Shire of Campaspe

Aquatic Facilities Report

Echuca War Memorial Aquatic Centre
Kyabram Swimming Pool
Rochester Swimming Pool
Rushworth Swimming Pool
Tongala Swimming Pool
Lockington Swimming Pool
Stanhope Swimming Pool
Colbinabbin Swimming Pool

Asset Review, Condition Summary, Capital Works Program & Recommendations.

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Disclaimer and Limitations

This report is based on information supplied by Campaspe Shire Council staff comprising condition assessments, specialist reports compiled by others and project reports. McCartney Solutions Pty Ltd conducted brief field inspections of each facility to identify listed infrastructure components and to confirm as far as possible by visual inspection the extent to which works recommended in these reports have been carried out. McCartney Solutions Pty Ltd has not conducted testing, sampling or detailed investigations of asset conditions to verify the accuracy of supplied reports. McCartney Solutions accepts no liability for the accuracy of information supplied in those reports.

Where insufficient information was supplied to determine renewal requirements, superficial field inspections were conducted together with a review of any available relevant information supplied by Campaspe Shire Council to provide an estimate of likely requirements. These estimates are by their nature of limited accuracy and subject to the need for further detailed testing and investigation to verify that they reflect what is actually required. Recommendations for additional expert investigations are provided in the report.

Estimates of cost contained in the report are first order 'orders of cost' based on typical construction costs for the listed items as determined by reference to typical structures and costs at other sites and industry rates. They are limited in accuracy as there are no concept, architectural or engineering plans available for the proposed works and the precise nature of the new infrastructure is not known (e.g. precise size, configuration, features and finishes.)

Estimated costs in this report are for comparative purposes to assist in deciding the best option for managing each site into the future and associated relative budgetary implications. Accurate construction costs cannot be estimated until the scope of work at each site is accurately determined through preparation of preliminary plans and specifications.

Introduction

Background

Campaspe Shire Council covers a large area of Northern Victoria and includes a number of towns throughout the area. Eight of the larger towns have swimming pools that range in size, standards and age. Council adopted a new service level for all of its pools following a 4 year community aquatic services review.

This report will cover the eight pools at Echuca (Echuca War Memorial Aquatic Centre (WWMAC)), Kyabram, Rochester, Rushworth, Tongala, Lockington, Stanhope and Colbinabbin and will provide a master asset spreadsheet for the pools based on all existing data sources held by council. The data has been verified and updated by simple onsite inspections and information supplied by Council Officers.

Ten year Capital Works Programs have been developed for all the pool complexes to:

a) Maintain them at the current service levels, and

b) To meet the new service levels developed from the aquatic services review.

Purpose of this Report

The purpose of this report is to present integrated Ten Year Capital Works Programs for each site based on retention of the existing service level and progressively upgrading all eight sites to the new service standard. These Programs are intended to enable Council to make an informed decision on the implementation of Councils Swimming Pool Strategy.

Council's new service levels will provide fully DDA and BCA compliant facilities and will specifically provide-:

Category A

- **EWMAC-:** Retention of a 50m pool indoor pool and all facilities plus provision of interactive water play features.
- **Kyabram-:** 25m pool with interactive water play features.
- **Rochester-:** 25m pool with interactive water play features.
- **Rushworth-:** 25m pool with interactive water play features.

Category B

- **Tongala-: Interactive water play feature.**
- **Lockington-: Interactive water play feature.**
- **Stanhope-: Interactive water play feature.**
- **Colbinabbin-: Interactive water play feature.**

This report provides capital works programs for the pools, associated plant, amenities and kiosks to:

1. Maintain them at their existing service standard for the next ten years excluding any upgrades (e.g. DDA compliance) that may be triggered by the Building Act if building permits are required; and
2. Provide fully compliant pools and/or interactive water play areas with associated plant, amenities, kiosk and landscaping that meet councils new service levels including maintaining the existing facilities until those works are implemented.

Scope of Report

McCartney Solutions has completed the following scope of works

1. Review of all relevant council reports as identified as references;
2. Producing a master spreadsheet of all pool assets with age, remaining useful life, condition assessments and replacement costs where available;
3. Councils 0 – 10 condition rating has been assumed in all reports;
4. Simple site inspections and gap analysis to identify assets not listed and/or data limitations, i.e. no detailed or specialist inspections have been undertaken as part of this report;
5. Recommendation on specialist reports that may be required to be carried out at each site, i.e. Filtration, chemical treatment systems, DDA compliance and WPH&S audits;
6. Provision of a capital works program detailing works required to maintain each site at the current service level;
7. For category A Pools an estimate of capital expenditure required to provide a swimming complex and interactive water play area at each site compliant with Council's new service level.
8. For category B Pools an estimate of capital expenditure required to remove existing pools, provide an interactive water play area at each site that meets Councils new service level and modify / replace other existing infrastructure to suit.

Structure of Report

This report commences with an overview of each of the 8 sites in terms of 7 categories of infrastructure. This section covers each pool separately providing a summary of the items, general condition and key issues within each category affecting that site. This information is sourced from existing reports and superficial site inspections. It lists the sources of this information, identifies deficiencies in existing asset data and follows on with recommendations for further expert reports to address identified shortcomings in available information.

The next major section identifies the minimum works considered necessary at each of the 8 sites to maintain them in a safe and serviceable condition over the next 10 years based on existing service standards. It does not include any upgrades except where required works will trigger building permits requiring the infrastructure on which those works are carried out to be brought into conformity with current legislative requirements (e.g. reconstruction of amenities buildings will trigger DDA compliance). A suggested Ten Year Capital Works Program is provided for each site that is integrated into a balanced overall program for the 8 sites.

The final section provides a schedule of works for each site to upgrade it to the new adopted service standard comprising a 50m indoor facility with outdoor water play feature at Echuca, 25m outdoor facilities with associated water play-parks at Kyabram, Rochester and Rushworth and water play-parks at the four smaller locations. A suggested Ten Year Capital Works Program is provided for a site by site conversion to the new standard whilst maintaining existing service standards until conversion occurs. Programs for each site are based on an integrated overall program providing a reasonably even annual budget demand over that ten year period.

Summary of Pool Assets

A master spreadsheet with information from all sources, as listed in the references, has been distilled into one report for each pool. All the pool sites have had assets assessed under the following categories:

1. Air Handling
2. Buildings
3. Filtration/Disinfectant
4. Equipment
5. Pool Vessel
6. Pool Heating
7. Site/Surrounds

Category A Pool Complexes

1. Echuca War Memorial Aquatic Centre (EWMAC)

Service St, Echuca

Site Map

The swimming pool complex Service St Echuca

1.1 Air Handling

Echuca is an indoor pool with pool water heating and building climate control. The pool hall was constructed in 1996 and is a steel frame structure, steel and glass walls, with steel roof with sky lights. The air within the hall is controlled automatically by 2 units delivering air via two delivery ducts with a number of vents into the main hall. Return air is extracted through a large vent and fan situated at the high point of the northern wall. The structure itself is generally in a good condition considering the excessive condensation being experienced through the poor air handling system. The only natural ventilation in the pool hall is via the various glass sliding doorways from the concourse to outside.

Control board on the roof northern end of the pool hall

The sky lights are a single polycarbonate sheet offering no heat transmission protection. They need to be upgraded to a sheet suitable for a pool hall that provides condensation and thermal control. This would require removal of the solar matting and ideally should be carried out at the same time as the roof insulation is upgraded.

Pool hall roof insulation, sky lights and air control duct work

The underroof insulation is of poor quality that provides a vapour barrier but allows excessive heat loss in winter and excessive heat gain in summer. This should be replaced with a 75mm insulation material to provide some thermal quality. The replacement would involve the removal of the solar matting and roof panels to allow for the installation of the insulation.

There is no high level natural ventilation in the hall with the only natural ventilation being the various doorways from the concourse to outside. It is recommended that high level natural ventilation by way of controlled louvres be installed in each end of the pool hall. The southern end can be constructed with glass louvres whereas the northern end is currently congested with the air handling exhaust system. Once this is removed then controlled aluminium louvres would provide both sun protection from the north and natural ventilation.

A specialist inspection and report highlighted the issues with the current air handling system including the extraction fan not working as designed and the delivery system valves not operating correctly. Overall the system and controls were in a poor condition and not able to reliably provide a controlled environment in the pool hall. It was recommended that the current air system be renewed with modern electric units that have built in air extraction systems. These would be more efficient and reliable allowing for the removal of the current air extraction system. The new units would be fitted so as to utilize the existing pool hall duct work.

The report raised serious concerns on the servicing, understanding and operation of the current air system. This was highlighted when during the recent inspection by McCartney Solutions the air extraction fans were not operational and the pool hall environment was very uncomfortable. It raises serious WPH&S concerns both for employees and patrons.

References-:

- Asset Identification and condition spreadsheet, McCartney Solutions, December 2017
- Echuca Aquatic Centre Pool Hall Environment Review, Stevenson & Associates 2016
- Renewal Project Charter - Echuca War Memorial Aquatic Centre Air Circulation System, Campaspe Shire Council 2014

1.2 Buildings

Plant/Chemicals

The plant room is an old double brick structure with steel roof constructed on the southern end of the site with access off the slip road from High St onto Ogilvie Avenue. This building is in average condition nearing the end of its 50 year life.

A small colour bond steel shed is provided for the storage of chemical. It is in good condition.

Reception

The area housing the reception counter/kiosk area, lounge waiting area, administrative/staff offices, group fitness room and change facilities and the gymnasium access/hallway are all under the one roof/building structure. The building is constructed of a steel frame, steel cladding and steel roof built in 1996.

The current structure is in very good condition with a controlled air environment. The redesign of the reception area and floor covers is part of a current design project.

The reception area provides DDA entry and departure via automatic sliding glass doors.

Administration

The administration offices are directly accessed from the reception area and provide offices fitted out for the pool manager, support and operation staff. The area needs a redesign and refit to provide a more efficient and compliant layout. The area is climate controlled.

Group Fitness Room

The group fitness room is accessed off the reception area and directly adjoins the administration area. This room is fit for purpose, climate controlled and provides DDA access.

Amenities

The amenities were recently refurbished to be DDA compliant and provide male and female facilities with separate parent/family facilities with direct access to the pool area. The facilities are in a very good condition with a controlled air environment.

Gymnasium

The building is a separate building adjoining the main administration building and is constructed of a steel frame, steel cladding and steel roof assumed to have been built in 1996. The structure is in a very good condition, climate controlled and provides DDA access.

Multi-Purpose Room

This is a separate building located on the eastern side of the property and is brick structure with an iron roof. This was previously used as a creche. The building is in good condition. The building has no DDA access or amenities.

Storeroom

A new store room has recently been added to the complex. This is a steel frame, wall and roof structure with direct access to the eastern side of the pool concourse. A shelving storage rack fit out would be beneficial. This building is in very good condition and obviously will help with decluttering the pool concourse and plant access room.

Pool Hall Building

The pool hall building was constructed over the main/wading pool area in 1996 when the outdoor pool was converted and restructured to an indoor facility. It is constructed of a steel frame with iron and glass walls, steel roof and sky lights over the main pool area. The structure is in a sound condition. The section on air handling refers to the current issues that are needed to improve the climate control within the pool hall area. In brief these require the installation of high level natural ventilation at the ends of the building, replacing the skylights with a more suitable skylight product and providing roof insulation. These capital works are recommended as a priority to improve the poor comfort level within the hall area and to minimize the highly moist/corrosive atmosphere.

References-:

- EWMAC Change Room Renewal Tender Specification, Campaspe Shire Council 2015
- Project Charter Echuca War Memorial Aquatic Centre Storage Facility, Campaspe Shire Council 2014
- Project Management Plan EWMAC Floor & Reception Design, Campaspe Shire Council 2016
- Asset Identification and condition spreadsheet, McCartney Solutions December 2017

1.3 Filtration/Disinfection

The pool runs a chlorine/acid injection system through dosing pumps that are controlled by a Blue Chemical Controller HG302. This system is in good condition with the 2 dosing pumps requiring periodic maintenance/replacement.

High volume horizontal sand filters with associated pipework

Filtering is provided through 4 x Chadson MHS3501 horizontal sand fibreglass filters. They appear fit for purpose and have significant life left. Their life expectancy would benefit from being under cover.

Two Southern Cross Centrifugal motor pump sets with hair/lint strainers are used for the water reticulation in the main/wading pools. These pump sets are in poor condition and not suitable for the application as it would require both pumps running to meet the design performance for filtration and pool water turnover. They should be replaced with appropriately designed units to meet the design performance of the filters.

2 No. Southern Cross Reticulation pumps

The concrete balance tank is inside the plant room and is inappropriate in size at 5,000 litres and is not used as a balance tank. Concrete tank itself is in good condition. A specialist report is required to determine requirements for a balance tank.

The soiled water return network is generally in good condition with the pipework from the wet deck gutters in good condition. The wet deck around the main/wading pool was renewed in 2017 and is in very good condition.

Two concrete tanks with a total capacity of 42,000 litres with pump are provided for the backwash system that is plumbed to sewer. This system is in good condition with the pump requiring periodic maintenance/replacement.

Concrete backwash retention tanks, EWMAC

The majority of the pool's water supply, return and drainage plumbing was renewed in 2015/6 following failed pressure testing in 2012.

References-:

- Asset Identification and condition spreadsheet, McCartney Solutions December 2017
- Echuca War Memorial Aquatic Centre Investigation and Report, Melbourne Pool & Spas August 2013

1.4 Equipment

Lap clock is in good condition, functional and fit for purpose.

The wading pool water feature was not tested. The pump and pipe work are the key operational components of the feature that need to be serviced and checked regularly.

A pool cleaner a Dolphin Wave 300 was identified on site. It is in good condition and has a design life of 5 – 10 years.

Two rollers with lane ropes were identified on site. These were in good condition.

8 x stainless steel/fibre glass starting blocks were attached to the southern end of the pool. They were in good condition.

A mobile pool blanket on a roller for the wading pool was on site. This was in good condition.

Two fixed pool blankets with electric motors were attached to the wall at the southern end of the main pool. They appeared in good condition.

References-:

- Asset Identification and condition spreadsheet, McCartney Solutions December 2017

1.5 Pool Vessel

Main Pool

Wading Pool

Main/Wading Pool

The main/wading pool is constructed from reinforced concrete that is painted, i.e. no internal liner. The main pool was constructed in the 1950's and was renovated in 1996 when the site was redeveloped from an outdoor pool to an indoor complex including the addition of the wading pool area. Melbourne Pools & Spa inspected the structure in 2013 and advised that the original structure was renovated to include a wet deck and wading pool. It generally looked in reasonable condition but would require detailed core sampling and reinforcement scanning to determine the quality of the structure. It was last repainted in 2016 and is listed for repaint in 2022/23 on a 7 year cycle.

The main pool is 50m long and 18m wide and is directly connected to the wading pool via a swimming channel on the western side of the complex. FINA guidelines recommend a 50m pool for long course or 25m pools for short course championships

The pool has DDA beach style access for wheel chairs via the wading pool.

The pool is lined marked for 8 lanes.

FINA guidelines recommend a minimum lane width of 2.5m with 0.2m from the first and last lane from the wall.

Royal Life Saving Guidelines recommend a minimum lane width of 2.5m for competition, 1.5m for recreational or 2m for 2 way lane swimming.

It is recommended that a compliant pool that meets councils new service level is the retention of the existing main pool (50m x 18M) and wading pool. This would allow for 7 competition width lanes, 9 two way lanes or 12 recreational lanes.

The pool ranges in depth from 0.9m to 1.8m.

FINA guidelines recommend a minimum depth from 1.35m where starting blocks are in use to 1m. Royal Life Saving Guidelines recommend a minimum depth of 0.9m for lap swimmers, i.e. to facilitate tumble turns.

Wading Pool

The wading pool is an irregular shape approximately 12m x 18m. The pool is constructed from reinforced concrete and was built in 1996. It is directly attached to the main pool as one body of water. It was last repainted in 2014. It is listed for a repaint in 2021/22 on a 7 year cycle.

There is an option to use this structure to meet councils new service standard for an interactive water play area. Detailed structural investigation should be undertaken if this option is to be considered.

References-:

- Asset Identification and condition spreadsheet, McCartney Solutions December 2017
- Renewal Project Charter - Swimming Pools Repaint Program, Campaspe Shire Council 2015
- Echuca War Memorial Aquatic Centre Investigation and Report, Melbourne Pool & Spas August 2013
- Federation Internationale De Natation Part IX FINA Facilities Rules 2015-17 Issued 28 October 2015
- Royal Life Saving Australia – Guidelines for Safe Pool Operation – Facility Design FD6 Issued 1 November 2007

1.6 Pool Heating

Echuca is an indoor heated pool via 2 gas fired boilers and a solar system set to maintain the pool at approximately 29 degrees. The boilers are located on the roof at the northern end of the pool hall and connected into the reticulation system. Although the boilers appear in reasonable condition no information was available on when they were installed or life expectancy. A special report prepared for council indicated that the gas boilers be replaced with electric heat pumps that would offering significant savings on pool heating costs. It indicated that savings would pay for the changeover in 4 to 5 years.

LARS Mighty Boilers - EWMAC

Solar heating comprises 900m2 of black rubber tube solar heat matting laid on the main pool hall roof. This is connected into the pool water reticulation system via 4 pumps located in the pump shed. This system was installed in 2014. The matting, pumps and pipe work appears to be in very good condition.

4 X Austral Solar pumps in the plant room with reticulation system

It is recommended that the existing gas boilers be programmed for replacement with the more efficient and less costly electric heat pumps.

Overall the pool heating system is able to meet councils new service level of maintaining a 50m heated indoor pool.

References-:

- Asset Identification and condition spreadsheet, McCartney Solutions December 2017
- Echuca Aquatic Centre Pool Hall Environment Review Stevenson & Associates 2016

1.7 Site/Surrounds

Access to the pool is from Service St in the centre of Echuca. No off street parking is provided or available. All parking is in the street in either Service St or Hare St. DDA parking is provided in Service St with access to the complex. It was noted that there is heavy parking congestion in the street during peak times.

The site is sufficient in size to maintain the existing complex to meet councils new service level of a 50m pool. There is limited space external to the main pool hall to provide an interactive water play area. The limited area along the western side and southern end are currently used for patrons during various swimming carnivals or events. Some of the land area to the south end may be required for the pool plant/chemical storage redeveloped compound and access.

The security fencing is in very good condition.

Pool concourse is generally in good condition with the main issue being with the covering applied over the concrete that requires regular maintenance.

Pathways in and around the complex are generally in good condition. Need to review trip hazards and treat on a regular basis.

Access to the plant room chemical storage area is via an unconstructed track leading from the slip road from High St to Ogilvie Avenue under the control of VicRoads. It is understood that this access is via a temporary agreement/permit with VicRoads. The formalising of an approved access should be prioritized to allow for the programmed design/renewal of the plant room, compound area and access.

It was noted that the war memorial is in poor condition hidden away on the eastern side of the site adjoining a residential area. The memorials foundations were in poor condition and plans should be made to renovate, relocate or remove it.

References:

- Asset Identification and condition spreadsheet, McCartney Solutions December 2017

2. Kyabram Swimming Pool

Union Street, Kyabram

Site Map

The swimming pool complex off Union St in the centre of Kyabram:

- Main pool outlined in blue
- Amenities & kiosk outlined in red
- Wading pool outlined in yellow
- Car park outlined in green
- Swimming Club Rooms outlined in purple
- Pump/Chemical Shed outlined in black

2.1 Air Handling

Kyabram is an outdoor pool and therefore has no assets in category 1.

2.2 Buildings

Kyabram kiosk & amenities entry from Union St

Plant/Chemicals

The plant room and chemical storage building are constructed of brick with bunding provided for dry chemical storage. These are in good condition.

Acid is stored in a 2200 litre special plastic tank on a bund under a steel structure. The structure is in good condition.

Amenities/Kiosk

The kiosk and amenities are constructed of brick with a steel frame and an iron roof.

The current structure and facilities are in poor condition with site drainage issues and privacy/security issues. The amenities are currently part of a Council project.

The current renewal project will provide a refurbishment of the facility including an approved drainage solution. The level of work identified in this project may not meet community expectations for this location and will not meet DDA requirements.

Works included in this project are-:

- Design a compliant grey water & storm water system for the complex
- Remove the old brick bike racks external to the change rooms
- Remove existing metal security screens and replace with security/privacy mesh to all external walls
- Construct a drainage system so buildings drain to the road drainage point.
- All roof/storm water to be discharged as per council requirements
- Installation of bollards along car park area to restrict traffic driving through the surface drain
- Grind all concrete floors throughout the change rooms and toilets, fill all cracks and level to drain to existing external and internal drains. Seal the concrete floor.

- Repair the roof including new box gutters, flashings, gutters and down pipes
- Remove all clothes hooks and replace with new along eastern, northern & southern walls.
- Repair all cracks in walls and provide a full internal repaint
- Shower rooms require a full refurbishment
- Remove all existing seating and replace with new along eastern, northern & southern walls along with new central benches under the roof supports
- Remove existing slide entry gate and replace with new roller door (retain old gate)
- Remove existing storeroom slide door and renew with roller door
- Install a new pool fence and gate to control access to the facility at an agreed location
- Renew pedestals, urinal, fixtures and fittings as required

Estimated cost of the project is $173,500 and it will not provide full DDA compliance.

Typical view of amenities structure

Shade Structures

The shade structure and roof over the wading pool are in good condition with significant life left.

The shade structures along the main pool are in good condition with the shade covers needing replacement every 7-10 years.

Swimming Club

The Swimming Club owns and maintains its own building on the site. They are in good condition at middle of life. A fit for purpose building but no DDA access is provided. A special assessment would be required to determine the requirements and cost to make this facility compliant.

References-:

- Renewal Project Charter Kyabram Swimming Pool Change Rooms 2014
- Kyabram Main/Toddler Pool Investigation and Report, Melbourne Pool & Spas August 2012
- Asset Identification and condition spreadsheet, McCartney Solutions December 2017

2.3 Filtration/Disinfection

The pool runs a chlorine/acid injection system through dosing pumps that are controlled by a Blue Chemical Controller HG302. This is a new system in good condition with the 2 dosing pumps requiring periodic maintenance/replacement.

Filtering is provided through 4 x Onga HF150 Horizontal sand filters. Their capacity is only just adequate and they are at end of life. They should be programmed for renewal.

An Ajax Elite E150-26 Centrifugal motor pump set is used for the water reticulation in the main and wading pools. This pump set is in poor condition and not suitable for the application and is at end of life. It should be programmed for renewal.

The concrete balance tank is inappropriate in size and in poor condition, contributing to water losses. It should be programmed for renewal.

The soiled water return network is in poor condition requiring renewal.

A 13,500litre plastic rain water tank with pump is provided for the backwash system that is plumbed to sewer. This is in good condition with the pump requiring periodic maintenance/replacement.

The majority of the pool's water supply, return and drainage plumbing is original. It failed pressure testing in 2012 and it was recommended that it all be renewed.

References-:

- Kyabram Main/Toddler Pool Investigation and Report, Melbourne Pool & Spas August 2012
- Asset Identification and condition spreadsheet, McCartney Solutions December 2017

2.4 Equipment

Lap clock is in good condition functional and fit for purpose.

The wading pool water feature is in good condition. The pump and pipe work are the key operational components of the feature that need to be serviced and checked regularly.

A pool cleaner was identified on site. It is in good condition and has a design life of 5 – 10 years.

References-:

- Asset Identification and condition spreadsheet, McCartney Solutions December 2017

2.5 Pool Vessel

Main Pool

Kyabram main pool 'Tee head' shape

The pool is constructed from reinforced concrete that is painted, ie no internal liner. It appears that the tee section of the pool was added sometime after the original pool was built in the 1950's. Significant cracking along this construction joint is visible. It was last repainted in 2014 and is listed for repaint in 2021/22 on a 7 year cycle. Melbourne Pools & Spa recommended installing a plastic liner in the main pool to overcome the issues identified in their report. These included water losses through cracking, holes and water stops.

The pool does not have any DDA access, but this could be provided by the provision of a mobile lift.

The main pool is 50m long being 12.8m wide for 38m and 20m wide for the remaining 12m, i.e. it is a 'Tee' shaped pool. FINA guidelines recommend a 50m pool for long course or 25m pools for short course championships.

The pool is lined marked for 6 lanes. FINA guidelines recommend a minimum lane width of 2.5m with 0.2m from the first and last lane from the wall. Royal Life Saving Guidelines recommend a minimum lane width of 2.5m for competition, 1.5m for recreational or 2m for 2 way lane swimming.

The pool ranges in depth from 0.9m to 1m with a deep point midway of 1.5m and no starting blocks are in place. FINA guidelines recommend a minimum depth of 1.35m where starting blocks are in use and 1m where starting blocks aren't in place. Royal Life Saving Guidelines recommend a minimum depth of 0.9m for lap swimmers; i.e. to enable tumble turns. Recommend a compliant pool depth of 1.5m to 1m to allow for competition short course events.

Recommend compliant pool as 25m long, 15.5m wide, DDA access along one side and depth from 1.5m to 1m. This would allow for starting blocks to be used along with 6 competition width lanes, 7 two way lanes or 10 recreational lanes.

The option to place a pool liner in the structure will not meet Councils new service standard of a 25m pool.

The pool does not have any DDA access, but this could be overcome by providing a mobile lift.

Wading Pool

Wading pool octagonal shape with water feature and hard cover of part of the pool

The wading pool is an octagonal shape approximately 10m wide. The pool is constructed from reinforced concrete. It was last repainted in 2014. It is listed for a repaint in 2021/22 on a 7year cycle.

Melbourne Pools & Spa advised that even installing a plastic liner in the wading pool to overcome the issues identified in their report would not extend its life. These included the structure being in poor condition and therefore end of life. It also has water losses through cracking, holes and water stops.

The option to use this structure to meet councils new service standard for an interactive water play area can't be considered as the structure is at the end of life.

References-:

- Kyabram Main/Toddler Pool Investigation and Report, Melbourne Pool & Spas August 2012
- Asset Identification and condition spreadsheet, McCartney Solutions December 2017
- Renewal Project Charter Swimming Pools Repaint Program, Campaspe Shire Council 2015
- Federation Internationale De Natation Part IX FINA Facilities Rules 2015-17 Issued 28 October 2015
- Royal Life Saving Australia – Guidelines for Safe Pool Operation – Facility Design FD6 Issued 1 November 2007

2.6 Pool Heating

Kyabram is an outdoor pool and therefore has no assets in category 6.

2.7 Site/Surrounds

Access to the pool is from Union St in the centre of Kyabram. A small informal gravel carpark is situated off Union St suitable for about 10 vehicles. No DDA parking or access to the complex is provided. This should be provided as part of any redevelopment works.

The site is sufficient in size to allow for redevelopment of the complex to meet councils new service level of a 25m pool with an interactive water play area.

The security fencing is in good condition, although concerns have raised with privacy and security around the change rooms.

Electric BBQ is in very good condition suitable for reuse if the site is redeveloped. It would benefit from shade being provided over it.

A variety of table & seat sets are in good to average condition and are generally under shade covers.

Pathways generally in good condition with some patching undertaken. Need to review trip hazards and treat on a regular basis.

Access to the plant room and chemical storage is through a gateway from the informal carpark accessed off Union St. There is no defined or formed vehicle access.

References-:

- Asset Identification and condition spreadsheet, McCartney Solutions December 2017

3. Rochester Swimming Pool

Ramsay Street, Rochester

Site Map

The swimming pool complex off Ramsay St centrally located in the centre of Rochester:

- Main pool outlined in blue
- Amenities & kiosk with swimming club building on southern end is outlined in red
- Wading pool outlined in yellow
- Car park outlined in green
- Plant building and compound outlined in black

3.1 Air Handling

Rochester is an outdoor pool and therefore has no assets in category 1.

3.2 Buildings

Pump shed with concrete filters attached behind

Plant/Chemicals

The plant room and chemical storage building are constructed of brick with bunding provided for dry chemical storage. The building is in good condition. An eye/body wash shower is in the building and is in good condition. The building being raised creates access issues via steps or the non-compliant ramp.

Acid is stored in a plastic tank on a relatively new colour bond shed. The structure is in good condition. An eye/body wash shower is attached and is in very good condition.

Amenities/Kiosk

The kiosk and amenities are constructed of brick with a steel frame with an iron roof.

The current structure and facilities are in a good condition being fit for purpose but not DDA compliant. Detailed design and costing would be required to determine if they could be economically renovated to DDA standards.

Shade Structures

Rochester pool shade structures

The shade structure over part of the wading pool is in average condition with less than 10 years life left. The covers are in good condition with the shade covers needing replacement every 7-10 years.

The 2 small shade structures along the main pool are in good condition with significant life left. The covers are in good condition with shade covers needing replacement every 7-10 years.

The shade structure over the northern end of the pool is in good condition with significant life left. The cover is in good condition with shade covers needing replacement every 7-10 years.

Swimming Club

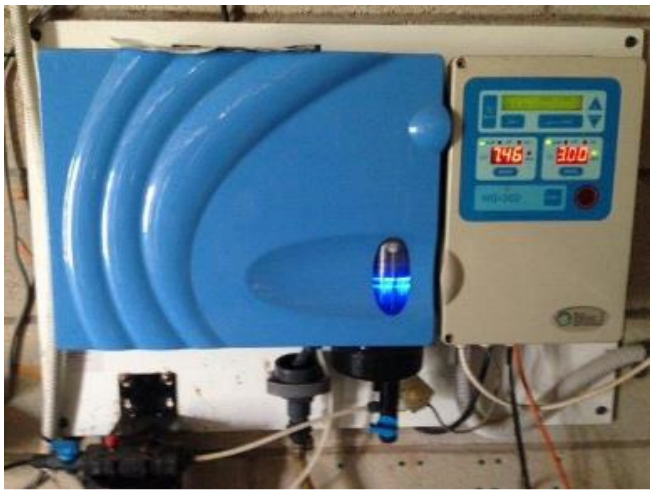
The Swimming Club owns and maintains its own building (Brett Hodgen Clubroom) on the site. It is constructed of concrete block with an iron roof. It is in good condition fit for purpose but not DDA compliant. A detailed design and costing would be required to determine if they could be economically renovated to DDA standards.

A concrete block room with roller door and steel roof has been added to the northern end of the amenities. This is used covers are storeroom by the swimming club. The structure is in very good condition.

References-:

- Rochester Swimming Pool Investigation and Report, Melbourne Pool & Spas August 2012
- Asset Identification and condition spreadsheet, McCartney Solutions December 2017

3.3 Filtration/Disinfection



HG 302 Chemical dosing controller

The pool runs a chlorine/acid injection system through dosing pumps that are controlled by a Blue Chemical Controller HG302. This system is in good condition with the 2 dosing pumps delivering acid and chlorine requiring periodic maintenance/replacement.

Concrete twin cell gravity filters

Filtering is provided through 2 x concrete twin cell gravity sand filters with an air scourer for backwashing. The concrete structure is in poor condition along with the inlet and outlet pipe work into the filters. They are at end of life and not suitable for a fully compliant new development.

A Harland VS86 Centrifugal motor pump set is used for the water reticulation in the main and wading pools. This pump set is functional but not in good condition and is at of life.

There are issues with the sizing of the foot valves and the hair lint strainer has been disconnected. The pumps discharge pipe work including valves and air bleed system are not functioning correctly. These should be renewed and are not suitable for a new compliant facility.

The concrete balance tank is a 48,000 litre concrete tank under the plant room. This has good capacity and is in reasonable condition. With treatment to the concrete tank its life can be extended until a new fully compliant facility is developed.

Soiled water return is provided by 2 concrete gutters acting via a skimmer system along the sides of the pool. There is significant cracking in the gutters and collection pickups causing significant water losses. The pipe work to the balance tank is in reasonable condition. Significant works are required to maintain the system.

A 13,500litre plastic rain water tank with pump is provided for the backwash system that is plumbed to sewer. This is in good condition with the pump requiring periodic maintenance/replacement.

The engineering report recommended a full renewal of the water supply, return and drainage plumbing system.

References-:

- Rochester Swimming Pool Investigation and Report, Melbourne Pool & Spas August 2012
- Asset Identification and condition spreadsheet, McCartney Solutions December 2017

3.4 Equipment

A new Dolphin Wave 100 pool cleaner was identified on site. These generally have a design life of 5 - 10 years.

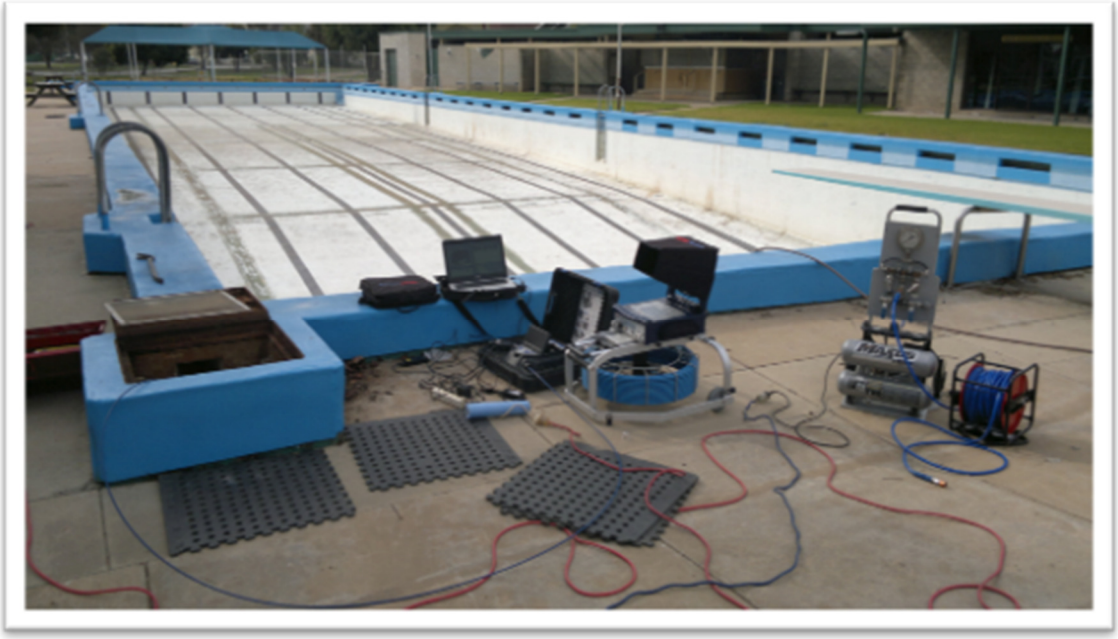
6 starting blocks were identified on site. The type wasn't identified. They appear in good condition at approximately 3 years old. Outdoor blocks have a design life of 5-10 years.

References-:

- Asset Identification and condition spreadsheet, McCartney Solutions December 2017

3.5 Pool Vessel

Main Pool



Main pool noting skimmer boxes on sides & blue rubber protection over the raised edges

The pool is constructed from reinforced concrete that is painted, ie no internal liner. It was constructed the 1950's. It is not recorded when it was last painted but it is estimated to be longer than 10 years and is listed for repaint in 2018/19 on a 7 year cycle. Melbourne Pools & Spa recommended installing a plastic liner in the main pool to overcome the issues identified in their report. These included water losses through cracking, holes and water stops. A more regular chalking and repaint program would maintain the current structure until a compliant facility is provided. This is a cost effective short term solution.

The main pool is 50m long and 12.9m wide. FINA guidelines recommend a 50m pool for long course or 25m pool for short course championships.

The pool is line marked for 6 lanes. FINA guidelines recommend a minimum lane width of 2.5m with 0.2m from the first and last lane from the wall. Royal Life Saving Guidelines recommend a minimum lane width of 2.5m for competition, 1.5m for recreational or 2m for two way lane swimming.

The pool ranges in depth from 0.7m to 2.15m with starting blocks in place. FINA guidelines recommend a minimum depth of 1.35m where starting blocks are in use and 1.0m where starting blocks aren't in place. Royal Life Saving Guidelines recommend a minimum depth of 0.9m for lap swimmers, i.e. to enable tumble turns. Recommend a compliant pool depth of 1.5m to 1m to allow for competition short course events.

Recommend a compliant pool as 25m long, 15.5m wide, DDA access along one side and depth from 1.5m to 1m. This would allow for starting blocks to be used along with 6 competition width lanes, 7 two way lanes or 10 recreational lanes.

The option of installing a pool liner into the existing structure will not meet this standard without significant and uneconomic modification to the length and width of the pool shell including provision for DDA access.

The pool does not have any DDA access. This may be overcome by providing a mobile lift but this will not address length, width and leakage deficiencies. Investigations identified a suitable platform lift would cost an estimated$85,000 installed. (Refer Appendix 2)

Wading Pool

Wading pool is 9m x 8m with a shade cover over it. The pool is constructed from reinforced concrete. It is not recorded when it was last painted but it is estimated to be longer than 10 years and is listed for repaint in 2018/19 on a 7 year cycle.

Melbourne Pools & Spa advised that even installing a plastic liner in the wading pool to overcome the issues identified in their report would not extend its life. Issues include the structure being in poor condition and therefore at end of life. It also has water losses through cracking, holes and water stops.

The option to use this structure to meet councils new service standard for an interactive water play area should not be considered as the structure is at the end of life.

References-:

- Rochester Swimming Pool Investigation and Report, Melbourne Pool & Spas August 2012
- Asset Identification and condition spreadsheet, McCartney Solutions December 2017
- Renewal Project Charter Swimming Pools Repaint Program, Campaspe Shire Council 2015
- Federation Internationale De Natation Part IX FINA Facilities Rules 2015-17 Issued 28/10/2015
- Royal Life Saving Australia – Guidelines for Safe Pool Operation – Facility Design FD6 Issued 1/11/2007

3.6 Pool Heating

Rochester is an outdoor pool with no assets in category 6.

3.7 Site/Surrounds

Access to the pool is from Ramsay St in the centre of Rochester. Street parking along Ramsay is provided including designated DDA parking. No compliant access to the complex is provided. This should be provided as part of any redevelopment works.

The site is sufficient in size to allow for redevelopment of the complex to meet councils new service level of a 25m pool with an interactive water play area. There is significant open space to allow for significant improvements on site.

The site security fencing is in good condition.

A separate compound with a security fence has been provided for the plant room and chemical storage sheds with a good concrete pathway and access for vehicles from the Northern Hwy. It is assumed that this is a VicRoads approved access. The fence and concrete access/turn around area is in good condition.

Electric BBQ Rochester pool

Steel slide

Electric BBQ is in very good condition suitable for reuse if the site is redeveloped. It would benefit from shade being provided over it.

A variety of table & seat sets are in average condition. They should be upgraded and placed under shade in any redevelopment works.

Pathways are generally in an average condition with some patching undertaken. Need to review trip hazards especially around the kiosk area and treat on a regular basis.

An old steel slide was identified on site. Although in reasonable condition it, it does not comply with playground safety standards and should be removed.

References-:

- Asset Identification and condition spreadsheet, McCartney Solutions December 2017

4. Rushworth Swimming Pool

Geyle Street, Rushworth

Site Map

The swimming pool complex is accessed off Geyle St Rushworth:

- Main pool outlined in blue
- Amenities & kiosk outlined in red
- Wading pool outlined in yellow
- Geyle St car parking outlined in green
- Plant/filters outlined in black

4.1 Air Handling

Rushworth is an outdoor pool and therefore has no assets in category 1.

4.2 Buildings

Plant/Chemicals

The plant room is constructed of brick and used for pumping equipment only. The building is approaching end of life and recently had a wet grate installed to overcome WPH&S issues. It needs renewing in the next 10 years.

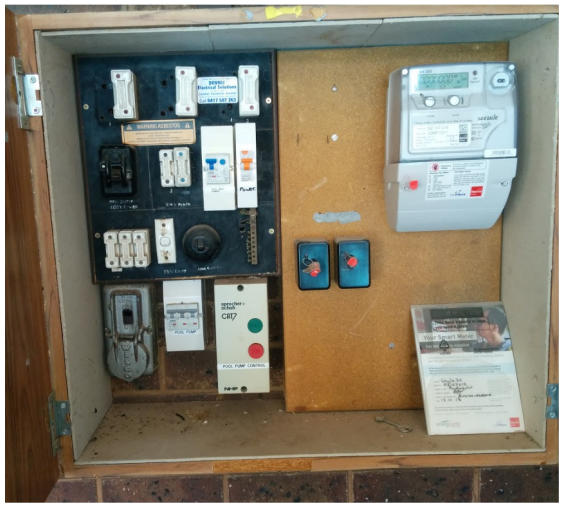
Dry chemicals are stored on 2 bunded plastic pallets in a new colour bond shed. This is a new structure in very good condition. Appropriate eye/body wash shower is in place and appears in good condition.

Sodium Hypochlorite Shed and Tank, Rushworth

Sodium Hypochlorite is stored in a special plastic tank on a bund in a new color-bond steel shed with a roller door with direct access from the plant room. The structure is new and in very good condition. Appropriate eye/body wash shower is in place and appears in good condition.

Amenities/Kiosk

Typical amenities fitout, Rushworth



Rushworth switchboard

The amenities are constructed of brick and are open air. They are in an average condition and it is not economically viable to upgrade them to be DDA compliant. The facility requires a full basic refit.

The kiosk is constructed of brick with a steel frame and an iron roof. The building is in an average condition with a full internal refit required including main switchboard which lacks RCD's.

Shade Structures

The shade structure and cover over the wading pool is in a good condition. The structure is painted steel that needs regular maintenance. Shade covers needing replacement every 7-10 years.

The 3 shade structures along the main pool are in good condition. The structure is galvanised steel and has significant life. Shade covers needing replacement every 7-10 years.

The kiosk shade structure and cover are in good condition. The structure is painted steel that needs regular maintenance. Shade covers needing replacement every 7-10 years.

2 timber slated pergolas near the kiosk are in average condition near end of life.

References-:

- Rushworth Swimming Pool Shell & Pipe Detailed Condition Assessment, GH&D June 2016
- Asset Identification and condition spreadsheet, McCartney Solutions December 2017

4.3 Filtration/Disinfection

The Rushworth pool runs a chlorine/acid injection system through dosing pumps controlled by a Blue Chemical Controller HG302. The system is in good condition with the 2 dosing pumps requiring periodic maintenance/replacement.

Sodium hypochlorite is stored in a 2,200 litre special plastic tank on a bund in a colour bond shed. The tank is in good condition but as they have a limited life will need renewing in next 10 years.

Filter & weather protection structure with small rainwater tank (front) & backwash tank

Filtering is provided through a single vertical filter cell located under a steel roofed structure. It appears in good condition. Its capacity was not assessed.

A 13,500litre plastic rain water tank with pump is provided for the backwash system that is plumbed to sewer. This is in good condition with the pump requiring periodic maintenance/replacement.

Pumps in brick plant room

The main pool runs two Onga reticulation pump/motor sets with sieve baskets. They appear relatively new with a minimum of 10 years of life left.

The wading pool runs an Austral pump/motor set with sieve basket. It appears in good condition.

A previous report in 2016 noted that there were broken and misaligned connections in the pool emptying system causing significant water losses. These works are required.

The filtered water return line also failed pressure testing due to multi perforations along the pipe for distribution into the pool. These rectification works are required.

The scum gutters are in poor condition requiring significant remedial work.

The exiting water supply and drainage system is in poor condition and is not suitable for reuse for a facility that would meet councils new service standard.

References-:

- Rushworth Swimming Pool Shell & Pipe Detailed Condition Assessment, GH&D June 2016
- Asset Identification and condition spreadsheet, McCartney Solutions December 2017

4.4 Equipment

The wading pool water feature is in good condition. The pump and pipe work are the key operational components of the feature that need to be serviced and checked regularly.

A new Dolphin Wave 100 pool cleaner was identified on site. It appears in fairly new condition with a design life of 5 -10 years.

Roller & Lane ropes

A galvanised roller with lanes ropes were identified. They are in good condition with lane ropes requiring replacement 7-10 years.

References-:

- Asset Identification and condition spreadsheet, McCartney Solutions December 2017

4.5 Pool Vessel

Main Pool

Main pool, Rushworth

The pool is constructed from reinforced concrete that is painted, i.e. no internal liner. The pool was built in the 1930's. There is no record of when it was last repainted, but it was repainted prior to the current season. It is listed for repaint in 2024/25 on a 7 year cycle.

The main pool is 30m long and 9.2m wide. FINA guidelines recommend a 25m pool for short course championships.

The pool is lined marked for 5 lanes. FINA guidelines recommend a minimum lane width of 2.5m with 0.2m from the first and last lane from the wall. Royal Life Saving Guidelines recommend a minimum lane width of 1.5m for recreational or 2m for 2 way lane swimming.

Recommend compliant pool as 25m long and 10.5m wide plus DDA access along one side. This would allow for 4 competition width lanes, 5 two way lanes or 6 recreational lanes.

The pool ranges in depth from 0.7m to 2.15m and no starting blocks are installed. FINA guidelines recommend a minimum depth of 1.35m where starting blocks are in use and 1m where starting blocks aren't in place. Recommend a compliant pool depth of 1.5m to 1m to allow for competition short course events.

An engineering inspection in 2016 revealed significant cracking and concrete delamination in the pool walls and gutters. Significant water losses from poor pipe work and cracking with up to 5% of the pools capacity lost daily. The report indicated that provided these works to fix the pipes and concrete cracking were repaired and a suitable pool repaint process undertaken then water losses can be managed.

The current pool configuration does not meet Councils new service standard and detailed investigation would be required to determine if the existing shell can be adapted to achieve a 25m pool that meets FINA guidelines for short course competition. It is considered unlikely.

The pool width at 9.2m means that only 3 lanes could be installed for competition (2.5m x 3 plus 0.2m from side walls) being 7.5m for lanes and 0.85m from side walls.

The pool depth at 2.15m at the deep end would comply with FINA standards but the shallow end at 0.7m would not.

The pool does not have any DDA access, but this could be overcome by providing a mobile lift.

Wading Pool

Wading pool octagonal shape with water feature and shade cover over part of the pool

The octagonal wading pool is approximately 7m wide. The pool is constructed from reinforced concrete. The pool has had a fibre glass coating installed, although no record of the date was available.

An engineering report in 2016 reported minor cracking of the fibre-glass that is in need of repair. No testing of the sub-structure has been undertaken. Recommended 5 yearly detailed inspection of the fibre glass shell and treat repair as required.

The option to use this structure to meet councils new service standard for an interactive water play area would require detailed engineering inspection and testing as it appears the structure could not be economically modified.

References-:

- Rushworth Swimming Pool Shell & Pipe Detailed Condition Assessment, GH&D June 2016
- Asset Identification and condition spreadsheet, McCartney Solutions December 2017
- Renewal Project Charter Swimming Pools Repaint Program 2015
- Federation Internationale De Natation Part IX FINA Facilities Rules 2015-17 Issued 28 October 2015
- Royal Life Saving Australia – Guidelines for Safe Pool Operation – Facility Design FD6 Issued 1 November 2007

4.6 Pool Heating

Rushworth is an outdoor pool with no assets in category 6.

4.7 Site/Surrounds

Access to the pool is from Geyle St in a central location in Rushworth. An adequate sealed parking area in Geyle St is shared with the bowls club. No DDA parking or access to the complex is provided. This should be provided as part of any redevelopment works.

The site is considered to be of just sufficient size to allow for redevelopment of the complex to meet councils new service level of a 25m pool with an interactive water play area.

The security fencing is in good condition.

The two table & seat sets are in average condition.

Pathways generally in good condition with some patching undertaken. Need to review trip hazards and treat on an annual basis.

4 x 6m galvanised steel poles with single lights were identified. The poles are in very good condition and lights were not tested.

Access to the plant/chemical shed is via a gateway from Moore St over an unformed track

References-:

- Asset Identification and condition spreadsheet, McCartney Solutions December 2017

Category B Pool Complexes

1. Tongala Swimming Pool

Henderson Road, Tongala

Site Map

The swimming pool complex is accessed off Henderson Road Tongala:

- Main pool outlined in blue
- Amenities & kiosk outlined in red
- Toddlers pool outlined in yellow
- Wading Pool outlined in green
- Plant/filters outlined in black
- The Swimming Clubroom is outlined in purple

1.1 Air Handling

Tongala is an outdoor pool and therefore has no assets in category 1.

1.2 Buildings

Plant/Chemicals

The plant room is constructed of colour bond and is used for pumping equipment only. The building is new and in very good condition and fit for purpose. Appropriate eye/body wash shower is in place and appears in good condition.

Dry chemicals are stored on 2 bunded plastic pallets in a galvanised steel shed. This is in reasonable condition.

Sodium Hypochlorite is stored in a special plastic tank on a bund in a colour-bond steel shed. The structure is in reasonable condition.

Amenities/Kiosk

The amenities are constructed of brick with the kiosk in the middle and the amenities each side. They are in an average condition and will require a major upgrade to be DDA compliant. The kiosk requires a full internal refit.

Swimming Clubrooms

The Swimming Clubrooms are constructed of brick with an iron roof and veranda. The building is in very good condition but does not provide DDA access.

Shade Structures

The shade structure and cover over the toddler's pool is in a good condition. The structure is powder coated steel with significant life remaining. Shade covers needing replacement every 7-10 years.

References-:

- Asset Identification and condition spreadsheet, McCartney Solutions December 2017

1.3 Filtration/Disinfection

The Tongala pool runs a chlorine/acid injection system through dosing pumps controlled by a Blue Chemical Controller HG302. The system is in good condition with the 2 dosing pumps requiring periodic maintenance/replacement.

Sodium hypochlorite is stored in a 2,200 litre special plastic tank on a bund in a colour bond shed. The tank is in good condition but as they have a limited life will need renewing in next 10 years.

Plant room with chemical controller, dosing pumps & toddlers pool filters.

Filtering is provided to the main & wading pools through four vertical filter cells located in the plant room. They appear in good condition and their capacity were not assessed.

Filtering is provided to the toddler's pool through two vertical sand filters located in the plant room. They appear in good condition and their capacity was not assessed.

A 30,000 litre plastic rain water tank with pump is provided for the backwash system that is plumbed to sewer. This is in good condition with the pump requiring periodic maintenance/replacement.

The main/learners pool runs an Ajax Elite reticulation pump/motor set.

The main/learners pump set appears to have been refurbished in recent years with 5-10 years life left.

The toddlers pool runs two Hurlcon pump/motor sets that were new in 2015. They have significant life left.

References-:

- Asset Identification and condition spreadsheet, McCartney Solutions December 2017

1.4 Equipment

A new Dolphin Wave 100 pool cleaner was identified on site. It appears in fairly new condition with a design life of 5 -10 years.

References-:

- Asset Identification and condition spreadsheet, McCartney Solutions December 2017

1.5 Pool Vessel

Main Pool

Main pool, Tongala

The pool is constructed from reinforced concrete that is painted, i.e. no internal liner. The pool was built in 1958. The main pool was recalked and painted in 2016. It is listed for repaint in a 7 year cycle.

The main pool is 'Tee' shaped and 25m long. 12.5m of its length is 10m wide and 12.5m is 15m wide. FINA guidelines recommend a 25m pool for short course championships.

The pool does not have any DDA access. Provision of a mobile lift may enable this requirement to be met.

Learners Pool

Toddlers pool with learners pool in background.

The learners pool is 8m x 8m and is constructed from reinforced concrete. The pool has a raised pebblecrete lip and concrete surrounds that are in good condition. It was repainted in 2016.

The toddlers pool is 8m in an octagonal shape and is constructed from reinforced concrete. The pool and concrete surrounds are in good condition. It was repainted in 2016.

The option to use these two structures to meet councils new service standard for an interactive water play area would require detailed engineering inspection and testing.

References-:

- Asset Identification and condition spreadsheet, McCartney Solutions December 2017
- Renewal Project Charter Swimming Pools Repaint Program 2015

1.6 Pool Heating

Tongala is an outdoor pool with no assets in category 6.

1.7 Site/Surrounds

Access to the pool is from Henderson Road on the southern entry to town adjacent to the main irrigation channel. A large informal off road parking area consisting of grass and crushed rock is available. No DDA parking or access to the complex is provided. This should be provided as part of any redevelopment works.

The site is considered to be of sufficient size to allow for redevelopment of the complex to meet councils new service level of an interactive water play area, associated plant and amenities.

The security fencing is in good condition.

There are six table & seat sets that vary from new to fair condition.

Pathways generally in good condition with some patching undertaken. Need to review trip hazards and treat on an annual basis.

Two steel poles with 3 and 4 lights were identified. The poles are shabby but serviceable and the lights were not tested.

References-:

- Asset Identification and condition spreadsheet, McCartney Solutions December 2017

2. Lockington Swimming Pool

Burns Street, Lockington

Site Map

The swimming pool complex is accessed off Burns St Lockington:

- Main pool outlined in blue
- Amenities & kiosk outlined in red
- Wading pool outlined in yellow
- Off street car parking outlined in green
- Plant/filters outlined in black
- Back wash & irrigation tanks outlined in purple

2.1 Air Handling

Lockington is an outdoor pool with no assets in category 1.

2.2 Buildings

Plant/Chemicals

A small brick building with steel roof contains the chemical controllers. This building is in average condition and is not suitable to store pumping and filter equipment.

Dry chemicals are stored on 2 bunded plastic pallets in a colorbond shed. The structure is in good condition. Appropriate eye/body wash shower is in place and appears in good condition.

Sodium Hypochlorite Shed with eye wash attached

Sodium Hypochlorite is stored in a special plastic tank on a bund in a new colour-bond steel shed. The structure is relatively new and in very good condition. Appropriate eye/body wash shower is in place and appears in good condition.

Amenities/Kiosk

Kiosk & amenities building

The amenities/kiosk is constructed of concrete block with a steel roof. The general store and kiosk are on the southern end with amenities on the northern end. Structurally they are in very good condition but could benefit from a refit. Although not DDA compliant they could be upgraded to meet compliance.

Shade Structures

Shade covers in front of kiosk and between main and wading pool

There are seven shade structures in the complex with 6 shade covers. The structures are in very good condition along with the remaining covers generally in good condition. Covers will need replacement every 7-10 years.

References-:

- Asset Identification and condition spreadsheet, McCartney Solutions December 2017

2.3 Filtration/Disinfection

The Lockington pool runs a chlorine/acid injection system through dosing pumps controlled by a Blue Chemical Controller HG302. The system is in good condition with the 2 dosing pumps requiring periodic maintenance/replacement.

Sodium hypochlorite is stored in a 2,200 litre special plastic tank on a bund in a colour bond shed. The tank is in good condition but as they have a limited life will need renewing in next 10 years.

Filter & plumbing in the open air.

Reticulation pump/motor set & strainer open air.

Filtering is provided through three vertical filter cells located in the open air. The filters are showing the effects of not being covered and have a life of 5-10 years. Their capacity was not assessed. It has not been recorded if works recommended by GH&D to repair and recertify the vessels has been carried out.

A 10,000litre plastic rain water tank with pump is provided for the backwash system that is plumbed to sewer. This is in good condition with the pump requiring periodic maintenance/replacement.

The pools run a Regent pump/motor set with a Hydro 5000 strainer. They appear in good condition but are situated in the open air next to the filter cells.

References-:

- Lockington Swimming Pool Condition Assessment Report, GH&D June 2016 (Filtration/Disinfection Report Only)
- Asset Identification and condition spreadsheet, McCartney Solutions December 2017

2.4 Equipment

The wading pool water feature is in good condition. The pump and pipe work are the key operational components of the feature that need to be serviced and checked regularly.
No pool cleaner was identified on site. It is understood that a new Dolphin Wave 100 pool cleaner is shared with Rochester.

References-:

- Asset Identification and condition spreadsheet, McCartney Solutions December 2017

2.5 Pool Vessel

Main Pool

Lockington main pool

The pool is constructed from reinforced concrete that is painted, ie no internal liner. The pool was built in 1967. There is no record of when it was last repainted, but it is listed for repaint in 2019/20 and then on a 7 year cycle.

The main pool is 25m long and 12m wide. FINA guidelines recommend a 25m pool for short course championships.

The pool generally appears in good condition with minimal cracking, but is showing signs of significant paint deterioration. This will affect the water quality and filtration system. Records indicate that the structure is in the later part of its life and would benefit from a more regular calking and painting program.

The pool does not have any DDA access. Provision of a mobile lift may enable this requirement to be met.

Wading Pool

Wading pool octagonal shape with water feature

The octagonal wading pool is approximately 8m wide. The pool was constructed in 1967 and is constructed with reinforced concrete. There is no record of when it was repainted but it is listed for repaint in 2019/20 and then on a 7 year cycle.

The pool generally appears in good condition with minimal cracking, but is showing signs of significant paint deterioration. This will affect the water quality and filtration system. Records indicate that the structure is at end of life and would benefit from a more regular calking and painting program.

The pool does not have any DDA access.

The option to use this structure to meet councils new service standard for an interactive water play area would require detailed engineering inspection and testing as it would appear that the structure could not be economically modified.

References-:

- Asset Identification and condition spreadsheet, McCartney Solutions December 2017
- Renewal Project Charter Swimming Pools Repaint Program 2015

2.6 Pool Heating

Lockington is an outdoor pool and therefore has no assets in category 6.

2.7 Site/Surrounds

Access to the pool is from Burns St in a central location. There are two small areas off street that can be used for informal parking otherwise parking is on Burns Street. No DDA parking or access to the complex is provided. This should be provided as part of any redevelopment works.

The site is considered to be of sufficient size to allow for redevelopment of the complex to meet councils new service level for an interactive water play area, associated plant and amenities.

The security fencing is in good condition.

There are four table & seat sets are in average to poor condition.

There are 6 wooden bench seats in average condition.

Pathways generally in good condition with some patching undertaken. Need to review trip hazards and treat on an annual basis.

Access to the plant/chemical shed is via a gateway from Burns St.

References-:

- Asset Identification and condition spreadsheet, McCartney Solutions December 2017

3. Stanhope Swimming Pool

Bridges Court, Stanhope

Site Map

The swimming pool complex is accessed off Bridges Crt Stanhope:

- Main pool outlined in blue
- Amenities & kiosk outlined in red
- Toddlers pool outlined in yellow
- Wading pool outlined in purple
- Bridges Court car parking outlined in green
- Plant/filters outlined in black

3.1 Air Handling

Stanhope is an outdoor pool with no assets in category 1.

3.2 Buildings

Plant/Chemicals

The plant room is constructed of brick with a steel roof and is used for pumping equipment only. The building is approaching end of life and requires a full rebuild similar to Tongala to overcome WPH&S issues. It needs renewing in the next 5-10 years.

Dry chemical store off end of male amenities

Internal fit out of kiosk

Dry chemicals are stored on 2 bunded plastic pallets in a brick building with a steel roof off the end of the men's amenities. Appropriate eye/body wash shower is in place and appears in good condition.

Sodium Hypochlorite Shed and Plant Room

Sodium Hypochlorite is stored in a special plastic tank on a bund in a galvanised iron shed adjoining the plant room. The structure is in good condition. Appropriate eye/body wash shower adjacent to the hypo fill point is in place and appears in good condition.

Amenities/Kiosk

Typical standard of amenities

The amenities are constructed of brick and are open air. They are approaching end of life and are in an average condition. It is not economically viable to upgrade them to be DDA compliant. The facility requires a full basic refit to be fit for purpose.

The kiosk is constructed of brick with a steel frame and an iron roof. The building is approaching end of life and is in an average condition. It requires a full refit to be fit form purpose.

Shade Structures

Shade structures at Stanhope Pool

The shade structure and cover between the wading pool and main pool is in a good condition. The structure is painted steel that needs regular maintenance. The cover is in good condition with covers needing replacement every 7-10 years.

The other shade structure is over the 3 table sets and is in good condition. The structure is painted steel that needs regular maintenance. The cover is in good condition with covers needing replacement every 7-10 years.

References-:

- Asset Identification and condition spreadsheet, McCartney Solutions December 2017

3.3 Filtration/Disinfection

The Stanhope pool runs a chlorine/acid injection system through dosing pumps controlled by a Blue Chemical Controller HG302. The system is in good condition with the 2 dosing pumps requiring periodic maintenance/replacement.

Sodium hypochlorite is stored in a 2,200 litre special plastic tank on a bund in a steel shed. The tank is in good condition but as they have a limited life will need renewing in next 10 years.

Filtering is provided through a single vertical filter cell located in the plant room. It appears in good condition. Its capacity was not assessed.

A 20,000 litre plastic rain water tank with pump is provided for the backwash system that appears to be plumbed to sewer. This is in good condition with the pump requiring periodic maintenance/replacement.

Reticulation pump & motor set under grate with filter cell in plant room

The main pool runs an Aquaplus reticulation pump/motor set located under the floor grate in the pump shed. It appears in relatively good condition with a minimum of 10 years of life left.

GH&D Report in 2016 advised of significant corrosion to the pipe work and valves for the water reticulation and back wash system. Recommend this be investigated and repaired as necessary.

References-:

- Stanhope Swimming Pool Condition Assessment Report, GH&D 2016 (Filtration/Disinfection Report Only)
- Asset Identification and condition spreadsheet, McCartney Solutions December 2017

3.4 Equipment

An old battery powered pool cleaner was identified on site. Recommended that a suitable pool cleaner be kept on site for regular use.

Roller & Lane ropes

A galvanised roller with lanes ropes were identified. They are in good condition with lane ropes requiring replacement 7-10 years.

References-:

- Asset Identification and condition spreadsheet, McCartney Solutions December 2017

3.5 Pool Vessel

Main Pool

The pool is constructed from reinforced concrete that is painted, ie no internal liner. The pool was built in the 1954. The pool was last repainted in 2013 and is listed for repaint in 2020/21 on a 7 year cycle.

The main pool is 25m long and 12m wide. FINA guidelines recommend a 25m pool for short course championships.

The pool does not have any DDA access, but this could be overcome by providing a mobile lift.

Wading Pool

Wading pool

The wading pool is approximately 10m long and 4m wide. The pool was constructed in 1984 from reinforced concrete. The pool was last repainted in 2013 and is listed for repaint in 2020/21 on a 7 year cycle.

The option to modify this structure to form part of an interactive water play area to meet Council's new service standard would require detailed engineering inspection and testing to determine its suitability.

Toddlers pool

The octagonal wading pool is approximately 7m wide. The pool was constructed in 1984 from reinforced concrete. The pool was last repainted in 2013 and is listed for repaint in 2020/21 on a 7 year cycle.

The option to modify this structure to form part of an interactive water play area to meet Council's new service standard would require detailed engineering inspection and testing to determine its suitability.

References-:

- Asset Identification and condition spreadsheet, McCartney Solutions December 2017
- Renewal Project Charter Swimming Pools Repaint Program 2015

3.6 Pool Heating

Stanhope is an outdoor pool with no assets in category 6.

3.7 Site/Surrounds

Access to the pool is from Bridges Court in a central location in Stanhope. Informal unsealed parking is available but no DDA parking or access to the complex is provided. This should be provided as part of any redevelopment works.

The site is considered to be of sufficient size to allow for redevelopment of the complex to meet councils new service level for an interactive water play area.

The security fencing is in reasonable condition.

There are 6 table & seat sets in good to average condition and 6 bench seats in good condition.

Pathways are generally in good condition with some patching undertaken. Need to review trip hazards and treat on an annual basis.

3 x poles with 3 lights were identified. The poles are substandard and need renewing. The lights were not tested.

Access to the plant/chemical shed is via a gateway from Bridges Court over an unformed track

A Hunter irrigation controller was on site that was not tested or checked. Question the water source, ie backwash or town supply.

An old metal judge's stand was on site. Need to check for compliance/safety etc.

A stainless steel drinking fountain was on site and appears in good condition.

References-:

- Asset Identification and condition spreadsheet, McCartney Solutions December 2017

4. Colbinabbin Swimming Pool

Colbinabbin Recreation Reserve, Colbinabbin

Site Map

The swimming pool complex is accessed from the recreation reserve

- Main pool outlined in blue
- Toddlers pool outlined in yellow
- Amenities & kiosk outlined in red
- Plant/filters outlined in black

4.1 Air Handling

Colbinabbin is an outdoor pool with no assets in category 1.

4.2 Buildings

Plant/Chemicals

The plant room is constructed of brick with steel roof and used for pumping equipment and chemical storage. The building is in very good condition. It does not require renewing in the next 10 years.

Plant shed with sodium Hypochlorite tank & pumping equipment

Sodium Hypochlorite is stored in a special plastic tank on a bund in the plant shed. The structure is in very good condition. Appropriate eye/body wash shower is in place and appears in good condition.

A skillion shed extension houses the dry chemicals. It's in a very good condition.

A small colour bond shed is used for general equipment/toys. It's in as new condition.

Amenities/Kiosk

Change rooms

Kiosk

The amenities and kiosk are a part of the Colbinabbin Recreation Reserve main facility. It is constructed of brick with a steel roof. The structure is in very good condition. A small area within this facility is made available for pool use. The area is suitable but the fit out is in poor condition and not DDA compliant. The facility requires a full basic refit.

Shade Structures

The shade structure over the toddler's pool is galvanised steel in very good condition. The shade cover is in good condition but will need replacement every 7-10 years.

The 2 shade structures near the pump shed are also galvanised steel in very good condition. The shade covers are in good condition but will need replacement every 7-10 years.

References-:

- Asset Identification and condition spreadsheet, McCartney Solutions December 2017

4.3 Filtration/Disinfection

The Colbinabbin pool runs a chlorine/acid injection system through dosing pumps controlled by a Blue Chemical Controller HG302. The system is in good condition with the 2 dosing pumps requiring periodic maintenance/replacement.

Sodium hypochlorite is stored in a 2,200 litre special plastic tank on a bund in the plant shed. The tank is in good condition but as they have a limited life will need renewing in next 10 years.

Hypo tank in plant shed

Waterco filter in plant shed

Filtering is provided through a single vertical filter cell located in the plant room. It appears in good condition. Its capacity was not assessed.

A 20,000litre plastic rain water tank with pump is provided for the backwash system that appears to be draining to grass.is plumbed to sewer. The tank is in good condition. Need to check compliance for drainage.

Colbinabbin Backwash and Reticulation pumps. Sta-rite at rear

HG302 Chemical controller

The pool runs a Sta-rite reticulation and a Austral E Series 290 backwash / recirculation pump/motor sets with sieve baskets. The Austral E Series appears relatively new with a minimum of 10 years life left whereas the GH&D identified Sta-rite pump as in need of replacement.

GH&D Report in 2016 advised of significant corrosion to the pipe work and valves for the water reticulation and back wash system which was evident in inspections by McCartney Solutions. Recommend this be investigated and repaired as necessary.

References-:

- Colbinabbin Swimming Pool Condition Assessment Report, GH&D 2016 (Filtration/Disinfection Report Only)
- Asset Identification and condition spreadsheet, McCartney Solutions December 2017

4.4 Equipment

A new Dolphin Diagnostic 3001 pool cleaner was identified on site. It appears in fairly new condition with a design life of 5 -10 years.

A Honda rotary lawn mower was on site. It is in good condition.

Raw water strainer on plant shed

A raw water strainer was identified on the wall of the pump shed. It appeared in good condition and not recorded in the Asset Register.

References-:

- Asset Identification and condition spreadsheet, McCartney Solutions December 2017

4.5 Pool Vessel

Main Pool

Main pool

The pool is constructed from reinforced concrete that is painted, ie no internal liner. The pool was built in the 1979. There is no record of when it was last repainted, but it listed for a repaint in 2019/20 on Councils 7 year cycle. It appears to be in good condition with no major cracking visible around the perimeter. No detailed technical inspection records are available.

The main pool is 20m long and 14m wide. FINA guidelines recommend a 25m pool for short course championships.

The pool does not have any DDA access. This may be overcome by providing a mobile lift.

Wading Pool

Wading pool with shade cover and table sets

The wading pool is approximately 4m x 4m and was constructed 1979 from reinforced concrete. It is not recorded when it was repainted but it is due for a recalk and repaint in 2019/20 in Councils pool repaint program.

The option to use this structure to meet councils new service standard for an interactive water play area would require detailed engineering inspection and testing to determine its suitability for purpose.

References-:

- Asset Identification and condition spreadsheet, McCartney Solutions December 2017
- Renewal Project Charter Swimming Pools Repaint Program 2015

4.6 Pool Heating

Colbinabbin is an outdoor pool with no assets in category 6.

4.7 Site/Surrounds

Access to the pool is from the access road to the recreation reserve. Informal parking is available and is suitable for the venue. No DDA parking or access to the complex is provided. This should be provided as part of any redevelopment works.

The site is considered to be of sufficient size to allow for redevelopment of the complex to meet councils new service level of an interactive water play area.

The security fencing is in good condition.

Three timber table seat sets and one bench seat is on site. They are in average condition.

Two galvanised light poles with 2 lights were identified and they are in very good condition.

100m2 of synthetic grass was identified and it is in good condition.

Pathways generally in good condition with some patching undertaken. Need to review trip hazards and treat on an annual basis.

References-:

- Asset Identification and condition spreadsheet, McCartney Solutions December 2017

Asset Data Deficiencies

General Comments

Each site requires a detailed analysis to ensure Councils asset register is current and up to date. On the brief inspections to each site it became obvious that many new and replacement assets had not been incorporated into the register and many redundant or abandoned assets remained on it. This included major and minor items. The register also possesses insufficient detail of a large number of assets to easily identify individual assets when conducting inspections.

It is understood that Council's accounting policy is to treat items as assets when they are valued at more than $5,000. Items under this value are funded through maintenance programs and may not be recorded in the asset register despite their criticality to a pool's performance.

It is necessary to record more than just an items description and financial value. All infrastructure and items of plant and equipment that are critical to the operational performance of the pools require recording in an asset management system including details of their type, age, specifications, condition and maintenance requirements and records so they can be effectively managed. The present system does not satisfy this need. Some of this information is available in various reports but it is incomplete, dated and not readily located.

The present system may identify capital assets in accordance with the accounting policy and provide for depreciation and general condition measures of asset groupings but this is of little value for determining specific capital and operational renewal budgets or maintenance requirements. This is considered to be a major contributor to the present inadequate level of planned maintenance and reliance on more expensive reactive and unplanned maintenance as infrastructure, plant and equipment fails.

Category A Pool Complexes

EWMAC

1) The existing main pool appears to meet councils new service standard of providing a 50m compliant facility. It is therefore important that a capital renewal program be prioritised to maintain the facility and improve the poor air handing system.
2) Council's asset data base has insufficient detail of a large number of assets to easily identify them when conducting inspections. Examples include the main circulation pump, chemical dosing pumps, chemical controllers, filter cells, boilers, pool cleaner, air-conditioning units and pool hall air system.
3) The spa pool that has been removed is still on the asset register along with various components such as the circulation pump and heat pump that still remain on site.
4) The asset data base also made it difficult to determine what capital works had been undertaken following the Melbourne Pool & Spas Report in 2013, in particular the water supply, return water and drainage pipe network. These types of works need to be updated into the asset register when closed off.
5) A number of old pool cleaners were found on site in a store shed near the plant room. If they are not serviceable they should be disposed of.

Kyabram Pool

1) As this pool doesn't meet Council's new service standard, maintenance of the pool rather than renewal upgrades is a requirement until a new pool and facilities are funded and built.
2) Council's asset data base has insufficient detail of a large number of assets to easily identify them when conducting inspections. Examples include the main circulation pump, chemical dosing pumps, chemical controllers and filter cells.
3) The data base is also incomplete. Some examples of items added via site visits included safety shower pump & tank, fencing, BBQ, table/seat sets, light towers, paving lap clock, drinking fountain and water feature & pumps.
4) Lives and costs of components of assets with very different lives need to be separately recognised - e.g. lives of shade structures and shade covers. Structures 25 years and covers approximately 10 years.

Rochester Pool

1) As this pool doesn't meet Councils new service standard, maintenance of the pool is a requirement rather than renewal upgrade, until a new pool and facilities are funded and built.
2) Council's asset data base has insufficient detail of a large number of assets to easily identify them when conducting inspections. Examples include the main circulation pumps, chemical dosing pumps, chemical controllers and filter cells.
3) The data base is also incomplete. Some examples of items added via site visits included fencing, Stenner and Grundfos chemical dosing pumps, table/seat sets, light towers, paving, lane ropes and roller, Dolphin Wave 100 pool cleaner and water feature.
4) Lives and costs of components of assets with very different lives need to be separately recognised - e.g. lives of shade structures and shade covers. Structures 25 years and covers approximately 10 years.

Rushworth Pool

1) As this pool doesn't meet Councils new service standard, maintenance of the pool is a requirement rather than renewal upgrade, until a new pool and facilities are funded and built.
2) Council's asset data base has insufficient detail of a large number of assets to easily identify them when conducting inspections. Examples include the main circulation pumps, chemical dosing pumps, chemical controllers and filter cells.
3) The data base is also incomplete. Some examples of items added via site visits included fencing, Stenner and Grundfos chemical dosing pumps, table/seat sets, light towers, paving, lane ropes and roller, Dolphin Wave 100 pool cleaner and water feature.
4) Lives and costs of components of assets with very different lives need to be separately recognised - e.g. lives of shade structures and shade covers. Structures 25 years and covers approximately 10 years.
5) A detailed site plan needs to be prepared and updated as new works are undertaken.

Category B Pool Complexes

Tongala Pool

1) As this pool doesn't meet Councils new service level, maintenance of the pool is a requirement, rather than renewal upgrades until the new interactive water play area is funded and built.
2) Council's asset data base has insufficient detail of a large number of assets to easily identify them when conducting inspections. Examples include the chemical dosing pumps, main circulation pumps, filters and strainers.
3) The data base is also incomplete. Some examples of items added via site visits included fencing, table/seat sets and light towers.
4) Lives and costs of components of assets with very different lives need to be separately recognised - e.g. lives of shade structures and shade covers. Structures 25 years and covers approximately 10 years.
5) A detailed site plan needs to be prepared and updated as new works are undertaken

Lockington Pool

1) As this pool doesn't meet Councils new service level maintenance of the pool is a requirement, rather than renewal upgrades, until the new interactive water play area is funded and built.
2) Council's asset data base has insufficient detail of a large number of assets to easily identify them when conducting inspections. Examples include the main circulation pumps, chemical dosing pumps, irrigation and backwash tanks and various shade structures.
3) The data base is also incomplete. Some examples of items added via site visits included fencing, table/seat sets, water feature/pump. Examples listed and assumed removed were diving board, pool cleaner, solar heating system with no roof matting but pumps etc still in place. Unsure if fibre filters have had repair works and recertification carried out.
4) Lives and costs of components of assets with very different lives need to be separately recognised - e.g. lives of shade structures and shade covers. Structures 25 years and covers approximately 10 years.
5) A detailed site plan needs to be prepared and updated as new works are undertaken.

Stanhope Pool

1) As this pool doesn't meet Councils new service level maintenance of the pool is a requirement, rather than renewal upgrades, until the new interactive water play area is funded and built.
2) Council's asset data base has insufficient detail of a large number of assets to easily identify them when conducting inspections. Examples include the back wash pump and shade structure locations.
3) The data base is also incomplete. Some examples of items added via site visits included table/seat sets, light towers, lane ropes/roller, pool cleaner, safety shower/eye wash and bunded pallets for chemical store.
4) Lives and costs of components of assets with very different lives need to be separately recognised - e.g. lives of shade structures and shade covers. Structures 25 years and covers approximately 10 years.
5) A detailed site plan needs to be prepared and updated as new works are undertaken.

Colbinabbin Pool

1) As this pool doesn't meet Councils new service level maintenance of the pool is a requirement, rather than renewal upgrades, until the new interactive water play area is funded and built.
2) Council's asset data base has insufficient detail of a large number of assets to easily identify them when conducting inspections. Examples include the chemical dosing pumps, main circulation pump, filters and tank sizes.
3) The data base is also incomplete. Some examples of items added via site visits included fencing, table/seat sets, light towers, raw water strainer, synthetic grass, furniture and bunded chemical pallets.
4) Lives and costs of components of assets with very different lives need to be separately recognised - e.g. lives of shade structures and shade covers. Structures 25 years and covers approximately 10 years.
5) A detailed site plan needs to be prepared and updated as new works are undertaken.

Special Reports Required

A summary of investigations and special reports recommended to be carried out for each pool complex is listed below.

Category A Pool Complexes

EWMAC

1) The consultants that undertook the pool inspection in 2013 advised that the shell generally looked in reasonable condition but would require detailed core sampling and reinforcement scanning to determine the quality of the structure. This investigation should be undertaken to determine the life of the current structure. This is a priority for this complex.

2) A specialist report is required to ensure the current complex is fully DDA compliant. This includes carpark to complex, kiosk work area, amenities, multi-use room, gymnasium and pool access.

3) A work place health and safety audit/report is required to identify any issues in the complex so they be programmed into future capital works programs.

4) A specialist report is required to determine the requirements for a balance tank, its size and location.

5) It is imperative that Council meets with VicRoads to progress the design and construction of an approved access to the plant building/compound. This option should be considered carefully with Item 6 below.

6) The EWMAC site is very constrained. It lacks legal road access to the plant room and chemical storage area, has no on-site and very limited on-road parking adjacent to the site and does not have adequate space for a well sited water play area or further facilities such as hydrotherapy pool. It is also remote from other recreation facilities and unable to share supporting infrastructure including club rooms, change rooms, toilets and car-parking. Options to address these issues include:

    a) **Relocation of the facility**. Relocation may be opportune in the near future as it requires significant renewal and upgrading works to meet required service standards including re-roofing and new air handling plant and systems. The plant room and pool concourse have limited life, the filtered water distribution and soiled water return systems were recently repaired with less than ideal but functional systems. Independent pool specialists have recommended detailed investigation of the pool shell to determine its condition. Possible sites include the new recreational precinct adjacent the schools in Echuca West where it may be integrated with other recreational facilities and sufficient area may be available or acquired.

    b) **Expansion of existing site**. Options include realigning the southern boundary fence to incorporate more of the highway reserve subject to VicRoads agreement and / or acquisition of several of the abutting Hare Street residential properties. At least a pair of abutting properties (i.e. 2,000m2) adjacent the pool hall would be necessary to address immediate needs for access, outdoor splash park and additional parking in reasonable proximity to the main activity area. In the longer term further properties may need to be acquired to cater for additional facilities (e.g. hydrotherapy pool) and access for the growing population.

The current General Residential Zone affecting these properties may allow their use subject to planning approval, for the splash park and associated access and parking as part of the indoor pool and gymnasium facility, under the definition of "Indoor Recreation Facility". However, this land may require reservation under the Planning Scheme to enable its acquisition and to cater for less restrictive uses.

This report is based on assumptions of retention and renewal of existing infrastructure, that the site access deficiencies can be resolved by negotiations with VicRoads and the proposed outdoor splash park is of reduced size located at the south end of the pool building with limited parental observation area. Notwithstanding, a strategic review is recommended before investing more heavily into this site to determine which site will provide the most economical and socially beneficial option to meet the long-term aquatic recreational needs of the Echuca and district community.

Kyabram, Rushworth and Kyabram Pools

1) Detailed planning and functional designs for each site need to be undertaken to develop new facilities compliant with Council's new service level as a priority.
2) It is considered the existing pools are incapable of economic modification to meet the new service standard. Replacement or significant modification is likely to trigger full DDA compliance of the associated site buildings. If retention of the buildings at the facility is contemplated, specialist reports should be commissioned for each site to determine the viability of making the complex compliant with the Building Act including DDA requirements. This includes access from carpark to complex, pool access, the kiosk work area, amenities and swim club rooms. Such a report is considered likely to show it is not economically viable to retain and modify the existing buildings.
3) A work place health and safety audit/report is required to identify current issues in the complexes.
4) In the case of Rochester, confirmation should also be sought of VicRoads approval for access to the plant room compound from the Northern Highway.

Category B Pool Complexes

Tongala, Lockington, Stanhope and Colbinabbin Pools

1) Detailed planning and functional designs for the sites need to be undertaken to provide for decommissioning of the existing pools, provision of interactive water play areas that meet Council's new service level and modification / replacement of associated existing infrastructure to suit. This is necessary to ensure planned short-term maintenance and renewal works are consistent with longer term plans for the sites and not wasted.
2) Removal of the existing pools and construction of the interactive water play areas is unlikely to trigger full DDA compliance of the site buildings. Nevertheless, it is likely that Council as a public authority that fosters an inclusive community will come under pressure to provide equal access for all to the new water play-parks and associated facilities. It is therefore assumed full DDA compliance will be required.

   If retention of the buildings at each facility is contemplated, a specialist report should be commissioned to determine the viability of making the complexes compliant with the Building Act including DDA requirements. This includes access from the carpark to the complex, interactive water play area and amenities at each site.

3) A work place health and safety audit/report is required for each site to identify current issues in each complex.

Capital Renewal – Current Service Level

This section provides a capital works program to retain each pool complex at their current service level over the next 10 years. It is broken up into the asset categories 1- 7 and provides a summary of the works required. All the works required have been identified by reports referred to in the references.

Category A Pool Complexes

EWMAC

1. Air Handling

- Replace the air handling plant system in pool hall. This provides for the removal of the 2 existing air units and single extraction fan. They will be replaced with 2 units with built in extraction systems that will utilize the existing duct work into the pool hall.
- Installation of high level louvres at each end of the pool to provide natural ventilation as required.
- Renew skylight panels with a type that provides thermal control.
  Estimated Cost $560,000

- Replace roofing insulation to pool hall to provide moisture and heat control. This will involve removal of the roofing iron and solar matting to allow for works.
  Estimated Cost $280,000

These works will help improve the inadequate temperature and humidity control in the pool hall and should reduce the operating costs of maintaining the air temperature.

Total Cost for Air Handling $840,000

2. Buildings

- Demolish and replace the old plant building, including refitting plant, pipes & valves for the reticulation system and solar system. Designed to accommodate the additional plant for the water play area.
  Estimated Cost $240,000

The works to the pool hall have been included in the air handling section above.

Total Cost for Buildings $240,000

3. Filtration/Disinfection

- Install filtration and plant room control valves to allow for system isolation, operator ease and flow control
  Estimated Cost $11,000
- Replace main circulation pump and motor sets with appropriately designed units, including hair lint filters to improve water flow and quality.

Estimated Cost $28,000

- Install foot valves, pipework and bracketing to main circulation pumps and motors to improve pumping efficiency, priming loss and vibration.
  Estimated Cost $13,000
- Replace the toddler feature pumps that will reach end of life. Includes costs to remove and install.
  Estimated Cost $5,000
- Replace the water main feed line into the plant room that is at end of life. This will reduce maintenance and shut down times.
  Estimated Cost $6,000
- Replace bulk chemical storage unit that will its end of life due to storage of acid.
  Estimated Cost $5,000
- Design and construct a new balance tank. The current tank is inappropriate in size for the purpose.
  Estimated Cost $40,000
- Replace acid dosing pump that will reach end of life. Supply and fit.
  Estimated Cost $1,500
- Replace chlorine dosing pumps x 2. Main pump and standby pumps will reach end of life.
  Estimated Cost $4,000

Total Estimated Cost for Filtration/Disinfection $113,500

4. Equipment

- Replace vacuum cleaner that ill reach end of life.
  Estimated Cost $12,000
- Replace one set of lane ropes that will reach end of life.
  Estimated Cost $20,000

Total Estimated Cost for Equipment $32,000

5. Pool Vessel

- Clean down, recalk and resurface the pool shell. To limit water losses, maintain water quality, reduce excessive chlorine demand and limit algae growth.

Total Estimated Cost for Pool Vessel $120,000

6. Pool Heating

- Replace the 2 gas water boilers with electric heat pumps. Units nearing end of life and are inefficient to operate. Significant operational savings with new units.

Total Estimated Cost for Pool Heating $135,000

7. Site/Surrounds

No significant items were costed into the program such as site access and acquiring extra land as they form part of investigations/special reports. Planning, design and costings will be required and should be considered when setting long term plans.

Total Estimated Cost for Site/Surrounds $ NIL

Total Estimated Costs for EWMAC $1,480,500 over the next 10 years

Ten Year Renewal Program EWMAC

Echuca Memorial Aquatic Centre													
10 Year Works Program - Retain Pools and Facilities as Existing													
Asset	Structural Items	Source	Issue	Est Cost	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
1	Replace air handling system in pool hall, incl install louvres, renew skylight panels and plant shade trees	Stevenson	Inadequate temperature and humidity control	$560,000	$200,000	$360,000								
1	Replace roofing insulation to pool hall	Stevenson	Inadequate temperature and humidity control	$280,000	$100,000	$180,000								
2	Demolish and replace plant building, incl refit existing plant		Plant building at end of life. Balance tank integral and leaking.	$240,000					$100,000	$140,000				
3	Install filtration and plant room control valves	MP&S	Isolation, operator ease and flow control	$11,000						$11,000				
3	Replace main filter/circulation pump and motor, incl hair/lint strainer and footvalve x 2		Filtration, water flow and quality	$28,000									$28,000	
3	Install foot valves, pipework and bracketing to main circulation pumps and motors x 2	MP&S	Pumping eficiency, priming loss and vibration	$13,000	$13,000									
3	Replace toddler feature pump x 2		End of useful life	$5,000										$5,000
3	Replace the water main feed into the plant room		Pipe at end of useful life. Reduce maintenance and shut down times.	$6,000			$6,000							
3	Replace bulk chemical storage unit		End of useful life	$5,000						$5,000				
3	Renew and enlarge balance tank to appropriate size	MP&S	Causing major water loss & too small	$40,000	$40,000									
3	Replace acid dosing pump		End of useful life	$1,500									$1,500	
3	Replace chlorine dosing pumps x 2		End of useful life	$4,000									$4,000	
4	Replace vacuum cleaner		End of useful life	$12,000								$12,000		
4	Replace one set of lane ropes		End of useful life	$20,000										$20,000
5	Resurface main pool shell	MP&S	Turbidity, excessive chlorine demand and algae growth	$120,000							$120,000			
6	Replace the hot water boiler with electric heat pumps	Stevenson		$135,000								$135,000		
			Total Annual Program Cost	**$1,480,500**	**$353,000**	**$540,000**	**$6,000**	**$0**	**$100,000**	**$156,000**	**$120,000**	**$147,000**	**$33,500**	**$25,000**

Kyabram Pool

Kyabram doesn't have any assets in category 1 Air Handling or 6 Pool Heating

2. Buildings

- Refurbishment of amenities/change rooms to fix drainage issues, privacy/security issues and renew fixtures and fittings.
  Estimated Cost $173,500
- Kiosk/Office refurbishment to improve amenity and function.
  Estimated Cost $10,000

Total Estimated Costs for Buildings $183,500

3. Filtration/Disinfection

- Replace main filter/circulation pump and motor, including hair/lint strainer and foot valve. The current pump is at end of life and not suitable for the application. This will improve water flow and quality.
  Estimated Cost $28,000
- Install new water level control system. Provide improved water level management.
  Estimated Cost $7,000
- Routine replacement to mechanical items that will be at end of life.
  Estimated Cost $30,000
- Replace filter cells x 4 including pipework. Will be end of life and are inadequate in capacity.
  Estimated Cost $50,000
- Design and construct a new balance tank. The current tank is inappropriate in size for the purpose and causing water losses.
  Estimated Cost $40,000
- Replace pipework and valves that will be end of life such as backwash valves.
  Estimated Cost $9,000
- Replace bulk acid/chemical storage and bund that will be end of life.
  Estimated Cost $3,000
- Replace backwash, acid dosing and chlorine dosing pumps that will be end of life.
  Estimated Cost $5,000
- Isolate existing main pool drainage system to prevent major water loss.
  Estimated Cost $5,500
- Install a new 200mm soiled water return main line including new connections to gutter droppers around the main pool to balance tank. Causing major water loss, circulation and water quality problems.
  Estimated Cost $115,000
- Install a new 200mm secondary soiled water return main line including 80mm branches from main pool to balance tank. Causing major water loss, circulation and water quality problems.
  Estimated Cost $110,000
- Install a new 150mm filtered water supply main line from plant room to filtered water supply branches, main pool. Causing major water loss, circulation and water quality problems.
  Estimated Cost $102,000

- Install a new 80mm filtered water supply from plant room to filtered water branches and wading pool. Causing major water loss, circulation and water quality problems
  Estimated Cost $32,000
- Install a soiled water return line from the new soiled water return gutter and wading pool, linked to main pool gutter return line. Causing major water loss, circulation and water quality problems.
  Estimated Cost $43,000
- Isolate vacuum cleaning plumbing and fittings from main pool tom prevent water losses.
  Estimated Cost $6,000

Total Estimated Costs for Filtration/Disinfection $585,500

4. Equipment

- Replace vacuum cleaner that will be at end of life.
  Estimated Cost $12,000
- Replace lane ropes x 1 set that will be at end of life.
  Estimated Cost $10,000

Total Estimated Costs for Equipment $22,000

5. Pool Vessel

- Install new internal step into the wading pool incorporating grated/soiled water return gutter. This is to improve the circulation, filtration and water treatment.
  Estimated Cost $17,000
- Repair soiled water gutter tile areas including the join in the main pool. Creating water loss.
  Estimated Cost $48,000
- Recalk and paint pool shells each 3 years to limit water losses and maintain water quality and efficient filtration.

Estimated Cost $210,000

Total Estimated Costs for Equipment $275,000

7. Site/Surrounds

- Remove and replace concrete concourse that will enable hydraulic works to be carried out.
  Estimated Cost $65,000
- Replace shade sail, toddler pool seating area where the geo-cloth will be at end of life.
  Estimated Cost $3,000
- Replace shade sails, main pool where the geo-cloth will be at end of life.
  Estimated Cost $9,000
- Replace table unit as the oldest unit will be end of life.
  Estimated Cost $3,000
- Prepare site plan to identify all infrastructure on the site.
  Estimated Cost $4,000

Total Estimated Costs for Site/Surrounds $84,000

Total Estimated Costs Kyabram Pool Complex $1,150,000 over the next 10 years

Ten Year Renewal Program Kyabram

Kyabram Swimming Pool														
10 Year Works Program 2 - Retain Pools and Facilities as Existing														
Asset Category	Item	Source	Issue	Est Cost	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
2	Facility/amenities refurbishment as per current project		Improved amenity and function,	$173,500				$73,500	$100,000					
2	Office fitout and refurbishment		Improved amenity and function,	$10,000					$10,000					
3	Replace main filter/circulation pump and motor, incl hair/lint strainer and footvalve	MP&S	Filtration, water flow and quality	$28,000							$28,000			
3	Install new water level control system	MP&S	Water level management	$7,000							$7,000			
3	Non Programmed replacement to mechanical items		Useful life cycle	$30,000	$10,000					$10,000				$10,000
3	Replace filter cells x 4 incl pipework	MP&S	Near end of useful life cycle	$50,000							$50,000			
3	Renew and enlarge balance tank to appropriate size	MP&S	Causing major water loss & too small	$40,000							$40,000			
3	Replace valves		Useful life cycle	$4,000							$4,000			
3	Replace filter/backwash control valves	MP&S	Useful life cycle	$5,000						$5,000				
3	Replace bulk chemical storage and bund		Useful life cycle	$3,000										$3,000
3	Replace backwash pump		Useful life cycle	$1,500							$1,500			
3	Replace acid dosing pumps x 1		Useful life cycle	$1,500							$1,500			
3	Replace chlorine dosing pumps x 1		Useful life cycle	$2,000							$2,000			
3	Isolate existing main pool drainage system	MP&S	Major water loss	$5,500			$5,500							
3	Install new 200mm soiled water return gutter main line incl new connections to gutter droppers around main pool to balance tank	MP&S	Causing major water loss, circulation and water quality problems	$115,000			$40,000	$75,000						
3	Install new 200mm secondary soiled water return main line incl 80mm branches from main pool to balance tank	MP&S	Causing major water loss, circulation and water quality problems	$110,000			$40,000	$70,000						
3	Install new 150mm filtered water supply main line from plant room to filtered water supply branches, main pool	MP&S	Causing major water loss, circulation and water quality problems	$102,000			$50,000	$52,000						
3	Install new 80mm filtered water supply from plant room to filtered water branches, toddler pool	MP&S	Causing major water loss, circulation and water quality problems	$32,000			$32,000							
3	Install soiled water return from new soiled water return gutter, toddler pool, linked to main pool gutter return line	MP&S	Causing major water loss, circulation and water quality problems	$43,000			$43,000							
3	Isolate vacuum cleaning plumbing and fittings from main pool	MP&S	Minor leak	$6,000				$6,000						
4	Replace vacuum cleaner		End of useful life	$12,000								$12,000		
4	Replace lane ropes x 1 set		End of useful life	$10,000										$10,000
5	Install new internal step into toddler pool incorporating grate/soiled water return gutter	MP&S	Provide adequate circulation, filtration and water treatment	$17,000					$17,000					
5	Repair soiled water gutter tile areas incl join in main pool	MP&S	Minor water loss	$48,000								$48,000		
5	Recaulk and paint pool shells		Asset maintenance and water loss	$210,000			$70,000			$70,000			$70,000	
7	Remove and replace concrete concourse	MP&S	Enable hydraulic works to be done	$65,000			$15,000	$50,000						
7	Replace shade sail, toddler pool seating area		Geo-cloth useful life limit	$3,000										$3,000
7	Replace shade sails, main pool		Geo-cloth useful life limit	$9,000										$9,000
7	Replace table unit		Oldest unit at end of useful life	$3,000									$3,000	
7	Prepare site plan	GHD	Identify site infrastructure	$4,000				$4,000						
			Total Annual Program Cost	**$1,150,000**	**$10,000**	**$0**	**$295,500**	**$330,500**	**$127,000**	**$85,000**	**$134,000**	**$60,000**	**$73,000**	**$35,000**

Rochester Pool

Rochester doesn't have any assets in category 1 Air Handling or 6 Pool Heating

2. Buildings

- Replace shade structure and covering over the wading pool. Structure and cover will be at end of life.
  Estimated Cost $7,000
- Refurbishment to kiosk/office building to improve amenity and function.
  Estimated Cost $10,000
- Facility/amenities refurbishment and refit of fittings at end of life to improve amenity and function.
  Estimated Cost $10,000
- Replace the shade covering at the end of the main pool that will be end of life.
  Estimated Cost $9,000

Total Estimated Costs for Buildings $36,000

3. Filtration/Disinfection

- Replace main circulation pump and motor set, including hair/lint strainer and foot valve. These are either not in place or at end of life. To be designed and sized to match the filters.
  Estimated Cost $28,000
- Seal and repair the balance tank, including pipe penetrations to seal water leaks.
  Estimated Cost $8,000
- Replace the old gravity concrete tank filter cells with a new filtration system. Structure at end of life causing major water loss, circulation and water quality problems.
  Estimated Cost $120,000
- Replace backwash pump, acid dosing and chlorine dosing pumps. They will be end of life.
  Estimated Cost $5,000
- Install automated water level control system for water level management.
  Estimated Cost $7,500
- Replace bulk chemical storage, including bunding. Tanks and bund will be end of life from storing acid.
  Estimated Cost $3,000
- Install new 200mm soiled water return main line including new connections to the gutter droppers around the main pool to the balance tank. Causing major water loss, circulation and water quality problems.
  Estimated Cost $84,000
- Install new 200mm secondary soiled water return main line including 80mm branches from the main pool to the balance tank. Causing major water loss, circulation and water quality problems.
  Estimated Cost $110,000
- Install new 150mm filtered water supply main line from the plant room to the filtered water supply branches from the main pool. Causing major water loss, circulation and water quality problems.
  Estimated Cost $90,000
- Install new 80mm filtered water supply from plant room to filtered water branches to the wading pool. Causing major water loss, circulation and water quality problems.
  Estimated Cost $32,000
- Install soiled water return from new soiled water return gutter, wading pool, linked to the main pool gutter return line. Causing major water loss, circulation and water quality problems.

Estimated Cost $43,000

- Replace the reticulation/backwash pipes as they will be end of life.
  Estimated Cost $18,000
- Isolate existing pool drainage system to limit water loss.
  Estimated Cost $5,500
- Isolate the existing wading pool filtered water supply and soiled water return systems.
  Estimated Cost 7,500
- Routine replacement to mechanical items that will reach end of life.
  Estimated Cost $20,000

Total Estimated Costs for Filtration/Disinfection $581,500

4. Equipment

- Replace vacuum cleaner that will be end of life.

Estimated Cost $12,000

- Replace table and seating units that are end of life.

Estimated Cost $6,000

- Replace starter blocks that will be end of life.

Estimated Cost $16,300

- Replace lane ropes x 1 set that will be end of life.

Estimated Cost $10,000

Total Estimated Costs for Equipment $44,300

5. Pool Vessel

- Recalk and paint pool shells each 3 years to limit water losses and maintain water quality and efficient filtration.

Estimated Cost $210,000

- Install a new internal step incorporating grated/soiled water return gutter to toddler pool. To improve water circulation, filtration and water quality.

Estimated Cost $14,500

Total Estimated Costs for the Pool Vessel $224,500

7. Site/Surrounds

- Replace light poles with galvanised poles as poles end of life. Need to maintain structural integrity.

Estimated Cost $10,000

- Remove and replace sections of the concrete concourse for hydraulic works, including in front of the kiosk. Public safety/Trip hazards & to enable hydraulic works.

Estimated Cost $65,000

Total Estimated Costs for the Site/Surrounds $75,000

Total Estimated Costs Rochester Pool Complex $961,300 over the next 10 years

Ten Year Renewal Program Rochester

Rochester Swimming Pool														
10 Year Works Program 2 - Retain Existing Pools and Facilities as Existing														
Asset Category	Structural Items	Source	Issue	Est Cost	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
2	Replace shade structure and covering, toddler pool		End of useful life	$7,000										$7,000
2	Refurbishment to office/admin building		Function and amenity	$10,000									$10,000	
2	Facility/amenities refurbishment		Improved amenity and function,	$10,000									$10,000	
2	Replace shade coverings, nth end of main pool x 3		End of useful life	$9,000										$9,000
3	Replace main filter/circulation pump and motor, incl hair/lint strainer and footvalve	MP&S	End of useful life	$28,000	$28,000									
3	Seal and repair balance tank, incl pipe penetrations	MP&S	Minor water loss	$8,000									$8,000	
3	Replace old concrete tank filter cells with new filtration system	MP&S	Causing major water loss, circulation and water quality problems	$120,000				$20,000	$100,000					
3	Replace backwash pump		Useful life cycle	$1,500							$1,500			
3	Replace acid dosing pumps x 1		Useful life cycle	$1,500							$1,500			
3	Replace chlorine dosing pumps x 1		Useful life cycle	$2,000							$2,000			
3	Install automated water level control system	MP&S	Water level management	$7,500				$7,500						
3	Replace bulk chemical storage, incl bunding			$3,000										$3,000
3	Install new 200mm soiled water return gutter main line incl new connections to gutter droppers around main pool to balance tank	MP&S	Causing major water loss, circulation and water quality problems	$84,000			$24,000	$60,000						
3	Install new 200mm secondary soiled water return main line incl 80mm branches from main pool to balance tank	MP&S	Causing major water loss, circulation and water quality problems	$110,000			$30,000	$80,000						
3	Install new 150mm filtered water supply main line from plant room to filtered water supply branches, main pool	MP&S	Causing major water loss, circulation and water quality problems	$90,000			$30,000	$60,000						
3	Install new 80mm filtered water supply from plant room to filtered water branches, toddler pool	MP&S	Causing major water loss, circulation and water quality problems	$32,000			$32,000							
3	Install soiled water return from new soiled water return gutter, toddler pool, linked to main pool gutter return line	MP&S	Causing major water loss, circulation and water quality problems	$43,000			$43,000							
3	Replace reticulation/backwash pipes		End of useful life	$18,000						$18,000				
3	Isolate existing pool drainage system	MP&S	Major water loss	$5,500			$5,500							
3	Isolate existing toddler pool filtered water supply and soiled water return systems	MP&S	Major water loss	$7,500			$7,500							
3	Non-programmed replacement to mechanical items		Useful life cycle	$20,000						$10,000				$10,000
4	Replace vacuum cleaner		End of useful life	$12,000									$12,000	
4	Replace table and seating units		End of useful life	$6,000							$6,000			
4	Replace starter blocks		End of useful life	$16,300										$16,300
4	Replace lane ropes x 1 set		End of useful life	$10,000										$10,000
5	Recaulk and paint pool shells		Asset maintenance	$210,000			$70,000			$70,000			$70,000	
5	Install new internal step incorporating grate/soiled water return gutter to toddler pool	MP&S	Adequate circulation, filtrations and water treatment	$14,500								$14,500		
7	Replace light poles with galvanised poles		To maintain structural integrity	$10,000							$10,000			
7	Remove and replace sections of concrete concourse, incl front of kiosk	MP&S	Public safety/Trip hazards. Enable hydraulic works	$65,000			$15,000	$50,000						
			Total Annual Program Cost	**$961,300**	**$28,000**	**$0**	**$257,000**	**$277,500**	**$100,000**	**$98,000**	**$21,000**	**$14,500**	**$110,000**	**$55,300**

Rushworth Pool

Rushworth doesn't have any assets in category 1 Air Handling or 6 Pool Heating

2. Buildings

- Facility/amenities refurbishment to improve the amenity and functionality.

Estimated Cost $10,000

- Replace shade sails x 5 that will be end of life. Geo-cloth at end of useful life limit.

Estimated Cost $20,000

- Upgrade the switchboard in office to compliance.

Estimated Cost $5,000

- Refurbishment to the kiosk/office building. To improve functionality and amenity.

Estimated Cost $10,000

Total Estimated Costs for the Buildings $45,000

3. Filtration/Disinfection

- Excavate and replace main pool drain line. To limit water losses from current leaking pipe system.

Estimated Cost $18,000

- Replace main pool scum gutter return line. To limit water losses from current leaking pipe system.

Estimated Cost $7,000

- Repair wading pool east drainage outlet. To limit water losses from cracked system.

Estimated Cost $2,000

- Seal and repair balance tank, including pipe penetrations. To fix minor water loss.

Estimated Cost $8,000

- Replace bulk chemical storage unit that will reach end of life. Acid tank has limited life.

Estimated Cost $5,000

- Replace backwash, acid dosing & chlorine dosing pumps. Will be end of useful life.

Estimated Cost $5,000

- Replace pipework that will reach end of life. Limit water losses.

Estimated Cost $10,000

- Replace valves that will reach end of life.

Estimated Cost $4,000

- **Routine replacement** to mechanical items that will reach end of life.

Estimated Cost $30,000

Total Estimated Costs for the Filtration/Disinfection $89,000

4. Equipment

- Replace vacuum cleaner that will reach end of life. Retain water quality.

Estimated Cost $12,000

- Replace lane ropes x 1 set that will reach end of life. Public safety.

Estimated Cost $10,000

Total Estimated Costs for the Equipment $22,000

5. Pool Vessel

- Remove and replace main pool western gutter ledge. Currently has corrosion and severe cracking. Limit water losses.

Estimated Cost $12,000

- Repair main pool access ladders and fittings that are missing or badly corroded. Public safety.

Estimated Cost $3,000

- Recalk and paint pool shells each 3 years to limit water losses and maintain water quality and efficient filtration. Asset maintenance and water loss prevention.

Estimated Cost $210,000

Total Estimated Costs for the Pool Vessel $225,000

7. Site/Surrounds

- Repair and level sections of the concrete concourse around the pools. Creating public safety issue.

Estimated Cost $15,000

- Replace light fittings to maintain reliability

Estimated Cost $4,000

- Prepare site plan to identify all infrastructure on the site.
  Estimated Cost $4,000

Total Estimated Costs for the Site/Surrounds $23,000

Total Estimated Costs Rushworth Pool Complex $404,000 over the next 10 years

Ten Year Renewal Program Rushworth

Rushworth Swimming Pool													
10 Year Works Program 2 - Retain Existing Pools and Facilities as Existing													
Asset Category	Structural Items	Source	Issue	Est Cost	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
2	Facility/amenities refurbishment		Improved amenity and function.	$10,000						$10,000				
2	Replace shade sails x 5		Geo-cloth useful life limit	$20,000									$20,000	
2	Upgrade switchboard in office to compliance		Compliance	$5,000								$5,000		
2	Refurbishment to office/admin building		Function and amenity	$10,000								$10,000		
3	Excavate and replace main pool drain line	GHD	Several severe leaks	$18,000			$18,000							
3	Replace main pool scum gutter return line	GHD	Severe leakage	$7,000		$7,000								
3	Repair wading pool east drain outlet	GHD	Cracking	$2,000		$2,000								
3	Seal and repair balance tank, incl pipe penetrations		Minor water loss	$8,000									$8,000	
3	Replace bulk chemical storage unit		End of useful life	$5,000					$5,000					
3	Replace backwash pump		End of useful life	$1,500								$1,500		
3	Replace acid dosing pump		End of useful life	$1,500							$1,500			
3	Replace chlorine dosing pump		End of useful life	$2,000							$2,000			
3	Non-programmed replacement of pipework		End of useful life	$10,000									$10,000	
3	Replace valves		End of useful life	$4,000									$4,000	
3	Non-programmed replacement of mechanical items		Useful life cycle	$30,000	$10,000				$10,000				$10,000	
4	Replace vacuum cleaner		End of useful life	$12,000										$12,000
4	Replace lane ropes x 1 set		End of useful life	$10,000								$10,000		
5	Remove and replace main pool western gutter ledge	GHD	Corrosion and severe cracking	$12,000			$12,000							
5	Repair main pool access ladders fixings	GHD	Missing or corroded fixings	$3,000			$3,000							
5	Recaulk and paint pool shells		Asset maintenance and water loss	$210,000			$70,000			$70,000			$70,000	
7	Repair,level sections of concrete concourse		Uneven, OHS	$15,000						$15,000				
7	Replace light fittings on existing poles		To maintain reliability	$4,000					$4,000					
7	Prepare site plan	GHD	Site infrastructure identified	$4,000				$4,000						
			Total Annual Program Cost	**$404,000**	**$10,000**	**$9,000**	**$103,000**	**$4,000**	**$19,000**	**$95,000**	**$3,500**	**$26,500**	**$122,000**	**$12,000**

Category B Pool Complexes

Tongala Pool

Tongala doesn't have any assets in category 1 Air Handling or 6 Pool Heating

2. Buildings

- Facility/amenities refurbishment to improve the amenity and functionality.

Estimated Cost $10,000

- Refurbishment to the kiosk/office building to improve functionality and amenity.

Estimated Cost $10,000

Total Estimated Costs for the Buildings $20,000

3. Filtration/Disinfection

- Replace the two sand filters for the learners that will reach end of life to maintain water quality.

Estimated Cost $5,000

- Replace bulk chemical storage tank and bund that will reach end of life.

Estimated Cost $5,000

- Replace circulation pump/motor sets for the main pool and learners pool that will reach end of life. To maintain water quality through the pools filters.

Estimated Cost $18,000

- Replace the acid and chlorine chemical dosing pumps that will reach end of life to maintain water quality.

Estimated Cost $7,000

- **Routine replacement** to pipe work and mechanical items that will reach end of life.

Estimated Cost $20,000

Total Estimated Costs for the Filtration/Disinfection $55,000

4. Equipment

- Replace vacuum cleaner that will reach end of life. Retain water quality.

Estimated Cost $12,000

Total Estimated Costs for the Equipment $12,000

5. Pool Vessel

- Recalk and paint pool shells each 3 years to limit water losses and maintain water quality and efficient filtration. Asset maintenance and water loss prevention.

Estimated Cost $210,000

Total Estimated Costs for the Pool Vessel $210,000

7. Site/Surrounds

- Replace sale shade over toddler's pool that will reach end of life.

Estimated Cost $5,000

- Replace light poles with galvanised to maintain structural integrity for public safety.

Estimated Cost $4,000

- Prepare site plan to identify all infrastructure on the site.

Estimated Cost $4,000

- Replace table seat set that will reach end of life for public safety.

Estimated Cost $3,000

Total Estimated Costs for the Site/Surrounds $16,000

Total Estimated Costs Tongala Pool Complex $313,000 over the next 10 years

Ten Year Renewal Program Tongala

Tongala Swimming Pool														
10 Year Works Program 1 - Retain Existing Pools and Facilities,														
Asset Category	Structural Items	Source	Issue	Est Cost	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
2	Facilities/amenities refurbishment		Improved amenity and function	$10,000										$10,000
2	Refurbishment to office/admin building		Function and amenity	$10,000										$10,000
3	Replace 2 sand filters, learner pool	MP&S	Useful life cycle	$5,000									$5,000	
3	Replace bulk chemical storage and bund	MP&S	Useful life cycle	$5,000									$5,000	
3	Replace main circulation pump		Useful life cycle	$10,000										$10,000
3	Replace learner pool circulation pumps x 2		Useful life cycle	$8,000										$8,000
3	Non-programmed replacement of mechanical items		End of service life	$10,000				$5,000					$5,000	
3	Replace acid dosing pumps		Useful life cycle	$3,000									$3,000	
3	Replace chlorine dosing pumps		Useful life cycle	$4,000									$4,000	
3	Non-programmed replacement of pipework		End of service life	$10,000						$10,000				
4	Replace vacuum cleaner		Useful life cycle	$12,000							$12,000			
5	Recaulk and repaint pool shells		3 year maintenance cycle	$210,000		$70,000			$70,000			$70,000		
7	Replace light poles with galvanised		To maintain structural integrity	$4,000							$4,000			
7	Prepare pool site drawing	GHD	Site information not available	$4,000		$4,000								
7	Replace shade sail, toddler pool		Useful life cycle	$5,000										$5,000
7	Replace table unit		Oldest unit at end of useful life	$3,000										$3,000
			Total Annual Program Cost	$313,000	$0	$74,000	$0	$5,000	$70,000	$10,000	$16,000	$70,000	$22,000	$46,000

Lockington Pool

Lockington doesn't have any assets in category 1 Air Handling or 6 Pool Heating

2. Buildings

- Facility/amenities refurbishment to improve the amenity and functionality.

Estimated Cost $10,000

- Refurbishment to the kiosk/office building to improve functionality and amenity.

Estimated Cost $10,000

Total Estimated Costs for the Buildings $45,000

3. Filtration/Disinfection

- Repairs to the 3 fibre glass filter cells that are open to the elements. To limit further deterioration due to UV exposure.

Estimated Cost $6,000

- Replace main circulation pump/motor set, acid dosing pump and chlorine dosing pumps that will be reach end of useful life.

Estimated Cost $13,500

- **Routine replacement** to mechanical items and pipe work that will reach end of life.

Estimated Cost $20,000

Total Estimated Costs for the Filtration/Disinfection $39,500

4. Equipment

- Replace vacuum cleaner that will reach end of life. Retain water quality.

Estimated Cost $12,000

Total Estimated Costs for the Equipment $12,000

5. Pool Vessel

- Recalk and paint pool shells each 3 years to limit water losses and maintain water quality and efficient filtration. Asset maintenance and water loss prevention.

Estimated Cost $180,000

Total Estimated Costs for the Pool Vessel $180,000

7. Site/Surrounds

- Install shade cover over the filter cells to prevent further degradation from UV exposure.

Estimated Cost $10,000

- Replace shade sails x 6 that will be end of life. Geo-cloth at end of useful life limit.

Estimated Cost $18,000

- Replace light fittings to maintain reliability

Estimated Cost $4,000

- Replace wooden table and seat sets that be at end of life. Public safety.

Estimated Cost $8,000

- Prepare site plan to identify all infrastructure on the site.
  Estimated Cost $4,000

Total Estimated Costs for the Site/Surrounds $44,000

Total Estimated Costs Lockington Pool Complex $291,500 over the next 10 years

Ten Year Renewal Program Lockington

Lockington Swimming Pool														
10 Year Works Program 2 - Retain Pools and Facilities as Existing														
Asset Category	Structural Items	Source	Issue	Est Cost	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
2	Refurbishment to office/admin building		Function and amenity	$10,000						$10,000				
2	Facilities/amenities refurbishment		Improved amenity and function	$10,000						$10,000				
3	Non-programmed replacement of mechanical items		End of service life	$10,000				$5,000					$5,000	
3	Non-programmed replacement of pipework		End of service life	$10,000				$5,000					$5,000	
3	Replace main recirculation pump		Useful life cycle	$10,000							$10,000			
3	Repairs to filter cells x 3	GHD	Material break down due to UV exposure	$6,000	$6,000									
3	Replace acid dosing pump		Useful life cycle	$1,500							$1,500			
3	Replace chlorine dosing pump		Useful life cycle	$2,000							$2,000			
4	Replace vacuum cleaner		Useful life cycle	$12,000									$12,000	
5	Recaulk and paint pool shells		3 year major maintenance program	$180,000		$60,000			$60,000			$60,000		
7	Install shade cover over filter cells		Prevent uv degradation	$10,000							$10,000			
7	Replace shade covering over kiosk area		Geo-cloth useful life limit	$5,000										$5,000
7	Replace shade covering adjacent to main pool		Geo-cloth useful life limit	$5,000										$5,000
7	Replace shade sail, toddler pool seating area		Geo-cloth useful life limit	$8,000										$8,000
7	Prepare site plan	GHD	Site infrastructure not identified	$4,000			$4,000							
7	Replace wooden table and seat units x 4		Oldest unit at end of useful life	$8,000							$8,000			
			Total Annual Program Cost	$291,500	$6,000	$60,000	$4,000	$10,000	$60,000	$20,000	$31,500	$60,000	$22,000	$18,000

Stanhope Pool

Stanhope doesn't have any assets in category 1 Air Handling or 6 Pool Heating

2. Buildings

- Demolish and reconstruct facility amenities as structurally unsound and in poor condition with separating walls. Must by brought up to DDA compliance.

Estimated Cost $665,000

- Reconstruction of kiosk/office building and store as impractical to refurbish when part of amenities building.

Estimated Cost $150,000

- Refurbish and modify plant room and hypo storage. Poor condition, layout and high OH&S risk.

Estimated Cost $100,000

Total Estimated Costs for the Buildings $915,000

3. Filtration/Disinfection

- Replace grates to the toddler's pool soiled water gutter and filtered water centre pit. To improve water quality.

Estimated Cost $5,000

- Install new UPVC line from toddler collection pit to gravity filters/balance tank and install new filtered water control valves. To maintain water levels and limit water losses.

Estimated Cost $35,000

- Replace water feature pump, acid dosing pump & chlorine dosing pumps. Will be end of useful life.

Estimated Cost $12,000

- Install new eyewash & safety shower at plant room / hypo stores. None nearby and OH&S risk.

Estimated Cost $5,000

- Routine replacement to mechanical items, valves and pipe work that will reach end of life.

Estimated Cost $30,000

Total Estimated Costs for the Filtration/Disinfection $87,000

4. Equipment

- Replace vacuum cleaner that will reach end of life. Retain water quality.

Estimated Cost $12,000

- Replace lane ropes x 1 set that will reach end of life. Public safety.

Estimated Cost $10,000

Total Estimated Costs for the Equipment $22,000

5. Pool Vessel

- Refurbish main and wading pool coping that is cracking and loosing cover including consequential repairs to skimmer gutters. Public safety.

Estimated Cost $100,000

- Recalk and paint pool shells each 3 years to limit water losses and maintain water quality and efficient filtration. Asset maintenance and water loss prevention.

Estimated Cost $310,000

Total Estimated Costs for the Pool Vessels $320,000

7. Site/Surrounds

- Repair and level sections of the concrete concourse around the pools. Creating public safety issue.

Estimated Cost $20,000

- Replace light poles x 3 to maintain structural integrity. Public safety.

Estimated Cost $6,000

- Replace the shade sail over toddler's pool that will be end of life. Geo-cloth at end of useful life limit.

Estimated Cost $5,000

- Replace wooden table and seat sets that be at end of life. Public safety.

Estimated Cost $6,000

- Prepare site plan to identify all infrastructure on the site.

Estimated Cost $4,000

Total Estimated Costs for the Site/Surrounds $41,000

Total Estimated Costs Stanhope Pool Complex $1,315,000 over the next 10 years

Ten Year Renewal Program Stanhope

Stanhope Swimming Pool														
10 Year Works Program 2 - Retain Pools and Facilities as Existing														
Asset Category	Structural Items	Source	Issue	Est Cost	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
2	Demolish and remove admin/office and amenities building		End of life - make way for new	$60,000							$60,000			
2	Build new admin/office building		Function and amenity - cannot refurbish as part of amenities	$150,000						$10,000	$140,000			
2	Build new amenities to provide disability access and facilities and improved amenity		Structurally failing, poor condition. Reconstruction triggers full DDA compliance	$605,000						$50,000	$555,000			
2	Refurbish pump and chemical storage sheds		Poor condition, poor layout from OH&S perspective	$100,000						$100,000				
3	Replace grates to toddler pool soiled water gutter covers and filtered water centre pit	MP&S	Water quality	$5,000						$5,000				
3	Replace water feature pump	MP&S	Water quality and level control	$5,000	$5,000									
3	Install new eye wash and safety shower at plant room		OH&S - No shower at dosing pumps & storage	$5,000	$5,000									
3	Replace acid dosing pump		Useful life cycle	$3,000							$3,000			
3	Replace chlorine dosing pump		Useful life cycle	$4,000							$4,000			
3	Non-programmed replacement of mechanical items		End of service life	$10,000						$10,000				
3	Install new upvc line from toddler collection pit to gravity filters/balance tank and install new filtered water control valves	MP&S	Water levels and balance	$35,000			$35,000							
3	Replace valves (plastic and metal)	GHD	Useful life cycle	$10,000				$5,000				$5,000		
3	Non-programmed replacement of pipework		End of service life	$10,000				$10,000						
4	Replace vacuum cleaner		End of service life	$12,000									$12,000	
4	Replace 1 set lane ropes		End of service life	$10,000										$10,000
5	Recaulk and repaint pool shells		Routine maintenance	$210,000		$70,000			$70,000			$70,000		
5	Repair to pool coping - Wading & Main		Cracking and loss of covering	$100,000					$50,000	$50,000				
7	Repair to concrete concourse		Cracking and subsidence	$20,000					$20,000					
7	Replace light poles with galvanised x 3		To maintain structural integrity	$6,000							$6,000			
7	Prepare site plan drawing	GHD	No plan of site	$4,000		$4,000								
7	Replace shade sail, toddler pool		Useful life cycle	$5,000										$5,000
7	Replace table/seating units		End of service life	$6,000									$6,000	
			Total Annual Program Cost	$1,315,000	$10,000	$74,000	$35,000	$15,000	$140,000	$225,000	$708,000	$75,000	$18,000	$15,000

Colbinabbin Pool

Colbinabbin doesn't have any assets in category 1 Air Handling or 6 Pool Heating

2. Buildings

- Facility/amenities refurbishment to improve the amenity and functionality of the reserves facilities.

Estimated Cost $10,000

- Refurbishment to the kiosk/office building to improve the amenity and functionality of the reserves facilities.

Estimated Cost $10,000

Total Estimated Costs for the Buildings $20,000

3. Filtration/Disinfection

- Replace main circulation pump, acid dosing & chlorine dosing pumps. Will be end of useful life.

Estimated Cost $13,500

- Routine replacement to mechanical items, valves and pipe work that will reach end of life.

Estimated Cost $23,000

Total Estimated Costs for the Filtration/Disinfection $36,500

4. Equipment

- Replace vacuum cleaner that will reach end of life. Retain water quality.

Estimated Cost $12,000

Total Estimated Costs for the Equipment $12,000

5. Pool Vessel

- Recalk and paint pool shells every 3 years to limit water losses and maintain water quality and efficient filtration. Asset maintenance and water loss prevention.

Estimated Cost $210,000

Total Estimated Costs for the Pool Vessel $210,000

7. Site/Surrounds

- Remove and relay sections of the concrete concourse. Creating public safety issue.

Estimated Cost $10,000

- Replace table/seat settings that will reach end of life. Public liability.

Estimated Cost $6,000

- Replace the shade sail over toddler's pool and shade area that will be end of life. Geo-cloth at end of useful life limit.

Estimated Cost $15,000

- Prepare site plan to identify all infrastructure on the site.

Estimated Cost $4,000

Total Estimated Costs for the Site/Surrounds $35,000

Total Estimated Costs Colbinabbin Pool Complex $313,500 over the next 10 years

Ten Year Renewal Program - Colbinabbin

Colbinabbin Swimming Pool														
10 Year Works Program 2 - Retain Existing Pools and Facilities														
Asset Category	Structural Items	Source	Issue	Est Cost	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
2	Refurbishment to office/admin building		Function and amenity	$10,000								$10,000		
2	Facilities/amenities refurbishment		Improved amenity and function	$10,000								$10,000		
3	Replace main filter/circulation pump and motor,	GHD	Filtration, water flow and quality	$10,000								$10,000		
3	Non-programmed replacement of mechanical items		End of service life	$10,000			$5,000						$5,000	
3	Non-programmed replacement of pipework		End of service life	$10,000								$10,000		
3	Replace metal gate valves	GHD	Useful life cycle	$3,000								$3,000		
3	Replace acid dosing pump		Useful life cycle	$1,500							$1,500			
3	Replace chlorine dosing pump		Useful life cycle	$2,000							$2,000			
4	Replace vacuum cleaner		Useful life cycle	$12,000								$12,000		
5	Recaulk and paint pool shells		3 yearly cyclic program	$210,000		$70,000			$70,000			$70,000		
7	Remove and relay sections of concrete concourse		OH&S, Improved amenity	$10,000								$10,000		
7	Replace shade sail, toddler pool seating area		Geo-cloth useful life limit	$15,000										$15,000
7	Prepare site plan drawing	GHD	Identify site infrastructure	$4,000								$4,000		
7	Replace table unit x 3		Oldest unit at end of useful life	$6,000										$6,000
			Total Annual Program Cost	$313,500	$0	$70,000	$5,000	$0	$70,000	$0	$3,500	$139,000	$5,000	$21,000

Summary – Capital Renewal to Maintain Current Service Levels

An estimated cost of at least $6m over next 10 years is required to maintain the current service levels assuming there are no major unforeseen failures. This pattern will continue and is expected to escalate further as amenities require replacement or upgrading to DDA compliance that will be triggered by pool shell replacements. A more intensive capital renewal program has been provided to maintain the ageing pool shells so as to limit water losses and maintain water quality.

The assessment has been based on all existing reports that were identified and brief site inspections. No detailed investigations were undertaken. There are a number of deficiencies in the available information where McCartney Solutions recommends detailed technical assessments be undertaken. It is expected that these inspections/investigations will expose additional issues that were not readily apparent.

Echuca, Stanhope and Kyabram pools are expected to require the most expenditure at $3,945,500:

- Echuca $1,480,500 - mainly because of the air handling system including ventilation, roof insulation and skylight issues and the plant room and balance tank.
- Kyabram $1,150,000 – mainly due significant water supply and drainage pipework, amenities and plant with new filters and balance tank. This location would be the priority for replacement with new aquatic facilities including 25m pool compliant with Councils new standard.
- Stanhope $1,315,000 - mainly due to the kiosk/change room/amenities that are structurally unsound and require replacement which will trigger DDA compliance. It is assumed this will not extend to the pool shell and access areas which are also in fair condition and will probably require very significant expenditure in the next 20 years. The plant room requires a full rebuild and refit to rectify functionality and existing WPH&S issues. This location would be the priority for replacement with a new water park and associated facilities.

In the case of EWMAC, it assumes no land acquisition is undertaken to address the current access issues from the Murray Valley Highway or to provide space for a water play-park of the standard at other locations or other additional facilities.

Estimated expenditure profile as follows:

Summary - Ten Year Renewal Program – All Pool Facilities

All Pools - 10 Year Works Program											
Option 1 - Retain Existing Pools and Facilities											
Pool	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	**Total**
Echuca War Memorial Aquatic Centre	$353,000	$540,000	$6,000	$0	$100,000	$156,000	$120,000	$147,000	$33,500	$25,000	**$1,480,500**
Kyabram Swimming Pool	$10,000	$0	$295,500	$330,500	$127,000	$85,000	$134,000	$60,000	$73,000	$35,000	**$1,150,000**
Rochester Swimming Pool	$28,000	$0	$257,000	$277,500	$100,000	$98,000	$21,000	$14,500	$110,000	$55,300	**$961,300**
Rushworth Swimming Pool	$10,000	$9,000	$103,000	$4,000	$19,000	$95,000	$3,500	$26,500	$122,000	$12,000	**$404,000**
Tongala Swimming Pool	$0	$74,000	$0	$5,000	$70,000	$10,000	$16,000	$70,000	$22,000	$46,000	**$313,000**
Lockington Swimming Pool	$6,000	$60,000	$4,000	$10,000	$60,000	$20,000	$31,500	$60,000	$22,000	$18,000	**$291,500**
Stanhope Swimming Pool	$10,000	$74,000	$35,000	$15,000	$140,000	$225,000	$708,000	$75,000	$18,000	$15,000	**$1,315,000**
Colbinabbin Swimming Pool	$0	$70,000	$5,000	$0	$70,000	$0	$3,500	$139,000	$5,000	$21,000	**$313,500**
Annual Total Program Cost	**$417,000**	**$827,000**	**$705,500**	**$642,000**	**$686,000**	**$689,000**	**$1,037,500**	**$592,000**	**$405,500**	**$227,300**	**$6,228,800**

Pool Complex Compliant with New Service Standard

This section provides indicative costs and a ten year works program to provide fully compliant pool complexes at each of Echuca, Kyabram, Rochester and Rushworth that meet Council's new service standard for each site. Interactive water play areas are considered separately and form part of this program.

The new service standard provides for provision of a 25m outdoor pool and water play-park at each of Kyabram, Rochester and Rushworth and a 50m indoor pool and outdoor water play facility at Echuca.

Standards and Indicative Costs For New 25m Pool

The following lists the basis for indicative costs for the planning/design, project management and construction of new facilities-:

- Demolition of existing facilities where required is noted separately in the cost Ten Year Upgrade Program for each site;
- Proposed 25m pools are to a 6 x 2.5m FINA lane standard providing for 8 lanes to Royal Life Saving Australia Guidelines plus DDA compliant access for Rochester and Kyabram with their larger populations and loss of existing 50m pools. A 4 x 2.5m FINA lane standard providing for 6 lanes to Royal Life Saving Australia Guidelines plus DDA compliant access is proposed for Rushworth with its lesser population. It will provide adequate lanes for school competitions and be a significant improvement in width to the existing 5 substandard lane x 9m wide pool.
- Assumed pool requirement are -: 25m long, 15.5m wide (10.5m Rushworth) plus DDA ramp access, 1.5m to 1m deep;
- Filtration system, water supply, return and drainage with associated chemical storage and vehicle access;
- New DDA compliant change rooms to BCA standard, kiosk and equipment buildings;
- Landscaping including seating, BBQ's and shaded areas (reuse existing equipment);
- Security fencing with controlled access (reuse existing);
- Car bus parking/drop off areas with DDA access and designated parking;

Indicative Costs for a New 25m Pool Complex

- Pool shell Design, Construct and Project Management (25m x 18.5m x 2.2m incl. ramp) = $1.28m
- Change rooms, office / kiosk, store rooms and plant room = $1.17m
- Landscaping including concourse, grass, sprinklers, lighting, basic park furniture = $0.18m
- Miscellaneous items – fencing, equipment not specifically listed (safety showers, lane ropes, starting blocks etc.) = $0.15m
- Excludes demolition and removal of old pool and buildings to clear and prepare site.
- The indicative costs do not provide any allowance for contingencies

  Total Estimated Cost = $2.78m

Sites Retaining Pool Facilities

The following information outlines the works required at each site and associated indicative costs to implement this new service standard. No contingencies have been included in the costings.

EWMAC

As previously stated, this report is based on assumptions of retention and renewal of existing infrastructure, resolution of site access deficiencies by negotiation with VicRoads and the proposed outdoor splash park is of reduced size located at the south end of the pool building with limited parental observation area. It also assumes none of the proposed works trigger full DDA compliance of the site (i.e. former crèche area).

It does not provide for expansion of the site either by re-fencing the road boundary or acquisition of adjoining properties and assumes the current deficiencies as outlined remain acceptable to the community. Addressing these issues would require acquisition of a minimum of 2 if not 3 adjoining Hare Street properties (2-3,000m2) at an estimated $0.8 - $1.5 million plus clearing and development costs.

Except for the addition of the water play facility discussed later, the works program remains identical to that previously identified to maintain and renew the existing facility.

$825,000 has been allowed for the construction of the water play-park, shade and associated plant excluding upgrade of the plant room required for the pool.

The total estimated cost to maintain the existing complex and construct a new compliant water play-park is **$2,322,500**. Air handling and roof scheduled in Years 1 & 2 as urgent and water play-park in Years 5 & 6.

Ten Year Upgrade Program to New Service Standard - EWMAC

Echuca Memorial Aquatic Centre														
10 Year Works Program - Upgrade to Compliance and Install Water Play Feature														
Asset Category	Structural Items	Source	Issue	Est Cost	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
1	Replace air handling system in pool hall, incl install louvres, renew skylight panels and plant shade trees	Stevenson	Inadequate tempreture and humidity control	$560,000	$260,000	$300,000								
1	Replace roofing insulation to pool hall	Stevenson	Inadequate tempreture and humidity control	$280,000	$200,000	$80,000								
2	Demolish and replace plant building, incl refit existing plant		Existing at end of life and to cater for additional plant for water play feature	$240,000					$140,000	$100,000				
2	Provide shade structure and lighting to water play feature area		OH&S, amenity	$25,000						$25,000				
3	Supply and install plant and pipework for new water play feature		Into new plant room	$100,000					$50,000	$50,000				
3	Install filtration and plant room control valves	MP&S	Isolation, operator ease and flow control	$11,000						$11,000				
3	Install foot valves, pipework and bracketing to main circulation pumps and motors x 2	MP&S	Pumping eficiency, priming loss and vibration	$14,000	$14,000									
3	Replace main filter/circulation pump and motor, incl hair/lint strainer and footvalve x 2		Filtration, water flow and quality	$28,000									$28,000	
3	Replace toddler feature pump x 2		End of useful life	$5,000										$5,000
3	Replace the water main feed into the plant room		Pipe at end of useful life. Reduce maintenance and shut down times.	$6,000			$6,000							
3	Replace bulk chemical storage unit		End of useful life	$5,000						$5,000				
3	Install screen to balance tank		Reduce cleaning of screen filter and foor valves	$16,000				$16,000						
3	Replace acid dosing pump		End of useful life	$1,500									$1,500	
3	Replace chlorine dosing pumps x 2		End of useful life	$4,000									$4,000	
3	Renew and enlarge balance tank to appropriate size	MP&S	Causing major water loss & too small	$40,000	$40,000									
4	Replace vacuum cleaner		End of useful life	$12,000								$12,000		
4	Replace one set of lane ropes		End of useful life	$20,000										$20,000
5	Resurface main pool shell	MP&S	Turbidity, excessive chlorine demand and algae growth	$120,000					$120,000					
5	Supply and install new water play feature,		Required standard of service	$700,000					$500,000	$200,000				
6	Replace the hot water boiler with electric heat pumps	Stevenson		$135,000								$135,000		
			Total Annual Program Cost	**$2,322,500**	**$514,000**	**$380,000**	**$6,000**	**$16,000**	**$810,000**	**$391,000**	**$0**	**$147,000**	**$33,500**	**$25,000**

Kyabram & Rochester Pool Complexes

Pool Shell – Construction of a new 25m x 15.5m pool or conversion of the existing pool to 25m will trigger full DDA compliance for the facility including amenities and general access. Existing pool shells are not suited to conversion as they are too narrow with inadequate depth. Demolition and construction of a new shell that meets minimum FINA standards is proposed. Pool shell 25m long, 15.5m wide plus disability access with depth from 1.35m (allows for starting blocks) to 1m.

Change rooms, kiosk and store facilities – Recommend the construction of new facilities as it is not economically viable to re -use the buildings to provide the required facilities including full DDA compliance. DDA accessible parking to be provided in designated car parking area with connecting path of travel.

Estimated costs allowed for in the Ten Year Capital Works Program are:

- DDA compliant amenities and kiosk within each of the fenced complexes is $855,000 per site. There may be some extra costs to make the amenities accessible to the water play area out of hours if Council decides to operate it under that arrangement, estimated at $20,000. These are not included;
- DDA parking and access to the complexes, $10,000 per site;

Plant Room, Chemical Stores – Construction of new plant rooms and chemical store rooms are required as the existing plant rooms are at end of life and inadequate to house the new plant for a pool and water play-park. The balance tanks are also defective, inappropriate in size and/or at end of life. $240,000 per site is allowed for masonry plant buildings and balance tanks at each site and $72,000 for chemical and equipment storage facilities.

Water Play-park – A new water play-park is estimated at $800,000 including features, plant and shade. This cost is variable depending on the standard of play-park desired. Refer '*New Interactive Water Play Area*' section for further details.

Demolition of existing infrastructure – All demolition costs for the existing buildings, plant and pools have been allowed along with an allowance for landscaping, seating, lighting and shade.

Swim Club Rooms – No allowance is included for demolition or provision of new or renovated swim club buildings at Rochester or Kyabram to meet DDA compliance. A separate detailed investigation of these standalone buildings is required as access was not available.

Kyabram - total estimated cost to maintain the existing complex and construct a new pool and water play-park compliant with Council's new standards is **$3,623,000.** Construction scheduled in Years 3 & 4 as the highest renewal priority.

Rochester - total estimated cost to maintain the existing complex and construct a new pool and water play-park compliant with Council's new standards is **$3,717,000.** Construction scheduled in Years 6 & 7 as the second highest renewal priority.

Ten Year Upgrade Program to New Service Standard - Kyabram

Kyabram Swimming Pool													
10 Year Works Program 1 - Modify Main Pool to 25m, replace Toddler Pool with Water Play Feature and upgrade Facilities													
Asset Category	**Structural Items**	**Issue**	**Est Cost**	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
2	Remove and replace plant building	Inadequate size to house new equipment. Existing plant outside with no protection	$240,000			$100,000	$140,000						
2	Replace equipment and chemical storage buildings	End of useful life	$72,000			$72,000							
2	Demolish and remove existing amenities and office building	To allow replacement	$60,000			$60,000							
2	Build new admin/office building	Improved amenity and function, DDA Compliance	$150,000			$100,000	$50,000						
2	Build new amenities building to provide disability access and facilities and improved amenity	Provide DDA compliance. Existing structure not suited to refurbishment	$705,000			$400,000	$305,000						
3	Supply and install plant and piping for water play feature		$100,000			$20,000	$80,000						
4	Replace vacuum cleaner	End of useful life	$15,000								$15,000		
4	Replace lane ropes x 1 set	End of useful life	$10,000								$10,000		
5	Dismantle and remove pool shells	Existing shell size and depth not functional	$70,000			$70,000							
5	Supply and install 25m pool shell, incl new plant and piping connection	Existing shell size and depth not functional	$1,280,000			$480,000	$800,000						
5	Install water play feature	Toddler pool at end of life	$700,000			$200,000	$500,000						
7	Remove and replace concrete concourse	Enable hydraulic works to be done and match to new infrastructure	$65,000			$15,000	$50,000						
7	Replace shade sail, toddler pool seating area, to match water play feature	To match water play feature	$25,000			$25,000							
7	Upgrade and relocate lighting	To suit new facility	$40,000			$40,000							
7	Install disability access bay in carpark and access into complex	DDA Complinace	$12,000					$12,000					
7	Replace and upgrade outdoor furniture units	Oldest unit at end of useful life	$21,000					$21,000					
7	Landscaping and relocate site facilities	To match to new facilities	$54,000				$54,000						
7	Prepare site plan	Identify site infrastructure	$4,000				$4,000						
		Total Annual Program Cost	**$3,623,000**	**$0**	**$0**	**$1,582,000**	**$1,983,000**	**$33,000**	**$0**	**$0**	**$25,000**	**$0**	**$0**

Ten Year Upgrade Program to New Service Standard - Rochester

Rochester Swimming Pool													
10 Year Works Program 1 - Modify Main Pool, install Water Play Feature in place of Toddler Pool and Upgrade Facilities													
Asset Category	**Structural Items**	**Issue**	**Est Cost**	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
2	Demolish and remove amenities and admin/office building	To allow for new buildings	$60,000						$60,000				
2	Build new amenities to provide disability access and facilities and improved amenity	Provide DDA compliance. Existing structure not suited to refurbishment	$705,000						$405,000	$300,000			
2	Build new admin/office building	Improved amenity and function, DDA Compliance	$150,000						$100,000	$50,000			
2	Remove and replace plant building	Inadequate size to house new equipment.	$240,000						$180,000	$60,000			
2	Replace equipment and chemical storage buildings	Inadequate size to house new equipment. Existing plant outside with no protection	$72,000							$72,000			
3	Non programmed replacement to mechanical items	Useful life cycle	$20,000			$10,000					$10,000		
3	Supply and install plant and piping for water play feature		$100,000						$40,000	$60,000			
3	Non-programmed replacement of pipework	Useful life cycle	$10,000				$10,000						
4	Replace lane ropes x 1 set	Useful life cycle	$20,000								$20,000		
4	Replace vacuum cleaner	Useful life cycle	$15,000										$15,000
5	Recaulk and paint pool shells		$70,000		$70,000								
5	Dismantle and remove pool shells	Existing shell size and depth not functional	$70,000						$70,000				
5	Supply and install 25m pool shell,	Existing shell size and depth not functional	$1,280,000						$280,000	$1,000,000			
5	Supply and install water play feature	Toddler pool at end of life	$700,000						$200,000	$500,000			
7	Remove and replace concrete concourse	Enable hydraulic works to be done and match to new infrastructure	$65,000						$15,000	$50,000			
7	Replace shade sails x 4 and relocate to match new pool and water play feature	To match water play feature	$25,000						$25,000				
7	Upgrade and relocate lighting	To suit new facility	$40,000							$40,000			
7	Install disability access from carpark into complex	DDA Compliance	$6,000							$6,000			
7	Replace and upgrade outdoor furniture units	Oldest unit at end of useful life	$21,000							$21,000			
7	Landscaping and relocate site facilities	To match to new facilities	$48,000							$48,000			
		Total Annual Program Cost	**$3,717,000**	**$0**	**$70,000**	**$10,000**	**$10,000**	**$0**	**$1,375,000**	**$2,207,000**	**$30,000**	**$0**	**$15,000**

Rushworth Pool Complex

Pool Shell – Construction of a new 25m x 10.5m pool or conversion of the existing pool to 25m will trigger full DDA compliance for the facility including amenities and general access. The existing pool shell is not economically suited to conversion as it is too narrow (9.2m) with inadequate depth (0.7 – 2.5m). Demolition and construction of a new shell that meets minimum FINA standards is proposed. Pool shell 25m long, 10.5m wide plus disability access with depth from 1.35m (allows for starting blocks) to 1m.

Change rooms, kiosk and store facilities – Recommend the construction of new facilities as it is not economically viable to re -use the building to provide the required facilities including full DDA compliance. DDA access will be provided from the designated car parking area.

Estimated costs allowed for in the Ten Year Capital Works Program are:

- DDA compliant amenities and kiosk within the fenced complex are $755,000. This is less than for Rochester and Kyabram reflecting the slightly smaller pool and resulting required facilities. There may be some extra costs to make the amenities accessible to the water play area out of hours if Council decides to operate it under that arrangement, estimated at $20,000. These are not included;
- DDA parking and access to the complex $10,000 from the existing carpark area;

Plant Room, Chemical Stores – Construction of a new plant and chemical store room is provided for as the balance tank is defective and too small, the existing room is near end of life and inadequate to house the new plant for the pool and water play-park. The current location also restricts siting for the new pool and water play-park. $240,000 is allowed for a masonry plant building and balance tank and $72,000 for chemical and equipment storage facilities.

Water Play-park – A new water play-park is estimated at $800,000 including features, plant and shade. This cost is variable depending on the standard of play-park desired. Refer '*New Interactive Water Play Area*' section for further details.

Demolition of existing infrastructure – All demolition costs for the existing buildings, plant and pools have been allowed along with an allowance for landscaping, seating, lighting and shade.

The total estimated cost to maintain the existing complex in the interim and construct a new pool and water play-park compliant with Council's new standards is **$3,501,000.** Construction scheduled in Years 9 & 10 as, of the three pools to be renewed and based on available information, Rushworth seems to be in the best condition although least compliant with the new standard.

Ten Year Upgrade Program to New Service Standard - Rushworth

Rushworth Swimming Pool												
10 Year Works Program 1 - Modify Main Pool, Replace Toddler Pool with Water Play Feature and Upgrade Facilities												
Asset Category	Structural Items	Issue	Est Cost	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
2	Demolish and remove admin/office and amenities building	To allow for new buildings	$60,000									$60,000	
2	Build new admin/office building	Improved amenity and function, DDA Compliance	$150,000									$100,000	$50,000
2	Build new amenities to provide disability access and facilities and improved amenity	Provide DDA compliance. Existing structure not suited to refurbishment	$605,000									$400,000	$205,000
2	Remove and replace plant building	Inadequate size, built over inadequate balance tank for new facility. Location hinders site use.	$240,000									$140,000	$100,000
2	Replace equipment and chemical storage buildings	Not suited to conversion	$72,000									$72,000	
3	Supply and install plant for water play feature		$100,000									$20,000	$80,000
3	Non programmed replacement to mechanical items	Useful life cycle	$10,000				$10,000						
3	Non-programmed replacement of pipework	Useful life cycle	$10,000			$10,000							
4	Replace lane ropes x 1 set	Useful life cycle	$20,000								$20,000		
4	Replace vacuum cleaner	Useful life cycle	$15,000								$15,000		
5	Recaulk and paint pool shells	Asset maintenance and water loss	$140,000		$70,000			$70,000					
5	Dismantle and remove pool shells	Existing shell size and depth not functional	$60,000									$60,000	
5	Supply and install 25m pool shell, incl new plant and piping connection	Existing shell size and depth not functional	$1,100,000									$400,000	$700,000
5	Supply and install water play feature		$700,000									$200,000	$500,000
7	Remove and replace concrete concourse	Enable hydraulic works to be done and match to new infrastructure	$65,000									$15,000	$50,000
7	Replace shade sails x 5 and relocate to match new pool and water play feature	To match water play feature	$25,000									$25,000	
7	Upgrade and relocate lighting	To suit new facility	$40,000										$40,000
7	Install disability parking and access from carpark into complex	DDA Compliance	$10,000									$10,000	
7	Replace and upgrade outdoor furniture units	Oldest unit at end of useful life	$21,000									$21,000	
7	Landscaping and relocate site facilities	To match to new facilities	$54,000									$20,000	$34,000
7	Prepare site plan	Identify site infrastructure	$4,000										$4,000
		Total Annual Program Cost	**$3,501,000**	**$0**	**$70,000**	**$10,000**	**$10,000**	**$70,000**	**$0**	**$0**	**$35,000**	**$1,543,000**	**$1,763,000**

New Interactive Water Play Areas

This section provides information and indicative costs to provide interactive water play areas at the eight pool complexes that will meet Council's new service level. Examples of water play areas in northern Victoria and indicative costings are provided.

Indicative costs to build a facility are in the range of $700,000 to $1,100,000. These costs are based on the examples provided in Appendix 3 at Wangaratta and elsewhere. The Rural City of Wangaratta constructed a standalone water play-park 4 years ago at a cost of $600,000 (play-park, plant and plant room only). Operators consider this a 'rock bottom' public facility. It uses domestic standard supporting infrastructure and buried concrete tanks as a plant room and water storage. It has already required significant maintenance and is considered to have a realistic maximum life of about 15years.

This facility is open to the public all year round but only operates for 6 months of the year on a time-clock and movement sensor. It is inspected morning and evening prior to and post daily operation during the operating season and operates unattended. No fees are charged. Indicative operating costs for the initial 3 years of operation as supplied by the City are $20,000 p.a. excluding inspections. This standard of facility is not recommended.

Rural City of Wangaratta is currently seeking tenders for a new water play-park to be constructed as part of their $13.5 million aquatic centre upgrade. This will be a fully tiled facility with good quality commercial infrastructure. The Quantity Surveyor estimates the cost of this facility including plant at $1.1 million.

There are numerous other examples in the area in caravan park / resort type facilities. These have typically cost around $800 - $900,000 including plant only to construct.

Other examples from Bright and Kerang have been provided to highlight the way a themed water play area could be developed to provide a point of difference from other water parks.

The cost of water play-parks is really budget dependant. They can range from something quite basic for around $500,000 to well in excess of $1.0 million. Our investigations indicate Council should ensure any facilities it constructs are of a good quality commercial standard to ensure durability and manageable long-term maintenance and renewal costs. A budget of $800,000 for the play features and associated plant and pipework is considered the absolute minimum required. This excludes demolition of old pools and construction of plant rooms, associated amenities and park furniture which need to be considered on a site by site basis. The Ten Year Capital Works Program is based on this figure.

Category A Pool Complexes

The following complexes are to be developed to meet Council's new service level of providing pools and water play areas. The EWMAC site is considered separately to the sites at Kyabram, Rochester and Rushworth that have been grouped together.

EWMAC

The EWMAC site has facilities that are DDA compliant that support the development of a water play area. The site has limited space for the installation of an outdoor water play-park and associated plant. Refer to the section on "Special Reports Required" to understand the issue in detail. The open spaces available are the area to the south between the main hall and plant room and a smaller open area along the western side. These areas are generally used for carnivals as breakout or assembly areas and really need to be retained.

It estimated that that footprint of at least 200m^2 will be required for a facility which is about the absolute maximum space realistically available at the south end of the site external to the pool hall. The estimated cost of a typical facility to fit within this space including associated plant and shade structures

is $825,000. A more compact but equally costly play-park is proposed for this site reflecting the existing site constraints.

It is expected this facility would be available for the hours the complex is open but only operate during the warmer months as it would not be heated. Pumping and filtration systems would be shut down and annual maintenance carried out during winter months.

Kyabram, Rochester & Rushworth Pool Complexes

The sites at Kyabram, Rochester and Rushworth do not have DDA compliant access or facilities to support the development of a water play area. Provision of an outdoor water play-park will not trigger change room / toilet upgrades to DDA standard. However upgrading of the pools will do so including provision of DDA compliant parking and access routes.

The sites have sufficient space for the installation of the interactive water play areas and associated plant. Demolition of the wading pools and redesign of the existing pools will provide opportunity to either include them within the fenced pool complex or place them outside depending on the level of access/operational times and supervision required.

If Council opts for an open access facility, a new compliant toilet/change facility could be designed to be multi use in servicing the pool complex and be available the water play area outside of pool hours. Timed open-access facilities are reasonably common offering fee-free, unsupervised access during daytime with pumps controlled by time clocks and movement sensors. Inspections are required prestart-up and post closure to ensure public safety and correct operation.

As with EWMAC, a footprint of at least 200m^2 is considered necessary plus additional viewing areas.

An estimated cost of $800,000 including filtration plant and pipework is included in the Ten Year Capital Works Program. However, the cost is variable and dependent on the available budget and preferred degree of sophistication and excludes plant rooms, demolition of existing pools and associated facilities. There is more than adequate space on the existing Kyabram and Rochester pool sites. Space at Rushworth is more confined but considered adequate for the scale of facility likely to be constructed.

It is considered the **minimum total additional cost** to provide a water play area of adequate sophistication and durable standard within the upgraded pool complexes is about **$950,000** as compared to only providing a 50m outdoor pool. This includes site preparation, removal of the existing play pools, enlargement of the plant room and associated shade structures and park furniture. It excludes the cost of new /modified amenities as these are required for the pool facilities and are not triggered by providing an open-air, freely accessible water play-park.

Category B Pool Complexes

Councils new service standard for aquatic facilities provides for conversion of the existing outdoor pools at these Category B complexes at Tongala, Lockington, Stanhope and Colbinabbin to outdoor water play-parks.

General Considerations

It is assumed that Council will want to maintain basic amenities at each site even though the Municipal Building Surveyor advises the BCA places no requirements on minimum facilities to be provided at an outdoor play-park where there is open access. It is assumed these facilities will comprise 1 x Unisex DDA compliant toilet, 2 x Ambulatory and 2 x standard toilets / urinals and 2 x basic change rooms (non-partitioned with bench seats) except Colbinabbin where the existing shared facilities will require refurbishment only.

A $700,000 water play-park plus associated plant, plant rooms and amenities at each site is proposed with the objective of re-using the existing plant and buildings as far as economically viable. This will provide for a basic but reasonable quality water play-park similar to the four main aquatic centres. These may be specifically 'themed' for each town to reflect local features and provide points of difference.

It is assumed these will be unsupervised facilities open to public and operational during daylight hours in warmer months. As is common practice, the facility may be controlled with a time clock restricted its operation to set periods and with a movement sensitive time clock so they only operate when people are present. As daily pre-opening and post closure inspections are required for health and safety reasons, the parks may be securely locked up overnight at minimal additional cost.

Tongala Water Park

It is proposed to demolish 50% of the existing amenities building and convert/ refurbish the remainder into 1 x DDA compliant toilet, 2 x Ambulatory and 2 x standard toilets / urinals and 2 x basic change areas. DDA access will be provided from the car park facilities.

Access to the water park and amenities may also be restricted out of hours by retaining/reusing part of the existing fencing on the site.

The relatively new colorbond plant room can be reused as a plant room and chemical store. Some of the plant can be reused to suit the new water play features.

The pool shells, concourse and a portion of the amenities buildings will be removed and as much of the remaining site infrastructure as practical (e.g. shade structures, seating) will be re-used. The reuse of existing infrastructure will require detailed investigation when planning the new park, to determine if it can be economically reused.

The total estimated cost to maintain the existing complex in the interim and convert it to a new water play-park compliant with Council's new standards is **$1,363,000.** Construction is scheduled in Years 9 & 10 as, of the four Category B pools to be converted and based on available information, Tongala is one of those in the best condition.

Ten Year Upgrade Program to New Service Standard – Tongala

Tongala Swimming Pool													
10 Year Works Program 2 - Replace Existing Pools with Water Play Feature													
Asset Category	Structural Items	Issue	Est Cost	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
2	Remove male amenities section of building and refit remaining building with 2 x DDA toilet and change area.	Improved amenity and function, DDA compliance	$260,000									$60,000	$200,000
2	Reuse existing plant room as plant room and store	Minor modifications	$10,000										$10,000
3	Supply and install plant and pipework for water play feature	Allow some re-use of existing plant.	$60,000									$20,000	$40,000
3	Non-programmed replacement of mechanical items	End of useful life	$10,000			$10,000							
3	Non-programmed replacement of pipework	End of useful life	$10,000				$10,000						
5	Decommission and remove existing pool shells	Redundant	$70,000									$70,000	
5	Supply and install water play feature		$700,000									$250,000	$450,000
5	Recaulk and paint pools		$140,000		$70,000			$70,000					
7	Replace shade sail and relocate structure	To match new facility	$10,000										$10,000
7	Replace light poles with galvanised and relocate	To maintain structural integrity and	$4,000										$4,000
7	Concrete concourse removal and replacement to fit new feature	Allow hydraulic works	$40,000									$10,000	$30,000
7	Install disability access park space and pathway	Provide DDA compliance	$10,000										$10,000
7	Landscaping and relocating site facilities		$24,000										$24,000
7	Replace bike rack	Existing rack at end of useful life	$3,000										$3,000
7	Upgrade and relocate outdoor furniture		$12,000										$12,000
		Total Annual Program Cost	**$1,363,000**	**$0**	**$70,000**	**$10,000**	**$10,000**	**$70,000**	**$0**	**$0**	**$0**	**$410,000**	**$793,000**

Lockington Water Park

The proposal is to demolish about 50% of the existing amenities building and convert/ refurbish the remainder into 1 x DDA compliant toilet, 2 x Ambulant WC's, 2 x standard WC's/urinal and 2 x basic change areas.

Access to the water play-park and amenities may also be restricted out of hours by retaining/reusing part of the existing fencing on the site.

Demolish and remove all the existing plant and buildings and construct a new colorbond plant building and balance tank. Some of the tanks such as the irrigation, backwash and chemical storage tanks may be suitable for reuse.

Install new plant and water play features

Remove existing pool shells, concourse and portion of the amenities buildings. Re-use as much of the remaining site infrastructure as practical (e.g. shade structures, seating). The reuse of existing infrastructure will require detailed investigation when planning the new park, to determine if it can economically be reused.

The total estimated cost to maintain the existing complex in the interim and convert it to a new water play-park compliant with Council's new standards is **$1,478,000.** Construction is scheduled in Years 7 & 8.

Ten Year Upgrade Program to New Service Standard - Lockington

Lockington Swimming Pool													
10 Year Works Program - Replace Pools with Water Play Feature and Upgrade Facilities													
Asset Category	Structural Items	Issue	Est Cost	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
2	Install new colourbond plant building	Plant currently unprotected, prevent uv degradation	$52,000							$52,000			
2	Remove portion of building and refit remainder to DDA toilet 2 x Ambulant WC's, 2 x std WC's/urinal and 2 x change areas.	Provide Improved amenity and function and DDA compliance	$330,000							$100,000	$230,000		
3	Supply and install plant and pipework for water play feature	Allow new plant	$100,000							$20,000	$80,000		
5	Decommission and remove pools		$60,000							$60,000			
5	Supply and install water play feature		$700,000							$150,000	$550,000		
5	Recaulk and paint pool shells	3 year routine maintenance	$120,000		$60,000			$60,000					
7	Prepare site plan drawings		$4,000								$4,000		
7	Upgrade/provide light poles and relocate lighting to suit.	To maintain structural integrity	$16,000								$16,000		
7	Replace shade coverings and relocate to new feature		$10,000								$10,000		
7	Remove and relay concrete concourse to match	Allow hydraulic works and to match to new facility	$45,000							$15,000	$30,000		
7	Install compliant access from parking area into complex		$5,000								$5,000		
7	Landscaping and relocating site facilities		$24,000								$24,000		
7	Upgrade and relocate outdoor furniture		$12,000								$12,000		
		Total Annual Program Cost	**$1,478,000**	**$0**	**$60,000**	**$0**	**$0**	**$60,000**	**$0**	**$397,000**	**$961,000**	**$0**	**$0**

Stanhope Water Park

The existing amenity buildings are not suited to adaption to provide DDA compliant access and are in very poor structural condition. It is proposed to demolish the existing amenities building and build new ones comprising 1 x DDA compliant toilet, 2 x Ambulant WC's, 2 x standard WC's/urinal and 2 x basic change areas.

Access to the water play-park and amenities may also be restricted out of hours by retaining/reusing part of the existing fencing on the site.

The existing plant room is structurally sound but of inadequate size and remote from any new facility. It is proposed to build a new colorbond plant room incorporating chemical storage facilities and a new balance tank. Some of the tanks such as the irrigation, backwash and chemical storage tanks may be suitable for reuse.

Install new plant and water play features

Existing pool shells and concourse are to be removed and as much of the remaining site infrastructure as practical (e.g. shade structures, seating) is to be re-used. The reuse of existing infrastructure will require detailed investigation when planning the new park, to determine if it is economical to reuse it.

The total estimated cost to maintain the existing complex in the interim and convert it to a new water play-park compliant with Council's new standards is **$1,471,000.** Construction is scheduled in Years 5 & 6 as it is one of the poorer condition facilities to be converted.

Ten Year Upgrade Program to New Service Standard - Stanhope

Stanhope Swimming Pool													
10 Year Works Program 2 - Replace Pools with Water Play Feature													
Asset Category	**Structural Items**	**Issue**	**Est Cost**	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
2	Demolish plant building, incl balance tank, and replace with colorbond plant & store room incl balance & recycling tank		$80,000					$30,000	$50,000				
2	Replace and relocate shade structures to suit new facility	Useful life cycle & to suit new facility	$20,000						$20,000				
2	Remove kiosk and amenities building and replace with smaller building with DDA toilet 2 x Ambulant WC's, 2 x std WC's/urinal and 2 x change areas.	Improved amenity and function, DDA compliance	$330,000					$100,000	$230,000				
3	Supply and install plant and pipework for water play feature	Allow new plant	$100,000					$30,000	$70,000				
4	Supply and install water play feature		$700,000					$450,000	$250,000				
5	Decommission and remove pool structures		$60,000					$60,000					
5	Recaulk and repaint existing pool shells	Useful life cycle	$70,000		$70,000								
7	Upgrade light poles and relocate lighting to suit	To maintain structural integrity	$16,000						$16,000				
7	Install disability access park space and pathway	Provide DDA compliance	$10,000						$10,000				
7	Remove and replace concrete concourse	Enable hydraulic works to be done and match to new infrastructure	$45,000					$15,000	$30,000				
7	Landscaping and relocating site facilities		$24,000						$24,000				
7	Prepare site plan	Site infrastructure identified	$4,000						$4,000				
7	Upgrade and relocate outdoor furniture		$12,000						$12,000				
		Total Annual Program Cost	**$1,471,000**	**$0**	**$70,000**	**$0**	**$0**	**$685,000**	**$716,000**	**$0**	**$0**	**$0**	**$0**

Colbinabbin Water Park

The existing kiosk and toilets form part of recreation reserve change room and kiosk facility. It is proposed to convert the existing kiosk into change rooms and refit existing toilets with 2 x DDA compliant facilities. New toilets and change rooms to be capable of isolation from remainder of recreation reserve building during summer months. DDA access will be provided from the car park facilities.

Access to the water park and amenities may also be restricted out of hours by retaining existing fenced site.

Refurbish the existing brick plant and store room to service the water park plant and chemical store.

Remove existing pool shells, concourse and redundant steel sheds. Re-use as much of the remaining site infrastructure as practical (e.g. shade structures, seating). The reuse of existing infrastructure will require detailed investigation when planning the new park, to determine if it is economical to reuse it.

The total estimated cost to maintain the existing complex in the interim and convert it to a new water play-park compliant with Council's new standards is **$1,215,000.** Construction is scheduled in Years 8 & 9 as it is one of the facilities in better condition to be converted.

Ten Year Upgrade Program to New Service Standard - Colbinabbin

Colbinabbin Swimming Pool													
10 Year Works Program 1 - Replace Pools with Water Play Feature and Replace Amenities													
Asset Category	Structural Items	Issue	Est Cost	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
2	Remodel canteen area to changerooms and install 2 x DDA compliant toilets in existing building	Provide DDA compliance, improved function and amenity	$150,000								$80,000	$70,000	
2	Refurbish existing plant room to suit		$15,000								$15,000		
3	Non-programmed replacement mechanical items		$5,000				$5,000						
3	Non-programmed replacement filtration/filtration lines		$5,000			$5,000							
3	Supply and install plant into existing plant building and pipework for water play feature	Allow some re-use of existing plant	$60,000								$20,000	$40,000	
5	Recaulk and paint pools	3 yearly major maintenance	$120,000		$60,000			$60,000					
5	Decommission and remove pool shells		$60,000								$60,000		
5	Supply and install water play feature		$700,000								$400,000	$300,000	
7	Replace shade sail and relocate to suit new facility	Geo-cloth useful life limit	$10,000									$10,000	
7	Remove and relay concrete concourse and pathways	Allow hydraulic works and match new facility	$45,000								$15,000	$30,000	
7	Install compliant access from parking area into complex	To match new facility	$5,000									$5,000	
7	Landscaping and relocating site facilities	To match new facility	$24,000									$24,000	
7	Upgrade and relocate outdoor furniture	To match new facility	$12,000									$12,000	
7	Prepare site plan drawing	Identify site infrastructure	$4,000									$4,000	
		Total Annual Program Cost	**$1,215,000**	**$0**	**$60,000**	**$5,000**	**$5,000**	**$60,000**	**$0**	**$0**	**$590,000**	**$495,000**	**$0**

Summary – Capital Program to Achieve New Service Standard across all venues.

Implementation of the new service levels across all venues over the next ten years will require a comparative capital investment of $18,690,500 excluding contingencies in 2017 dollar values

A more realistic budget figure should include contingencies of at least 30% to account for unforeseen issues that can reasonably expected to be encountered on a capital project of this magnitude where base cost estimates have been prepared prior to detailed investigations, on the basis of maintaining existing aged infrastructure of unknown condition for an extended period of time and prior to preparation of concept plans accurately identifying the scope of works on each site. i.e. budgetary forecast $25+ million. Similarly a realistic budget figure to maintain the existing infrastructure must include at least the same percentage of contingencies to account for the unknown and more unpredictable nature of this aging infrastructure.

Of this comparative capital investment, Category A complexes account for $13,163,500 of which EWMAC is the only complex not requiring a new pool shell. Renewal of the air handling system and roof insulation at EUMAC is highest priority to enable it to operate safely, more economically and without incurring further corrosion and structural damage to the building. Kyabram with the highest costs ($1,150,000) to maintain the current service level would be the priority for a new compliant complex at an estimated cost of $3,623,000. Upgrading of Rochester followed by Rushworth would follow reflecting their relative condition. These sites are spread over the ten year period.

Category B complexes account for $5,527,000 of this comparative capital investment with all complexes incurring similar costs. Stanhope with the highest costs ($1,315,000) to maintain the current service level is the priority for a new compliant water play-park at an estimated cost of $1,471,000. Others follow generally in order of relative condition. Category B pool conversions are programmed in the latter five years to provide time to develop an implementation strategy given the likely negative community reaction. Programming these conversions as soon as possible provides the best economic value through savings in operating costs.

Future years beyond Year 10 will incur relatively little capital and much lower maintenance and operating costs than option 1. Capital costs of option 1 are expected to increase significantly post Year 10 when existing amenities and pool shells age further and require replacement or closure as they become completely inoperable or unsafe.

This program only reflects the capital costs associated with known issues. They do not reflect day to day operational and maintenance costs or repair costs of unplanned/unexpected breakdowns and failures. Neither do they reflect the social or political costs of unexpected and unplanned closures or damage to reputation of presenting low standard unreliable facilities to the community.

Ten Year Upgrade Program to New Service Standard

Option 2											
Modify Main Pools and Replace Toddler and Wader Pools with Water Play Feature & Replace Facilities											
Pool	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	**Total**
Echuca War Memorial Aquatic Centre,	$514,000	$380,000	$6,000	$16,000	$810,000	$391,000	$0	$147,000	$33,500	$25,000	**$2,322,500**
Kyabram Swimming Pool	$0	$0	$1,582,000	$1,983,000	$33,000	$0	$0	$25,000	$0	$0	**$3,623,000**
Rochester Swimming Pool	$0	$70,000	$10,000	$10,000	$0	$1,375,000	$2,207,000	$30,000	$0	$15,000	**$3,717,000**
Rushworth Swimming Pool	$0	$70,000	$10,000	$10,000	$70,000	$0	$0	$35,000	$1,543,000	$1,763,000	**$3,501,000**
Remove Smaller Pools and Replace with Water Play Feature and Basic Amenities											
Tongala Swimming Pool	$0	$70,000	$10,000	$10,000	$70,000	$0	$0	$0	$410,000	$793,000	**$1,363,000**
Lockington Swimming Pool	$0	$60,000	$0	$0	$60,000	$0	$397,000	$961,000	$0	$0	**$1,478,000**
Stanhope Swimming Pool	$0	$70,000	$0	$0	$685,000	$716,000	$0	$0	$0	$0	**$1,471,000**
Colbinabbin Swimming Pool	$0	$60,000	$5,000	$5,000	$60,000	$0	$0	$590,000	$495,000	$0	**$1,215,000**
Annual Total Program Sub-Cost	**$514,000**	**$780,000**	**$1,623,000**	**$2,034,000**	**$1,788,000**	**$2,482,000**	**$2,604,000**	**$1,788,000**	**$2,481,500**	**$2,596,000**	**$18,690,500**

Appendices

1. Asset Identification and condition spreadsheet, McCartney Solutions January 2018

Refer Separate Excel Spreadsheet:

"Final Combined Pools Asset Data Mastersheet 2018-01-27"

2. Cost Estimate 25m Pool McCartney Solutions 2017

Reference: Rawlinson Estimate – Adjusted 2016 Costs

Pool shell & Filtration Equipment

- 25m x 18.5m x 2.2m deep, includes fully formed reinforced concrete inclusive of all plant and filtration equipment Melbourne = $877 - $945k – Say $945k
- Country Loading = 4% Echuca area = $38k
- Dec 2015 prices above. Add 4.5% pa per Construction Index Prediction say 9% = $85k
- Dec 2017 base = $1,065,000. + Design & PM costs @20% = $1,278,000

Outdoor Landscaping & Paving & Shelters

- Grass area including shrubs, trees and sprinkler system = $10/m2 based on 4,000m2/site = $40,000
- Concourse – allow 3m perimeter concrete + connecting paths & seat / BBQ slabs etc = 400m2 @$120 = $48,000
- Public lighting – say 6 poles, lights, cabling etc. $30,000
- Outside park furniture installed (4 benches@1500, 2 picnic settings @2500, 6 wheelie bins & stands@ 500) = $14,000
- Assume use existing shade structures UNO

Base Total landscaping, concourse, lighting etc. round to $150,000 + Design & PM Coast @20% = $180,000

Plus Fencing = $70/m plus gates – double@$1500, hand gate @$500 (2m chain mesh)

Buildings:

Toilets / showers $2670 x 1.1 x 1.04 = $3054/m2. (Compares to $4,200/m2 per Wangaratta advice.)

- Add mechanical ventilation @ $120/m2 =
- Ducted A/C = $400/m2
- Adopt $4,200/m2 per Wangaratta QS estimate.

Other Buildings

- Office building - Basic $1600/m2 + fit out@$500/m2 + A/C $400 = $2500/m2
- Plant Room – adopt same as office as extra industrial fittings
- Store Rooms – Basic + fit out (shelving etc) Adopt $2,000/m2

Areas & Estimated Costs:

- Change rooms / toilets / showers - Assume 70m2 each (see typical example below) = 140m2 @$4200 = $588,000 base cost.
  => $705,000 incl. Design & PM
- Plant Room 8m x 10m = 80m2 @ $2,500 = $200,000
  => $240,000 incl. Design & PM
- Store rooms =2No x 3m x 5m = 30m2 @ $2000 = $60,000
  => $72,000 incl. Design & PM
- Admin / Office / kiosk = 6 x 6 + circulation space= say 50m2@ $2500 = $125,000
  => $150,000 incl. Design & PM

Total Buildings = $1,167,000 incl. Design & PM @20%

Summary:

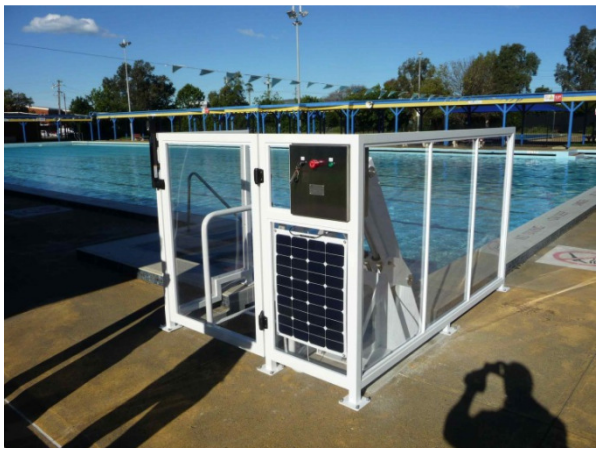
- Pool shell Design, Construct and Project Management (25m x 18.5m x 2.2m incl ramp) = $1.28m
- Change rooms, office / kiosk, store rooms and plant room = $1.17m
- Landscaping including concourse, grass, sprinklers, lighting, basic park furniture = $0.18m
- Miscellaneous items – fencing, equipment not specifically listed (safety showers, lane ropes etc.) = $0.15m
- Excludes demolition and removal of old pool and buildings to clear and prepare site.

Total Estimated Cost = $2.78m

Retrofitted DDA Access

Source - Disability Pool Lifts Australia - www.dplaustralia.com.au

- Installations at Wollongong and Hinchenbrook.
- Platform operates straight off side , ideally in a recess similar to that for stairs.
- Lowers by extending out over pool and down in a curved path.
- Stainless steel construction. Recommend acquiring SS wheelchair to go with it as non-buoyant.
- Typical Cost Lift $50,000, Wheelchair $2,500, Installation excluding civil works $7,000
- Where pool side needs modifying **allow total of $85,000.**



3. Examples of Water Play-Parks

Examples of water play-parks that have been themed to use local features.

1. Wangaratta Regional Council

The Rural City of Wangaratta entered a “Design & Construct” contract for provision of a water play park with Water Features by Design Pty Ltd (WFBD). The total project cost was around $600,000. It is costing around $20,000 per season (22 weeks) to operate and maintain not a allowing for depreciation. Infrastructure managers advise that while the image looks great to the users, it is of light weight ‘domestic standard’ construction with an estimated life of less than 15 years. It has been in operation for 3 years and already incurred unexpected maintenance costs.
Source – Alan Thrum – Project Manager – Wangaratta Rural City

Details from the WFBD web site is as follows:

Combining nature play with water (Refer https://www.wfbd.com.au/)

Taking just 5 weeks to complete, the new Wangaratta Water Playgound marks a new direction for WFBD in water park design which combines elements of aquatic play with nature play to provide a more engaging, challenging and diverse play experience. We call it our "Nature Splash" range of park options.

The Wangaratta Park serves as both a water playground and nature play space and offers year round use with the option to disable the water play functions during the cooler months.

Researchers at the University of WA have found that natural playgrounds provide children with more opportunities than typical pre-formed playgrounds to develop gross-motor skills.

In view of this research and the Council's request for a "mountain and valley" themed play space, the park was designed to include natural elements such as rock, timber and water because children who play in natural settings play in more diverse, imaginative and creative ways and show improved language and collaboration skills. Single use, repetitive play equipment - as found in a traditional playground - becomes boring quickly.

The Wangaratta water park incorporates climbable mountains of terraced rock and fort-mounted water cannons, natural log steps, cascading waterfalls, misting tunnels, random ground geysers, rocky spillways, enclosed slides, overhead showers, giant dumper buckets and leaf races.

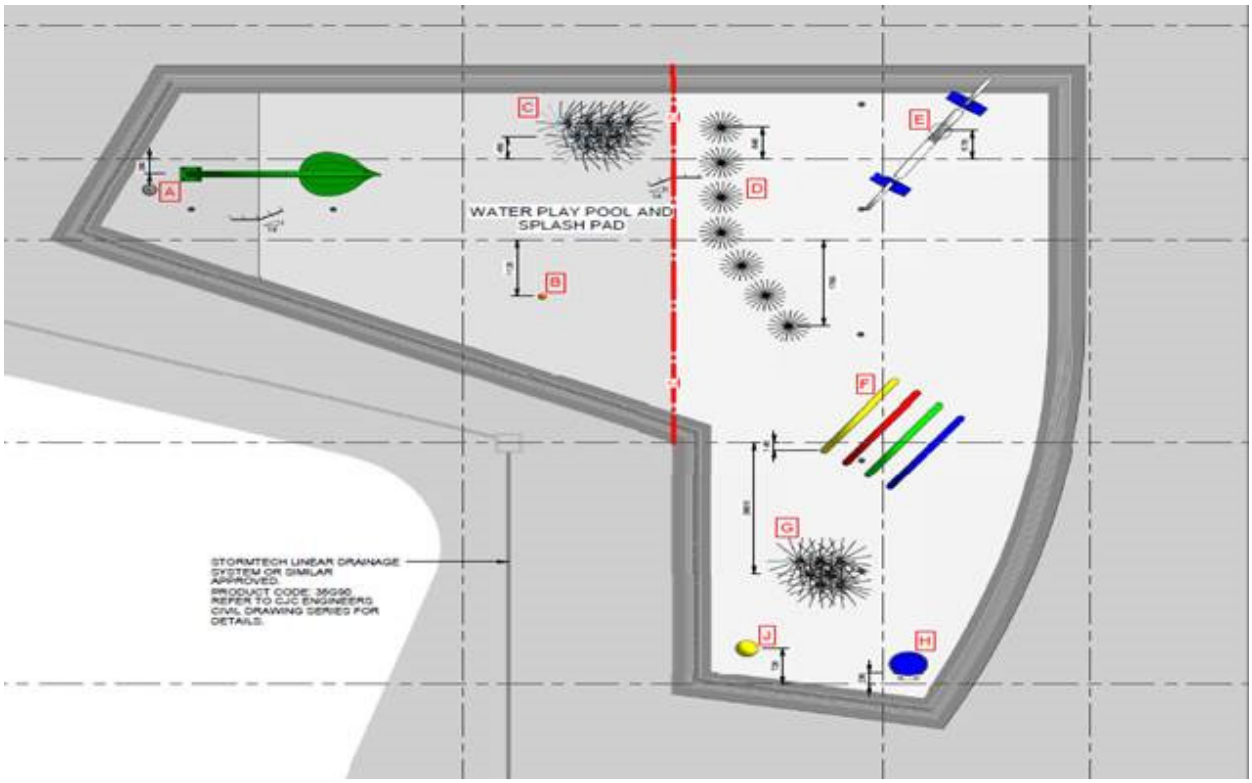
The park also includes a Toddler Corner complete with adjustable water mushrooms, gentle ground sprays and a decanting feature which allows the littlies to fill and tip a series of cups from gently trickling fountains.

Children benefit greatly from unstructured play, particularly make-believe play. And kids are far more creative in natural play spaces than on the typical flat playground of old. They are far more likely to invent their own games in natural places and the addition of water makes it even more fun!

The park opened in early November to record crowds and has proved a firm favourite with local children and tourists alike.

Wangaratta Rural City is also planning a second high quality facility as shown below. It is it is fully tiled with a full commercial plant fully automated and is a part of a $13.5m Aquatic extension to our existing Indoor facility.

The Project Manager advises it has been costed out by a QS at around $1m with an asset life around 50 years. It's has been design by DWP Suters from Melbourne with a consultancy team of engineers.



2. Gannawarra Shire Council

Inspired by the Murray River

The Kerang Water Park was designed to reflect some of the Gannawarra Shire's celebrated flora and fauna and takes its inspiration from the nearby Murray and Loddon Rivers and the Gunbower State Forest.

It incorporates two distinct play pads each catering for a specific age group: 1-4 years and 5 to 10. Each section has its own activator.

The two pads are delineated by a magnificent River Red Gum Tree Trunk feature made from hand-carved concrete to resemble life-life bark and timber. Water showers from the wings of a custom-made White Bellied Sea Eagle feature perched upon the tree's outstretched branch. A water blade beneath the branch sends water trickling onto a series of hand-carved concrete tree roots which form a series of broad natural looking steps that lead down to a waterfall set into a curved hand-carved rock wall.

The water from the tree branches trickles down the tree-root steps to create a gentle stream that leads to a waterfall feature. A sheet of solid water projects from the waterfall which toddlers can shower under and even hide behind. This toddler section also includes a giant fiberglass Spotted Marsh Frog which littlies can climb and sit on while surrounded by a ring of random ground sprays and bubblers.

A giant Cormorant feature soars overhead and showers water on delighted toddlers who can also play in the Mushroom Water Garden comprising three interactive cascading mushroom features of different heights - the flow and arc of which can be controlled by turning the head of each feature.

The toddler section also includes a giant granite ball from which water will bubble and cascade and an innovative "tip and fill" station. This interactive decanting feature allows the littlies to fill and tip a series of buckets from gently trickling fountains.

The second pad is slightly raised above the Toddler Pad and includes a tunnel clad in hand-carved concrete to resemble the rocks and stone found within the local region. The tunnel features a water blade at one end to create a solid waterfall effect and random ground sprays on the floor. Patrons can climb a series of broad, hand-carved concrete steps to access a look-out point complete with a set of duelling water cannons set on top of the tunnel. The two cannons correspond with another two ground-mounted cannons to encourage water wars between kids on the ground and those on top of the tunnel fort.

A giant dumper bucket is positioned next to the tunnel feature along with a giant overhead Murray Cod shower feature. This area also includes a hand-carved cave wall and waterfall feature along with a series of geysers and random ground sprays and three giant coloured shower rings. All single pole features are interchangeable.

3. Alpine Shire Council

Riverside delight

In early 2014, Water Features by Design was commissioned by the Alpine Shire in Victoria to design and construct an interactive water park in the regional, river-side town of Bright. Works involved the demolition and removal of an old toddler pool to create the interactive, natural-themed splash park designed to reflect the the region's rich gold mining heritage.

Construction began in June with the park being fully operational by September 2014 as scheduled.

The water park was built with an innovative water supply system, designed to provide chemical free, low cost water to the park that would not be affected by water restrictions during times of drought. This system required the construction of an 80m deep bore near the site to provide water that cycles once through the system before flowing back to the river, which in turn improves environmental flows to the river in summer.

The park's design reflects the region's mining heritage and natural environment with textured concrete steps that lead to the river's edge and a series of graduated splash pads, each designed to suit different age groups from toddlers through to teenagers.

The splash pad surface is textured concrete with a range of randomly sequenced ground sprays, pole features, duelling water cannons, a water mushroom and giant, mining-inspired dumper bucket. Everything but the dumper bucket runs at random intervals, while the bucket slowly fills to capacity. Visitors watch and wait with anticipation of the impending dump which is indicated through the use of three rows of small holes drilled in the side of the bucket. As the water level rises, it trickles out the holes, while kids watch in rapt excitement as the first row leaks, then the second, then the third before dumping a massive, drenching cascade of water over the delighted recipients.

The entire park is designed to complement the surrounding environment, with plenty of natural stone and hand carved textured concrete to merge with the nearby creek and towering Elm trees.

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