTS	-	-	-	-	112,652	112,652	112,652	112,652
CONTRACT SERVICES	-	-	-	-	10,000	10,000	10,000	10,000
MATERIALS GEN	-	-	-	-	4,000	4,000	4,000	4,000
MINOR EQUIP	-	-	-	-	3,500	3,500	3,500	3,500
Total Health and Fitness	-	-	-	-	457,152	457,152	457,152	457,152
Group Fitness								
SALARY NORMAL	-	-	93,600	109,200	312,000	312,000	312,000	312,000
SALARY ON-COSTS	-	-	32,245	37,619	107,484	107,484	107,484	107,484
MATERIALS GEN	-	-	1,000	1,500	1,000	1,500	1,000	1,500
MINOR EQUIP	-	-	1,000	2,500	3,000	3,000	4,000	4,000
Total Group Fitness	-	-	127,845	150,819	423,484	423,984	424,484	424,984



Expenditure	KWP Stage 1 new 50m pool and LTS + existing slides		KWP stage 2 only indoor 25m +LTS +Hydro + slides		HWCH Stage 1 - 900m2 fitness Indoor 25m + LTS +Hydro		HWCH complete -900m2 fitness Indoor + Slides + Outdoor 50m	
	Conservative	Optimistic	Conservative	Optimistic	Conservative	Optimistic	Conservative	Optimistic
Aquatics								
SALARY NORMAL	277,920	277,920	481,800	481,800	481,800	481,800	909,600	909,600
SALARY ON-COSTS	95,743	95,743	165,980	165,980	165,980	165,980	313,357	313,357
LICENSE	2,000	2,000	3,000	3,000	4,000	4,000	4,000	4,000
CONTRACT	20,000	20,000	50,000	50,000	55,000	55,000	70,000	70,000
MATERIALS GEN	5,000	4,000	40,000	45,000	45,000	45,000	45,000	45,000
CHEMICALS	20,000	20,000	40,000	45,000	45,000	45,000	45,000	45,000
MINOR EQUIP	2,000	2,000	3,000	3,000	3,000	3,000	4,000	4,000
Total Aquatics	422,663	421,663	783,780	793,780	799,780	799,780	1,390,957	1,390,957
Swim School								
SALARY NORMAL	52,167	53,500	185,667	191,000	207,500	219,947	215,260	221,887
SALARY ON-COSTS	17,971	18,431	63,962	65,800	71,484	75,772	74,157	76,440
LICENSE	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
MATERIALS GEN	1,000	1,000	1,500	1,500	2,000	2,000	2,500	2,500
REIMBURSEMENT	450	450	1,200	1,400	1,300	1,500	1,300	1,500
Total Swim School	72,588	74,381	253,329	260,700	283,284	300,218	294,217	303,327
Kiosk and Merchandise								
SALARY NORMAL	61,511	61,511	102,518	102,518	186,000	186,000	186,000	186,000
SALARY ON-COSTS	21,190	21,190	35,317	35,317	64,077	64,077	64,077	64,077
PURCHASE STOCK	29,250	39,000	81,250	97,500	105,750	126,000	166,500	186,750
Total Kiosk	111,951	121,701	219,085	235,335	355,827	376,077	416,577	436,827
Utilities								
ELECTRICITY	45,706	45,706	184,871	175,141	194,601	184,871	257,016	248,376
ELECTRICITY (heating)	16,721	15,129	44,627	40,377	51,347	46,457	84,790	76,714
WATER	15,000	15,000	28,000	26,000	28,000	26,000	45,000	43,000
COMMUNICATIONS	4,000	4,500	8,000	8,500	8,000	8,500	8,000	8,500
Total Utilities	81,427	80,334	265,498	250,018	281,948	265,828	394,806	376,591
Cleaning								
CONTRACT	10,000	10,000	88,695	82,125	153,300	148,920	162,060	157,680
WASTE REMOVAL	9,800	9,800	18,200	17,940	17,680	17,160	19,760	18,720
Total Cleaning	19,800	19,800	88,695	82,125	153,300	148,920	162,060	157,680



Expenditure	KWP Stage 1 new 50m pool and LTS + existing slides		KWP stage 2 only indoor 25m +LTS +Hydro + slides		HWCH Stage 1 - 900m2 fitness Indoor 25m + LTS +Hydro		HWCH complete -900m2 fitness Indoor + Slides + Outdoor 50m	
OPEX Scenarios	Conservative	Optimistic	Conservative	Optimistic	Conservative	Optimistic	Conservative	Optimistic
Facility Maintenance								
CONTRACT	32,000	30,000	72,000	72,000	75,000	75,000	110,000	110,000
MATERIALS GEN	3,500	3,500	8,500	8,500	10,500	10,500	14,000	14,000
Total Building Mtce	35,500	33,500	80,500	80,500	85,500	85,500	124,000	124,000
Grounds and Carpark Maintenance								
CONTRACT	8,000	8,000	10,000	10,000	15,000	15,000	15,000	15,000
MATERIALS GEN	2,000	2,000	3,000	3,000	3,200	3,100	3,400	3,300
Total Grounds Mtce	10,000	10,000	13,000	13,000	18,200	18,100	18,400	18,300
Corporate Allocations								
DEPRECIATION								
CORPORATE OVERHEADS								
Total Corporate allocations	-	-	-	-	-	-	-	-
Operating cost	1,081,114	1,088,564	2,599,048	2,635,792	3,785,322	3,804,806	4,715,883	4,725,348
Corporate Overheads	-	-	-	-	-	-	-	-
Total Facility Cost	1,081,114	1,088,564	2,599,048	2,635,792	3,785,322	3,804,806	4,715,883	4,725,348
Operating income	361,985	509,378	723,296	974,056	2,575,550	2,945,640	3,387,930	3,953,510
Operating loss (surplus)	719,129	579,186	1,875,751	1,661,737	1,209,772	859,166	1,327,953	771,838
Net Total Facility Cost	719,129	579,186	1,875,751	1,661,737	1,209,772	859,166	1,327,953	771,838
Performance indicators								
Total Labour costs	\$842,502	\$842,702	\$1,982,705	\$1,996,869	\$2,999,081	\$3,001,195	\$3,763,908	\$3,756,102
Attendance	45,000	60,000	125,000	150,000	235,000	280,000	370,000	415,000
User subsidy	\$15.98	\$9.65	\$15.01	\$11.08	\$5.15	\$3.07	\$3.59	\$1.86
Expenditure comparison	\$12.00 per entry PLA benchmark							
Expenditure via benchmark	540,000	720,000	1,500,000	1,800,000	2,820,000	3,360,000	4,440,000	4,980,000
Variation	100%	51%	73%	46%	34%	13%	6%	-5%
Forecast per entry expenditure	\$24.02	\$18.14	\$20.79	\$17.57	\$16.11	\$13.59	\$12.75	\$11.39

10.4. Forecast Operational Model – One Facility in City

Table 13 Aquatic Centre Operating Performance Summary for Option 2b Only.

	Option 2b	
Key components	HWCH complete - 900m2 fitness + indoor 25m + LTS + Hydro	
	+ Slides + Outdoor 50m	
CAPEX	\$31,907,585	
OPEX Scenarios	Conservative	Optimistic
Attendance	400,000	465,000
OPEX Income	\$ 3,723,800	\$ 4,398,200
Opex Expenditure	\$ 4,720,497	\$ 4,739,015
Corporate O'heads	\$ -	\$ -
Operating loss	\$ 996,697	\$ 340,815
Total net cost	\$ 996,697	\$ 340,815
User subsidy	\$ 2.49	\$ 0.73

A variety of assumptions have been developed to help derive the income and expenditure projections:

- The City is operating a one-facility model being the Foothills Aquatic Centre only, it does not include the operation of the community centre and library components.
- All assumption remain the same as per Section 10.3. however as only one aquatic facility is in operation, attendances will increase between 400,000 to 465,000, swim school enrolments between 3,500 to 4,000 persons and vehicle expenses are not required.

10.5. Commercial Opportunities to Improve Sustainability

As previously mentioned in sect. 7.2, in addition to the revenue generated through the fitness centre, swim school, refreshments, creche, café and merchandise component of the facility, consideration also needs to be given to commercial opportunities. These could typically be aligned to the provision of Allied Health services such as:

- Physiotherapists
- Chiropractors
- Naturopaths
- Remedial masseurs
- Nutritionists
- Occupational therapists



Services delivered by third party agencies such as allied health practitioners are usually undertaken under a commercial tenancy arrangement.

Other commercial opportunities worthy of consideration are meeting rooms, office space, and child care. An analysis was completed for childcare showing that a \$1.7m investment would return in the vicinity of \$105-120K annually. The more area allocated for commercial tenancies the greater potential return, subject to occupancy. The capital investment and any debt servicing requirements needs for be factored into any calculation related to reducing operating costs.

11. OPTIONS ANALYSIS

This business case has responded to the findings of the stakeholder engagement and research phases of the study. The options presented here focus on the provision of two aquatic facilities, one in the hills to replace the existing KWP facility, which is approaching the end of its useful life, and one in the foothills which is situated closer to the majority of the City's population.

The analysis suggests that the foothill's facility should be afforded the highest priority, even though it may be delivered after the KPW facility is replaced. Indeed, if the City determined to build only one facility, it should be in the foothills as part of a community hub surrounding the High Wycombe Train Station.

Of the two options for the KWP site, Option 1 a), the like for like replacement of an outdoor 50m with heating to increase swimmer comfort and extend the shoulder period is the preferred and least expensive.

Option 1 b), the development of an indoor complex is over \$1.2 million more expensive to construct and will carry an additional operating cost of between \$600,000 and \$700,000 annually. Over a forecast 25 year life span this will require the City to find an additional \$18.25 million. Over a full 50 year life span the indoor facility will incur an additional cost in the order of \$34.5 million. It must be noted, however, that an indoor aquatic facility would be available all year round and is forecast to serve an additional 150,000 patrons annually, or more than 3.75 million patrons over 25 years; and 7.5 million patrons over a 50 year facility life.

Of the two options for the foothill's facility, Option 2 a), the aquatic and fitness centre without the outdoor pool is some \$8.5 million cheaper than the full development including the outdoor 50m pool and water slides. Option 2 b), however, will deliver a lower operating cost (up to \$250,000 less per annum) than the option without the outdoor pool. Over the forecast 25 year life span, the \$8.25million in additional capital cost will be offset by \$6.25million in operational costs savings. Over 50 years the operational cost savings with the outdoor pool and water slides will deliver a saving of around \$12.5 million.

It is also noted that the fully developed facility is forecast to service an additional 135,000 patrons annually, or 3.375 million additional patrons over 25 years and more than 6.75 million additional patrons of a 50 year facility life.

On this basis it is recommended that the City should pursue options 1 a) and 2 b).



12. LIFECYCLE COST

A comprehensive component replacement program has been prepared using best estimates of areas and numbers of components based on the concept plans for the foothill's facility with a 50m outdoor pool and water slides. Given that this assessment is based on concept plans only, there are extensive assumptions in the calculations related to number and size of components. The live worksheet for this program is provided separately and can be updated as design development proceeds and equipment specifications are detailed in subsequent stages.

The elemental life and component costs included in the worksheet have been populated in association with the quantity surveyor using industry standards for life cycles and allowing an annual inflation rate of 3%. Without detailed design drawings and operating specifications, it is not possible to provide a more accurate estimate of renewal or replacement costs. The program is summarised below allowing for all components to be replaced (some repeatedly) at the nominated frequency over an anticipated 50 year life.

Table 16 Lifecycle Cost Projections

Component	Replacement cycle (years)	50 year cost
Carpet	8	413,173
Vinyl floor coverings	15	179,466
Tiling to walls and floors	25	355,383
Painting	7	836,400
External works	20	1,743,960
Lift equipment	20	664,272
Pump and fan motors	15	303,956
Pumps and fans	15	243,472
Hot water system	20	61,507
Ceilings and window treatments	13	3,890,320
Tapware and toilet hardware	15	2,375,291
Fittings and fitments	20	1,033,312
Kitchen fittings and appliances	15	791,764
Lane ropes	10	686,550
Pool blankets	8	1,444,043
Robotic pool cleaners	10	111,564
Split system air conditioning units	10	514,912
Heat pumps	20	688,875
Roofing, gutters and insulation	25	548,854
Air handling equipment	25	457,379
Electrical fittings and services	15	1,244,200
Water feature renewal	15	1,508,122
Gym equipment	10	1,501,828
Water slides	15	2,782,756
Total lifecycle component replacement cost		24,381,359



13. RISK ASSESSMENT

The following schedule of risks and potential mitigation strategies has been developed for the development and management of the City of Kalamunda's Aquatic facilities. Scoring has been based on the City's Risk Matrix adopted in 2019.

CITY OF KALAMUNDA RISK MATRIX 2019							LIKELIHOOD					
							< once in 15years	At least once in 10 years	At least once in 3 years	At least once per year	More than once per year	
CONSEQUENCE							May occur, only in exceptional circumstances	Could occur at some time	Should occur at some time	Will probably occur in most circumstances	Expected to occur in most circumstances	
F	H	R	O	E	C	P	Severity	Rare	Unlikely	Possible	Likely	Almost Certain
Financial	Health & Safety	Reputation	Operation	Environment	Compliance	Project		E	D	C	B	A
>\$1M	Fatality or permanent disabling injuries or illness	Substantiated, public embarrassment, very high multiple impacts, high widespread multiple news profile, third party actions	Non-achievement of major deliverables	Major breach of legislation or extensive contamination and environmental damage requiring third party intervention	Breach resulting in external investigation or third party actions resulting in significant tangible loss and damage to reputation	>50% increase in cost or timeline, or inability to meet project objectives requiring the project to be abandoned or redeveloped	Critical	Medium 5	High 10	High 15	Extreme 20	Extreme 25
\$500,000 - \$1M	Serious irreversible injuries or illness	Substantiated, organisational embarrassment, high impact news profile, third party actions	Non-achievement of major deliverables	Minor Breach of legislation / significant contamination or damage requiring third party assistance	Breach resulting in external investigation or third party actions resulting in tangible loss and some damage to reputation	20 — 50 % increase in time or cost or significant variation to scope or objective requiring restructure of project and Senior Management or Council approval	Major	Low 4	Medium 8	High 12	Extreme 16	Extreme 20
\$100,000 - \$500,000	Injuries or illness that could lead to a Lost Time Injury	Substantiated, public embarrassment, moderate impact, moderate news profile	Significant delays to major deliverables	Environmental damage requiring restitution or internal clean up	Breach requiring internal investigation, treatment or moderate damage control	10 -20 % increase in time or cost or variation to scope or objective requiring Senior Management approval	Significant	Low 3	Medium 6	High 9	High 12	High 15
\$10,000 - \$100,000	Medical treatment injury or illness	Substantiated, low impact, low news item	Inconvenient delays	Minor damage or contamination	Breach of policy, process or legislative requirement requiring attention of minimal damage control	5-10% increase in time or cost or variation to scope or objective requiring managers approval	Moderate	Low 2	Low 4	Medium 6	Medium 8	High 10
< \$10,000	First aid treatment injury or illness	Unsubstantiated, low impact, low profile or "no news" item	Little impact	Little impact	Minor breach of policy, or process requiring approval or variance	Small variation to cost, timelines, scope or quality of objectives and required outcomes	Insignificant	Low 1	Low 2	Low 3	Low 4	Medium 5

Figure 11 Risk Matrix



Table 17 Development Risks

Development Risk	Score	Actions that could be taken to manage the risk
1. Difficulty in securing project funding	F 20	<ul style="list-style-type: none"> Develop a project funding strategy Enlist elected members and local parliamentarians in advocacy campaign Establish partnership arrangements with state and federal governments agencies Establish project partnership arrangements with private providers Establish funding arrangements through corporate and philanthropic agencies
2. Challenges in land assembly and acquisition for the foothills	R 12	<ul style="list-style-type: none"> Compulsory acquisition from reluctant landowners Reduction of community purposes site size
3. Loss of key skills / expertise to oversee project delivery	O 12	<ul style="list-style-type: none"> Assess depth of skills / back up / redundancy in appointed contractor to ensure work is completed Establish internal project working party Ensure in-house project management expertise is available Identify secondary project manager within project management team for back up
4. Failure of the existing facility prior to the opening of a new facility	R 12	<ul style="list-style-type: none"> Advise the community and other stakeholders of the condition of the existing facility Promote the proposed development timeline and subject conditions e.g. securing funding, population growth, construction contract price
5. Supply chain failure/delays	P 12	<ul style="list-style-type: none"> Know the location of your suppliers and their suppliers' facilities Meet with your suppliers and understand their rerouting procedures and risk management procedures Check your suppliers are compliant with local regulations Diversify your approved suppliers
6. Delays to program through external challenges	P 10	<ul style="list-style-type: none"> Risk to employees of extreme weather - ensure safe temperatures at work, ready access to water, shaded working areas Risk to facilities, buildings, resources, materials - insurance e.g. buildings and contents, invest in storm protection, fire prevention etc., secure storage Develop an emergency prevention and recovery plan Industrial action preventing or slowing the work program - engage with shop stewards



7. Cost of components - increase or decrease	P 10	<ul style="list-style-type: none"> • Enter into a fixed price contract not subject to rise and fall • Develop a dedicated strategy for components that are subject to volatility • Use financial and operational hedging • Monitor pricing trends • Manage inventory to soften impact of price changes e.g., stockpile
8. Difficulty in securing political support	O 10	<ul style="list-style-type: none"> • Establish and maintain relationships with local politicians • Influence the political landscape via lobbying, networking, assisting candidates/parties • Enlist lobbyists to promote the projects to political entities
9. Bankruptcy of building contractors or suppliers	P 8	<ul style="list-style-type: none"> • Assess financial history and corporate background of potential contractors before engagement • Use business intelligence agencies to source information if required • Avoid single source dependence
10. Transportation delay or damage to construction materials or components	P 8	<ul style="list-style-type: none"> • Purchase insurance which covers sea or air transit • Chose a suitable freight forwarder • Understand value of shipments, split high value shipments • Be clear on the impact of losses in the supply chain on corporate financials
11. Regulatory compliance - difficulty in compliance or failure to achieve building certification	C 6	<ul style="list-style-type: none"> • Invest in compliance consultants • Train employees on regulations • Use analytics and technology to monitor compliance activities • Conduct a compliance risk assessment
12. Over servicing the community with excess level of facility provision	F 5	<ul style="list-style-type: none"> • Limit the scope of facilities developed on each site • Ensure facilities in hills and foothills are complementary not competitive



Table 18 Operational Risks

Operational Risks	Score	Actions that could be taken to manage the risk
13. Seasonal risk of diminished patronage	O 20	<ul style="list-style-type: none"> Consider a complete / partial shutdown of facilities during off-peak periods to reduce costs Adapt your services/product to the seasons Market in off-peak times Reduce opening times during off-peak periods
14. Ability to financially operate two aquatic facilities	F 25	<ul style="list-style-type: none"> Consider outsourcing of facility operations. Consider rationalising underperforming City assets and services. Develop two complimentary aquatic facilities. Incorporate compatible commercial revenue opportunities into the facility design (e.g., Allied Health Services).
15. Safety	H 16	<ul style="list-style-type: none"> Ensuring the safety of products, services, and programs for everyone involved, whether as a participant or within a workplace and public-safety context. Develop a facility specific occupational health and safety manual Require all staff to undertake an organisation and facility safety induction programs
16. Revenue forecast missed	F 16	<ul style="list-style-type: none"> Use variance analysis and comparisons to highlight potential inaccuracies in forecasts Set high, low, and expected forecasts (30, 50 and 70 percent probabilities) Measure forecasts against actual results to improve accuracy Update forecasts regularly e.g., monthly Establish a sales training program for all front-line staff
17. Natural disaster including further pandemic outbreaks and restrictions	O 16	<ul style="list-style-type: none"> Identify natural hazards Measure vulnerability to natural hazards Measure proximity of risk e.g., use weather forecasts, critical hot spots to decide potential action Create plans for responding to natural disasters / facility closures Insure against losses were possible Provide regular updates to staff and [patrons on operating conditions



18. Profit - loss of profit or missing profit projections	F 16	<ul style="list-style-type: none"> Require all front line staff to be trained in sales Ensure realistic forecasting and sales pipeline - Understand what number of contacts need to be made and what % of lead opportunities will not be converted. Improve quality of leads, before handing opportunities to dedicated sales people Adjust sales pipeline multiplier Prevent unnecessary discounting on memberships and block booking sales
19. Technology breakdown e.g., server outage, filtration dosing controller, security program	O 16	<ul style="list-style-type: none"> Build in redundancy and use data backups Establishing a regular update and maintenance regime Establish 24/7 on call service agreements Have power and cooling backups e.g., generators Invest in monitoring and early warning systems
20. Image and reputation damage through accident / incident	R 15	<ul style="list-style-type: none"> Protect and enhance the reputation of the City among stakeholders and the community Provide values training to guide the conduct of employees and others. Track evolving stakeholder expectations to manage the risk Put a plan in place to manage a reputation crisis Undertake regular customer satisfaction surveys Monitor customer sentiment online using social media monitoring tools, engage promptly
21. Membership and/or participation rates are not achieved	F 12	<ul style="list-style-type: none"> Segmented marketing strategy offering services and programs for all age / service groups Targeted programming by gender, time of use, day of use, Provision of ancillary services (e.g., café / crèche / specialised merchandise) Incentivised retention and renewal promotions for members Promotion of early adopter, length of membership and whole of family
22. Emergence of new competitors and aggressive marketing by existing	F 12	<ul style="list-style-type: none"> Gather market intelligence (planning department) and assess risk from new competition Promote alternative / complementary facilities and services in lieu of head on competition Use industry research and advisory firms to scan for competitive risk
23. Essential plant, equipment, or machinery failure	O 12	<ul style="list-style-type: none"> Ensure recommended servicing and maintenance schedules are followed - require service manuals to be maintained and available for inspection Have contract with emergency 24/7 repair services Train employees on safe use, maintenance, and basic repair



24. Compliance failure	C 10	<ul style="list-style-type: none"> Comply with relevant legislation, regulations, standards and the Code of Practice for the Design, Construction, Operation, Management & Maintenance of Aquatic Facilities Establish and provide training in organisational and facility specific policies, procedures and expectations set by the City.
25. Operational disruption e.g., risk to day-to-day operations	O 10	<ul style="list-style-type: none"> Use recognised Operational Risk Management (ORM) process Assess risks for each operational area e.g., IT, HR, finance, security Automate operational workflows Improve people management Provide extensive staff training Invest in high efficiency self-service and automated infrastructure
26. Damage to assets e.g., fire, flooding, vandalism, theft	F 10	<ul style="list-style-type: none"> Insure assets Compliance with fire & building regulations Early warning systems e.g., smoke alarms, sprinklers, CCTV monitoring systems Establish and manage a secure compound / site
27. Poor patron attraction / market acceptance	O 10	<ul style="list-style-type: none"> Make use of early adopters / patrons to promote the new facilities and services Regularly consult existing customer base on what they want/need Undertake routine performance audits on facility condition and service delivery
28. Security breaches, intruders, break-ins	O 8	<ul style="list-style-type: none"> Including the protection of information, intellectual property, premises, assets, people & technology. Exit open alarm systems CCTV monitoring
29. Competition: legal action or political pressure from existing commercial providers	C 8	<ul style="list-style-type: none"> Demonstrate competitive neutrality Advise and inform existing competitors of the City's development and services program
30. Environmental harm	E 8	<ul style="list-style-type: none"> Ensure the compatibility of the centre's activities with environmental legislation and the protection of cultural assets Promote water and energy efficiency practices Promote waste minimisation practices - reduce, reuse, recycle Ensure toxic and dangerous chemicals are properly installed, maintained and disposed of
31. Facilities and assets received poorly by patrons	R 8	<ul style="list-style-type: none"> Ensure facilities are in a clean, safe, fit-for-purpose condition. Provide a safe and supportive working environment Take all reasonable steps to protect staff and patrons from environmental and behavioural risks



32. Governance and administration failures disrupt operations	C 6	<ul style="list-style-type: none"> • Strive for continuous improvement of the Centre's financial viability, to ensure the successful development and delivery of programs or services. • Measure and regularly review performance against agreed benchmarks and other indicators
33. Failure of utilities e.g. water, electricity	O 6	<ul style="list-style-type: none"> • Backup generators and/or off grid solutions • Water storage on site or own bore hole • Change products/processes to reduce reliance on utilities e.g., require less water
34. New markets - distract or provide opportunity	F 6	<ul style="list-style-type: none"> • Conduct due diligence and gather market intelligence • Identify new stakeholders • Review competitor services, programs and prices
35. Failure to attract skilled facility management staff	O 4	<ul style="list-style-type: none"> • Advertise widely for facility management contractors providing detailed service level statements performance indicator measures and targets and reporting requirements • Agree budget and operational performance targets and regularly report against them
36. Strategic misalignment	R 2	<ul style="list-style-type: none"> • Planning, scoping, resourcing and developing the aquatic facility in line with the City's strategic community plan and corporate objectives • Maintain community awareness of the projects and progress



14. IMPLEMENTATION

The actual timetable for development will be influenced by a variety of factors, many of which are external to control by the City of Kalamunda.

The following program has been developed in response to:

1. Availability of funds
2. Likelihood of external funding / grants
3. Land assembly and acquisition timeline for High Wycombe
4. Population growth, particularly in the foothill's catchment area
5. The anticipated failure of the existing Kalamunda Water Park facilities

It may be possible for the City to redevelop KWP in accordance with option 1 a) in this report with limited external funding support, potentially via CSRFF. Should this option be adopted by the City, the shortest reasonable implementation timeline is likely to be as follows, noting that calling tenders cannot occur until funding is secured:

Table 19 Implementation Program for KWP

Stage / element	Months	Comment
Decision to proceed	6	Business case driven by City of Kalamunda
Project Definition Plan	2	Project funding to be secured in this period
Schematic design	2	
Design development	3	Funding agreements and final approval to proceed before calling tenders
Tender documentation	3	
Call and award tenders	4	
Demolition and Construction	10	Project management by City of Kalamunda
PC commissioning and fit-out	2	
Total time to Opening	32	from 1 January 2021 – Opening in October 2023

The development of the foothill's facility will be considerably influenced by the availability of State Government funding and support from the METRONET project.

The intention is to encourage the State Government to pre-fund this project and develop the community hub adjacent to the High Wycombe Train Station in full and at the earliest possible opportunity.



An indicative timeline assuming funding support is forthcoming is shown below:

Table 20 Implementation Program for the Foothill's Facility

Stage / element	Months	Comment
Decision to proceed	6	Business case driven by METRONET Approved by the State Government and City of Kalamunda
Project Definition Plan	2	
Schematic design	2.5	Project funding to be secured in this period
Design development	4	13.5 months for land assembly, funding agreements and final approval to proceed before calling tenders
Tender documentation	5	
Call and award tenders	4	
Construction	22	Project management by City of Kalamunda
PC commissioning and fit-out	2.5	
Total time to Opening	48	from 1 April 2021 – Opening in March 2025

15. FUNDING

The funding strategy outlined below has been developed within a framework that reflects:

- Historical grant programs and funding schemes
- Case studies of funding allocations made to similar projects
- Eligibility criteria and funding limits via program
- The bespoke circumstances and conditions prevailing in High Wycombe associated with the METRONET Airport Forrestfield Link rail expansion program.

Please note that the strategy anticipates that future funding rounds in existing or new programs will be announced. This cannot be guaranteed. The availability, quantum and eligibility criteria for capital works grant programs is in a state of constant flux and never before so precarious in these times of uncertainty due to Covid-19.

Parties wishing to secure funding need to be watchful for opportunities as they arise and to establish and nurture personal relationships with potential funding partners. Below is a schedule of government grants that are ongoing, recently advertised and recently closed which may announce another round in the future. The second part of this schedule relates to program funding which may be useful for operational and program support once the proposed facilities are completed as local governments are generally responsible for meeting the ongoing operational costs for these facilities.



Table 21 Potential Infrastructure Capital Works Funding Sources

Grant Name	Agency	Criteria	Value (\$)	Rounds
Programs to support community infrastructure development				
WA State Government				
CSRFF - Forward Planning	DLGSC	Large scale sport and recreation infrastructure projects valued over \$500 K	168 K - 2 m	October annually
Community Infrastructure Framework	Lotterywest	Program supports projects that deliver on one of the framework's pillars including active healthy people, an inclusive thriving community and a smart innovative society	unspecified	All funds currently diverted to Covid-19 recovery programs
Federal Government				
FF&WS Program	DIRDC	Investment in female change rooms, facility upgrades and swimming pools	No fixed amount	Annually to 2023
Community Development Grants (CDG) Programme	DITCRD	Support needed infrastructure that promotes stable, secure and viable local and regional economies.	No fixed amount	Ongoing to 30/06/2026
Building Better Regions Fund	DITCRD	Supports investment ready projects that provide economic and social benefits for regional and remote area.	20 k – 10 m	Round 5 closes 5 March 2021
Safer Communities Fund	Dept Home Affairs	Grants for crime prevention initiatives aimed at reducing crime, violence, anti-social behaviour and/or other security risks driven by racial and/or religious intolerance	10 K - 1 m	TBA
Other Agencies				
Community Sport Infrastructure	Sport Australia	Small to medium scale projects to improve local community sport infrastructure - especially for women	50k - 500 K	TBA



Table 22 Potential Operating Cost Funding Sources

Grant Name	Agency	Criteria	Value	Rounds
Programs for physical activity and participation				
Active Australia Innovation Challenge	Heart Foundation	Raise community awareness of the value of physical activity and increase the number of Australians becoming more physically active.	10 K	TBA
Targeted Participation Program Funding Scheme - Category One	DLGSC	Promote participation and active engagement of Western Australian communities in sport and active recreation.	Cat 1 50 - 150 K Cat 2 10 - 50 K Cat 3 < 5 K	annual TBA
Stronger Communities Programme	DIRDC	Small capital projects that improve local community participation and contribute to vibrant viable communities - by invitation from the local MP	2.5 K - 20 K	annual TBA
Fundraising4Sport	Australian Sports Foundation	Projects registered with the ASF allow donors to use F4S to claim tax relief for any donation of \$2 or more.	Any donations made go the specified project	Always open
Healthy Local Government Grants	Healthway	Develop a greater focus on a range of public health issues under their control at the local level	Up to 50 K	Always open

In order to understand current trends and opportunities in funding for community facilities a series of recent and proposed similar projects have been investigated. These are listed below.

Table 23 Funding Source Case Study Venues

No.	Local Government	Facility name
1	Karratha	Red Earth Arts Precinct
2	Karratha	Leisureplex
3	Karratha	Dampier Community Hub
4	Karratha	Wickham Community Hub
5	Gosnells*	Sutherlands Park Recreation Precinct
6	Gosnells	Mills Park Recreation Precinct
7	East Pilbara	Martumili Arts Centre



8	South Perth*	Regional Recreation and Aquatic Facility
9	Cockburn	Aquatic and Recreation Centre
10	Armadale	Aquatic centre
11	Swan*	Ellenbrook Aquatic Facility
12	Northam	Aquatic Centre

When these case study examples are aggregated and assessed by category, local government is by far the largest contributor at 42%. State and Federal government programs contribute another 42% collectively and the remaining funds come from a variety of project specific sources.

Table 24 Typical Funding Source Contributions

Source of Funds by Category	Sum (\$)	Category Percentage
Total Local Government funds	247,464,012	42%
Total State Government funds	125,326,133	21%
Total Federal Government funds	123,280,000	21%
Total Development Partners funds	44,750,000	8%
Total Industry Sponsors / Donors funds	52,800,000	9%
Total Project Cost / Total Funding	593,620,145	100%

Development partners relate specifically to the project in question. In the case studies listed above they include contributions from the Education Department, Curtin University, Fremantle Football Club, Clublinks and other facility managers.

The industry sponsor and donor category has been remarkably strong in the Pilbara with large contributions from the resource sector. There have also been contributions from developers, both under formal DCP arrangements and through good corporate citizen behaviours, from other community minded local businesses and some philanthropic foundation contributions.

Developer contributions for the provision of community facilities in Forrestfield North (High Wycombe South) will actually come from the State in the guise of DevelopmentWA. It is noted that the Forrestfield North (High Wycombe South) area will contribute just under an estimated 20% of the demand in the catchment area and the contribution will be aligned accordingly.

In the context of the City of Kalamunda, the City has a reduced capacity to provide significant capital funding contributions to major infrastructure projects due to a limited and narrow rates base as the locality is predominately rural and residential areas with only limited industrial and commercial areas.



Given the significant investment proposed it may be prudent for the City to investigate the rationalisation of some of its underperforming assets, particularly those that the new foothills community hub would replace. Opportunities may exist in the removal or repurposing of sites including: High Wycombe Library, Cyril Road Hall and the High Wycombe Community Recreation Centre. This approach would still only provide a limited City contribution.

As a result, the City predominately funds major capital infrastructure projects through advocacy campaigning and staging of projects.

Therefore, the funding strategy for KWP Option 1a and the foothills community hub is to develop an advocacy campaign to target the 2022 Federal Election and the 2025 State Election. In particular, for the foothills community hub the City needs to engage with the State Government to advocate for pre-funding the development as an early or lead provision, to catalyse the TOD around the High Wycombe Train Station. It is expected that the State will subsequently seek to recoup a portion of its investment through a variety of sources, including developer contributions.

Following any successful advocacy campaigns Council would then need to carefully consider the City's capacity to make a capital contribution or determine potential staging options available.

It's important to note that the City would also be responsible for Project Management through construction and commissioning, ongoing facility management and operational responsibility. Current operational modelling estimates the City would equate to approximately \$2 million per annum.



16. RECOMMENDATIONS

It is recommended that the City of Kalamunda:

1. Acknowledge the strong community support for new aquatic facilities in the City and carefully consider the ongoing financial impacts.
2. If deemed feasible for the City, pursue the development of two aquatic centres within the City comprising:
 - a. A like for like replacement of the existing facility on the site of the Kalamunda Water Park allowing to refurbish the changeroom, administration and kiosk buildings, construct a new 50m pool and toddlers / learn to swim pool, heat the pool water and extend season into the shoulder months; and
 - b. An indoor and outdoor swimming complex as part of the Foothill's Community Hub located opposite the new High Wycombe Train Station.
3. If the two-facility model is not deemed feasible for the City, then the City should pursue the foothill's facility project only.

Upon determination of the feasibility of a one or two aquatic facility model for the City, the following recommendations are made:

- Develop a comprehensive funding strategy for each of the aquatic facility development projects that embraces capital, operational and life cycle (facility renewal) costs. The strategy is to explore:
 - grant income and advocacy funding opportunities to establish the facilities
 - operational income generation and commercial revenue opportunities
 - the establishment of a facility renewal reserve to provide for progressive renewal and upgrades.
- The City to undertake further detailed operational cost analysis on the preferred facility option, in consultation with industry professionals.
- Support the METRONET business case for the development of the foothill's community hub in full and as one project, in the earliest possible timeframe with a view to attracting development and activating the High Wycombe Station TOD precinct.
- Subject to the State Government agreeing to progress the foothill's community hub project and prefund its development, work with the State's project team to move the project through to design development and tender documentation.
- Negotiate with the State Government for the land upon which the foothill's community hub is to be developed to be transferred to the City prior to construction commencing.