

Construction Options Report

Kununurra Leisure Centre

3/12/2021

Option 1

Decommission existing 25m pool facility, demolition of all existing pools, pool plant equipment, and plant buildings make good site ready for proposed construction works.

Additional Works

No additional works under the contract.

Pro's

- No additional works, or costs required to facilitate construction of the Proposed Aquatic Centre. Cost estimate as per previous QS costings.
- Clearly defined construction programme with no staged practical completion, separable portions of work.
- No effect to construction programme, warranties and defects liability period.

Con's

- Aquatic facility will be closed during construction until completion of the proposed Aquatic Centre.
- Alternative swimming venues will need to be arranged if required.

Programme

- Base on previous experience with works carried out at Southern Cross Aquatic, CAA have provided a notional construction period 12-14 for this option.

Option 2

Maintain existing 25m lap pool, keeping existing plantroom building and filtration equipment fully operational. *'Will require the installation of a temporary disinfection system to existing filtration equipment'*. Decommission and demolish existing Gas chlorine system and storage building ready for proposed construction works.

Additional Works

- Consolidate existing levels between proposed site and existing 25m pool. This may require temporary sheet piling or the like to shore up the upper level, before the proposed works.
- Install temporary disinfection system to existing filtration equipment, including all relevant health department approvals.
- Decommission, demolish and make good existing gas chlorine system and storage building ready for proposed construction works.
- Construction of temporary amenities, duty managers/ life savers station and entry point if required to oversee and manage the existing pool. This could be a 'donga' style village and would require hydraulic and electrical services.

Pro's

- Existing 25m pool remains fully operational for the community during construction of the proposed new aquatic centre.
- Minor effect to the building programme.
- Minor reduction of surveillance to 50m pool from central administration.

Con's

- Additional works under the contract would be required as detailed above.
- Cost - Estimated notional increase to construction costs ***in the order of \$100,000 to \$150,000*** over and above previous QS costings.
- Staged practical completion required. Complicating handover, warranties and defects liability period.

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Programme

- Base on previous experience with works carried out at Southern Cross Aquatic, CAA have provided a notional construction period 12-14 for this option.

Option 3

Maintain existing 25m lap pool only and building a temporary plant room compound and relocating existing filtration equipment and control gear where permissible and install temporary disinfection system as required. Decommission and demolish existing gas chlorine system and storage building ready for proposed construction works.

Additional Works Required

- Consolidate existing levels between proposed site and existing 25m pool. May require temporary sheet piling or the like to shore up the upper level before the proposed works.
- Build temporary plant room compound and relocation with existing filtration equipment. Includes removal of filter media, disassemble plant, relocate and reassembly all equipment with new filter media.
- Installation of temporary balance tank in appropriate location.
- Disconnection and relocation of FWR and SWS lines to existing pool.
- Installation of temporary hydraulic and electrical services to plant compound.
- Decommission, demolish and make good existing gas chlorine system and storage building ready for proposed construction works.
- Construction of temporary amenities, duty managers/ life savers station and entry point. This could be a 'donga' style village and would require hydraulic and electrical services.

Pro's

- Existing 25m pool remains fully operational during construction of the proposed new aquatic centre.

Con's

- Additional works under the contract would be required as detailed above.
- Cost - Estimated notional increase to construction costs ***in the order of \$500,000 to \$650,000*** over and above previous QS costings.
- Construction programme would be lengthened to allow for additional works.
- Staged practical completion required. Complicating handover, warranties and defects liability period.

Programme

- Base on previous experience with works carried out at Southern Cross Aquatic, CAA have provided a notional construction period of 16 months for this option.

Additional Commentary

We understand that the existing liner has been repaired recently by CAA, this is a ticking time bomb. The patched areas may fail in the next week, but also may last 5 years.

Being a liner pool, it will have some ability to cope with ground movement during construction, however it is a risk. CAA can provide a liner/ maintenance/ inspection service during to reduce the risk of possible failures at an early stage.

Reviewing the three options above it is our opinion, 'Option 2' would provide the council with the best outcome. It provides the community and swim clubs with a viable swimming venue during the construction programme with only a small effect on programme and costs.