

Matthew Crawford Architects





We acknowledge the custodians of this land, the Whadjuk Nyoongar and their elders past, present and emerging. We wish to acknowledge and respect their continuing culture and the contribution they make to the life of this city and this region.

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1. INTRODUCTION

1.1 Executive Summary

The Swan Yacht Club has an illustrious history dating back to its establishment in 1904. The club provides a broad range of facilities for its membership that, while focused on the mooring of boats on the Swan River, also includes a multitude of other associated services and social facilities.

The purpose of this masterplan is to review the current mix of facilities and identify logical steps to be incorporated moving forward to provide a framework for future development. This development can then be realised in a logical sequence ensuring the clubs future strength.

This Masterplan is the result of close consultation

and negotiation with both the Town of East
Fremantle and the Department for Biodiversity,
Conservation and Attractions (DBCA). The Town
of East Fremantle are both the owners of the land
on which the club is situated and the regulating
local authority. The DBCA (incorporating the
Swan River Trust) are the primary government
department providing independent, high level
strategic advice on the protection of the Swan
and Canning rivers.

The prompt for this process was the imminent need to replace Jetty 5. As part of the replacement approvals a masterplan was required to ensure all outcomes provide uplift and acceptable development outcomes not only directly for club members but also the greater public and for the ongoing safety and enjoyment of the Swan River.



Figure 2. Photograph of refurbished front facade.

Key Objectives include;

- A large increase in area of the existing water lease line to accommodate the new Jetty 5 development.
- General improvements to all boating facilities including new dry stack boat storage, new affiliate club amenities, a new bosun's shed, and upgraded dredging facilities.
- Improvements to the riverbank directly adjacent to the waters edge with the establishment of a 20m greenbelt from the high water mark. This green belt will be landscaped to benefit club members and aid in increasing public access and use of the foreshore.
- Upgrades to the social club to increase public

- accessibility through clubhouse expansions and a new terrace roof.
- Upgrades to all site services including rationalised car parking, secure vehicle entry and waste management strategies.

2. MASTERPLAN CONTEXT

2.1 Site Indigenous Context

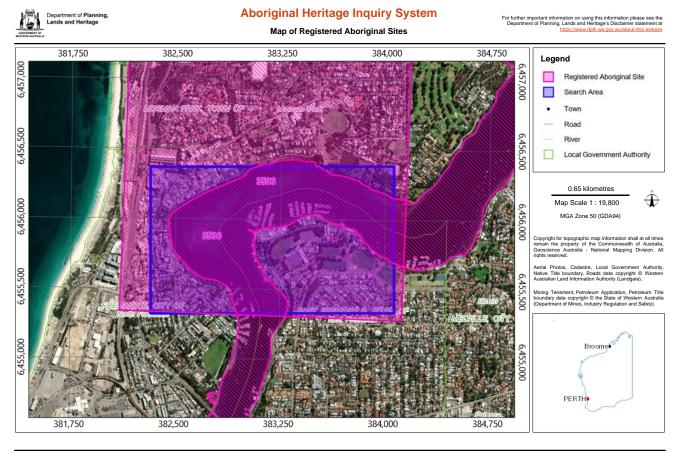
The Derbarl Yerrigan, or Swan River, is a place with a rich mythological history in Indigenous Australian history. Located in Nyoongar country, the Derbarl Yerrigan was used as a hub, a place to hunt and gather food, to trade and as a place of cultural importance. The river was a major source of fresh water and food for the Nyoongar people, where campsites were located, often connected to fresh water springs.

The river is also the resting place of the Waugul (rainbow serpent). The Waugul carved out the river and remains within it, as described in the Australian Interaction Consultants report which states the Waugul created the river by "making it's way down the river, creating the bends at

Belmont and Maylands before emerging through the narrows into Perth Water to create the large expanse of downstream water." The river and Waugul are associated with many dreaming Stories and Dreaming tracks in Nyoongar culture

The Department of Aboriginal Affairs (DAA)
Aboriginal Heritage Inquiry System online
mapping database indicates that although the
Swan Yacht Club land site is not a place of
significance, the Swan River is a registered site
with a significant history. The table below from
the DAA Heritage Inquiry System shows any
significant places on or adjacent to the Swan
Yacht Club Site.

DAA ID	Name	Status	Туре
3536	Swan River	Registered site	Mythological
3596	Rocky Bay	Registered site	Mythological, named place



2.2 Site European Context

In 1904, the inaugural meeting of the Swan Yacht Club was held at the Plympton Hotel, now known as The Tradewinds Hotel. The meeting was attended by three "gentlemen", including Admiral Sir Frederick Bedford, who was then the Governor of Western Australia, who was asked and accepted to become a patron of the club. It was first proposed the club was to be called Richmond Yacht Club, but after much discussion the name of the Swan Yacht Club was settled on.

Another meeting was held in the following months where the club decided to obtain land near the Phoenix or Castlemaine Brewery for its clubhouse where it remained for many years.

Due to construction of the Stirling Bridge, the club premises were moved to Point Preston, where construction began in 1962 on what is now Jetty 1.

After a liquor license was granted in 1967, SYC became a local hangout for many wharf workers and grew in patronage becoming the large club that it is today.



Figure 4. Historic photograph circa

2.3 Location & Topography

Swan Yacht Club Survey 1 (East), produced by Brown McAllister Surveys, 2017

Swan Yacht Club is located in East Fremantle, a short 10 minute drive from the West End in the heart of Fremantle. Topographically, the Swan

Yacht Club seawall sits more than 1 metre above the river level, this is further discussed in the climate change section of this masterplan.

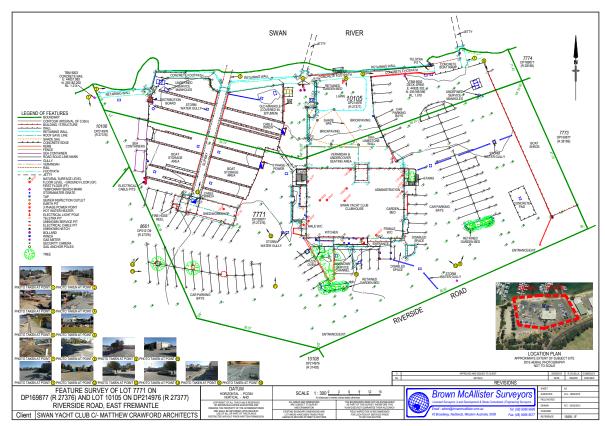


Figure 5. Survey provided by Brown McAllister

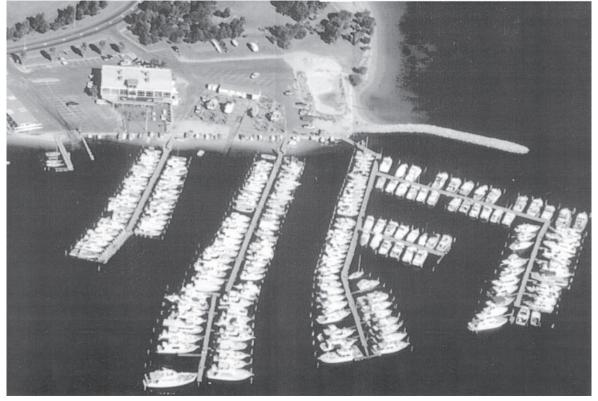


Figure 6. Historic aerial photograph

2.4 Climate Change

The draft East Fremantle Foreshore Master Plan (EFFMP) addresses research done on sea level rise within Western Australia by the Department of Transport (DoT) in 2010. The Intergovernmental Panel on Climate Change (IPCC) Report Fourth Assessment Report and the Commonwealth Science and Industrial Research Organisation (CSIRO) technical report were used as major sources of information.

Sea levels are expected to rise approximately 0.4m by 2070 and 0.9m by 2110. This masterplan and the EFFMP adopt a medium-term plan for the next 5 to 15 years where sea levels are approximated to rise up to 0.1m.

As stated in EFFMP, the IPCC reports indicates due to improved physical understanding of components of sea level, improved modeling, and inclusion of ice sheet dynamical changes, they have increased their confidence in a mean sea level rise. Globally, the IPCC predict a mean sea level rise of 0.26m to 0.98m by 2100.

In Western Australia, the policy for the allowance of sea level changes in coastal planning adopted by the Western Australian Planning Commission aligns with the latest information on global mean sea level rises. Over the next 5 to 15 years the effects of climate change on the river are likely to be minimal, with other natural effects such as El Niño also having impact on mean sea levels.



Figure 7. Predicted sea level rise of 0.9m by 2110, produced by Climate Central Mapping.

3. EXISTING SITE REVIEW

3.1 Existing Site

The Swan Yacht Club has a proud history that dates back to 1904. It has been located at its current location since 1964 when it relocated from its original location right under where the Stirling traffic bridge is today, on the East Fremantle side.

The site itself includes a number of lots that encompass both water leases and land leases. The area of water leases encompasses an area of 30804sqm within the Swan River and land leases encompass an approximate area of 12,750 sqm.

The site is owned by the Town of East Fremantle.

The club has a diverse and extensive member base and offers those members an equally

extensive range and mix of facilities. These facilities centre on the centrally located clubhouse that offers a social hub for members and income producing function areas. As a yacht club the water-based facilities include 5 mooring jetties, a boat ramp, slip facilities, and multiple land based storage areas.

The facilities have been amended and added to over the long history of the club which has led to outcomes that do not necessarily make the best use of the site or meet the needs of members, the public, authorities and owners. A masterplan for how to amalgamate the diverse needs case is therefore required to identify opportunities and requirements for a sustainable future.



Figure 8. Aerial photograph of existing site, acquired from Nearmaps.



Figure 9. Photograph of existing clubhouse.

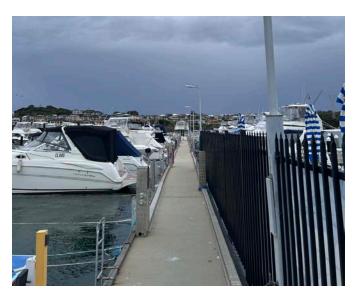


Figure 11. Photograph of existing Jetty 1.



Figure 13. Photograph of existing slipway.



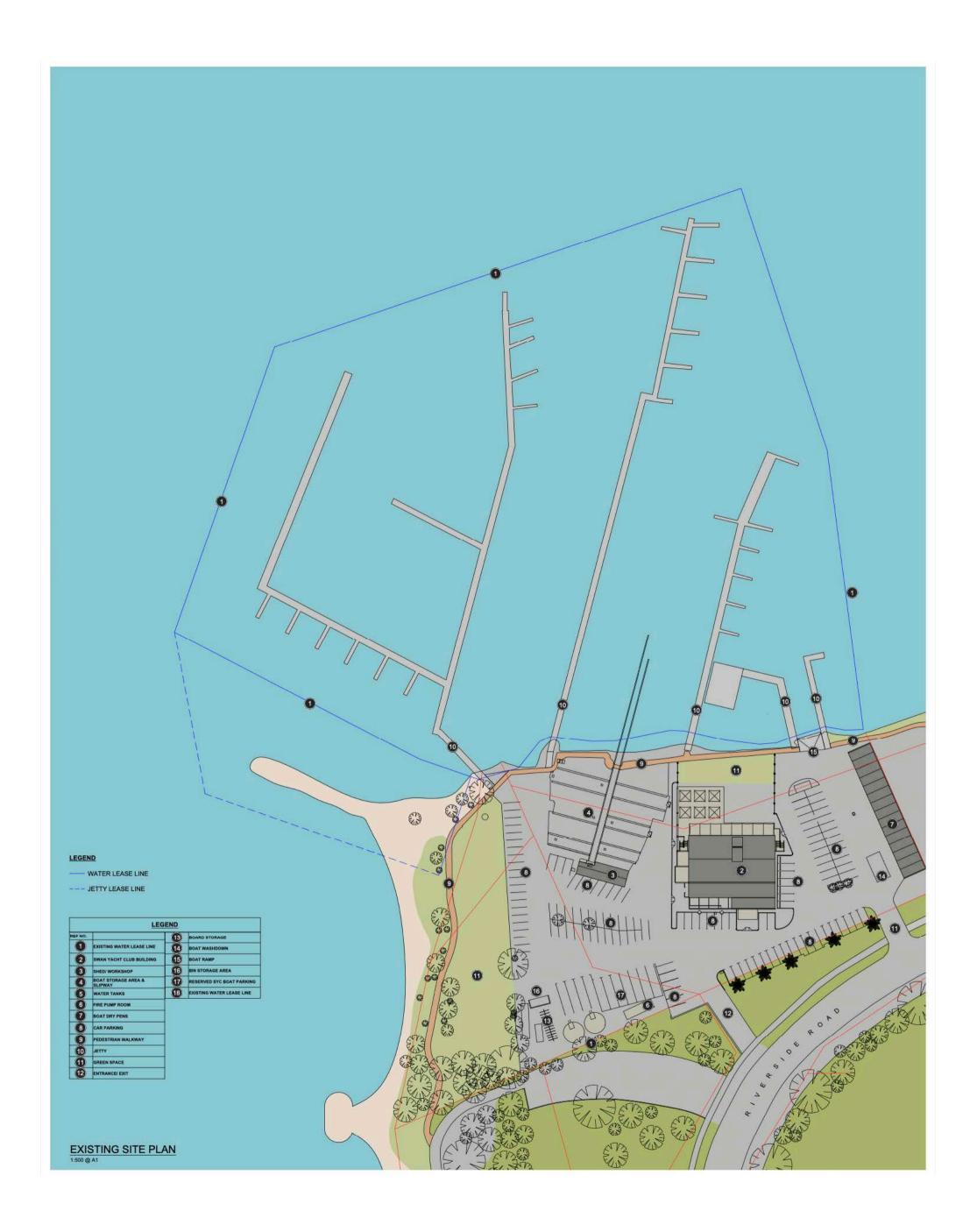
Figure 10. Photograph of existing dredging area.



Figure 12. Photograph of existing dry pens.



Figure 14. Photograph of existing Jetty 5.



4. MASTERPLAN

4.1 Vision & Objectives

The vision of this masterplan is to set the Swan Yacht Club up for the future and enhance all members enjoyment, safety, ease of use and breadth of experience. It is a framework for future development to be realized over the next 20 years. Outcomes to stem from this planned approach will ensure a logical and efficient programme of development as the club decides to invest in further infrastructure projects.

These outcomes also incorporate critical elements to meet the expressed aims and requirements of the DBCA and the Town of East Fremantle.

4.2 Stage 1 - 1 to 5 Years

This masterplan is separated in to three stages to be implemented over the next 20 years. Stage 1 is expected to be implemented in the near term from 1 to 5 years. Stage 2 over the following 5 to 10 years and Stage three within 20 years. For clarity, the objectives have been broken into water based items and land based items.

Water Based Objectives and Outcomes

- Make a significant increase to the existing water lease line to allow for the expansion and re-alignment of Jetty 5.
- Re-develop and expand Jetty 5. The new jetty will also offer wave mitigation to the other jetties and enhance waterline protection.
- Re-develop Jetty 7 with minor re-alignment.
- Replace the existing boat ramp with a new boat ramp.
- Build a new negative fork wharf alongside the new boat ramp.
- Streamline the approvals process for installing private floating dry dock facilities in pens

Land Based Objectives and Outcomes

- Create an enhanced green belt to the rivers edge. Commit to all future development being located a minimum of 20m from the high water line of the river. Development within this green belt area is limited to landscaping enhancements apart from the existing clubhouse facility and the area adjacent to the boat ramp and Jetty 7.
- Remove the existing slipway and hardstand area to the west of the clubhouse and repatriate. A new area for boat maintenance consisting of 6 bays, ranging from 10 to 13m in length, will be created to the eastern side of the clubhouse.
- Relocate the existing Bosun's store into the existing dry pens on the eastern boundary.
- Create a new informal function space for club usage in the area repatriated from the slipway removal. This repatriation will include re-alignment of the public pathways while maintaining access pathways to each of the jetties.
- Extend the liquor license area to include this newly created informal function space.
- Re-align the lease line on the western river's edge to follow the line of the current pedestrian pathway.
- Rationalise non-boating and boating parking and functions by relocating members parking bays all to the western side of the main clubhouse.
- Formalise entry and exit points to the club to enhance safety and security.
- Create additional leased area located adjacent to the main entry gate. The fire service water tanks will be relocated here to make way for hardstand parking of dragon boats and outrigger canoes.



4.3 Stage 2 - 5 to 10 Years

In addition to finalising all items outlined in Stage 1 but not completed in the first 5 years the main thrust of Stage 2 will be to remove the asbestos dry stores. This will allow for the creation of state of the art vertically stacked boat storage.

Water Based Objectives and Outcomes

 Construct a new secure accessway to the floating pontoon deck to free up the existing accessway for temporary mooring for launch and retrieval.

Land Based Objectives and Outcomes

- Demolish the existing corrugated asbestos dry pens.
- Construct new dry stacked boat storage pens in place of the current dry pens on the eastern boundary and over the designated maintenance bays located adjacent to the Clubhouse.
- Relocate the Bosun's Shed to the western side of the Clubhouse.

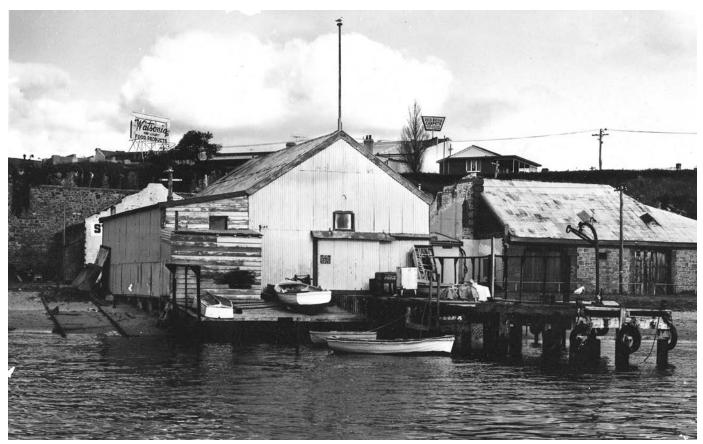


Figure 17. Historic photograph of Swan Yacht Club.



4.4 Stage 3 - 10 to 20 years

Stage 3 will see the completion of the Swan Yacht Club masterplan. As part of this period of development the club envisages the potential for a large building project in the form of a two storey building to the west of the existing clubhouse. This building will house the bosun's store, a ground floor cafe/restaurant and upper floor meeting and function rooms.

Land Based Objectives and Outcomes

- Construct a new 2 storey extension to the Clubhouse on the eastern side, fronting onto the informal function space.
- Relinquish the lease over the existing dredging area on the basis that the whole area remains available to undertake the existing dredging process.



Figure 19. Historic photograph of Swan Yacht Club.



4.5 Water Lease Line

As a part of this masterplan there is an increase in the water lease line, adding 5600sqm in area to the existing 30804sqm for the re-configuration of boat pens for Jetty 5. There are a variety of benefits for the redevelopment of Jetty 5;

- Wave attenuator will provide a safer marina environment for boat owners by reducing the passing boats wakes.
- Wave attenuator also reduces erosion of the shoreline and creates a safer area for community in the water way.

- Reduction in dredging of SYC required due to new jetty decreasing the amount of silt that builds up.
- Encourages users of the river to use the correct navigational channel, creating safer foreshore for users including school maritime programs, rowing club, outrigger canoe club, and dragon boat club.
- Upgraded modern fittings to allow for increased dry dock installation and use.
- Moorings fit for purpose and to Australian Standards, resulting in overall increase in number of pens after increase in lease area.



Figure 21. Existing water lease line diagram.



Figure 22. Proposed water lease line.

4.6 Shoreline Enhancement

This Masterplan aims to address the aspirations of the Swan River Trust and the DBCA through the establishment of a 20m setback from the high water mark, creating a green belt that connects the river and landscape to the public.

The first stage of the greenbelt will be realised within 5 years. Planting in the north-east corner of the site will be added to link the SYC site with the existing green space to the east. Planting is also added on the eastern side of the clubhouse to separate the open clubhouse area from the boating facilities. Rationalisation of the car parking

creates a pocket of planting in the north-western corner of the site, creating a connection between the north and western green belts and making them one. The existing grassed area will remain for dredging purposes but will incorporate further planting along the eastern side in order to ensure no uncontrolled vehicle access.

The removal of the slipway significantly enhances the green space surrounding the public pathway along the river.



Figure 23. Collage of proposed green belt surrounding public pathway.



Figure 24. Existing site green areas.



Figure 25. Final proposed shoreline enhancement.



Figure 26. Proposed landscaping plan, produced by Design in Green.

4.7 Dry Stack Boat Storage

This masterplan proposes the removal of existing dry pens on the site and replacing them with new 4-storey open aspect boat stacking facilities. The proposed dry stack boat storage facilities also allow for a more streamlined layout of the site, logically separating boating facilities from clubhouse facilities.

4.8 Dry Dock Systems

The Jetty 5 development's design incorporates dry dock technologies to allow for floating pontoons. Negotiations are in place to get

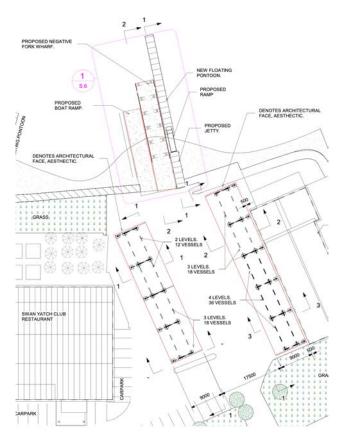


Figure 27. Proposed dry stack boat storage and wharf

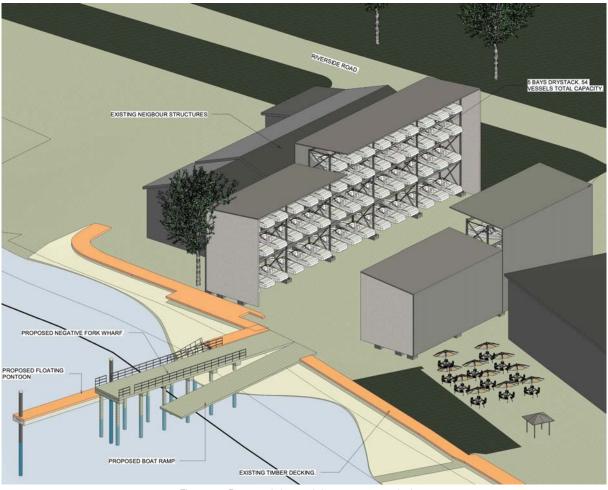


Figure 28. Proposed dry stack boat storage and wharf

club wide approvals for a number of different proprietary systems without the need for separate individual applications. This approval would allow for several pens at a time to be upgraded to dry dock facilities.

4.9 Slipway

The slipway currently is located in the area designated, by the DBCA, for repatriation to open garden space and foreshore enhancement.

As part of the masterplan strategy 6 working bays will be made available on the eastern side of the clubhouse to realise the intention to separate social parking from boat related tasks.

As part of the heritage interpretation a section of the rails will be maintained within the foreshore enhancement zone designated for informal club functions.

4.10 Dredging Area

The dredging process that the Swan Yacht Club currently undertakes will not change, and will still take place on the grass lawn on the western side of the site. However this area of the site will be replanted to re-establish a large green belt between SYC and the foreshore, with the dredging area taking up 600sqm of the total 2080sqm of green space.

4.11 Entry Sequence

New entry gates have been added for increased security at the entrance where there is also a new roundabout, allowing for a new entry sequence where patrons can be dropped off easily by ride share services like Uber, chauffeur, Didi, and Ola.

4.12 Rationalised Services

The existing site provides a total of 102 car parking bays. These include 2 universal bays, 7 reserved bays and 93 bays for members. These bays are located across the whole site in a fairly haphazard arrangement.

As part of the masterplan proposal the member parking has been relocated to the western portion of the site.

In total the number of bays will increase by 2 member bays, the universal and reserved bays will remain directly in-front of the clubhouse and all member accessible bays will be relocated in a more regular code compliant grid on the western side of the clubhouse.

This will provide two benefits, namely there will be no need for members to drive past the trailer parking bays leading to less potential congestion, but also free up safer access to the boat ramp. Through the creation of a single car lane to the east of the clubhouse, cars with boats on trailers will be able to easily access the launching ramp. This also provides clear and safe working space for the forklift to access the boat stacks.

Site services such as the electrical, sewerage and fire pumping services will be maintained, reused and/or rationalised as part of this masterplan. Through the rationalisation of the waste management, SYC will be able to more effectively run their site in a functional and rational way.

4.13 Clubhouse Roof Solar

SYC has a large and relatively flat roof that is a prime location for solar panels. By installing solar panels with roof safe access on a north facing roof area, a great environmental benefit of reducing energy usage and powering the clubhouse through solar power. The club will undertake a cost benefit analysis in order to determine the financial benefits of incorporating solar panels.

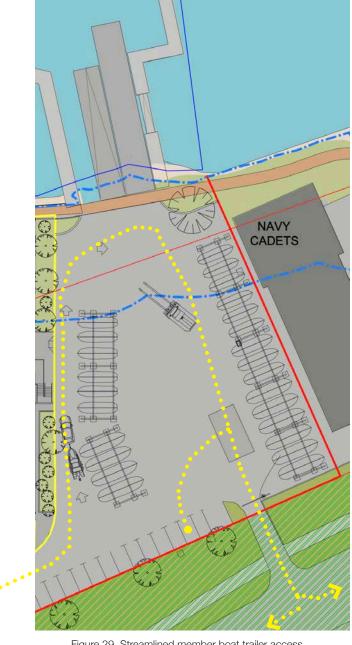


Figure 29. Streamlined member boat trailer access

5. MASTERPLAN OUTCOMES

5.1 Benefits to SYC Members

With over 2500 members, the Swan Yacht Club is a place where friends and families can enjoy their time on the water. By offering a varying and flexible range of memberships, from social to life members, SYC welcomes all to enjoy their facilities. The new facilities and layout proposed in this masterplan create a more streamlined and sustainable club, enhancing the experience for all members now and for the future.

5.2 Benefits to Governance

This masterplan has been developed with input from all key stakeholders. It has been led by the SYC administration including committee members and the Town of East Fremantle, Swan River Trust, DBCA, and the club members. These parties will need to be involved in the making of key decisions in order to keep values aligned.

5.3 Benefits to Natural Environment

Swan Yacht Club acknowledges the importance the natural environment should have on this masterplan and their role in advocating for the natural surrounds. Through the establishment of a green belt along the foreshore, this proposal aims to align itself with the current policy of the DBCA for the future protection and enhancement of the river foreshore and benefit of all.

5.4 Benefits to the Public

An important aspect of this masterplan is the engagement between the Swan Yacht Club and

the public. Through the expansion of the green belt and the clubhouse, a conversation between the public and SYC is established.

6. CONCLUSION

This masterplan aims to highlight and propose ways in which Swan Yacht Club is able to rationalise, maintain and upgrade their facilities in order to strengthen relationships between the club and its members, governing bodies, the environment and the local community.

The main outcomes of this masterplan are;

- Overall increase in boat storage to offer new state of the art facilities on the water and more boats in dry stack facilities.
- Enhanced shore based facilities for all members including broad greening initiatives at the waters edge.

- Rationalised parking facilities to make it easier and safer to use the club.
- The formation of key strategic built opportunities to enhance the offering to members and strengthen revenue opportunities.



Figure 30. Photograph of refurbished clubhouse.

7. LIST OF FIGURES

Figure 1. Cover page image. Aerial photograph obtained from Nearmaps.

Figure 2. Photograph by Dion Robeson of refurbished front facade, 2015.

Figure 3. Map obtained from Aboriginal Heritage Inquiry System, 2022.

Figure 4. Historic photograph of original Swan Yacht Club (Castlemaine), obtained 2022.

Figure 5. Feature survey showing boundaries, services and spot heights, provided by Brown McAllister Surveyors, 2015.

Figure 6. Historic aerial photograph, obtained 2015.

Figure 7. Predicted sea level rise map, produced by Climate Central Mapping, 2022.

Figure 8. Aerial photograph of Swan Yacht Club, obtained from Nearmaps, 2022.

Figure 9. Photograph by Dion Robeson of refurbished front facade, 2015.

Figure 10. Photograph by Matthew Crawford Architects of dredging area, 2022.

Figure 11. Photograph by Matthew Crawford Architects of Jetty 1, 2022.

Figure 12. Photograph by Matthew Crawford Architects of dry pens, 2022.

Figure 13. Photograph by Matthew Crawford Architects of slipway, 2022.

Figure 14. Photograph by Matthew Crawford Architects of Jetty 5, 2022.

Figure 15. Existing club extent plan, produced by Matthew Crawford Architects 2023.

Figure 16. Proposed masterplan stage 1, produced by Matthew Crawford Architects 2023.

Figure 17. Historic photograph of Swan Yacht Club, obtained 2022.

Figure 18. Proposed masterplan stage 2, produced by Matthew Crawford Architects 2023.

Figure 19. Historic photograph of Swan Yacht Club, obtained 2022.

Figure 20. Proposed masterplan stage 3, produced by Matthew Crawford Architects 2023.

Figure 21. Diagram of existing water lease line, produced by Matthew Crawford Architects, 2023.

Figure 22. Diagram of proposed water lease line, produced by Matthew Crawford Architects, 2023.

Figure 23. Collage of proposed green belt, produced by Matthew Crawford Architects., 2022.

Figure 24. Diagram of existing green areas on site, produced by Matthew Crawford Architects, 2022.

Figure 25. Diagram of proposed green belt on site, produced by Matthew Crawford Architects, 2022.

Figure 26. Proposed landscaping plan, produced by Design in Green, 2023.

Figure 27. Plan of dry stack boat facilities, produced by Dry Stack Australia.

Figure 28. 3D Model perspective of dry stack boat facilities, produced by Dry Stack Australia.

Figure 29. Diagram of streamlined boat trailer dropoff, produced by Matthew Crawford Architects.

Figure 30. Photograph by Dion Robeson of refurbished clubhouse, 2015.

8. APPENDICES