



City of
Melville

AGENDA BRIEFING FORUM

6th October 2020

**LeisureFit Booragoon
Refurbishment Works**



- Tiling in both pools is in need of replacement.
- The leisure pool reinforced concrete shell is deteriorating.
- Both pool balance tanks require recoating.
- Both pool hall decks require retiling.
- Both pool halls require repainting (walls, ceilings, exposed steel beams).
- The change room facilities require refurbishment.
- The Heating, Ventilation & Air Conditioning systems (HVAC) servicing the pool halls are at end of life and need renewal.



Leisure Pool:

- Serious deterioration of the concrete pool shell
- The compressive strength of the concrete pool shell was found to be below design specification.
- Deflection of the eastern pool wall has occurred

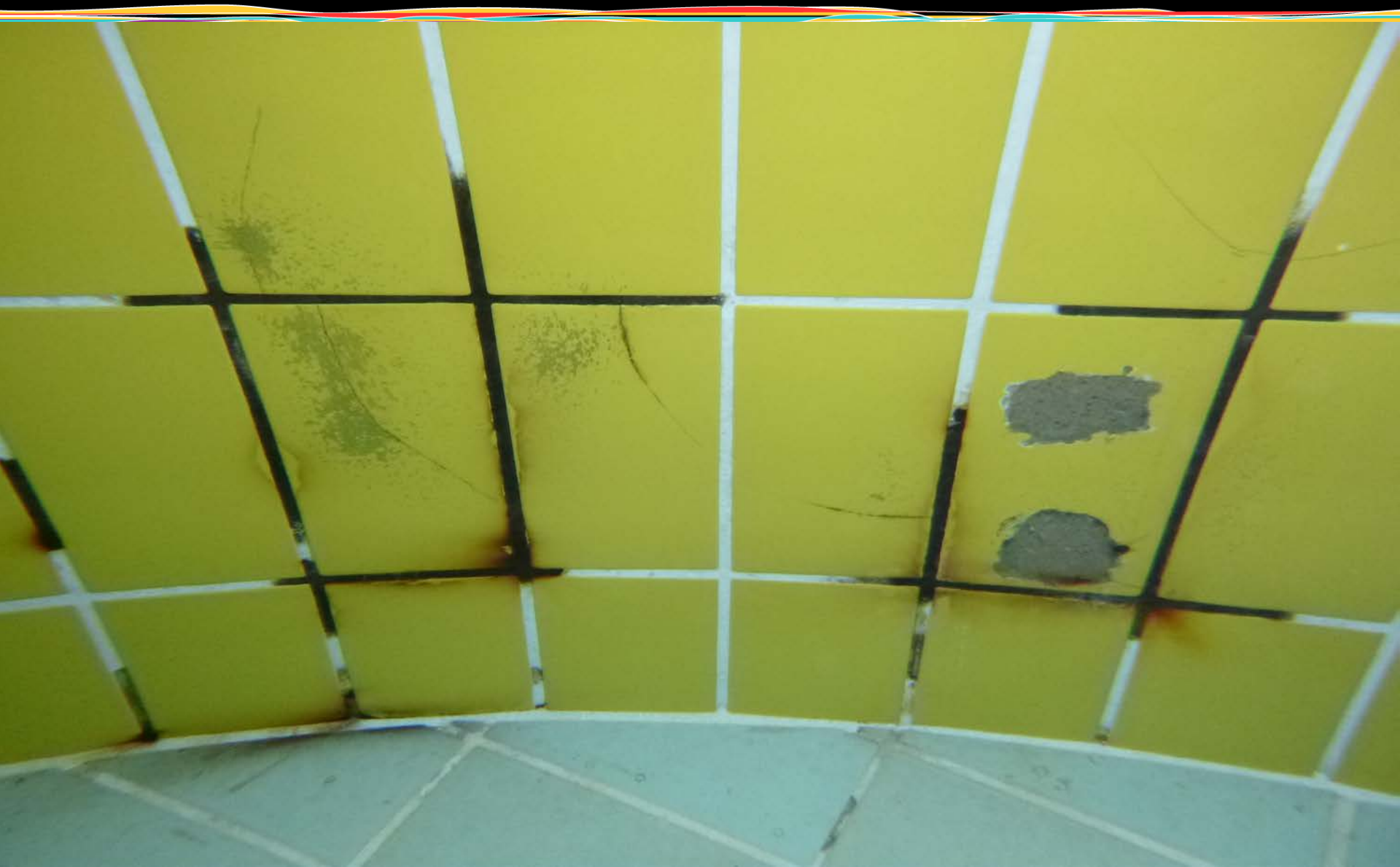
50m Pool:

- Localised corrosion and minor cracking in areas
- Tiles faded and grouting discoloured.



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Leisure Pool - Corrosion





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Leisure Pool - Gutters





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Leisure Pool East Wall Deflection





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50m Pool Condition





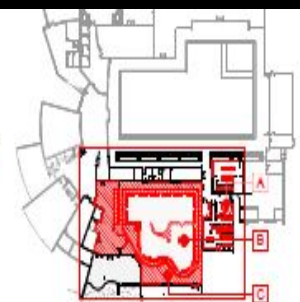
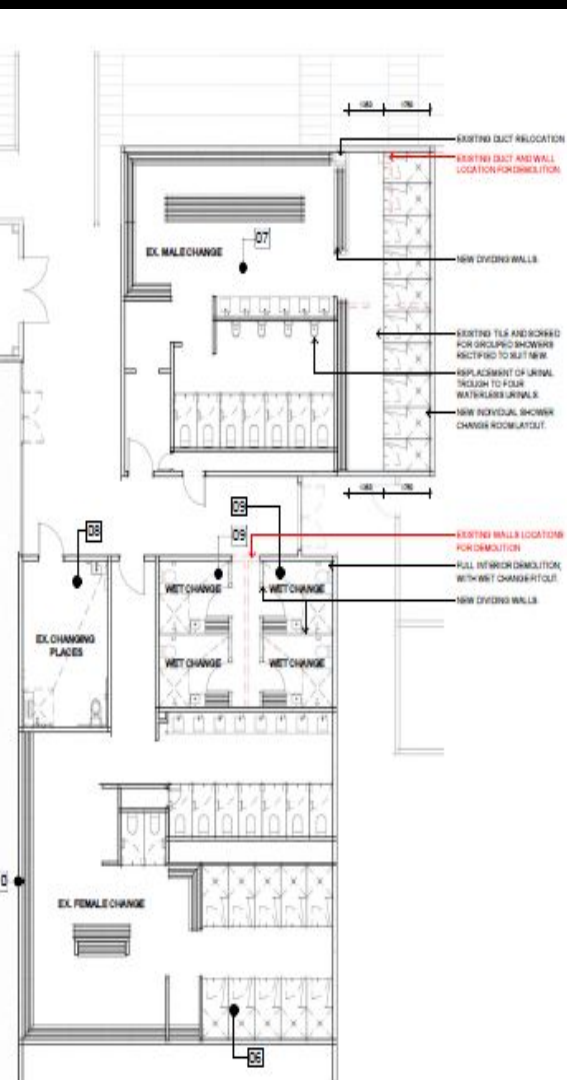
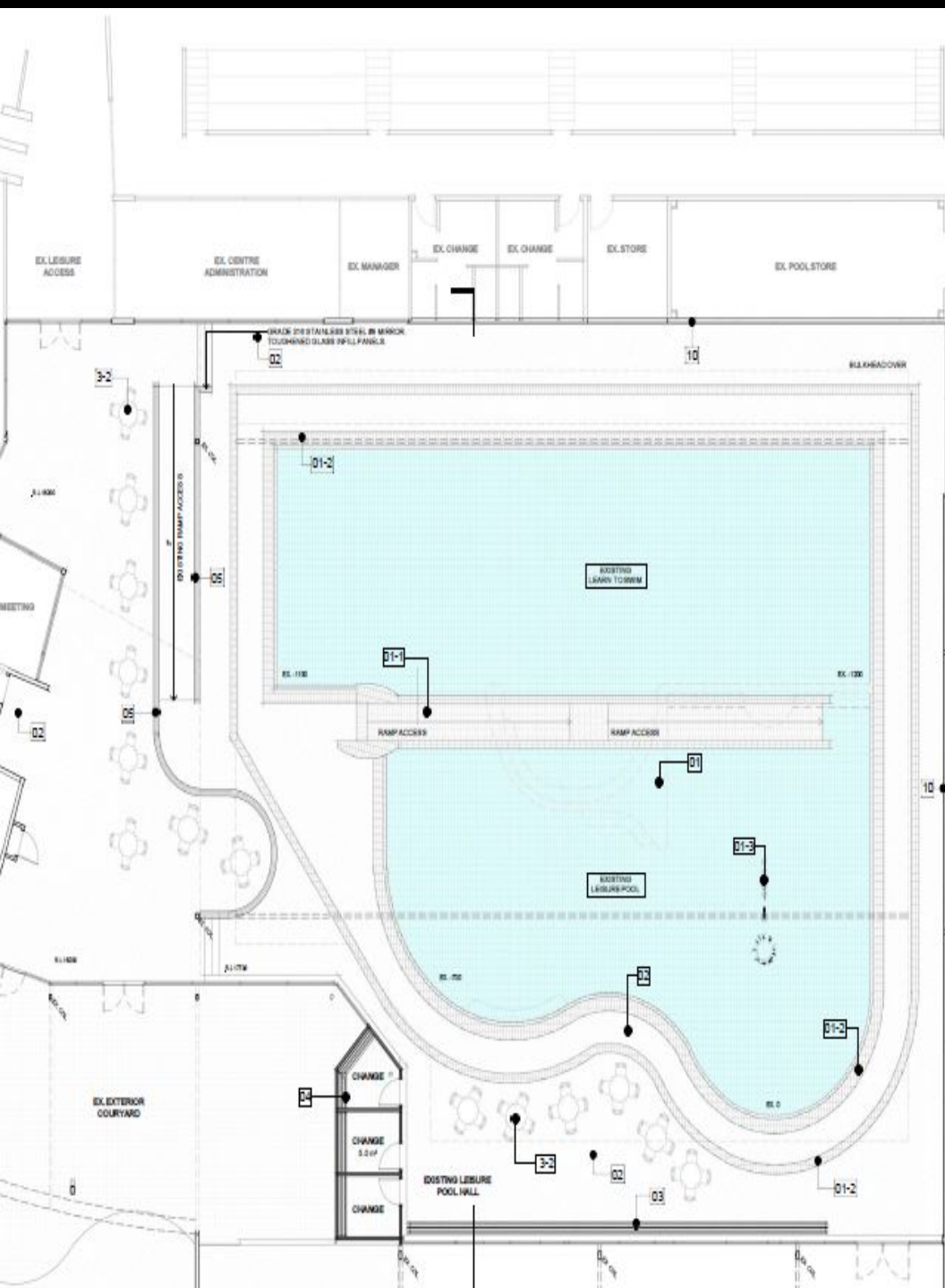
Donovan Payne Architects have developed design options:

Option A :

- Partial demolition and repair of the existing concrete pool shell and retile.
- Provide enhanced support infrastructure.

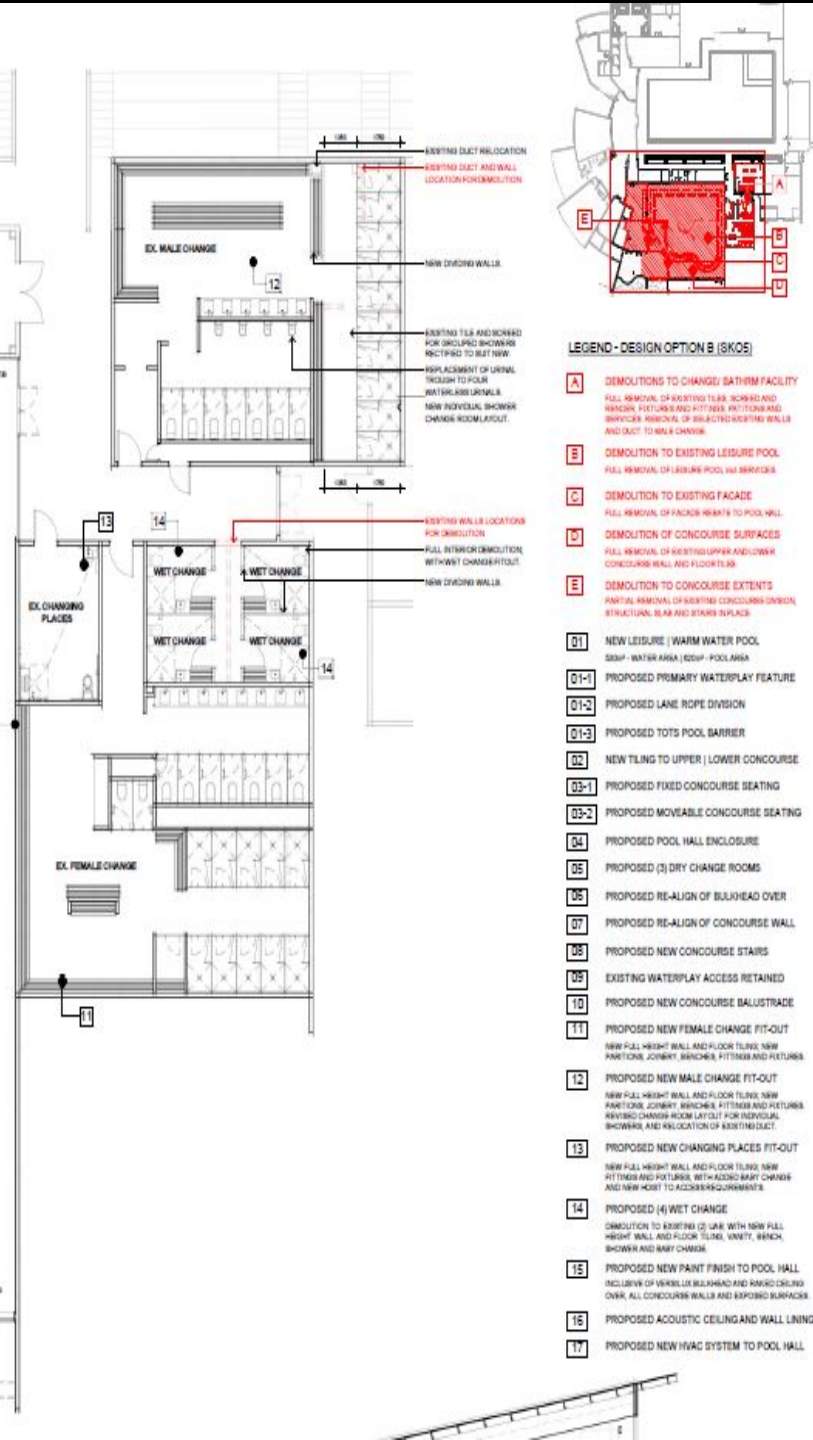
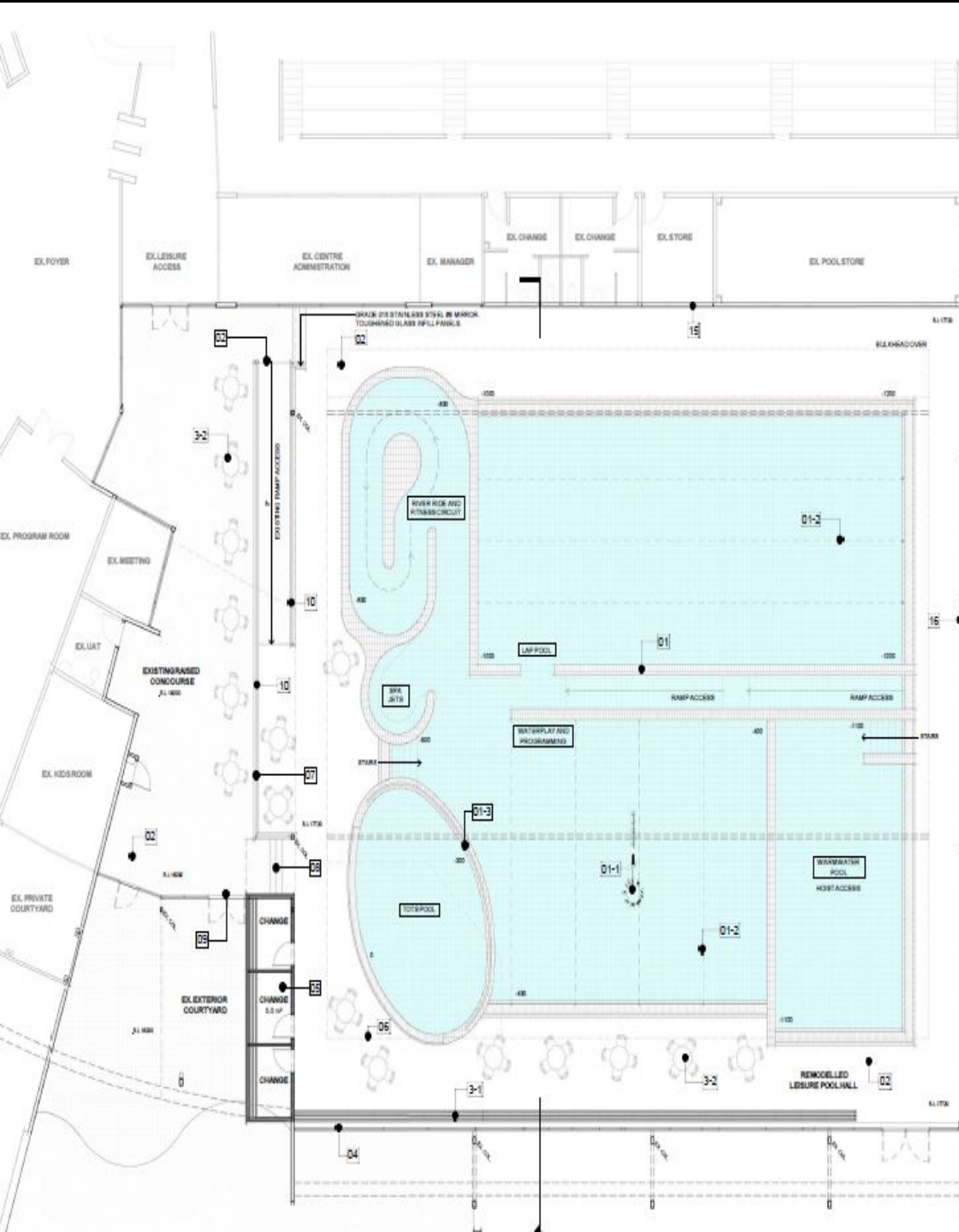
Option B:

- Full demolition of existing pool shell and construct contemporary multi-functional leisure pool.
- Provide enhanced support infrastructure.



LEGEND - DESIGN OPTION A (REFURB)

- A** DEMOLITIONS TO CHANGE (BATHROOM FACILITY)
FULL REMOVAL OF EXISTING TILES, SKIRTING AND WAINSCOT, PARTITIONS AND FITTINGS, REMOVAL OF EXISTING WETTING WALLS AND DUCT TO WALLS CHANGE
- B** DEMOLITION TO CHANGE LEISURE POOL
PARTIAL REMOVAL OF LEISURE POOL LINE BEFORE DRY
- C** DEMOLITION OF CONCOURSE SURFACES
FULL REMOVAL OF EXISTING UPPER AND LOWER CONCOURSE WALL AND FLOOR TILES
- D1** EXISTING LEISURE POOL REFURBISHMENT
PROPOSED NEW POOL SCUM GLITTER GRATING WITH NEW TILING TO ALL EXISTING FLOORS, WALLS, BULKHEADS AND FLOORINGS, REMOVAL TO BE APPLIED TO EXISTING OUTSIDE POOL
BSP - WATER AREA / BSP - POOL AREA
- D1-1** PROPOSED NEW POOL UNIVERSAL RAMP
- D1-2** PROPOSED NEW SCUM GLITTER GRATING
- D1-3** PROPOSED PRIMARY WATERPLAY FEATURE
- D2** NEW TILING TO UPPER LOWER CONCOURSE
- D3-1** PROPOSED FIXED CONCOURSE SEATING
- D3-2** PROPOSED MOVEABLE CONCOURSE SEATING
- D4** PROPOSED (3) DRY CHANGE ROOMS
- D5** PROPOSED NEW CONCOURSE BALLSTRADA
- D6** PROPOSED NEW FEMALE CHANGE FIT-OUT
NEW FULL HEIGHT WALL AND FLOOR TILING, NEW PARTITIONS, JOINTS, BENCHES, FITTINGS AND FIXTURES
- D7** PROPOSED NEW MALE CHANGE FIT-OUT
NEW FULL HEIGHT WALL AND FLOOR TILING, NEW PARTITIONS, JOINTS, BENCHES, FITTINGS AND FIXTURES, REMOVAL OF EXISTING DUCT FOR INDIVIDUAL SHOWERS, AND RELOCATION OF EXISTING DUCT
- D8** PROPOSED NEW CHANGING PLACES FIT-OUT
NEW FULL HEIGHT WALL AND FLOOR TILING, NEW PARTITIONS AND PARTIAL, WITH ACCESS BARRY CHAIRS AND NEW MOIST TO ACCESS REQUIREMENTS
- D9** PROPOSED (4) WET CHANGE
DEMOLITION TO EXISTING (2) LINES WITH NEW FULL HEIGHT WALL AND FLOOR TILING, VANITY, BENCH, SHOWER AND BARRY CHAIRS
- D10** PROPOSED NEW PAINT FINISH TO POOL HALL
INCLUDES OF VENEER BULKHEADS AND BARRY CHAIRS OVER, ALL CONCOURSE WALLS AND BARRY SURFACES
- D11** PROPOSED ACOUSTIC CEILING AND WALL LINING
- D12** PROPOSED NEW HVAC SYSTEM TO POOL HALL



LEGEND - DESIGN OPTION B (SKOS)

- A** DEMOLITIONS TO CHANGE BATHING FACILITY
FULL REMOVAL OF EXISTING TILES, ROOFING AND
WALLS. REMOVAL OF EXISTING WALLS, PARTITIONS AND
BATHING. REMOVAL OF EXISTING ROOFING WALLS
AND DUCT TO NEW CHANGE.
- B** DEMOLITION TO EXISTING LEISURE POOL
FULL REMOVAL OF EXISTING POOL AND REMOVALS
- C** DEMOLITION TO EXISTING FACADE
FULL REMOVAL OF FACADE REBATE TO POOL WALL
- D** DEMOLITION OF CONCOURSE SURFACES
FULL REMOVAL OF EXISTING UPPER AND LOWER
CONCOURSE WALL AND FLOOR TILES
- E** DEMOLITION TO CONCOURSE EXTENTS
PARTIAL REMOVAL OF EXISTING CONCOURSE DIVISION,
STRUCTURAL SLAB AND STAIRS IN PLACE
- 01** NEW LEISURE (WARM WATER POOL
DEEP WATER AREA / DEEP POOL AREA
- 01-1** PROPOSED PRIMARY WATERPLAY FEATURE
- 01-2** PROPOSED LAKE ROPE DIVISION
- 01-3** PROPOSED TOTS POOL BARRIER
- 02** NEW TILING TO UPPER / LOWER CONCOURSE
- 03-1** PROPOSED FIXED CONCOURSE SEATING
- 03-2** PROPOSED MOVABLE CONCOURSE SEATING
- 04** PROPOSED POOL HALL ENCLOSURE
- 05** PROPOSED (3) DRY CHANGE ROOMS
- 06** PROPOSED RE-ALIGN OF BULKHEAD OVER
- 07** PROPOSED NEW CONCOURSE WALL
- 08** PROPOSED NEW CONCOURSE STAIRS
- 09** EXISTING WATERPLAY ACCESS RETAINED
- 10** PROPOSED NEW CONCOURSE BALUSTRADE
- 11** PROPOSED NEW FEMALE CHANGE FIT-OUT
NEW FULL HEIGHT WALL AND FLOOR TILES, NEW
PARTITIONS, JOINTS, BENCHES, FITTINGS AND FIXTURES
- 12** PROPOSED NEW MALE CHANGE FIT-OUT
NEW FULL HEIGHT WALL AND FLOOR TILES, NEW
PARTITIONS, JOINTS, BENCHES, FITTINGS AND FIXTURES
NEW CONCOURSE ROOM LAYOUT FOR INDIVIDUAL
SHOWERS, AND RELOCATION OF EXISTING DUCT
- 13** PROPOSED NEW CHANGING PLACES FIT-OUT
NEW FULL HEIGHT WALL AND FLOOR TILES, NEW
FITTINGS AND FIXTURES, WITH ADDED BABY CHANGE
AND NEW HOIST TO ACCESS REQUIREMENTS
- 14** PROPOSED (4) WET CHANGE
DEMOLITION TO EXISTING (2) USE WITH NEW FULL
HEIGHT WALL AND FLOOR TILES, VANITY, BENCH,
SHOWER AND BABY CHANGE
- 15** PROPOSED NEW PAINT FINISH TO POOL HALL
INCLUDE OF WHOLE EX BULKHEAD AND ROOFING CEILING
OVER, ALL CONCOURSE WALLS AND EXPOSING SURFACES
- 16** PROPOSED ACOUSTIC CEILING AND WALL LINING
- 17** PROPOSED NEW HVAC SYSTEM TO POOL HALL



The following Risks are associated with Option A, **HIGH likelihood of occurrence:**

- Discovery of further concrete shell deterioration during works
- Various issues arising from abutting different strength concretes in the pool shell:
 - Constructability
 - Contractor Warranties
 - Potential for long term maintenance issues

Consequences:

- Downtime and extended construction period.
- Cost of repairs rise considerably.
- Potentially the works are aborted to revert to Option B.
- Abort costs estimated by Rawlinsons to be **\$550,000**



Option A:

Project Cost	\$3,582,453
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Adjusted for Risk:

Abortive risk cost	\$ 550,000
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Extra-over cost to construct Option B	\$1,264,214
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Total risk adjusted Project Cost	<u>\$5,396,667</u>
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Option B:

Project Cost	<u>\$4,846,667</u>
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- **Warmer Water Program Pool:**
 - Better suited to programs for seniors, babies and rehabilitation.
- **Increased Programmable Space / Multi -Functional use:**
 - Current design is poor for learn to swim.
 - Design more suited to community groups and health professionals
- **Dedicated Program Spaces**
 - Current Leisure Pool results in conflicts between walkers, swimmers, play & programs.



Adopt Option B for the refurbishment of the Leisure Pool as it provides a superior outcome with lower risks

Option B:

- Presents opportunities to ***enhance the services*** offered by the City to the community
- ***Presents less risk*** to the City compared to Option A – both short term and long term
- Presents a ***higher quality, higher value for money*** solution on a risk-adjusted basis



The City will appoint a design team to document a refurbishment solution for the 50 metre pool.

- Deliverables include:
 - Repair and resurfacing of the concrete pool shell.
 - Retile pool concourse.
 - Repaint walls and ceiling.
 - Findings from DAIP Audit.

Rawlinsons have prepared an opinion of costs for the works, estimated at **\$1,569,000**



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HVAC System Renewal





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HVAC System Renewal





Norman Disney Young were appointed to develop a HVAC solution for the Leisure & 50m Pool Halls.

The renewed HVAC system will deliver :

- A measureable improvement in indoor air quality by increased air supply and exhaust flow rates.
- An improvement in occupant comfort levels for swimmers, spectators and staff.
- Be energy efficient and environmentally sustainable.
- Be regularly fine-tuned to achieve optimum performance.

Rawlinsons have estimated the works associated with the HVAC renewal at **\$686,507**



<i>Approved Budgets:</i>	
18/19 CWP:	
50m pool (Available from Reserves)	\$ 1,025,000
20/21 CWP:	
Leisure Pool	\$ 2,655,909
50m Pool (Design) + HVAC	\$ 892,237
Sub-Total	\$ 4,573,146
<i>Estimated Costs:</i>	
Leisure Pool - Option B	\$ 4,846,667
50m Pool	\$ 1,569,000
HVAC	\$ 686,507
Sub-Total	\$ 7,102,174

- Additional funding of **\$2,529,028** required to complete all works
- Required to facilitate issue of construction tender – majority of funding will be spent in the 2021-2022 and 2022-2023 financial year



- Issue Request for Tender May 2021
- Award Contract September 2021
- Site Commencement October 2021
- HVAC Completion June 2022
- 50m Pool Completion June 2022
- Leisure Pool Completion October 2022



- The Leisure Pool will be closed for 52 weeks between October 2021 and October 2022
- The 50m Pool will be closed for 35 weeks between October 2021 and June 2022
- The financial impact associated with reduced pool patron revenue based on the above is estimated to be approx. \$1.4m to \$1.5m

Pool Closure Mitigations:

- Use of school pools out of hours for continuation of programs
- Facilitate increased public access to Melville Water Polo Pool
- Communication strategy to update and engage swimmers during closure



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LeisureFit Booragoon Refurbishment

Questions?