

REPORT TITLE NAVAL RESERVE BIRKENHEAD CONCEPT PLAN

Report Type	Decision
City Plan Theme	Community Environment & Heritage Placemaking Leadership
Report Author	Project Leader - Stormwater (City Assets)
Report Summary	The Naval Reserve, Birkenhead is the site of a proposed stormwater basin required as part of Lefevre Peninsula Stormwater Management Plan. The reserve is currently in need of additional upgrades that are outside of the stormwater upgrade project scope. A concept plan has been completed for the open space that outlines additional features which are currently not budgeted for in Councils LTTP. Council Administration are seeking approval to proceed with Community engagement to finalise the open space design.
Attachments	Attachment 1 – Concept Plan

RECOMMENDATION

Council resolves that:

1. The Director City Assets' report titled *"Naval Reserve Birkenhead Concept Plan"* be received and noted.
2. Further design and community consultation for the reserve upgrade be undertaken in late August 2020, based on a construction budget allowance between \$1,400,000 and \$1,500,000 (excluding stormwater works that have existing budgets).
4. Council Administration will prepare a further Council report detailing the outcomes of the community consultation, and discuss opportunities for implementing a finalised reserve upgrade concept plan, timing of works and Budget implications.

Report

At its meeting on 13 August 2019, Council resolved as follows:

1. *The Director City Assets' report titled "Naval Reserve Basin, Birkenhead" be received and noted.*
2. *Option 2 as described within table 1 of the report "Naval Reserve Basin, Birkenhead" be adopted and progressed with the preparation of a Cultural Heritage Audit and finalising the detailed design noting the design differing from that depicted in the Lefevre Peninsula Stormwater Management Plan for the proposed stormwater detention basin.*

3. *Administration continue to work with the Port Adelaide Residents Environment Protection Group (PAREPG) and Councils Aboriginal Advisor to progress and develop the design further mindful of the capacity requirements for the basin, mindful of the capacity requirements.*
4. *That following detailed design development of more detailed landscape plans for the basin, that further community engagement is undertaken on the Project and a further report be brought back to Council on the outcomes of that further consultation in order for a final decision to be made.*
5. *Key stakeholders are advised of (2) and (3) accordingly."*

Background

Naval Reserve, Birkenhead is the proposed site of a new stormwater basin required as part of the Lefevre Peninsula Stormwater Management Plan to help reduce the frequency of flooding for the Birkenhead area.

The reserve is located in the Semaphore Road East catchment with a large portion of the catchment consisting of significant residential developments in low lying areas. The sub-catchment area (consisting of the local streets of Hughes St, Close St, Moore St, Fletcher Rd and Semaphore Rd) are susceptible to flooding and in particular when there is a rain event coinciding with a high tide.

In August 2019, Council resolved that budget allocation be made for the next two financial years to undertake construction of the associated drainage works and an 'Option 2' – reduced basin size and larger pump when considering other factors such as community use of the reserve, cultural significance and project Net Present Value (NPV). This will be delivered as follows:

Stage	Financial Year	Budget Allocation	Works
1	2020/21	\$1,920,000	<ul style="list-style-type: none"> • Stormwater Basin • Pump Station
2	2021/22	\$1,480,000	<ul style="list-style-type: none"> • Infrastructure in local street network
TOTAL		\$3,400,000	

Cultural Heritage

A Cultural Heritage Audit and subsequent Cultural Heritage Management Plan has been prepared by external consultants in liaison with the Kurna Nations Cultural Heritage Association (KNCHA), the City of Port Adelaide Enfield's Aboriginal Advisory Panel and Council staff to sensitively guide heritage management during construction works.

Reserve Upgrade Concept Plan

To address community concerns regarding the reserve amenity and recreational facilities, a Landscape Architect has been engaged to prepare a preliminary reserve upgrade concept plan (**Refer to Attachment 1**) for the entire reserve, in consideration of its cultural and historical significance. This has been presented to the Aboriginal Advisory Panel and PAREPG to seek their feedback. Further open and broader community engagement is proposed to be undertaken in late August 2020.

The reserve concept design comprises a unification of recreational opportunities at the northern end of the reserve, including play spaces for juniors and seniors, a half sports court, looped path, picnic facilities, interpretative artwork, significantly increased landscaping and a new toilet facility. The stormwater basin has been located at the southern end of the reserve to maximise useable open space as well as allowing for efficient stormwater detention in large storm events.

A cost opinion of this concept is detailed below:

Works	Cost
Preliminaries & Site Set Up	\$92,000
Site Preparation	\$45,500
Demolition	\$125,000
Earthworks	\$93,000
Paths	\$225,000
Playground	\$417,500
Half Court & AFL Goalposts	\$37,000
Large Shelter & BBQ's	\$100,000
Toilet	\$260,000
Park Furniture	\$31,500
Naval Theme Entry Artwork	\$75,000
Kaurna Interpretation Feature	\$100,000
Interpretive Signs	\$7,500
Landscaping	\$147,000
Irrigation	\$135,350
Establishment	\$104,000
Council Staff Overheads	\$259,400
20% Project Contingency	\$399,000
Total	\$2,653,750

This is a significant expenditure considering the size of the reserve. In comparing the cost per square metre, it is comparable with the upgrade of a Regional Recreation Park, such as Roy Marten Park.

Alternative Reserve Upgrade Concept Plan Cost Estimate

Birkenhead Naval Reserve is considered a Neighbourhood Recreation Park that would attract people from a radius of 500 metres and typically spend 1 to 2 hours. A proportionate expenditure for upgrading a reserve within this hierarchy could be approximately:

Works	Cost
Preliminaries & Site Set Up	\$55,300
Site Preparation	\$40,000
Demolition	\$95,000
Earthworks	\$90,000

Paths	\$150,000
Playground	\$180,000
Half Court & AFL Goalposts	\$37,000
Shelter & BBQ	\$60,000
Provision for Future Toilet (Pipe work only)	\$20,000
Park Furniture	\$20,000
Naval Theme Entry Artwork	\$40,000
Kaurna Interpretation Feature	\$40,000
Landscaping	\$120,000
Irrigation	\$11,000
Establishment	\$104,000
Council Staff Overheads	\$152,000
20% Project Contingency	\$232,300
Total	\$1,490,300

NOTE: These costings are indicative only to illustrate potential works.

The above table demonstrates that this reserve upgrade can be achieved within a defined construction allowance that is proportional to its context within the overall open space network and will still achieve a positive outcome for the community.

This proposal suggests that provision will be allowed for a new strategically located toilet on the reserve, however its implementation will be undertaken as a part of the asset renewal process at the end of its useful life.

City Plan Relationship

Council Administration is demonstrating its commitment to the City Plan vision by creating an open space and stormwater solution that is a unique, distinctive places for people which addresses flooding issues and climate change.

This project supports the targets outlined in the 'Draft Open Space Strategy, Draft Asset Management Plan and Lefevre Peninsula Stormwater Management Plan'.

Council Administration is committed to achieving the City Plan vision and seeks to ensure that the community is confident in its leaders by demonstrating a collaborative and innovative approach to asset renewal/upgrade.

Legislative Context and Related Policies

The Local Government Act requires Council to mitigate the impact and effects of natural hazards i.e. flooding.

The upgrade of the Naval Reserve open space responds to and aligns with the following:

- Active Recreation Facilities Plan
- Open Space Plan
- Asset Management Plan – Parks
- TS10 - Shade of Playgrounds Policy.

Stakeholder Engagement

Council Administration staff have already met with the Aboriginal Advisory Panel and PAREPG to discuss the concept plan and have received feedback for consideration. Work will continue with the two groups to further develop the concept plan to detailed design.

Council Administration are proposing to go to the wider Community Engagement in late August 2020. This Engagement will be undertaken in line with current COVID-19 requirements and could include an opportunity to provide face-to-face feedback, mail out, social media, and questionnaires as appropriate.

Risk Management

The Cultural Heritage Management Plan will be finalised in the next month which will help inform the construction methodology and processes to follow in the instance of discovery of artefacts and remains during construction.

Staged implementation of the stormwater project and the open space upgrade will spread the financial impact across multiple years, however; it will double the amount of time that the reserve is closed for public use, increase construction traffic in the local area, and cost more overall. The implementation of all works consecutively is the most risk adverse option given; it is more cost effective for the rate payer, minimises disruption to the local community and minimises overlap of work/interface issues with previous staged works.

Financial Management

Long Term Financial Planning (LTFP) - Stormwater

The Lefevre Peninsula Stormwater Management Plan highlighted the Naval Reserve flood mitigation strategy as being 'High Priority' due to flooding issues in the catchment and also the impacts of rising sea levels on the existing gravity stormwater system. The construction of the stormwater infrastructure (which also includes other work outside the naval basin works) will occur in the 2020/21 and 2021/22 financial years. The allocated construction budget only allowed for the required stormwater elements and earthworks involved in the construction of the stormwater basin. The budget estimate for this project made allowance for simple basin planting and turf re-establishment.

\$1.92 million is allocated towards the Naval Reserve Detention basin utilising funds rolled over from 2019/20 and new funds available in 2020/21.

Long Term Financial Planning – Parks and Garden

Currently the only budget allocation in the long term financial plan for Naval Reserve is \$180,000 in 2021/2022. This allocation is for the renewal of the playground asset which has almost reached its useful life. There is currently no budget allocation for any additional reserve upgrades.

It is recommended that the further design and consultation is undertaken in consideration of a construction allocation between \$1,400,000 and \$1,500,000. Following consultation, a further report will be provided to consider when and how to fund this additional work utilising the feedback from consultation.

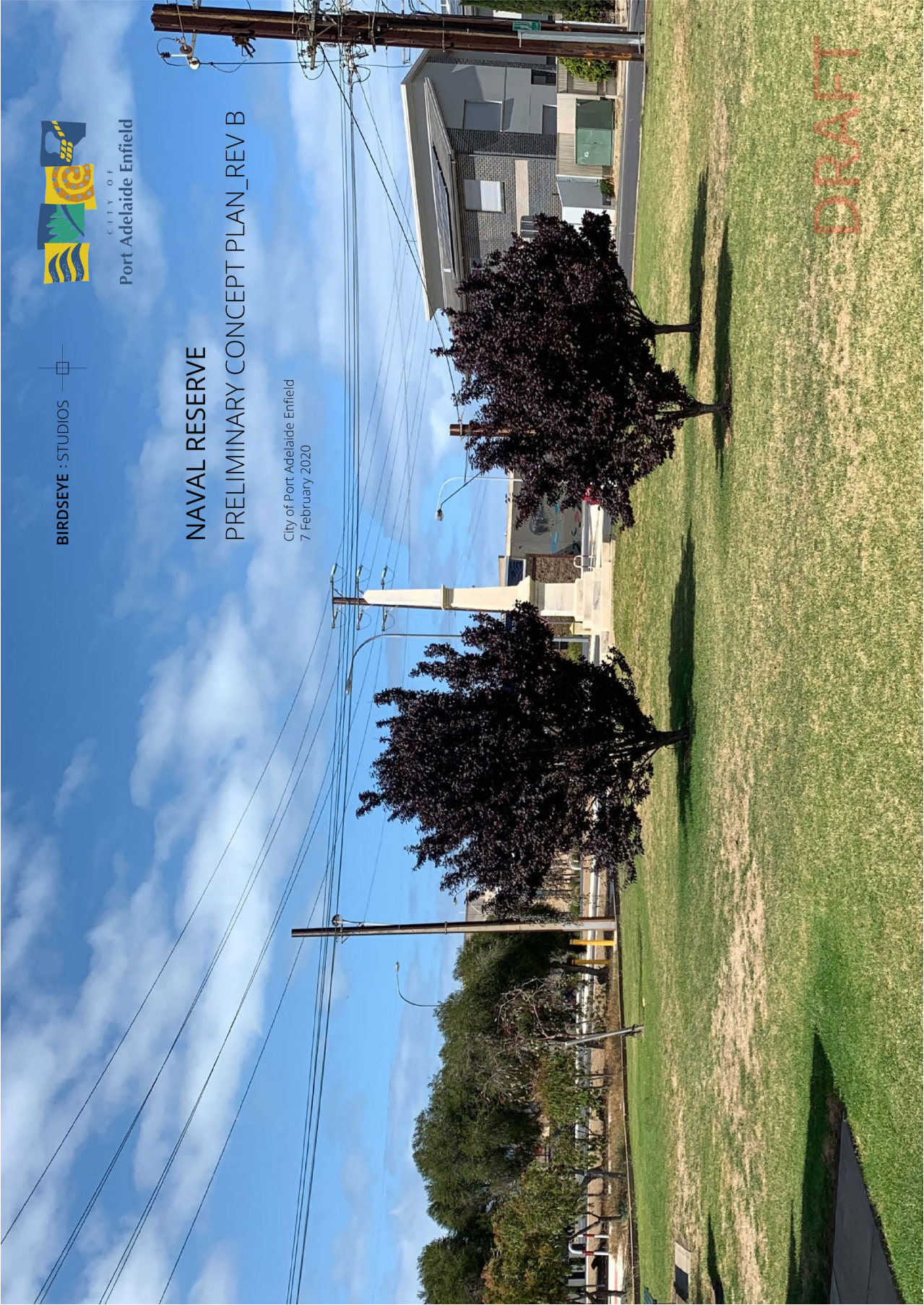
Grant Opportunities

Council Administration have recently applied for funding for the upgrade of the Naval Reserve Open Space under the '2020 Open Spaces and Places for People' grant scheme. On this occasion our application was unsuccessful.

Environmental and Social Impacts

The proposed stormwater works will reduce the extent and frequency of flooding for the surrounding streets and mitigate the impacts of high tides, rising sea levels and climate change.

Open space is important for both mental and physical health for the Community. Having a cohesive and engaging open space makes it more attractive for residents to spend time in the outdoors.





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BIRDSEYE : STUDIOS
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Fullarton SA 5063

birdseyestudios.com.au








contact@birdseyestudios.com.au



CITY OF
Port Adelaide Enfield

SITE CONCEPT PLAN

LEGEND

-  3m wide concrete shared path and kerb ramps
-  1.5m wide concrete footpath and kerb ramps
-  1.0m wide bitumen or stabilised rubble bike loop
-  1.0m high retaining wall
-  Irrigated turf
-  Min 8m wide native revegetation buffer to fence lines
-  Semi-aquatic planting in bottom of basin

- ① New pedestrian crossing across Semaphore Rd linking to new development
- ② Retain existing shared path connection to intersection, entry feature, and naval monument. Relocate other smaller monuments from around the reserve to this area.
- ③ Retain existing cul-de-sac and remove existing trees to create new entry threshold to reserve
- ④ Transplant existing Wollomai Pines to locations shown
- ⑤ Demolish existing public toilet and storage building
- ⑥ Deep section of basin located in narrow southern section of reserve to enable large usable open space to the north
- ⑦ GPT and stormwater pump platform
- ⑧ Remove medium shrub layer from revegetation zones and support with new local understorey revegetation
- ⑨ Upgrade maintenance vehicle entry and gate
- ⑩ Open kickabout / events area
- ⑪ Public toilet
- ⑫ Mini AFL Goals
- ⑬ Shelter, BBQ and seating area
- ⑭ Toddler / Junior Play Area
- ⑮ Swing area
- ⑯ Senior Play / Climbing Play Area
- ⑰ Nature Play Area
- ⑱ Kauria interpretation artwork / signage
- ⑲ Basketball half-court
- ⑳ Bike loop path



Preliminary Site Concept Plan

DETAIL CONCEPT PLAN



① NATURE PLAY AREA



② KAUNA INTERPRETATION ARTWORK & SIGNAGE



③ NAVAL THEMED TODDLER / JUNIOR PLAY AREA

BIRDSEYE STUDIOS | Naval Reserve | Preliminary Concept Plan



Preliminary Detail Concept Plan



④ COASTAL THEMED SHELTER STRUCTURE WITH BBQ & SEATING

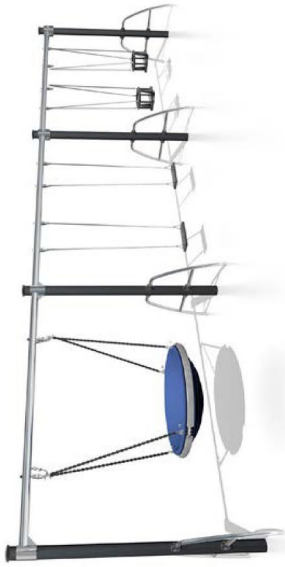
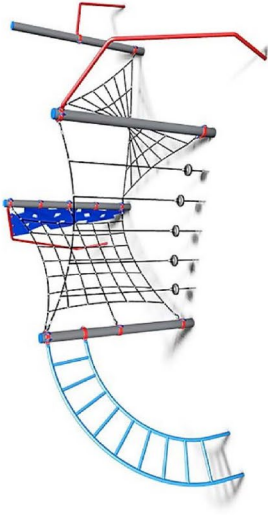


⑤ PUBLIC TOILET WITH HISTORIC GRAPHICS

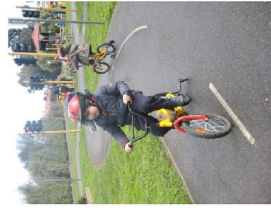
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⑥ SENIOR / CLIMBING PLAY AREA



⑦ MULTI SWING AREA



⑧ LOOP TRACK










⑨ 3 ON 3 BASKETBALL COURT & MINI AFL GOALS



PLANTING CONCEPT PLAN

LEGEND

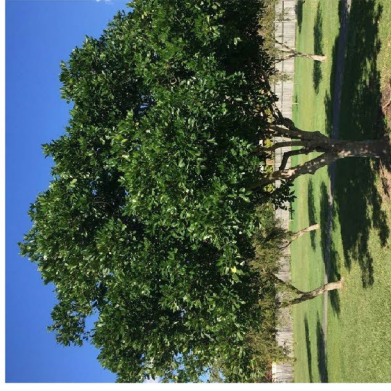
- 
3m wide concrete shared path and kerb ramps
- 
1.5m wide concrete footpath and kerb ramps
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1.0m wide bitumen or stabilised rubble bike loop
- 
1.0m high retaining wall
- 
Irrigated turf
- 
Min 8m wide native revegetation buffer to fence lines
- 
Semi-aquatic planting in bottom of basin

PLANT SCHEDULE	
KEY	BOTANICAL NAME
TREES	
Ca	Cupressus anacardoides
Ga	Grevillea robusta
Ip	Ipomoea pes-caprae
Za	Zantedea aemula 'Green Vein'
SHRUBS AND GROUNDCOVERS	
Ap	Acacia panicea
As	Asplenium platyneuron
Ab	Angelicum 'Big Red'
Bm	Banksia microphylla var. japonica
Br	Banksia integrifolia
Cr	Cornus reflexa
Dr	Dianella monstrosa
Hv	Hardy geranium violacea
BASIN PLANTING	
Cy	Cyperus vaginatus
Gr	Giant reed
Gs	Giant sedgemoor
Jpl	Juncus subnodulosus
Jpl	Juncus subnodulosus



PLANTING PALATTE

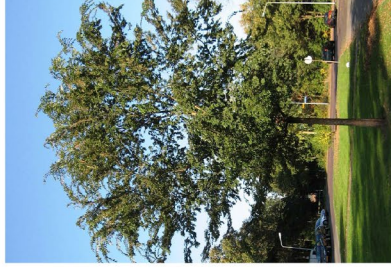
RESERVE TREES



Cupaniopsis anacardioides



Zelkova serrata 'Green Vase'



Ulmus parvifolia

ENTRY PLANTING



Buxus microphylla var. japonica



Dianella revoluta

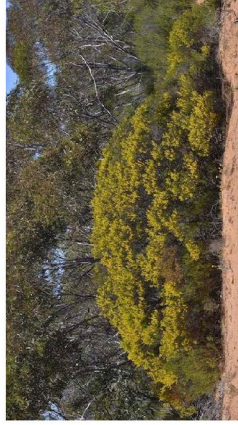


Anigozanthos 'Big Red'

BUFFER / UNDERSTOREY REVEGETATION



Acacia paradoxa



Acacia wilhelmiana

BASIN PLANTING



Cyperus vaginatus



Gahnia sieberiana



Juncus pallidus



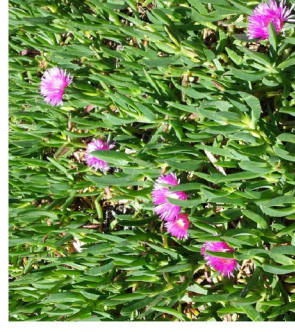
Hardenbergia violacea



Correa reflexa



Ficinia nodosa



Carpobrotus rossii