

FROM EMPIRE TO THE FUTURE; REPLACEMENT OF PERRY LAKES SPORTING FACILITIES

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Abstract

A key project for the Department of Sport and Recreation was the replacement of the aged sporting facilities at Perry Lakes, created for the 1962 Empire Games.

A significant challenge was to commence construction within a 3 year timeframe on a Bush Forever¹ site, in a heated construction market. In addition, the legislation for the project required a number of key Environmentally Sustainable Design (ESD) deliverables and was used by the department as a vehicle to showcase sustainable governance and management practices.

The project evolved with the design, statutory planning and management streams moving in parallel instead of the normal sequential approach. Due to the impact each stream had on the others it was necessary to have a highly focussed project management team that could keep the project moving forward.

In May 2009 the new State Athletics Centre at AK Reserve opened in the first step that will deliver an international level sporting precinct in partnership with WA Sports Centre Trust and University of Western Australia (UWA), which is expected to serve the community for the next 30 years.

Key Words: project management, environmentally sustainable design, community consultation, master planning

Introduction

The City of Perth, Commonwealth and State Governments funded the development of the Perry Lakes Stadium complex, which was opened in 1962, at a cost of over £1,000,000. The complex incorporated the athletics facility, warm up track and an indoor facility for boxing and fencing.

¹ Bush Forever is an endorsed State Government Policy which identifies regionally significant bushland to be retained and protected forever. Further information on Bush Forever is available from

<http://www.planning.wa.gov.au/Plans+and+policies/Publications/99.aspx>

The facilities remained within the City of Perth until the creation of the Town of Cambridge in 1995².

Since 1962 the original indoor facility evolved to become an eight court basketball stadium and the warm-up track to a headquarters for rugby union in Western Australia.

The athletics stadium, with a capacity for 30,000 was used for a variety of events including a soccer match between Manchester United and Liverpool and a rugby test between Australia and South Africa during the apartheid era, but would only be filled to capacity on one other occasion being a Rolling Stones concert in 1995³. With the highest recorded crowd since January 2003 being 4,000 at a Telstra A Series meet.⁴

The adaption of the athletics stadium has been considered on a number of occasions including the development of the site for an AFL stadium but a consistent development option for housing has persisted since 1995. To assist with the progress of the project the Department of Sport and Recreation, Department for Planning and Infrastructure and Town of Cambridge initiated Mount Claremont Sporting Precinct Structure Plan, undertaken by Chris Anthill and Associates in 2005.

UWA as an adjacent landowner responded to the Structure Plan putting forward an alternate design scenario.

Due to the zoning of the land as Parks and Recreation an amendment to the Metropolitan Region Scheme was required. In 2003 the then State Government changed the zoning status to Urban Deferred, conditional upon the Town of Cambridge making suitable

progress towards the replacement of existing sporting facilities.

As a result of the location of the Perry Lakes Stadium within the Endowments Land⁵ a location in close proximity to the existing site was required. AK Reserve was identified as the only real location. AK reserve did present a number of challenges being:

- Gazetted Bush Forever Site
- Insufficient size for all three facilities
- Required agreement to access or purchase adjacent land
- AK Reserve is the boundary between Town of Cambridge and City of Nedlands hence some buildings cross the boundary
- Statutory planning approval processes.

Project Evolution

Following the completion of the Structure Plan in February 2005, the Town of Cambridge embarked on a process to develop the sporting facilities and the existing Perry Lakes site for housing. This involved the selection of a development partner. A cornerstone document for the subsequent project is the Town of Cambridge Preliminary Functional Brief which outlined the Town's expectation in regard to the scope of the replacement sporting facilities which in some instances provided the sports with expanded facilities.

As a result of a lack of progress by the Town the State intervened with the introduction of the *Perry Lakes Redevelopment Act 2005 (WA)*⁶ which resulted in the State assuming the development responsibility for both the sporting facilities and the residential development and in return would provide the Town with a minimum financial return of \$50 million.

² The City of Perth was split into four local governments in 1995 being Town of Cambridge, Town of Vincent, Town of Victoria Park and City of Perth.

³ 8th April 1995, attendance "37,000 inside and a further 10,000 outside" Stones give fans some satisfaction. (1995, 9 April). *The West Australian* p1

⁴ Perry Lakes Stadium. (09/12/1995). Retrieved July, 2009, from the Australian Stadiums website: www.austadiums.com

⁵ *Cambridge Endowments Lands Act 1920 (WA)* prescribes that the proceeds of sale were to be credited to the Cambridge Endowment Lands account towards the development of the "said lands"

⁶ The *Perry Lakes Redevelopment Act 2005 (WA)* is available from www.slp.wa.gov.au

The legislation was proclaimed in December 2005 and came into effect as of 3 February 2006.

Site Context

Perry Lakes and AK Reserve are approximately 3km west of the Perth CBD and within 1km of the coast line. AK Reserve (approx 10ha) is immediately adjacent to UWA Sports Park which incorporates Challenge Stadium and McGillivray Sporting fields (approx 56ha). Immediately south of UWA Sports Park is a further 19 hectares of State land (former Brockway Tip) and playing fields for Christ Church Grammar School and John XXIII College.

AK Reserve also serves as part of a greenway link from Bold Park to Kings Park.

Perry Lakes Redevelopment Act 2005 (WA)

The Act has two main components, one relating to the sporting facilities and the other the residential development. This paper focuses on the processes for the sporting facilities. In summary, the Act:

- Suspended Town Planning laws over the AK Reserve Redevelopment Area;
- Required a Redevelopment Plan to be developed to serve in the place of the Town Planning laws;
- Outlined a number of expectations in regard to environmental design provisions for the facilities;
- Outlined the Development Application process for the construction of the sporting facilities; and
- Gave certain powers to the Minister for Sport and Recreation⁷ as to the scope and extent of the facilities to be constructed.

The nature of the project required the replacement sporting facilities to be constructed first and then for the land to be developed and sold for housing. In effect, the State would be paying for these facilities in advance, as such there was a requirement to progress the construction as quickly as possible.

This necessitated the planning, design and management processes being run concurrently. Also the significance of the

⁷ Minister for AK Reserve is defined as the Minister for Sport and Recreation under the Act.

project has required a substantial communication strategy.

Planning

The AK Reserve Redevelopment Area itself has been recognised through a number of statutory planning processes prior to the Mt Claremont Sports Precinct Structure Plan including 2004 Shenton Park Structure Plan. However, as the success of the project relied on the cooperation of UWA the department initiated a Master Planning exercise with UWA and over 40 stakeholders to outline the key principles for the precinct.

The Master Plan⁸ combined the findings of the Mt Claremont Sports Precinct Structure Plan and UWA's alternate design. 13 key planning principles were developed including:

- "Main Street";
- Sub-precincts and shared use
- Public transport and carparking distribution; and
- Environment

These principles and the associated Master Plan provided the basis for the subsequent AK Reserve Redevelopment Plan⁹.

The Redevelopment Plan was modified to include the consideration of the extent of the ESD requirements of the Act and also reflect the evolution of the design based on consultation with the sports.

Following the approval of the Redevelopment Plan in December 2007 the progress of the northern precinct went smoothly. However, the southern precinct became problematic with the enactment of the *Contaminated Sites Act 2003 (WA)*.

The original intent was for a 3,000 seat Rugby stadium and administration headquarters to be located south of UWA Sports Park, supported with playing fields for public use. This would provide a connection

⁸ Department of Sport and Recreation. (2006). *AK Reserve / UWA sports park master plan*. Perth, Western Australia: Authors..

⁹ Department of Sport and Recreation (2007). *AK reserve redevelopment plan: vol.3 master plan and supporting documents*.. Perth, Western Australia: Author.

The AK Reserve Development plan is available for viewing at www.akreserve.wa.gov.au

to the Christ Church and John XXIII playing fields.

However, the requirements of the Contaminated Sites Act particularly the approval process, monitoring requirements and onus for the resolution of a number of wider issues including determining the source of an existing underground water plume, meant that it was not possible to develop the facility in the required timeframes.

As a result of discussions with Rugby WA the Department has sought to construct an administration/strength and conditioning facility on the northern precinct which has necessitated an amendment to the plan. The department is now considering how to progress the eventual development of the southern precinct as public open space, through a separate planning process.

Design

The design of the facilities has involved three parameters; where possible adherence to the Town of Cambridge Preliminary Functional Brief, consistency with the AK Reserve/UWA Sports Park Master Plan and the design principles outlined in the *Perry Lakes Redevelopment Act 2005 (WA)*. The design principles include:

- Minimisation of the consumption of non-renewable resources;
- Maximise the use of recycled materials;
- Maximise natural ventilation and natural light;
- Minimise noise and light emissions;
- Incorporation of passive solar design principles; and
- Minimise consumption of energy and water with specific measures to be introduced.

Three design teams were appointed for the project¹⁰ with the Basketball design team to also be responsible for the infrastructure and planning interface (including retention of the Bush Corridor).

¹⁰ Peter Hunt and Darryl Jackson – Basketball and Site Infrastructure.

Cox Howlett + Bailey Woodland – Athletics.

Sandover Pinder - Rugby

The strategies implemented for the projects to address the parameters include:

- Sustainability Audit for each stage of facility design.
- Whole of Life Cost Modelling – operational impact of the design to determine product selection.

This process resulted in the opportunity for the department to showcase a number of strategies it has been advocating including:

- Water Harvesting and use of recycled water to create a closed circuit
- Use of photo-voltaic cells for rugby and solar water systems in the basketball and athletics
- Use of sensory lighting in all non-essential areas of all three facilities.

The other design considerations to reduce the impact of the facilities on the bush corridor included the development of a basement carpark for the basketball stadium and the positioning of the athletics stadium to maximise the retention of bush considered to be of higher quality. This positioning had two objectives as in addition to the requirements of the Act it provides a funnelling effect for the straight to maximise the prospect of legal winds for athletes.

One of the design challenges that persisted throughout the project for the athletics venue was the design brief to provide a facility for the maximum benefit of the athlete and not necessarily the spectator. This is not a traditional approach and has resulted in some feedback as to the location of the grandstand on the southern side of the track facing east. This has been mitigated with extensive sun and wind studies and noting most significant events will occur under lights.

Further, the inclusion of additional throwing areas, jump sites and additional lanes enables school users to reduce the length of time for their events.

The facilities will be managed by VenuesWest¹¹, who have been involved with the project from its commencement. During the design process was the department initiated capacity audits of the sports¹² to understand whether they would

¹¹ VenuesWest were formerly known as WA Sports Centre Trust.

¹² Basketball WA, Athletics WA and Rugby WA.

have the ability to manage the new facilities in line with the State's expectation. The reports concluded that they would not so the department then initiated a process to negotiate the terms for the sports access to the new facilities and undertake the business planning processes to secure the necessary funds for their operation.

There are still challenges, as stakeholders become educated as to the new practices regarding maintenance, management practices and fee structures.

Communication

The communication strategy was to address a number of prominent stakeholder groups being the local environmental groups, the sporting fraternity, local government and the representative indigenous groups.

The environmental groups and sporting groups in the early design sessions had opposing objectives with the environmental groups not wanting any tree clearing and no parking provision. Conversely the sporting group's objective was for the optimal location of the sporting facilities generally without any consideration towards the impact on the existing bushland.¹³

While the AK Reserve and immediate surrounds have no ethnographic sites of significance a comprehensive consultation process was undertaken with traditional land owners¹⁴, for input into the location, design and operation of the sporting facilities. As the

¹³ Department of Sport and Recreation (2007). *AK reserve redevelopment plan: vol.3 master plan and supporting documents..* Perth, Western Australia: Author..

¹⁴ Senior representatives of the Combined Metropolitan Working Group (CMWG) Native Title Claimants (Bropho, Garlett, Wilkes, Corunna and Warrell family representatives; Senior members of the Bibbulman Tribal Group (Colbung family representatives); the Independent Aboriginal Environment Group (Hume family representatives); Mr C. Bodney representing the Bodney Native Title Claim on behalf of the Ballarruk and Didjarruk peoples; and senior representatives of the Jacobs family representing the Mooro Region Oor-Dal-Kalla Tribe Yalagongas Group

process evolved, the groups which have historically not worked together, combined and jointly planned and implemented the opening ceremony.

The project communication process involved the establishment of a number of key reference groups including; the AK Reserve Steering Committee and the various Project Control Groups that reported to the Steering Committee.

The terms of reference for the Steering Committee are:

1. To Establish and provide direction to a series of Project control Groups to oversee the development to the Athletics, Basketball, Rugby Union and Riding for Disabled
2. To control and collate information in relation to the replacement facilities and to provide a "complete picture" as to the status of the projects.
3. To report to the AK Minister on progress of the project and make recommendations in relation to:
 - a. Terms of Reference and composition of the Project Control Group.
 - b. The achievement of timelines, milestones and activity budgets.
 - c. Findings of the Probity Auditor.
4. To liaise with other agencies and stakeholders as necessary to ensure the delivery of the new sporting facilities within time and budget.

While ideally, all matters would be referred through this process, the extent of delegation and the timeframe pressures of the project made it necessary for the department to undertake action and make recommendations directly to the Minister without requiring the approval of the AK Reserve Steering Committee.

This approach to an open communication process continued through the construction program and the involvement of the builder.

Procurement

The Department of Sport and Recreation was required to use the then Department of Housing and Works (now Building Management and Works) for the procurement of consultants and the supervision of the construction contracts.

To maximise the knowledge of both departments there was an agreed framework for the project delivery with the Department of Sport and Recreation being the interface between the State and the stakeholders (sporting groups, community and planning controls) and Department of Housing and Works between the State and the Construction process (Architects, construction company and sub-consultants). Attached to this group were a Probity Auditor and overall project Quantity Surveyor. This arrangement resulted in an extremely strong relationship between the agencies and provided an atmosphere with opportunities to explore a range of initiatives could be considered including:

- Advanced shop work drawings for the Athletics structural steel and concrete, that were then novated to the construction company
- Packaging of the construction tenders to provide a variety of options for applicants. Given that at the time of tender there was an overheated construction market there was a need to create an atmosphere of competition. The end result was a discount of \$1.5 million provided for the award of a packaged tender versus awarding the projects separately.
- Application of the ESD principles in the consideration of defined packages including the lighting of the athletics stadium. The end result is a solution that can provide three lux levels for the athletics stadium and overall energy consumption is reduced.

One significant aspect of the process was that prior to the commencement of the project all of the government stakeholders participated in a values definition process. This was to determine what values would take priority in any situation. The results were a greater value assigned to time, value for money and legislative compliance.¹⁵

¹⁵ Department of Sport and Recreation. (2006). Perry lakes renewal (AK reserve sporting facility) (unpublished paper) Perth, Western Australia.

This process was referred to on a number of occasions an example of most significance was when a decision was required an installation of a basement carpark for basketball. In this instance the priority of environment and function were considered a higher priority than the finance.

Conclusion

The State Athletics Centre was opened on 26 May 2009. This is within three years from the commencement date of the *Perry Lakes Redevelopment Act 2005 (WA)*.

During the opening the Premier said the WA Athletics Stadium had already been recognised as a high performance venue by Athletics Australia and would host the Commonwealth team selections and National Athletics championships in April 2010. The close collaboration between all stakeholders was recognised as one of the keys to the project being realised in a short space of time.

The State Basketball Centre is on track for completion at the end of October 2009 and the State Rugby Headquarters will commence construction in early 2010. This project was the first real opportunity for the department to showcase its capacity to directly deliver world class sporting facilities and also highlights the best practice initiatives that the department has been recommending to its stakeholders.

The complications of the project were made easier by a strategic framework to the delivery of the project and through the use of cross-agency knowledge and expertise.

Key Learnings

If this project was to be repeated the Key Learning and improvements would be:

1. Having clearly defined values and ownership of those values at the start.
2. The importance of having clearly defined teams and roles from the outset that recognised the strengths of agencies and/or individuals.
3. The ability to have alternate views to what is regarded as the "main stream" approach.
4. Having a number of contingencies in place so that if the first plan does not work then there are alternatives that can be actioned.

5. Having an ability and confidence to initiate the alternatives when the processes indicate that a change is needed.
6. Open and effective communication to stakeholders as to the project outcomes and working to maximise win:win scenarios

Further Information

The AK Reserve website contains a wide range of publications on the project and the planning process.

www.akreserve.com.au

References

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