

GARDENS TENNIS COMPLEX DARWIN

CONCEPT SITE MASTERPLANNING REVIEW

Prepared by SPORTDEV

October 2016



TABLE OF CONTENTS

EXECUTIVE SUMMARY	3
INTRODUCTION AND BACKGROUND	4
PROJECT METHODOLOGY and DUE DILIGENCE PROCESS	5
The Tennis NT Facility Strategy	5
The Gardens Tennis Facility Audit.....	6
The Geotechnical Investigation Report	6
PROJECT BRIEF and STAKEHOLDER CONSIDERATIONS	8
CONCEPT MASTERPLAN OPTIONS	10
OPTION 1 – 10 Court Option (refer overleaf).....	10
OPTION 2 – 11 Court Option (refer overleaf).....	12
OPTION 3 – 12 Court Option (refer overleaf).....	13
COST ESTIMATE – OVERALL SUMMARY	15
STAGING PLAN and COST ESTIMATES	16
MASTERPLAN - RECOMMENDATION	18
APPENDIX A – PRELIMINARY COST ESTIMATES	20
APPENDIX B – SHADE STRUCTURE - COURTS 1 and 2.....	21
APPENDIX C - GTC CLUBHOUSE CONCEPT PLAN	22



EXECUTIVE SUMMARY

The Darwin Tennis Association (DTA) commissioned Adelaide based Sporting Facility Architectural Practice, SportDev to prepare a site masterplanning report for the Gardens Tennis Complex (GTC) in August 2016.

The masterplan review follows the completion of earlier consultant reports (i.e. Tennis NT Strategy, GTC Geotechnical Investigation and Facility Court Audit) and presents options for how the Club could support increased tennis participation in the region through ‘best practice’ facility design and optimal interaction with the proposed Mararra Regional Tennis Centre including holding and supporting TA / ITF accredited tournaments.

The results and recommendations of both the court audit and geotechnical investigation suggested that the sub-standard court surfaces evident today exist as a result of extremely poor subsurface drainage issues across all court enclosures. The view is that any interim ‘short-term’ remedial work such as crack-filling, grinding and repainting will not ‘fix’ this ongoing problem’ and will in effect be a wasteful and ineffective use of available financial resources. **Full reconstruction of the courts is therefore recommended as the only practical and pragmatic way forward in ensuring longevity for the GTC courts and paving the way in achieving the Club’s mission above.**

Courts 1 and 2 in particular are identified for immediate reconstruction to eliminate the risk to both public safety and the GTC and is therefore prioritised as Stage 1 works. Other shortcomings of the site include:

- an inefficient court layout from an operational and management perspective
- a lack of shade and general amenity for spectators and players
- poor site circulation and limited access to northern courts
- limited scope for ‘event mode’ temporary seating opportunities.

Three (3) masterplan options have been presented and reviewed for consideration i.e.

Option 1: - A reduction in court numbers from 12 to 10 comprising 5 x 2 court modules and central landscaped circulation spine with shaded seating / viewing areas

Option 2: - A reduction in court numbers from 12 to 11 comprising 3 x 2 court modules and 5 reconfigured northern courts along with landscaped viewing and shaded areas

Option 3: - Retaining all 12 courts with 2 x 2 court modules, 1 x 3 court module and 5 reconfigured northern courts with limited viewing and shaded areas

Cost Estimates for each option were prepared by a qualified Cost Consultant as follows:

Recommended Scope of Work	Option 1	Option 2	Option 3
Full Reconstruction of All Courts	2,672,940.00	2,796,140.00	2,844,640.00
Professional Fees @10%	267,294.00	279,614.00	284,640.00
Contingencies allowances 7.5%	220,500.00	231,000.00	234,700.00
Estimated Option Project Totals (Ex GST)	\$3,160,000.00	\$3,310,000.00	\$3,363,000.00

It is recommended that Site Masterplan Option 1 is adopted which, along with being the cheapest, presents the best opportunity to redefine the planning of the courts in a manner that reflects current ‘best practice’ in tennis facility planning and will provide the GTC with the most flexible court layout development strategy capable of being staged for the future as needed.

INTRODUCTION AND BACKGROUND

Adelaide based Sporting Facility Architectural Firm, SportDev has been engaged by the Darwin Tennis Association (DTA) to prepare a site masterplanning report for the Gardens Tennis Complex (GTC) that includes alternative site layout options that aim to assist the DTA's mission objectives as set out in the Tennis NT Facilities Strategy as 'a major community focused club'. The masterplan presents a framework to:

- Facilitate Gardens Tennis Complex to fulfil the role set out for it in the 2015 Tennis NT Facility Strategy for the next 10 years as a Large Community Facility servicing at least 400-500 regular active participants and the only publicly accessible tennis venue within the Darwin CBD and southern suburbs area and offering tennis services and activities that include:
 - a strong focus on Hot Shots, junior coaching programs and support for local talent squads
 - the NT Academies and Tennis in Schools programs
 - adult coaching, Cardio Tennis sessions and the organisation of social play
 - providing public court hire access and the running of internal, inter-venue, JT, JDS and Pro-Tour competitions and tournaments
- Assist Gardens Tennis support increased tennis participation in the region with optimal interaction with the new Marrara Regional Tennis Centre including holding and supporting TA / ITF accredited tournaments
- Guide facility development at Gardens Tennis to meet best practice for tennis facility design, layout and amenity based on principles set out by the national peak body for tennis -Tennis Australia
- Assist Gardens Tennis gain support from various funders and stakeholders for the development of the Club's facilities

We provide an overview of the opportunities and constraints of the current site with recommendations based upon considered site investigation reports as well as the goals and aspirations of the key project stakeholders namely the DTA, Tennis NT, The City of Darwin and the current commercial service provider, Top End Tennis.

A successful masterplan must integrate and consider not only site constraints, court layout modifications and improvements but also include suggestions for alterations to the existing clubhouse together to improve operational efficiencies and viability for cash flow generation, tennis program delivery, development of social and community tennis initiatives, junior development, and member growth and retention.

This report presents:

- An overview of the Site Investigation reports and Tennis NT Strategy summarising their key recommendations
- 3 site masterplan options with commentary on respective strategic benefits and shortfalls and how each concept may assist the DTA achieve its vision for the site
- Preliminary cost estimates for each of the concept options showing an elemental breakdown of the key elements for comparison purposes.
- A suggested concept floor plan for the redevelopment of the Clubhouse.

The concept masterplans are based upon the fundamental principles as outlined within Tennis Australia's '*National Tennis Facility Planning and Development Guide*' reflecting 'best practice' for tennis facility design, layout and amenity.



PROJECT METHODOLOGY and DUE DILIGENCE PROCESS

The project entailed undertaking a site visit in April 2016 to inspect the GTC and to hold meetings with the following key stakeholders:

- Prof. Charles Webb – President DTA
- Mr. Jamie O’Brien – Treasurer DTA
- Mr. Sam Gibson - CEO of Tennis NT
- Mr. Matt Grassmayr – Manager Rec. Events Customer Services- City of Darwin
- Mr. Matt James - NT Government Department of Sport and Recreation
- Mr. Ben McLachlan and Ms. Jordyn Howarth – Facility Managers / Coaches

The site inspection included a walk over the courts where existing deficiencies in both the court surfaces and layout were highlighted and observed along with operational inefficiencies evident in the Clubhouse Pro-Shop / Clubroom planning layout.

External consultant reports reviewed in conjunction with this process included:

1. **The Tennis NT Facility Strategy** (Inside Edge - Aug 2015)
2. **Gardens Tennis Facility Audit** (Inside Edge - Jan 2015)
3. **Geotechnical Investigation Report** (Cardno Ullman & Nolan March 2016)

Independent phone conversations were also undertaken with Mr. Michael Bodman, Director of Inside Edge Sport and Recreation Planners regarding court use, court numbers and the ramifications of modifying or reducing the number of courts at this venue. A summary of the recommendations from these reports is as follows:

The Tennis NT Facility Strategy

This strategy identified 5 strategic priorities for tennis in the NT:

- PRIORITY 1: A Regional Tennis Centre in Darwin
- PRIORITY 2: Improved Venue Management Outcomes
- PRIORITY 3: New courts to service growth areas
- PRIORITY 4: Life-Cycle Investment into existing venues
- PRIORITY 5: Hot Shots Courts at existing venues

Priorities 2, 4 and 5 have direct relevance to the GTC where we note that new management operations involving the appointment of a commercial service provider to operate the centre, have been established while life-cycle investment investigations and recommendations form part of the outcome of this masterplan. The introduction of court facilities to support Hot Shots programs to the venue is an immediate recommendation out of 24 that has been identified to occur within the 2015 / 2016 financial year. The strategy has suggested that Courts 1 and 2 be converted into dedicated Hot Shots Courts ‘.....to better provide for junior and development programs’.

While this is a supported recommendation we don’t believe that these two courts should solely be used for this purpose but should be considered in the context of the overall facility and its operations. It is noted that courts 1 and 2 have recently been marked out with blended lines for Hot Shots after a temporary surface repair.

The Gardens Tennis Facility Audit

This audit identified many shortcomings with the current court infrastructure including court substrate failure and surface deterioration. Such shortcomings are likely to affect the capacity and ability of the GTC to maintain current coaching, club competition events and programs in future.

Of particular relevance is the condition of courts 1 and 2 where evidence of major surface cracking / uneven playing surfaces to both courts has rendered them almost unplayable while court 1 at the time of inspection was taken out of play as a result of safety concerns.

The court audit in summary described the overall condition of the courts as follows:

- Courts 1 and 2:** **Very Poor** with a lifespan of less than 12 months.
(Since the date of the audit i.e. January 2015 however the recommended time frame for reconstruction is now 'immediate'.)
- Courts 3 to 7:** **Poor to Moderate** with a recommended reconstruction period of 2-3 years. 'Bird baths' or court depressions are evident to all of these courts as well as the obvious safety risk posed by the centrally located light poles.
- Courts 8-12:** **Moderate** with a lifespan before reconstruction of 2-3 years. Significant subsidence at the back of these courts was a consistent observation.

The facility audit included a review of the condition of the Clubhouse and provided possible suggestions for improvement for both the building's physical condition and operational efficiency. This report expands upon these comments and presents a possible architectural planning solution that responds to these recommendations.

The Geotechnical Investigation Report

This report was very clear in its findings stating that the general failure of the overall court surface is primarily due to ***poor subsurface drainage with the surrounding overland flow contributing to occasional water ponding in many areas of the court surfaces.*** The report clearly suggests that ***'.....the best option to remedy the root causes of the problemshould be to enhance the drainage and to strengthen the pavement. This will involve replacing some or all of the pavements'***.

From our own observations of the site and guided by our experience having worked on over 200 tennis facility developments nationally we would strongly support the above finding proposing that full reconstruction of the court bases and a new acrylic playing surface remains the most cost effective option moving forward to remove the ongoing burden to all stakeholders of future costly resurfacing obligations. Interim 'short-term' fixes of crack-filling, grinding and repainting that do not address the root cause(s) of the problem are deemed to be a wasteful and ineffective use of available financial resources.

SITE CONTEXT REVIEW - FUTURE EXPANSION and INTEGRATION

A key consideration for this masterplan is to understand the constraints imposed by the current lease boundaries of the site and the impact upon the potential development or rearrangement of the court configuration in future. We are advised that any future development of the GTC should not go beyond the lease boundaries at this time primarily for reasons of feasibility and difficulties in obtaining the necessary approvals.

We have however considered potential integration opportunities that could exist beyond the site's northern boundary where community activities abound on a regular basis by way of Market Days on Mindil Beach and whether some form of future integration with this precinct could be accommodated and capitalised upon to potentially improve business at GTC and take advantage of the site's key location characteristics.

The recommended masterplan option provides for this opportunity.

In addition, if the level of player participation increases at GTC to a point that warrants an increase in court numbers the possibility of site expansion in the future to the north for 2 additional courts can be physically achieved (although land ownership / lease arrangements would need to be addressed). This is demonstrated on the Nearmap image overleaf.



Potential Future
2 x Court Expansion

Potential interconnectivity with
Mindi Beach Markets

GTC Clubhouse

GTC Vehicle / Pedestrian Entry

Sky City Entry

GILRUTH
AVE

GARDENS TENNIS COMPLEX DARWIN – SITE CONTEXT (EXISTING)

PROJECT BRIEF and STAKEHOLDER CONSIDERATIONS

Key stakeholder inputs discussed with SportDev within the masterplan review included:

Court Layout Improvements

- Review the immediate future of courts 1 and 2
- Review court configuration and court numbers to achieve tennis facility 'best practice'
- Review court condition and options to achieve player / participant safety
- Consider improved circulation between courts
- Review extent of shade / shade structures
- Review associated tennis court lighting layout
- Consider covering court options for courts 1 and 2
- Consider provisions for Hot Shots to be included at the facility

Clubhouse Modifications

- Improve efficiencies in operation for Pro-Shop staff by:
 - rearranging the Reception / Pro-Shop ensuring clubroom visibility
 - improving / increasing product display space opportunities
 - improving connectivity with patrons via the external servery
 - creating increased kitchen and storage areas adjacent reception
- Improve Clubhouse Entry and hitting wall location and orientation
- Improve usability of clubhouse spaces by members and other clients of GTC
- Consider after-hours access and egress.
- Resolve disabled access and Building Code of Australia compliance issues

We understand that the above considerations are not exhaustive but reflect the main concerns of stakeholders associated with the GTC.

Courts 1 and 2

Regardless of which overall masterplan option is selected or further investigated what is common to each option is the immediate need to reconstruct these two courts to eliminate possible public safety risks as a result of an unsafe playing surface. This position is strongly represented in all due diligence investigations.

To improve the overall viability and usability of the tennis complex a permanent roof / shade structure should be considered for these courts. Such a structure would facilitate daylong access for social players, seniors, school groups, tourists / visitors etc. that are otherwise unable to use the courts due to sun intensity. All masterplan options include this recommendation which in addition provides a greater percentage of shade on the site and improves viewing conditions for parents and spectators alike. A roof covering will provide coaching staff with greater flexibility and the opportunity to use the courts all year round day and night (or as long as practically possible) for both group and private coaching, running Hot Shots and Cardio Tennis Programs etc. Covering courts 1 and 2 with a permanent shade structure is also likely to extend the lifespan of the playing surface and reduce the requirement for ongoing court maintenance.

TENNIS FACILITY DESIGN – ‘BEST PRACTICE’ CONSIDERATIONS

‘Best practice’ in respect of tennis facility design seeks to integrate the following key elements:

1. The Number, Configuration and Expansion potential of tennis courts
2. Spectator access, circulation and viewing opportunities
3. Clubhouse planning and design supporting the required management model

The intent of this masterplan is to bring together a recommended combination of these objectives in the context of GTC to create a plan for longevity for the site that will benefit the interests of tennis in the NT both as a supporting complex to the soon to be constructed regional tennis centre at Mararra but also as a stand-alone major community tennis facility with on-going health and wellbeing benefits to club members, competitive and social players alike.

A 2-court module planning philosophy is endorsed by Tennis Australia within their ‘*National Tennis Facility Planning and Development Guide*’ and where possible should be integrated into the planning of all new (and where possible) existing tennis facilities. Such implementation extends from local club level facilities to full sub-regional, regional and State and Territory level facilities of 4 courts or more.

The following functional and operational advantages are achieved with this form of court layout:

1. Ball control / collection convenience for both players and coaches with divided truncated fencing
2. Greater efficiencies / reduced running costs are achieved through the court lighting configuration
3. Opportunities to improve circulation between courts by separating the courts and creating greater opportunities for more seating and shaded areas.
4. Better spectator viewing opportunities via the lower side truncated fencing
5. Flexible hiring opportunities for groups / teams of players etc is enhanced
6. Competition training benefits for teams having a dedicated space to train

For both club, social and competition play multiple groupings of 2 court modules also provides for easier visual control of match progress from the clubhouse Pro-Shop.

Recent examples of tennis centres either completed or in the design phase using the 2 court planning philosophy include:

- Mararra Tennis Centre – NT (15 courts)
- Memorial Drive - Adelaide SA - Proposed Stage 1 Redevelopment (12 courts)
- State Tennis Centre -Tennis West – WA (20 courts)
- Playford Tennis Centre – Adelaide SA (22 courts)

CONCEPT MASTERPLAN OPTIONS

Three (3) concept site redevelopment options for the GTC Site with associated commentary are presented herein for consideration. Option 1 is the only option that provides a site layout consistent with TA's 'best practice' considerations as outlined above.

Where possible the 3 options address:

- Geotechnical considerations of the site regarding poor drainage / base conditions through an overall recommendation for court reconstruction
- Establishing longevity for the GTC through court layout modifications
- To a varying degree improving site circulation, access and viewing opportunities for participants
- Opportunities for Hot Shots Court integration
- Establishing a clear project staging hierarchy for consideration
- Site expansion and integration opportunities with land to the north of the site
- Improving the configuration of the clubhouse to improve operational efficiencies
- Introducing a shade structure covering to courts 1 and 2 to improve facility usage and services to members and other clients of GTC

A review of the strategic advantages and anticipated benefits to the Club and its stakeholders is presented following the summary of each option.

OPTION 1 – 10 Court Option (refer overleaf)

Option 1 presents a concept reducing the existing number of courts from 12 to 10 by reconfiguring them into five (5) two court modules reflecting TA 'best practice' recommendations. The concept includes:

1. a shade structure / cover to courts 1 and 2 configuring them as 'show-courts' at the front of the complex
2. all courts with dividing / truncated fencing
3. all courts with shaded viewing structures and / or seating within the circulation walkways and / or between all courts
4. all courts fully lit to Australian standards
5. opportunity for Hot Shots 'blended lines' to any 2 court module
6. an approximately 10m wide north / south 'central circulation spine' fully landscaped with paved walkways and grassed / planting areas enabling easy access from the clubhouse to all courts, a central large gazebo / shade structure with seating, water coolers, possible coach equipment storage etc.
7. two smaller shaded seating structures within the main spine
8. potential for a strong north / south link and controlled connectivity / flexibility to the northern land parcel and Mindil Beach markets precinct.
9. a formalised carpark and revised entry point into the existing Clubhouse.

NOM 10.0M WIDE CENTRAL WALKWAY SPINE / LANDSCAPED WITH SEATING SHELTERS

4.0M WIDE PAVED WALKWAY WITH SMALL SHADE STRUCTURES / SEATING

GRASSED / LANDSCAPED ZONES BETWEEN COURTS AND WALKWAYS

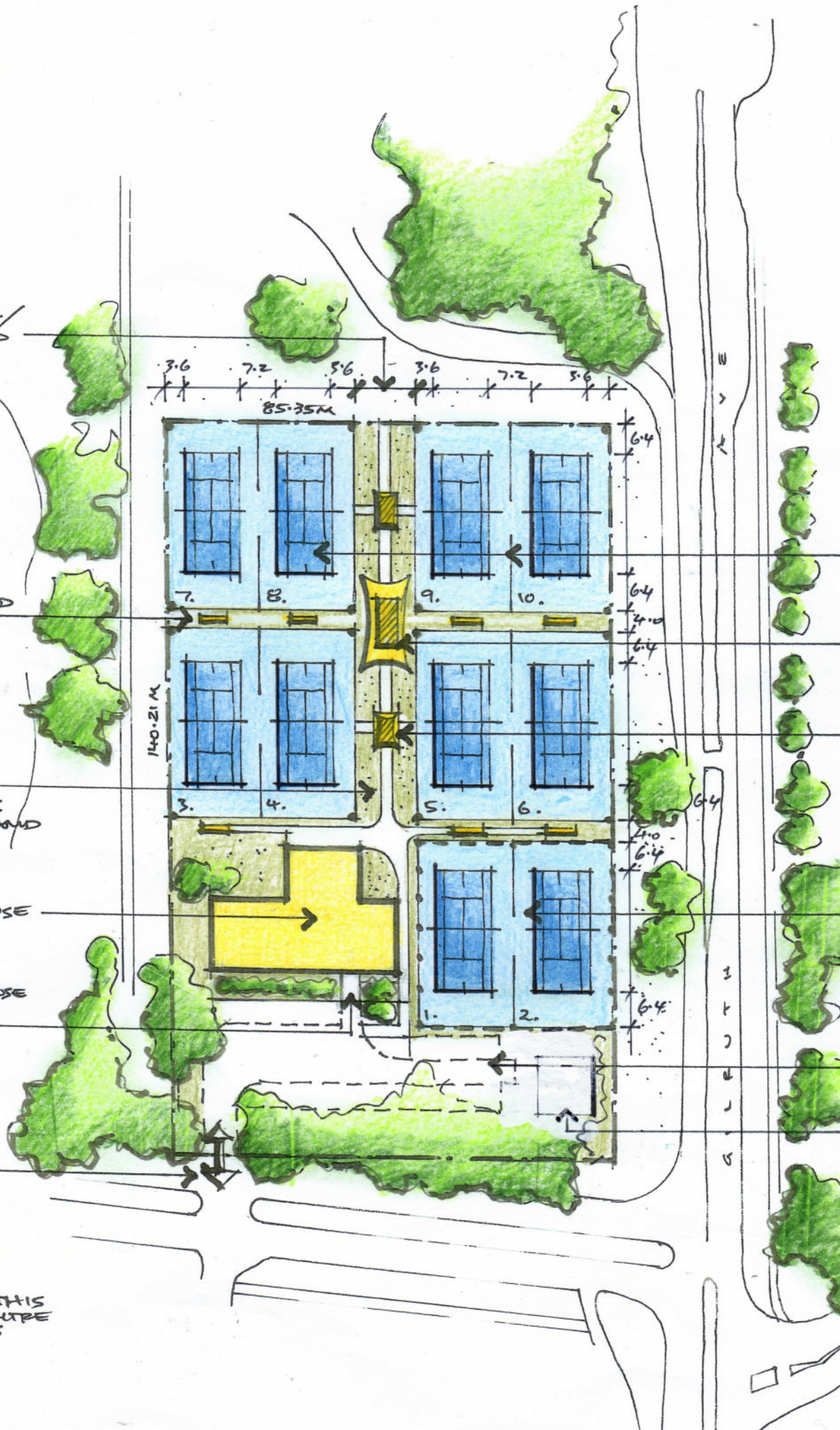
EXISTING CURHOUSE

REVISED DIRECT ENTRY TO CURHOUSE FROM CARPARK

EXISTING SITE ENTRY / EXIT

NOTE:

ALL COURTS IN THIS OPTION HAVE CENTRE DIVIDING FENCES



2 X 2 COURT MODULES ACRYLIC HARD COURTS TO ITF/TA COMPLIANCE STANDARDS

CENTRAL 'LARGE' SHADE STRUCTURE AND SEATING UNDER

'SMALLER' SHADE STRUCTURE / SEATING

2 X 2 COURT MODULES ACRYLIC HARD COURTS TO ITF/TA COMPLIANCE STANDARDS

COURTS 1 + 2 COVERED WITH SHADE STRUCTURE WITH DIVIDING FENCES.

EXISTING CARPARK TO BE EXTENDED / FORMAUDED.

* HITTING WALL TO BE RECONSTRUCTED / RELOCATED

PRELIMINARY

**GARDENS TENNIS COMPLEX DARWIN
CONCEPT SITE MASTERPLAN - OPTION 1**

FOR DISCUSSION ONLY

June 2016

1:1000 Approx @ A3



With the introduction of the new Marrara complex which focusses on efficiency and ease of access around court modules the improvements suggested within Option 1 for GTC will doubly ensure that the facility is well received ‘comparatively’ by players and spectators.

We also believe that a masterplan strategy that includes a recommendation for covering courts 1 and 2 will not only increase the economic viability of the GTC but will create the opportunity to add significant value ‘visually’ to the Sky City Casino entry area through an innovative shade structure design reflecting the latest in shade structure technology. (We attach at **Appendix C** an indication of what such a structure might look like).

OPTION 2 – 11 Court Option (refer overleaf)

Option 2 presents a concept reducing the current number of courts by 12 to 11 providing a more restricted level of amenity than Option 1 including:

1. a shade structure / cover to courts 1 and 2
2. dividing / truncated fencing provided to 6 courts only
3. Limited shade and viewing structures and less efficient site circulation / walkways
4. all courts would be fully lit to Australian Standards requiring perimeter light pole positioning to the 5 court northern enclosure and corner lighting to the middle court modules
5. a nom 10m wide north / south central landscaped zone with paved walkways and grassed / planting areas providing access from the Clubhouse to the northern 5 courts, a central large gazebo / shade structure with seating, water coolers, possible coach equipment storage etc.
6. a formalised carpark and revised entry point into the existing Clubhouse.

There are a number of disadvantages with Option 2 compared with Option 1 including:

- Not adopting the best practice 2-court layout recommended by Tennis Australia across the whole complex with contingent loss of amenity and operational efficiency
- Having more limited shade and viewing arrangements
- Not being able to develop a central walkway linking the northern bank of courts to the northern land parcel due to east / west site boundary constraints and required court separation dimensioning limiting possible future integration with the Mindil Beach markets
- No access (other than ‘through’ the back row of 5 courts) to a future 2 court expansion to the north of the site...This is considered to be a poor planning approach.





PRELIMINARY

**GARDENS TENNIS COMPLEX DARWIN
CONCEPT SITE MASTERPLAN - OPTION 2**

FOR DISCUSSION ONLY

June 2016

1:1000 Approx @ A3

SPORTDEV
Masterplanning • Architectural Concept Design • Project Facilitation

OPTION 3 – 12 Court Option (refer overleaf)

Option 3 maintains current court numbers at 12 with some minor variations in court configuration. This concept includes:

- a shade structure / cover to courts 1 and 2
- limited shade and viewing structures within the circulation walkways providing less than satisfactory site circulation and amenity
- all courts are fully lit to Australian Standards requiring perimeter light pole positioning to the 5 court northern enclosure and corner lighting to the middle court modules
- a formalised carpark and revised entry point into the existing Clubhouse.

Option 3, in our opinion, will limit the potential growth of the GTC as a recognised tennis facility in Darwin and potentially prohibit the centre from holding future major events both in isolation and / or in a support role for the future Mararra facility primarily as a result of:

- A court layout leading to significant operational and event management inefficiencies
- A significant reduction in shaded spectator viewing areas
- Limited opportunities for 'bump-in' temporary grandstand seating for major events
- Lack of a suitable linkage with Mindil Beach and restricted access to any future court expansion to the north
- Less efficient lighting set-out, design and performance opportunities

COURT SURFACE SELECTION

As a Grand Slam surface acrylic on hardcourt provides the most benefit for tennis / junior development and competition in this country both in respect of flexibility and variability in the provision of tennis programs. This surface in addition offers greater benefits primarily in terms of maintenance / longevity / replacement and practicality (particularly for the Darwin climate.)

In respect of SFAG (Sand Filled Artificial Grass) both Tennis Australia and Tennis NT are not in support. For this reason as well as in consideration of the club's mission to increase tennis participation and promote player development in the region we suggest that SFAG is not considered and that acrylic hardcourt only is installed at the GTC.

Adopting an acrylic surface with fully compliant courts will present an ability for Darwin to attract an additional number of tournaments which can be held across both the Marrara, GTC (and possibly Palmerston) facilities. One of the key directives outlined within the Tennis NT strategy indicated that there should be a network of tennis facilities that are able to collaborate with each other in a variety of areas.

Developing GTC with ITF compliant acrylic hardcourts would see Darwin well placed in achieving this vision.





PRELIMINARY

**GARDENS TENNIS COMPLEX DARWIN
CONCEPT SITE MASTERPLAN - OPTION 3**

FOR DISCUSSION ONLY

June 2016

1:1000 Approx @ A3

CLUBHOUSE DESIGN AND AMENITY CONSIDERATIONS

As mentioned earlier 'best practice' in tennis facility development (new or existing) requires, in addition to site layout and court configuration, consideration of 'clubhouse planning and design' to support the management model in place for each facility.

In the case of the GTC a 10-12 court complex is classified by Tennis Australia as a 'Sub-Regional Facility' which ideally should accommodate the following amenities:

1. Sanitary Facilities for males, females and people with a disability (changerooms) with combined internal and external access to cater for 'after hours' access if required
2. Access for people with a disability to all areas including courts
3. Café / kiosk / servery to a covered outdoor area and multi-purpose space
4. Pro-Shop (with stringing area) integrated with café / tennis office
5. Multi-purpose clubroom space (to accommodate approximately 50 people in a seated arrangement)
6. Up to 2 multi-Purpose rooms (capable of seating 12 people in each room) opening onto the main open space and having visibility to courts
7. Tennis Office (1 Staff)
8. Admin Office (1 Staff)
9. Adequate storage (including external coach's access)
10. Covered viewing areas (i.e. verandahs)
11. Small gym space (Free weights / stretching area)...if possible
12. Shaded playground / BBQ area
13. Simple controlled entry point from carparking
14. Open clubroom space

The Inside Edge Facility Audit suggested that...*'the spending of between \$60k and \$100k on internal building reconfiguration and refurbishment works would make a significant improvement for the presentation, usage and functionality of the building'*.

Following our inspection several shortfalls were identified where the clubhouse layout currently limits or restricts opportunities for management / coaching staff to better operate the facility.

These shortfalls include:

- The size and layout of the Pro-Shop / Kiosk with no climate control, limiting the range of services able to be offered to patrons and potential workplace health and safety issues for people working in the area.
- An 'unclear' facility entry via the side of the building
- Lack of adequate dedicated storage space for coaches and their equipment
- Lack of kitchen facilities within the main Pro-Shop and servery area
- Lack of a dedicated meeting room or tennis office
- Restricted visibility for retail goods e.g. racquet displays etc.
- Building Code of Australia (BCA) compliance issues in respect of access for people with a disability including counter heights etc.

With reference to **Appendix C** we present an indicative concept floor plan showing possible alterations and additions that could address the above shortfalls.

We note that this concept plan has been submitted as part of a NT Government FACE (Facilities and Capital Equipment) Grant Program Application for 2016-17 seeking funding for the 'Phase 1 Scope of Work' as presented on the concept plan. This scope has been formally costed by a Quantity Surveyor to be in the order of \$85,000.00+GST to \$90,000.00+GST.

Both Pro-Shop and Kiosk modifications along with a more centrally located entry point from the carpark will greatly improve the functionality and efficiency of the facility through greater visual exposure to Pro-Shop products and displays and provide better work-flow arrangements overall.

We would also suggest that any proposed modifications to the carpark include the relocation of the hitting wall (as shown on all masterplan options) to ensure that the location is safe and easily accessible for users.

COST ESTIMATE – OVERALL SUMMARY

Chris Sale Consulting, a Qualified Quantity Surveyor was commissioned for this masterplanning review to provide a 'Preliminary Order of Cost' for each of the proposed Options 1,2 and 3 under the following assumption:

Adoption of the Masterplanning and Geotechnical Engineer recommendation for Full reconstruction of all Courts (including Courts 1 and 2 with shade structure), new fencing, lighting and acrylic surfacing along with landscaping and shade.

The estimate summary below is based upon undertaking the works in full. An indicative cost estimate reflecting suggested staging options is presented in the next section of this document.

Recommended Scope of Work	Option 1	Option 2	Option 3
Full Reconstruction of All Courts	2,587,940.00	2,711,140.00	2,759,640.00
Professional Fees @10%	258,794.00	271,114.00	275,964.00
Contingencies allowances 7.5%	194,095.50	203,335.50	206,973.00
Estimated Option Project Totals (Ex GST)	\$3,040,829.50	\$3,185,589.50	\$3,363,000.00

Please note that the cost estimate of approximately \$85,000.00+GST for recommended renovations to the Clubhouse are EXCLUDED from the above costings. (A detailed Cost Estimate Report (which includes the Clubhouse estimate) is included in **Appendix A** for reference.)

STAGING PLAN and COST ESTIMATES

We recommend that to ensure the ongoing viability and operation of the centre the facility should remain open during court reconstruction works. We therefore suggest that the works are planned into 3 Stages and provide not only flexibility for funding purposes but safe, easy and clear access / delineation between the enclosures while maintaining continuity of business.

Option 1 with defined 5 x 2 court modules provides the most practical site layout for staging and constructability as well as being the most flexible option for project funding either by module or in groups of modules.

For simplicity we have classified the court modules as:

- Courts 1 and 2 - Enclosure 1
- Courts 3 and 4 – Enclosure 2
- Courts 5 and 6 – Enclosure 3
- Courts 7 and 8 – Enclosure 4
- Courts 9 and 10 – Enclosure 5

A suggested staging plan of reconstruction works to support continued business is:

- Stage 1 – Enclosure 1 (including shade structure)
- Stage 2 – Enclosures 3 and 5 (including demolition of current courts 5 and 10)
- Stage 3 – Enclosures 2 and 4

From a programming point of view the time frame to construct one module (i.e. 2 courts with new fencing and lighting and on the assumption that the site is accessible with little or no time lost with inclement weather) is approximately 8 weeks per module. This will of course also be dependent upon the condition and location of the existing lighting reticulation and modifications that would need to be completed. We show below staging and cost estimates based upon Option 1 and we've assumed that all professional fees and contingencies are applied separately for each stage.

STAGE 1

As highlighted above to eliminate public risk the reconstruction of courts 1 and 2 should be undertaken immediately. To ensure a safe construction site the designated entry to the Clubhouse should be redirected through the proposed central doorway from the carpark and not via the current eastern side entry. The estimated cost to complete Stage 1 (including a shade structure) is presented below:

Enclosure 1: (Courts 1 and 2 Reconstruction and Shade Structure)	Cost (+GST)
Removing existing courts and base and reconstructing including fencing and lighting	290,000.00
Shade Structure over Courts 1 and 2	693,000.00
Sub-Total Estimate (Ex GST)	983,000.00
Professional Fees @10%	98,300.00
Contingencies allowances 7.5%	73,725.00
Estimated Stage 1 Project Total (Ex GST)	\$ 1,155,025.00

STAGE 2

The second stage of works includes enclosures 3 and 5 to the east of the site as well as the landscaped spine and nominated shade structures. It is suggested that with the 2 covered courts completed in Stage 1 and with a safe central walkway created between enclosures 3 and 5 the GTC would be able to remain in operation while also catering for a future link to the northern land parcel.

This second stage would incorporate 'making good' to the existing courts 4 and 8 and modifications to the associated court lighting. (Please note that this recommendation is dependent upon future advice from a Sports Lighting Specialist Contractor / Engineer).

The estimated cost to complete Stage 2 is presented below:

Enclosures 3 and 5: (Courts 5,6,9 and 10)	Cost (+GST)
Removing existing courts and base and reconstructing including fencing and lighting	580,000.00
Central landscaped spine / Soft landscaping	35,000.00
Shade structures	169,500.00
Walkways between courts / making good to courts 4 and 8	90,640.00
Hitting Wall	28,000.00
Carpark reconstruction (allowance)	100,000.00
Sub-Total Estimate (Ex GST)	1,003,140.00
Professional Fees @10%	100,314.00
Contingencies allowances 7.5%	75,235.50
Estimated Stage 2 Project Total	\$1,178,689.50

STAGE 3

A third stage of work would be to complete Enclosures 2 and 4 while protecting the previously established central landscaped spine. The estimated cost to complete Stage 3 is presented below:

Enclosures 2 and 4: (Courts 3,4,7 and 8)	Cost (+GST)
Removing existing courts and base and reconstructing including fencing and lighting	580,000.00
Landscaped spine / making good allowance	50,000.00
Sub-Total Estimate (Ex GST)	630,000.00
Professional Fees @10%	63,000.00
Contingencies allowances 7.5%	47,250.00
Estimated Stage 3 Project Total	\$ 740,250.00

These estimates are exclusive of the following:

- GST
- Contaminated Soil Removal
- Escalation in Costs for an extended period of time
- Land and financing costs
- Special footings

MASTERPLAN - RECOMMENDATION

Three (3) Site Masterplan Options have been presented for the Gardens Tennis Complex.

OPTION 1 (10 COURTS) in our view clearly satisfies the 'best practice' 2 court module configuration as endorsed by Tennis Australia bringing with it contingent gains in efficiency and amenity for the site. We present this as '**the preferred option**' with the significantly more efficient court configuration, improved amenity for players / spectators and with 2 covered courts the potential for improvement in the centre's economic viability in future.

The Option is based upon grouping 5 x 2 court modules which:

- Aligns the venue with recognised 'best practice' in tennis facility design nationally.
- Offers greater flexibility for the Club, Coaches and their respective competition, social and coaching programs with opportunities for Community access
- Offers a more efficient lighting layout which in turn reduces ongoing running costs
- Provides greater flexibility for the future staging and funding of refurbishment works by limiting the amount of disruption that would impact upon existing court operations.

With an attractive, centrally landscaped circulation spine the opportunity to hold community / coaching events / demonstrations etc. under shade, covered spectator seating with viewing to all courts is available and will most definitely provide a unique point of difference to other tennis venues particularly as a supporting venue for the proposed Mararra Tennis Complex in both 'event' and 'non-event' mode.

The central spine offers the additional advantage of providing greater spectator viewing space by way of 'bump-in' temporary grandstand seating opportunities and the potential for future integration with the northern land parcel and Mindil Beach Markets precinct.

In terms of total cost Option 1 is costed as the cheapest while life-cycle maintenance costs are reduced due to the fewer number of courts to maintain than that represented in options 2 and 3.

In terms of total court stock there is the potential development expansion for a future two (2) additional court modules north of enclosure 4.

OPTION 2 (11 COURTS) creates 3 x 2 court modules with 5 courts remaining to the northern row. This option is considered **less desirable** as the northern 5 courts are unable to support dividing fences (a TA recommended planning preference) due to space restrictions. The general pedestrian circulation within the site does not offer the same advantages nor flexibility of use of the site as does Option 1.

OPTION 3 (12 COURTS) although once again a basically complying court layout, Option 3 is considered the **least preferred option** due to the absence of necessary shaded spectator and player seating zones (so necessary in Darwin) and a centrally landscaped north / south circulation spine that offers the flexibility of use for the site as noted above.

Lighting inefficiencies would also be evident with both the 3 and 5 court enclosures as shown in both Options 2 and 3 while a lack of 'bump-in' temporary grandstand seating space limits the venue's future opportunities for staging tournaments / events and therefore potential revenue streams.

In summary the results and recommendations of both the facility / court audit and geotechnical investigation point clearly at the only practical option which is to fully reconstruct all tennis courts in order to eliminate the subsurface drainage issues that have severely impacted the playing surface of all courts and their immediate surrounds.

To this end and to better align the facility layout with the strategic objectives of the GTC we recommend that the proposed Site Masterplan Option 1 be adopted entailing a staged reconstruction and redefined layout of the courts in a manner that reflects current tennis facility 'best practice'.

APPENDIX A – PRELIMINARY COST ESTIMATES

Elemental Report

Project: Gardens Tennis Complex Darwin

Building: Gardens Tennis Complex Darwin

Project No: 161143

Details: Order of Cost Option 1 August '16

GFA: 0

Elem. Code	Elemental Description	% B.C.	Cost/m2	Sub total	Mark Up %	Elemental Total
	Overall	0.00%		0		0
1	Walkways between existing Courts	3.15%		99,440		99,440
2	New Courts 1 and 2 including lighting and shade cover	31.11%		983,000		983,000
3	New Courts 3-10 inclusive including lighting - no shade cover	36.71%		1,160,000		1,160,000
4	Shade Structures, Viewing Shelters etc	5.46%		172,500		172,500
5	Soft Landscaping	1.43%		45,000		45,000
6	Hitting Wall	0.89%		28,000		28,000
7	PC Sum for extending and formalising existing front car park and entry to Clubhouse	3.17%		100,000		100,000
8	Clubhouse Alterations	2.69%		85,000		85,000
	Subtotal	84.59%				2,672,940
9	Professional Fees at 10 percent	8.46%		267,294		267,294
10	Contingencies allowances 7.5 percent	6.98%		220,500		220,500
11	Rounding	-0.02%				-734
	Total (Excl GST)	100.00%				3,160,000

Elemental Report

Project	Gardens Tennis Complex Darwin	Building:	Gardens Tennis Complex Darwin
Project No:	161143	Details	Order of Cost Option 1 August '16
GFA:	0		

Code	Description	Quantity	Unit	Rate	Total
------	-------------	----------	------	------	-------

Overall

	This Cost Plan provides an Order of Cost Estimate for proposed Option 1 redevelopment at Gardens Tennis Complex Darwin as depicted on Sportsdev Concepts June 2016				
	The following costs are not included:				
	- GST				
	- Contaminated soil removal				
	- Escalation in costs for an extended period of time				
	- Land and Financing costs				
	- Special footings				
Overall Total					\$ 0

1 Walkways between existing Courts

1	Paving between existing courts 2000 wide - 4000 wide	904	m2	110.00	99,440
Walkways between existing Courts Total					\$ 99,440

2 New Courts 1 and 2 including lighting and shade cover

2	New Courts 1 and 2 including removing existing courts and base and reconstructing including fencing and lighting	2	no	145,000.00	290,000
3	Shade Structure over Courts 1 and 2	1,260	m2	550.00	693,000
New Courts 1 and 2 including lighting and shade cover Total					\$ 983,000

3 New Courts 3-10 inclusive including lighting - no shade

4	New Courts 3-10 inclusive including removing existing courts and base and reconstructing including fencing and lighting	8	No	145,000.00	1,160,000
New Courts 3-10 inclusive including lighting - no shade cover Total					\$ 1,160,000

4 Shade Structures, Viewing Shelters etc

5	Small shade structure and seating	7	no	7,500.00	52,500
6	Medium shade structure and seating	2	no	17,500.00	35,000
7	Large shade structure to Central area approx 9 metres x 15 metres	1	no	75,000.00	75,000
8	Seating allowance		item		10,000
Shade Structures, Viewing Shelters etc Total					\$ 172,500

Elemental Report

Project	Gardens Tennis Complex Darwin	Building:	Gardens Tennis Complex Darwin
Project No:	161143	Details	Order of Cost Option 1 August '16
GFA:	0		

Code	Description	Quantity	Unit	Rate	Total
5	<u>Soft Landscaping</u>				
9	PC Sum for landscaping including Central Space and adjacent to Courts and Existing Clubhouse		item		45,000
Soft Landscaping Total					\$ 45,000
6	<u>Hitting Wall</u>				
10	New hitting wall comprising rendered 200 thick masonry wall 6 metres long x 2.4 metres high with footing and 8metrex 12 metre acrylic surfaced bitumen surface to one side	1	no	25,000.00	25,000
11	Demolish existing hitting wall etc		item		3,000
Hitting Wall Total					\$ 28,000
7	<u>PC Sum for extending and formalising existing front carpark</u>				
12	PC Sum approx 1000m2		item		100,000
PC Sum for extending and formalising existing front carpark and entry to Clubhouse Total					\$ 100,000
8	<u>Clubhouse Alterations</u>				
13	Alterations and renovations to existing Clubroom as indicated on Concept Floor Plan		item		85,000
Clubhouse Alterations Total					\$ 85,000
9	<u>Professional Fees at 10percent</u>				
14	Professional Fees at 10percent		item		267,294
Professional Fees at 10percent Total					\$ 267,294
10	<u>Contingencies allowances 7.5percent</u>				
15	Contingencies allowances 7.5 percent				220,500
Contingencies allowances 7.5percent Total					\$ 220,500
Construction Total					\$ 3,160,734

Elemental Report

Project	Gardens Tennis Complex Darwin	Building:	Gardens Tennis Complex Darwin
Project No:	161143	Details	Order of Cost Option 1 August '16

Code	Description	Quantity	Unit	Rate	Total
------	-------------	----------	------	------	-------

Elemental Report

Project: Gardens Tennis Complex Darwin

Building: Gardens Tennis Complex Darwin

Project No: 161143

Details: Order of Cost Option 2 August '16

GFA: 0

Elem. Code	Elemental Description	% B.C.	Cost/m2	Sub total	Mark Up %	Elemental Total
	Overall	0.00%		0		0
1	Walkways between existing Courts	2.74%		90,640		90,640
2	New Courts 1 and 2 including lighting and shade cover	29.70%		983,000		983,000
3	New Courts 3-11 inclusive including lighting - no shade cover	39.43%		1,305,000		1,305,000
4	Shade Structures, Viewing Shelters etc	5.13%		169,500		169,500
5	Soft Landscaping	1.06%		35,000		35,000
6	Hitting Wall	0.85%		28,000		28,000
7	PC Sum for extending and formalising existing front car park and entry to Clubhouse	3.03%		100,000		100,000
8	Clubhouse Alterations	2.57%		85,000		85,000
	Sub-Total	84.48%		2,796,140		2,796,140
9	Professional Fees at 10 percent	8.45%		279,614		279,614
10	Contingencies allowances 7.5 percent	6.98%		231,000		231,000
11	Rounding	0.10%		3,246		3,246
	TOTAL (excluding GST)	100.00%		3,310,000		3,310,000

Elemental Report

Project: Gardens Tennis Complex Darwin **Building:** Gardens Tennis Complex Darwin
Project No: 161143 **Details:** Order of Cost Option 2 August '16
GFA: 0

Code	Description	Quantity	Unit	Rate	Total
------	-------------	----------	------	------	-------

Overall

	This Cost Plan provides an Order of Cost Estimate for proposed Option 2 redevelopment at Gardens Tennis Complex Darwin as depicted on Sportsdev Concepts June 2016				
	The following costs are not included:				
	- GST				
	- Contaminated soil removal				
	- Escalation in costs for an extended period of time				
	- Land and Financing costs				
	- Special footings				
Overall Total					\$ 0

1 Walkways between existing Courts

1	Paving between existing courts 2000wide - 4000 wide	824	m2	110.00	90,640
Walkways between existing Courts Total					\$ 90,640

2 New Courts 1 and 2 including lighting and shade cover

2	New Courts 1 and 2 including removing existing courts and base and reconstructing including fencing and lighting	2	No	145,000.00	290,000
3	Shade Structure over Courts 1 and 2	1,260	m2	550.00	693,000
New Courts 1 and 2 including lighting and shade cover Total					\$ 983,000

3 New Courts 3-11 inclusive including lighting - no shade

4	New Courts 3-11 inclusive including removing existing courts and base and reconstructing including fencing and lighting	9	No	145,000.00	1,305,000
New Courts 3-11 inclusive including lighting - no shade cover Total					\$ 1,305,000

4 Shade Structures, Viewing Shelters etc

5	Viewing shelter	8	No	4,000.00	32,000
6	Small shade structure and seating	7	No	7,500.00	52,500
7	Large shade structure to Central area approx 9metres x 15 metres	1	No	75,000.00	75,000
8	Seating allowance		Item		10,000
Shade Structures, Viewing Shelters etc Total					\$ 169,500

Elemental Report

Project	Gardens Tennis Complex Darwin	Building:	Gardens Tennis Complex Darwin
Project No:	161143	Details	Order of Cost Option 2 August '16
GFA:	0		

Code	Description	Quantity	Unit	Rate	Total
5	<u>Soft Landscaping</u>				
9	PC Sum for landscaping including Central Space and adjacent to Courts and Existing Clubhouse		Item		35,000
Soft Landscaping Total					\$ 35,000
6	<u>Hitting Wall</u>				
10	New hitting wall comprising rendered 200 thick masonry wall 6 metres long x 2.4 metres high with footing and 8metrex 12 metre acrylic surfaced bitumen surface to one side	1	No	25,000.00	25,000
11	Demolish existing hitting wall etc		Item		3,000
Hitting Wall Total					\$ 28,000
7	<u>PC Sum for extending and formalising existing front carpark</u>				
12	PC Sum approx 1000m2		Item		100,000
PC Sum for extending and formalising existing front carpark and entry to Clubhouse Total					\$ 100,000
8	<u>Clubhouse Alterations</u>				
13	Alterations and renovations to existing Clubroom as indicated on Concept Floor Plan		Item		85,000
Clubhouse Alterations Total					\$ 85,000
9	<u>Professional Fees at 10percent</u>				
14	Professional Fees at 10percent		Item		279,614
Professional Fees at 10percent Total					\$ 279,614
10	<u>Contingencies allowances 7.5 percent</u>				
15	Contingencies allowances 7.5 percent				231,000
Contingencies allowances 7.5 percent Total					\$ 231,000
Construction Total					\$ 3,306,754

Elemental Report

Project	Gardens Tennis Complex Darwin	Building:	Gardens Tennis Complex Darwin
Project No:	161143	Details	Order of Cost Option 2 August '16

Code	Description	Quantity	Unit	Rate	Total
------	-------------	----------	------	------	-------

Elemental Report

Project: Gardens Tennis Complex Darwin

Building: Gardens Tennis Complex Darwin

Project No: 161143

Details: Order of Cost Option 3 August '16

GFA: 0

Elem. Code	Elemental Description	% B.C.	Cost/m2	Sub total	Mark Up %	Elemental Total
	Overall	0.00%		0		0
1	Walkways between existing Courts	2.70%		90,640		90,640
2	New Courts 1 and 2 including lighting and shade cover	29.23%		983,000		983,000
3	New Courts 3-12 inclusive including lighting - no shade cover	43.12%		1,450,000		1,450,000
4	Shade Structures, Viewing Shelters etc	2.38%		80,000		80,000
5	Soft Landscaping	0.84%		28,000		28,000
6	Hitting Wall	0.84%		28,000		28,000
7	PC Sum for extending and formalising existing front car park and entry to Clubhouse	2.98%		100,000		100,000
8	Clubhouse Alterations	2.53%		85,000		85,000
	Subtotal	84.59%				2,844,640
9	Professional Fees at 10 percent	8.46%		284,464		284,464
10	Contingencies allowances 7.5 percent	6.98%		234,700		234,700
11	Rounding	-0.02%		-804		-804
	Total (Excl GST)	100.00%				3,363,000

Elemental Report

Project Gardens Tennis Complex Darwin	Building: Gardens Tennis Complex Darwin
Project No: 161143	Details Order of Cost Option 3 August '16
GFA: 0	

Code	Description	Quantity	Unit	Rate	Total
Overall					
	This Cost Plan provides an Order of Cost Estimate for proposed Option 3 redevelopment at Gardens Tennis Complex Darwin as depicted on Sportsdev Concepts June 2016				
	The following costs are not included:				
	- GST				
	- Contaminated soil removal				
	- Escalation in costs for an extended period of time				
	- Land and Financing costs				
	- Special footings				
Overall Total					\$ 0

1 Walkways between existing Courts

1	Paving between existing courts 2000wide - 4000 wide	824	m2	110.00	90,640
Walkways between existing Courts Total					\$ 90,640

2 New Courts 1 and 2 including lighting and shade cover

2	New Courts 1 and 2 including removing existing courts and base and reconstructing including fencing and lighting	2	no	145,000.00	290,000
3	Shade Structure over Courts 1 and 2	1,260	m2	550.00	693,000
New Courts 1 and 2 including lighting and shade cover Total					\$ 983,000

3 New Courts 3-12 inclusive including lighting - no shade

4	New Courts 3-12 inclusive including removing existing courts and base and reconstructing including fencing and lighting	10	No	145,000.00	1,450,000
New Courts 3-12 inclusive including lighting - no shade cover Total					\$ 1,450,000

4 Shade Structures, Viewing Shelters etc

5	Viewing shelter	7	no	4,000.00	28,000
6	Small shade structure and seating	7	no	6,000.00	42,000
7	Seating allowance		item		10,000
Shade Structures, Viewing Shelters etc Total					\$ 80,000

5 Soft Landscaping

Elemental Report

Project: Gardens Tennis Complex Darwin	Building: Gardens Tennis Complex Darwin
Project No: 161143	Details: Order of Cost Option 3 August '16
GFA: 0	

Code	Description	Quantity	Unit	Rate	Total
8	PC Sum for landscaping including Central Space and adjacent to Courts and Existing Clubhouse		item		28,000
Soft Landscaping Total					\$ 28,000

6 Hitting Wall

9	New hitting wall comprising rendered 200 thick masonry wall 6 metres long x 2.4 metres high with footing and 8metrex 12 metre acrylic surfaced bitumen surface to one side	1	no	25,000.00	25,000
10	Demolish existing hitting wall etc		item		3,000
Hitting Wall Total					\$ 28,000

7 PC Sum for extending and formalising existing front carpark

11	PC Sum approx 1000m2		item		100,000
PC Sum for extending and formalising existing front carpark and entry to Clubhouse Total					\$ 100,000

8 Clubhouse Alterations

12	Alterations and renovations to existing Clubroom as indicated on Concept Floor Plan		item		85,000
Clubhouse Alterations Total					\$ 85,000

9 Professional Fees at 10percent

13	Professional Fees at 10percent		item		284,464
Professional Fees at 10percent Total					\$ 284,464

10 Contingencies allowances 7.5 percent

14	Contingencies allowances 7.5 percent				234,700
Contingencies allowances 7.5 percent Total					\$ 234,700

Construction Total \$ 3,363,804

Elemental Report

Project Gardens Tennis Complex Darwin

Building: Gardens Tennis Complex Darwin

Project No: 161143

Details Order of Cost Option 3 August '16

Code	Description	Quantity	Unit	Rate	Total
------	-------------	----------	------	------	-------

APPENDIX B – SHADE STRUCTURE - COURTS 1 and 2

AUSTRALIA

14/15 John Duncan Drive
Varsity Lakes QLD
+61 7 5587 7000
info@fabritecture.com

USA

SINGAPORE
HONG KONG

www.fabritecture.com



IFAI proud member
INDUSTRIAL FABRIC ASSOCIATION INTERNATIONAL

In addition to its custom structures, Fabritecture supplies, delivers, and installs a range of pre-engineered solutions for requirements in sports, aviation, mining, remediation, civil works, and general industrial projects. Products are available for purchase by Global Fabric Structures or for rent by Allsite Structure Rentals.



ADELAIDE OVAL
ADELAIDE, AUSTRALIA



SYDNEY WILDLIFE WORLD
SYDNEY, AUSTRALIA

OUR UNIQUE FABRITECTURE VALUES

We take great pride in every aspect of a project; from the design, delivery, construction, after sales service and even the way we answer your call.

We constantly encourage new and alternative technologies, fabrication practices, installation methodology and more efficient methods of environmental sustainability.

We believe passionately in the design and construction of environmentally responsible tensile architecture and aim to constantly maximise opportunities for achieving technologies to meet existing environmental needs.

We adhere to stringent quality assurance practices, ensuring every project is completed to the highest quality standards.

Strict Health and Safety practices are followed without fail.

Our handpicked team of professionals, with a combined experience of over 100 years, are respectful, passionate, knowledgeable and committed to their jobs.

A dedicated Project Manager is always assigned to each project and available to discuss any matter of concern or to answer any questions at any stage of the project, providing our clients with unsurpassed project management expertise and commitment to service excellence.

We consistently exceed client expectations in the delivery of first-class creative fabric architecture. We understand the close connection between architecture, engineering and construction, ensuring our tensile fabric structures are built on functionality and attention to detail.

We never, ever forget that you trust us to realise your unique project dreams safely, on time, and on budget.

CUSTOM TENSILE ARCHITECTURE

Fabritecture is recognized as a global ground-breaker in the design and construction of tensile fabric structures.

Our fabric structures are designed and built to the strictest standards for safety and quality. Incorporating PTFE, ETFE, PVC and mesh for their specific strengths as shade solutions, the tensile membrane structures of Fabritecture push the frontiers of form and function. The sleek lines and reflective surfaces of a Fabritecture tensile fabric structure reduce lighting and cooling costs, as well as solar gain, creating more energy-efficient structures.

An enviable international client list and an inventory of excellence awards are a testimony to Fabritecture's internationally-recognised design and project management skills.



ADELAIDE OVAL

- IFAI Outstanding International Achievement Award 2014
- Specialised Textile Association Award for Excellence 2014



LOTUS THEATRE
MACQUARIE UNIVERSITY

- TEFMA Australasia Award for Innovation 2013
- Specialised Textile Association Award Winner 2011



COCKBURN TOWN SQUARE

- IFAI Outstanding Achievement Award 2013
- Specialised Textile Association Special 2013



HALO NIGHTCLUB

- IFAI Award of Excellence 2012
- Specialised Textile Association Overall Winner 2012
- Specialised Textile Association Winner 2012



QUEENSLAND TENNIS CENTRE
BRISBANE, AUSTRALIA



OUR TEAM, OUR COMMITMENT, YOUR SUCCESS

DESIGN CONCEPT

“Award-winning design depends on the depth of knowledge of what is possible and how far the boundaries can be pushed.”

As one of the world’s most highly-awarded tensile fabric structure specialists, Fabritecture brings over 100 years experience to everything it does. Inherent in every design we submit is a vast experiential knowledge of tensile fabric materials and their unique behaviours under all conditions.

ENGINEERING

“We work closely and consistently with the world’s top independent engineers, expanding and contracting our engineering resource to embrace the biggest projects.”

One of Fabritecture’s greatest strengths at the level of cost-efficiency and outcome, is its unique ability to morph into any-sized organization in response to any project in the world. Supporting a core culture of award-winning designers, installers and highly-experienced Project Managers, is a global network of the world’s leading tensile fabric structure engineers. Whether the project involves working with an existing steel, concrete, brick or wooden structure, or starting from the ground-up, Fabritecture will hand-pick the engineers for the job.

PROJECT MANAGEMENT

“Ultimately our greatest strength, our greatest resource and our greatest point of difference is the sheer caliber and commitment of our people.”

They are hand-picked for the personal and professional qualities they bring to our brand. At the end of the day the most important and enduring thing we build is relationships – partnerships of trust and mutual pride. A dedicated Project Manager is always assigned to each project and available to discuss any matter of concern or to answer any questions at any stage of the project.

CONSTRUCTION

“The key to construction is experience and ‘know how.’ Beneath the clean lines and eye-catching creativity of the finished job is the craft, cleverness and courage of unsung experts.”

Tensile architecture assembly is a specialized field. Often working high above the ground in exposed conditions, Fabritecture’s inhouse team of tensile fabric installers work a courageous form of high-wire magic, pushing steel, cable and fabric to the farthest edge of daring and design.

FABRICATION

“We work only with the world’s leading fabricators and the world’s best materials.”

Fabrication is about always working with the best people, understanding the materials and how far you can push them, and setting a benchmark on quality.

MAINTENANCE

“We don’t treat maintenance as an afterthought, we think about it right from the conceptual stage.”

At Fabritecture we like to construct buildings that retain their fresh, clean appearance and require the minimal amount of looking after.

By considering maintenance at the conceptual stage we are able to design in-systems and solutions that avoid the build-up of wind-blown debris and dirt. We also incorporate safe access systems to roof areas to make regular inspections safe and easy.





SOUL RESORT
GOLD COAST, AUSTRALIA

WHY CHOOSE A TENSIONED MEMBRANE STRUCTURE?

The flagship fabrics that drive the tensile fabric building boom each come with their own distinct attributes of lightness, strength, durability, fire resistance, clean-ability and compliance.

MEMBRANE TYPES

PVC

(Poly Vinyl Chloride)
Is the most cost effective and common material choice for both temporary and permanent tension structures. PVC is available in a variety of colours and types to meet a wide range of applications and structural requirements.

PVC membranes are coated and treated with specific formulas to protect against UV, staining and fire resistance. Warranties for PVC fabrics range from 5 - 15 years.

PTFE

(Poly Tetra Fluoro Ethylene)
is a Teflon coating over woven fiberglass fibers, a high quality material suitable for only permanent applications. It is UV resistant, noncombustible, and boasts a high reflective capability. Due to the smooth Teflon surface, the membrane is washed clean every time it rains and therefore normally does not require additional cleaning. With a life expectancy in excess of 30 years, a PTFE membrane structure will stand the test of time, with warranties for PTFE ranging from 15 - 20 years.

ETFE

(Copolymer of ethylene and tetrafluoroethylene)
Is a lightweight glass alternative that has specific advantages such as translucency of 90% high absorption of radiation, low absorption of UV and visible light that give associated advantages for use where covered landscape areas are required. ETFE is an increasingly popular film material that is typically used for pneumatic cushion structures.

Natural Light and energy efficiency

On average, tensioned membrane structures typically reflect 75 - 85% of external heat and light.

In addition to this, fabrics used in membrane structures allow 9-18% transmission of daylight, which allow for a softly diffused light within the structure.

Often this will result in the elimination of the need for artificial lighting, therefore increasing the energy efficiency of your structure. Fabritecture can also provide tensile fabric that offers transparency of up to 98% for a clear and virtually unobstructed light transmission

Reduced Lighting Requirements

Tensioned fabric structures are transformed, as they diffuse and reflect surrounding light, by reflecting this light, these structures can reduce the lighting requirements of your structure by 40%

Sound Quality

A Fabritecture structure, provides superior sound reduction from rain, hail and wind when compared to a metal roofing structure. Primarily due to the materials used, which allow sound absorption and reflection

Roofing

The combination of flexibility, price and creativity of tensioned fabric structures as a roofing solution is unparalleled in a conventional roofing system

Lightweight

Fabric has the ability, to span greater distances, requiring less supporting framework, so by pure design fabric structures are a lighter, more environmentally efficient solution as they generate a considerably lower amount of carbon footprint to produce





LUNA PARK
SYDNEY, AUSTRALIA



"Baulderstone's preference to work closely with Fabritecture came through their demonstrated ability and desire to provide the required feedback and data, which enabled Baulderstone to seamlessly assess the risks and opportunities, before entering into a subcontract agreement.

In addition to this, the post contract negotiations with Fabritecture on additional D&C scope, produced favourable outcomes for both parties, as their expertise and patience to work through multiple options, while delivering value for money solutions that were also fit for intended purpose."

Marcus Towell - Cost Planning Manager - Adelaide Oval Redevelopment
Baulderstone



"Cockburn is a bustling town centre that now has an iconic fabric structure landmark. The professionalism, project management expertise and the commitment of the Fabritecture Team was exceptional and was a major component of the success of the Cockburn Town Centre Project"

Matt Huxtable - Managing Director
Phase 3 Landscapes
Cockburn Town Centre



"The professionalism, project management, adaptability and commitment of the Fabritecture team made our project a success. The wealth of knowledge and pragmatism of the team made working with Fabritecture a pleasure. We are more than impressed with the results from these projects and hope that any future development at our park is as successful as this."

Martin Davies, Managing Director
Gammon Pte Ltd
ITE College - Singapore



"The Fabritecture people were fantastic. They understood the simplicity of the structure and the parabolic curve which needed to be braced naturally. Jethro Jones and his team were the key to realising the simplicity of the structure."

Misho Architect
Sydney Wildlife World



"The professionalism, project management, adaptability and commitment of the Fabritecture team made our project a success. The wealth of knowledge and pragmatism of the team made working with Fabritecture a pleasure. We are more than impressed with the results from these projects and hope that any future developments at our park are as successful as this."

Peter Hearne, Managing Director
Luna Park

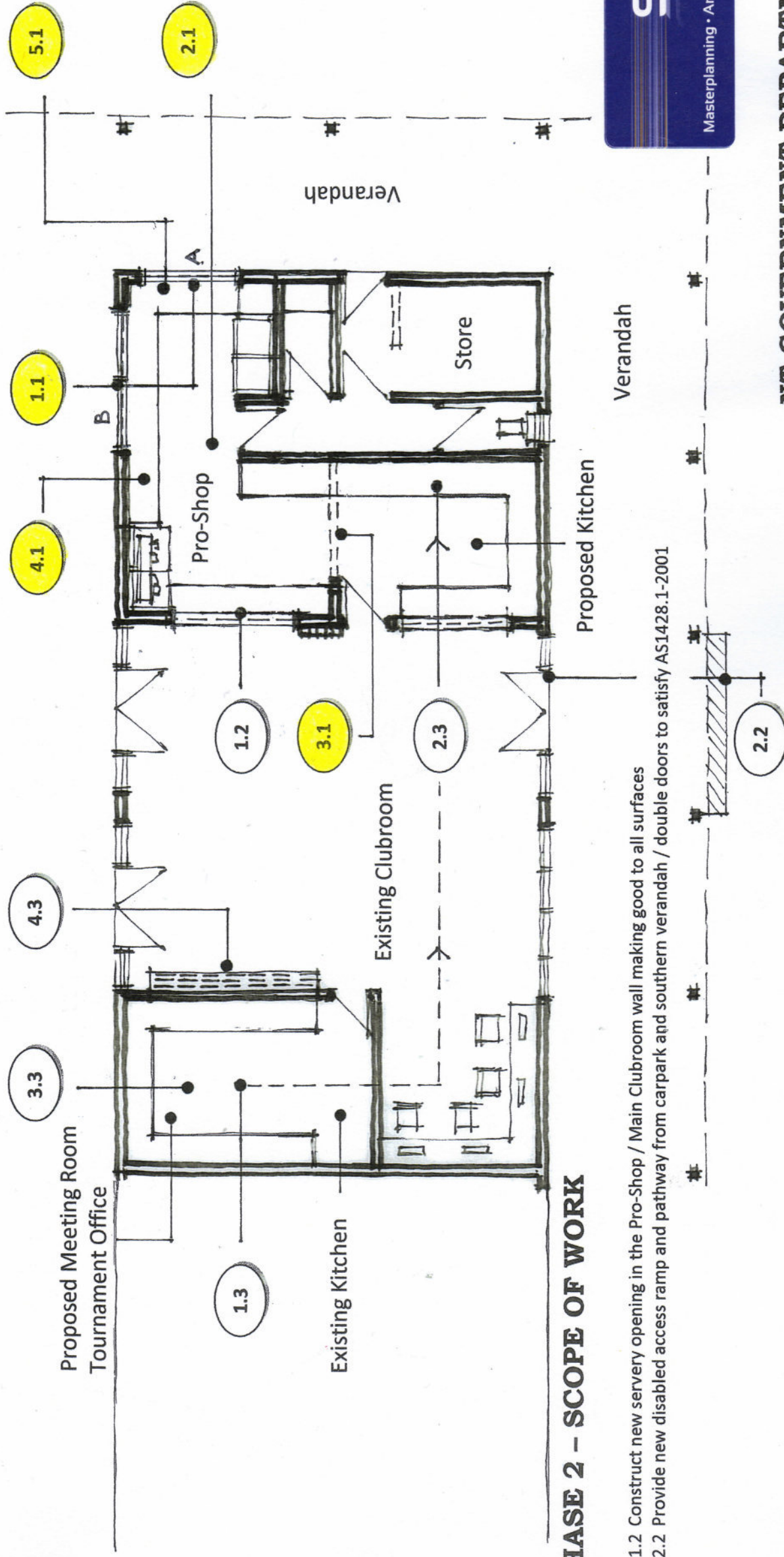
APPENDIX C - GTC CLUBHOUSE CONCEPT PLAN



PHASE 1 - SCOPE OF WORK

- 1.1 Install New Bi-Fold Windows and Retractable Electric Shutters to Servery A and B
- 2.1 Install new 7Kw Panasonic Split-System A/C
- 3.1 Demolish Non-Structural Wall at rear of Pro-Shop and make good to floor and ceiling
- 4.1 Install new benches / counter tops to perimeter of Pro-Shop / Kiosk / Office Space
- 5.1 Modify Servery 'A' counter height to satisfy AS1428-Part 2 1992 Clause 24.1

Covered Seating / Patio Area



PHASE 2 - SCOPE OF WORK

- 1.2 Construct new servery opening in the Pro-Shop / Main Clubroom wall making good to all surfaces
- 2.2 Provide new disabled access ramp and pathway from carpark and southern verandah / double doors to satisfy AS1428.1-2001

PHASE 3 - SCOPE OF WORK

- 1.3 Relocate existing Kitchen to existing 'Tournament Room' at rear of Pro-Shop:
- 2.3 Replace / make good to benches as required including power provision
- 3.3 Make good to existing kitchen area including flooring and walls to suit a new meeting room / tournament office space
- 4.3 Provide for Slat-Wall or similar display racking to outside of this room facing internally to main clubroom space for equipment displays



**NT GOVERNMENT DEPARTMENT OF SPORT
FACILITIES and CAPITAL EQUIPMENT
GRANT PROGRAM 2016-2017**

**GARDENS TENNIS COMPLEX
CLUBHOUSE REFURBISHMENT SCOPE OF WORK**
September 2016