MINUTES

Council Meeting

Tuesday, 16 April 2024 at 6:30 PM

Disclaimer

Whilst Council has the power to resolve such items and may in fact, appear to have done so at the meeting, no person should rely on or act on the basis of such decision or on any advice or information provided by a member or officer, or on the content of any discussion occurring, during the course of the meeting.

Persons should be aware that the provisions of the Local Government Act 1995 (section 5.25 I) establish procedures for revocation or recission of a Council decision. No person should rely on the decisions made by Council until formal advice of the Council decision is received by that person.

The Town of East Fremantle expressly disclaims liability for any loss or damage suffered by any person as a result of relying on or acting on the basis of any resolution of Council, or any advice or information provided by a member or officer, or the content of any discussion occurring, during the course of the Council meeting.

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CONTENTS

MINUTES

MINUTES OF THE ORDINARY MEETING OF COUNCIL HELD IN THE COUNCIL CHAMBER, 135 CANNING HIGHWAY EAST FREMANTLE ON TUESDAY, 16 APRIL 2024.

1 OFFICIAL OPENING

The Presiding Member opened the meeting at 6.30pm.

2 ACKNOWLEDGEMENT OF COUNTRY

"On behalf of the Council I would like to acknowledge the Whadjuk Nyoongar people as the traditional custodians of the land on which this meeting is taking place and pay my respects to Elders past, present and emerging."

3 ANNOUNCEMENT TO GALLERY

"Members of the gallery are advised that no Council decision from tonight's meeting will be communicated or implemented until 12 noon on the first clear working day after this meeting, unless Council, by resolution carried at this meeting, requested the CEO to take immediate action to implement the decision."

4 RECORD OF ATTENDANCE

4.1 ATTENDANCE

The following members were in attendance:

Mayor J O'Neill	Presiding Member
Cr C Collinson	
Cr K Donovan	
Cr J Harrington	
Cr L Maywood	
Cr A McPhail	
Cr A Natale	
Cr A White	
Cr M Wilson	

The following staff were in attendance:

Mr J Throssell	Chief Executive Officer (CEO)
Mr A Malone	Executive Manager Regulatory Services (EMRS)
Mr P Kocian	Executive Manager Corporate Services (EMCS)
Mr N King	Executive Manager Technical Services (EMTS)
Ms J May	Minute Secretary
Ms N Parker	Consultant (Full Fat Consulting)

There was one member of the public in attendance.

4.2 APOLOGIES

Nil

4.3 APPROVED

Nil

5 DISCLOSURES OF INTEREST

5.1 FINANCIAL

Nil

5.2 PROXIMITY

5.2.1 ITEM 13.6 HEAD CONTRACT VARIATION – EAST FREMANTLE OVAL REDEVELOPMENT PROJECT

Mayor O'Neill disclosed a proximity interest in Item 13.6 Head Contract Variation East Fremantle Oval Redevelopment Project as he resides opposite where the extra variations have been recommended for approval. This was consistent with his previous declarations.

5.3 IMPARTIALITY

Nil

6 PUBLIC QUESTION TIME

6.1 RESPONSES TO PREVIOUS QUESTIONS FROM MEMBERS OF THE PUBLIC TAKEN ON NOTICE

Nil

6.2 PUBLIC QUESTION TIME

6.2.1 M MARON, 9 OAKOVER STREET

Mayor O'Neill noted Mr Maron's submitted public questions which had been circulated to council members. Staff responses to these questions are reprinted below:

1. Can the Town of East Fremantle outline any plans it has to combat PHSB (Polyphagous Shot Hole Borer) in the Town of East Fremantle?

   Regarding the issue of combatting PHSB (Polyphagous Shot Hole Borer) in East Fremantle, the Town is actively collaborating with DPIRD. We've identified that 16 out of the 41 trees listed in the Style Guide are either reproductive or non-reproductive hosts for PHSB. Of these susceptible species, 8 are introduced, 4 are native to regions outside of WA and 4 are native to Western Australia. In light of this, the planting of host tree species will be suspended until further notice, as PHSB may evolve. For those verge trees already requested, the Town will contact the residents and offer alternative species unaffected by PSHB. Additionally, we'll update the Verge Tree Request form and the Urban Streetscape guide to ensure problematic species are removed.

2. Can the Town of East Fremantle action the overhaul of the street trees it purchases to exclude species that are listed by DPIRD as PHSB Hot species (Species where the PHSB can reproduce and spread from)?

While DPIRD hasn't yet recommended ceasing the planting of host species, we can certainly consider this action and implement it if necessary. We are currently awaiting confirmation from DPIRD whether we can plant Non reproductive host species or not.

3. Can the Town of East Fremantle ensure that no new street trees of said species are purchased?

The Town will consider refraining from purchasing such trees for new street tree installations, noting there will be further discussion on this matter at a future Council Forum.

7 PRESENTATIONS/DEPUTATIONS

7.1 PRESENTATIONS

Nil

7.2 DEPUTATIONS

Nil

8 APPLICATIONS FOR LEAVE OF ABSENCE

8.1 CR WHITE

Cr White requested leave of absence from 20 May to 16 June 2024.

Moved Cr McPhail, seconded Cr Harrington

That leave of absence be granted to Cr White for the period 20 May to 16 June 2024.

(CARRIED UNANIMOUSLY 9:0)

For: **Mayor O'Neill, Crs Wilson, Collinson, Donovan, Harrington, Natale, McPhail, White & Maywood.**

Against: **Nil**

9 CONFIRMATION OF MINUTES OF PREVIOUS MEETING

9.1 MEETING OF COUNCIL (19 MARCH 2024)

OFFICER RECOMMENDATION

Moved Cr Donovan, seconded Cr Natale

That the minutes of the Ordinary meeting of Council held on Tuesday, 19 March 2024 be confirmed as a true and correct record of proceedings.

(CARRIED UNANIMOUSLY 9:0)

For: **Mayor O'Neill, Crs Wilson, Collinson, Donovan, Harrington, Natale, McPhail, White & Maywood.**

Against: **Nil**

10 ANNOUNCEMENTS BY THE PRESIDING MEMBER

Mayor O'Neill made the following announcements:

20/21 March - Year 4 Richmond Primary School visits
Thank all staff and Cr Harrington for attending. The kids were fantastic.

24 March – HMAS Perth
Attended on the Sunday morning where a rowing skiff from East Fremantle Yacht Club was being restored.

26 March – Hon Simone McGurk MLA/Lisa O'Malley/Belgravia representative
The CEO and I met with the above parties to discuss the East Fremantle Community Park and other matters relating to East Fremantle.

27 March – WA Tree Week
I attended with Mr Warn the celebration of WA Tree Week, held in Botanic Gardens in Kings Park.

13 April – Launch of Reliant 2
On Saturday morning I attended this launch at the Sea Rescue Fremantle, Royal Fremantle Annex, Mews Road. Busiest sea rescue group in Australia.

11 UNRESOLVED BUSINESS FROM PREVIOUS MEETINGS

Nil

12 REPORTS AND RECOMMENDATIONS OF COMMITTEES

Nil

13 REPORTS OF OFFICERS

Reports start on the next page

13.1 MONTHLY FINANCE REPORT 31 MARCH 2024

Report Reference Number	OCR-2722
Prepared by	Phil Garoni, Finance Manager
Supervised by	Peter Kocian, Executive Manager Corporate Services
Meeting date	Tuesday, 16 April 2024
Voting requirements	Part 3 of the Recommendation requires an Absolute Majority
Documents tabled	Nil

Attachments

1. Monthly Financial Report for the month ended 31 March 2024 containing the Statements of Financial Activity and Financial Position.

PURPOSE

The purpose of this report is to present to the Council the Monthly Financial Report (containing the Statement of Financial Activity by Nature and Type and Statement of Financial Position) for the month ended 31 March 2024. A Capital Works report has been incorporated into the workbook.

EXECUTIVE SUMMARY

A Monthly Financial Report workbook has been prepared to provide an overview of key financial activity.

The State Government has recently amended regulation 34 of the *Local Government (Financial Management) Regulations 1996* to require the Statement of Financial Activity to be presented according to nature or type classification.

Regulation 35 also requires local governments to prepare a monthly Statement of Financial Position. This has now been inserted into the Monthly Financial Report.

A Capital Works Report is presented detailing committed expenditure against budgets. This report is used to assess the clearance rate of capital projects.

BACKGROUND

Presentation of a monthly financial report to Council is both a statutory obligation and good financial management practice that:

a. demonstrates the Town's commitment to managing its operations in a financially responsible and sustainable manner.
b. provides timely identification of variances from budget expectations for revenues and expenditures and identification of emerging opportunities or changes in economic conditions.
c. ensures proper accountability to the ratepayers for the use of financial resources.

Financial information that is required to be reported to Council monthly includes:

a. operational financial performance against budget expectations.
b. explanations for identified variances from expectations.
c. financial position of the Town at the end of each month.

Understanding the Financials

When reading the financial information/statements, variances (deviations from budget expectations) are classified as either:

a. Favourable variance (F)
b. Unfavourable variance (U)
c. Timing variance (T)

A timing variance relates to a budgeted revenue or expense that has not occurred at the time it was expected, but which is still expected to occur with the budget year. That is, the financial transaction will still occur, but just in a different month. This timing difference may require for the year-to-date budget to be amended for future periods.

A realised favourable or unfavourable variance is different to a timing variance. It represents a genuine difference between the actual and budgeted revenue or expenditure item.

A realised favourable variance on a revenue item is a positive outcome as it increases the projected budget surplus. An unfavourable variance on a revenue item has the opposite effect, resulting in a decrease to the projected budget result.

A realised favourable variance on an expenditure item may have either of two causes – one being a saving because the outcome was achieved for lesser cost, which has the effect of increasing the projected budget result. The other cause may be that the proposed expenditure may not have been undertaken and is not expected to be incurred in that financial year. Whilst this may seem positive from the financial position perspective, it may not be a positive outcome for the community if the service or project is not delivered.

If a realised favourable or unfavourable variance is material in value, a recommendation will be provided to Council to amend the budget.

CONSULTATION

Budget Managers are provided with a monthly Responsible Officer Report for review and reporting of budget variances.

STATUTORY ENVIRONMENT

Section 6.4 of the *Local Government Act 1995* and Regulation 34 of *the Local Government (Financial Management) Regulations 1996* detail the form and way a local government is to prepare its Statement of Financial Activity.

Regulation 35 of the *Local Government (Financial Management) Regulations 1996* requires a monthly Statement of Financial Position to be prepared.

Expenditure from the municipal fund not included in the annual budget must be authorised in advance by an absolute majority decision of Council pursuant to section 6.8 of the *Local Government Act 1995*.

Fees and charges are imposed in accordance with section 6.16 of the *Local Government Act 1995.* Fees and charges imposed outside of the Annual Budget require an absolute majority decision of Council and must give local public notice of the new fees pursuant to section 6.19 of the *Local Government Act 1995*.

POLICY IMPLICATIONS

Significant Accounting Policies are adopted by Council on an annual basis. These policies are used in the preparation of the statutory reports submitted to Council.

FINANCIAL IMPLICATIONS

Material variances are disclosed in the Statement of Financial Activity.

As part of the adopted 2023/24 Budget, Council adopted the following thresholds as levels of material variances for financial reporting:

That in accordance with regulation 34 (5) of the Local Government (Financial Management) Regulations 1996, and AASB 1031 Materiality, the level to be used in statements of financial activity in 2023/24 for reporting material variances shall be:

a) 10% of the amended budget; or
b) $10,000 of the amended budget;
whichever is greater.

In addition, that the material variance limit be applied to total revenue and expenditure for each Nature and Type classification and capital income and expenditure in the Statement of Financial Activity.

STRATEGIC IMPLICATIONS

The monthly financial report is the key financial reporting mechanism to Council, to provide oversight of the financial management of the local government. This ties into the Strategic Community Plan as follows:

4.9 A financially sustainable Town – Provide financial management services to enable the Town to sustainably provide services to the community.

RISK IMPLICATIONS

RISKS

Risk	Risk Likelihood (based on history & with existing controls)	Risk Impact / Consequence	Risk Rating (Prior to Treatment or Control)	Principal Risk Theme	Risk Action Plan (Controls or Treatment proposed)
Inadequate oversight of the financial position of the Town may result in adverse financial trends	Rare (1)	Major (4)	Low (1-4)	FINANCIAL IMPACT $50,000 - $250,000	Manage by monthly review of financial statements and key financial information
Inadequate monitoring of grant funding and expenditure resulting in incorrect income transfers	Possible (3)	Moderate (3)	Moderate (5-9)	FINANCIAL IMPACT $250,001 - $1,000,000	Manage by updating the internal grants register and contract liabilities register each month

RISK MATRIX

Consequence / Likelihood		Insignificant	Minor	Moderate	Major	Extreme
		1	2	3	4	5
Almost Certain	**5**	**Moderate (5)**	**High (10)**	**High (15)**	**Extreme (20)**	**Extreme (25)**
Likely	**4**	**Low (4)**	**Moderate (8)**	**High (12)**	**High (16)**	**Extreme (20)**
Possible	**3**	**Low (3)**	**Moderate (6)**	**Moderate (9)**	**High (12)**	**High (15)**
Unlikely	**2**	**Low (2)**	**Low (4)**	**Moderate (6)**	**Moderate (8)**	**High (10)**
Rare	**1**	**Low (1)**	**Low (2)**	**Low (3)**	**Low (4)**	**Moderate (5)**

A risk is often specified in terms of an event or circumstance and the consequences that may flow from it. An effect may be positive, negative or a deviation from the expected and may be related to the following objectives: occupational health and safety, financial, service interruption, compliance, reputation and environment. A risk matrix has been prepared and a risk rating is provided below. Any items with a risk rating over 16 will be added to the Risk Register, and any item with a risk rating over 16 will require a specific risk treatment plan to be developed.

RISK RATING

Risk Rating	9
Does this item need to be added to the Town's Risk Register	Yes
Is a Risk Treatment Plan Required	No

SITE INSPECTION

Not applicable.

COMMENT

This report presents the Statement of Financial Activity by Nature and Type for the month ending 31 March 2024.

The following is a summary of headline numbers from the attached financial report, and explanations for variances is provided in Note 1 of the workbook:

	Original Budget	Current Budget	YTD Budget	YTD Actuals
Opening Surplus	**378,508**	**751,732**	**751,732**	**751,732**
Operating Revenue	11,974,645	12,085,849	11,735,843	11,730,769
Operating Expenditure	(12,611,283)	(12,972,909)	(9,377,100)	(9,049,327)
Capital Expenditure	(22,424,516)	(23,971,912)	(21,340,629)	(20,618,519)
Capital Income	16,151,762	17,465,892	17,318,799	15,081,687
Financing Activities	4,449,554	4,770,005	4,091,593	4,091,592
Non-Cash Items	2,081,330	2,063,530	1,521,897	1,330,493
Closing Surplus/(Deficit)	**0**	**192,187**	**4,702,135**	**3,318,428**

The YTD closing surplus is lower than the YTD budget primarily due to a variance against non-operating income. This relates to income transfers that have yet to be processed for the East Fremantle Oval Redevelopment and the Fremantle City Women's Football Club projects, as well as grant payments that will be recouped on completion of these projects.

The Executive Summary in the workbook provides an overview of key indicators for the month. Further comments are provided below:

- Rate Notices were issued on the 19 July. The Town received $10.6M in rates and charges revenue (including rates, ESL, service charges) by the end of March, equating to 95.70% of total rates and charges paid.
- Capital works are progressing with a financial completion rate of 86% against the full year budget.
- The EF Oval Redevelopment Project expenditure recognised in 2023/24 against the EF Oval Project is $19.8M, bringing the total Project Costs to Date to $32.8M, representing 94.8% of the total Project Budget.

Budget Variations:

Mid-year review recommended $80,000 allocated for Road pavement surface – renewal to be removed. Road inspections and assessments by the operations area rated our current road surfacing was at an adequate level. A recent works committee meeting held on 26th March 2024, has identified works for Penhurst Road resurfacing project between Fraser Street and Pier Street. As such savings have been identified by the operations area to offset against the requirement for these works. These adjustments have affected the apportionment of capital expenditure in the 2023/24 budget. The overall budget position has not changed.

General ledger	Account description	Current Budget	Amended Budget	Change in Net Current Assets	Comment
INF620R	Penshurst Streetresurfacing project between Fraser Street and Pier Street	$0	$72,399	**($72,399)**	Road surfacing recommended by works committee
E12823	Capex - Drainage Rationalisation – Foreshore	$60,000	$17,601	**$42,399**	Savings identified based on works completed.
E11742	Infrastructure - Parks & Ovals - Retic Controllers	$10,000	$0	**$10,000**	Savings identified based on works completed.
E12801	George Street - general paving repairs	$30,000	$10,000	**$20,000**	Savings identified based on works completed.
Total		**$100,000**	**$100,000**	**$0**	

CONCLUSION

Council is requested to receive the Monthly Financial Report for the month ended March 2024 and approve the schedule of budget variations as submitted.

13.1 OFFICER RECOMMENDATION / COUNCIL RESOLUTION

Council Resolution 011604

OFFICER RECOMMENDATION:

Moved Cr McPhail, seconded Cr Natale

That Council:

1. **receives the Monthly Financial Report for the month ended 31 March 2024, as presented as attachment 1 to this report, inclusive of:**
   - **(i) Statement of Financial Activity by Nature and Type**
   - **(ii) Statement of Financial Position**
   - **(iii) Capital Expenditure Report**
2. **notes the unrestricted municipal surplus of $3,318,428 for the month ended 31 March 2024.**
3. **pursuant to section 6.8 of the *Local Government Act 1995*, approves by absolute majority the schedule of budget variations below, resulting in a nil change in net current assets at 30 June 2024.**

General ledger	Account description	Current Budget	Amended Budget	Change in Net Current Assets	Comment
INF620R	**Penshurst Street resurfacing project between Fraser Street and Pier Street**	**$0**	**$72,399**	**($72,399)**	**Road surfacing recommended by works committee**
E12823	**Capex - Drainage Rationalisation – Foreshore**	**$60,000**	**$17,601**	**$42,399**	**Savings identified based on works completed.**

E11742	**Infrastructure - Parks & Ovals - Retic Controllers**	**$10,000**	**$0**	**$10,000**	**Savings identified based on works completed.**
E12801	**George Street - general paving repairs**	**$30,000**	**$10,000**	**$20,000**	**Savings identified based on works completed.**
Total		**$100,000**	**$100,000**	**$0**	

(CARRIED UNANIMOUSLY BY AN ABSOLUTE MAJORITY 9:0)

For: **Mayor O'Neill, Crs Wilson, Collinson, Donovan, Harrington, Natale, Maywood, White & McPhail.**

Against: **Nil**

REPORT ATTACHMENTS

Attachments start on the next page

TOWN OF EAST FREMANTLE

MONTHLY FINANCIAL REPORT
(Containing the Statements of Financial Activity and Financial Position)
For the period ended 31 March 2024

LOCAL GOVERNMENT ACT 1995
LOCAL GOVERNMENT (FINANCIAL MANAGEMENT) REGULATIONS 1996

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TOWN OF EAST FREMANTLE
FOR THE PERIOD ENDED 31 MARCH 2024

KEY INFORMATION

Funding Surplus or Deficit Components

Funding surplus / (deficit)

	Adopted Budget	YTD Budget (a)	YTD Actual (b)	Var. $ (b)-(a)
Opening	$0.75 M	$0.75 M	$0.75 M	$0.00 M
Closing	$0.19 M	$4.70 M	$3.32 M	($1.38 M)

Refer to Statement of Financial Activity

Cash and cash equivalents

	$9.04 M	% of total
Unrestricted Cash	$4.37 M	48.4%
Restricted Cash	$4.66 M	51.6%

Refer to 3 - Cash and Cash Investments

Payables

	$1.23 M	% Outstanding
Trade Payables	$0.63 M	
0 to 30 Days		0.0%
Over 30 Days		0.0%
Over 90 Days		0.0%

Receivables

	$0.17 M	% Collected
Rates Receivable	$0.47 M	95.7%
Trade Receivable	$0.17 M	% Outstanding
Over 30 Days		14.9%
Over 90 Days		1.9%

Refer to 7 - Receivables

Key Operating Activities

Amount attributable to operating activities

Adopted Budget	YTD Budget (a)	YTD Actual (b)	Var. $ (b)-(a)
$1.18 M	$3.88 M	$4.01 M	$0.13 M

Refer to Statement of Financial Activity

Rates Revenue

YTD Actual	$9.12 M	% Variance
YTD Budget	$9.12 M	0.0%

Refer to 8 - Rate Revenue

Grants and Contributions

YTD Actual	$0.76 M	% Variance
YTD Budget	$0.78 M	(2.5%)

Refer to 10 - Grants and Contributions

Fees and Charges

YTD Actual	$1.22 M	% Variance
YTD Budget	$1.22 M	0.8%

Refer to Statement of Financial Activity

Key Investing Activities

Amount attributable to investing activities

Adopted Budget	YTD Budget (a)	YTD Actual (b)	Var. $ (b)-(a)
($6.51 M)	($4.02 M)	($5.54 M)	($1.52 M)

Refer to Statement of Financial Activity

Proceeds on sale

YTD Actual	$0.04 M	%
Adopted Budget	$0.17 M	(76.0%)

Refer to 6 - Disposal of Assets

Asset Acquisition

YTD Actual	$0.37 M	% Spent
Adopted Budget	$0.67 M	(44.9%)

Refer to 5 - Capital Acquisitions

Capital Grants

YTD Actual	$15.04 M	% Received
Adopted Budget	$17.29 M	(13.0%)

Refer to 5 - Capital Acquisitions

Key Financing Activities

Amount attributable to financing activities

Adopted Budget	YTD Budget (a)	YTD Actual (b)	Var. $ (b)-(a)
$4.77 M	$4.09 M	$4.09 M	($0.00 M)

Refer to Statement of Financial Activity

Borrowings

Principal repayments	($0.00 M)
Interest expense	$0.00 M
Principal due	$4.90 M

Refer to 9 - Borrowings

Reserves

Reserves balance	$3.30 M
Interest earned	$0.44 M

Refer to 4 - Cash Reserves

Report Preparation

Prepared by:	Manager Finance
Reviewed by:	Executive Manager Corporate Services
Date Prepared:	8/04/2024

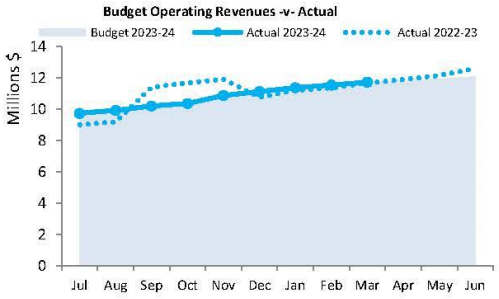
This information is to be read in conjunction with the accompanying Financial Statements and notes.

TOWN OF EAST FREMANTLE
FOR THE PERIOD ENDED 31 MARCH 2024

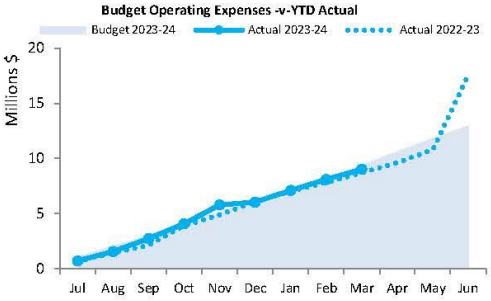
KEY INFORMATION - GRAPHICAL

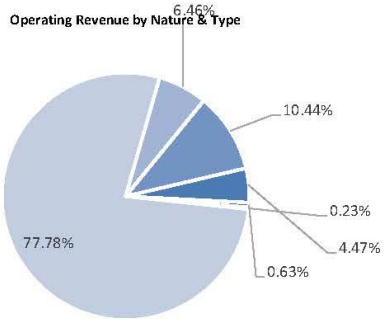
OPERATING ACTIVITIES

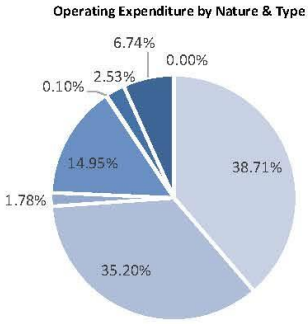
OPERATING REVENUE



OPERATING EXPENSES





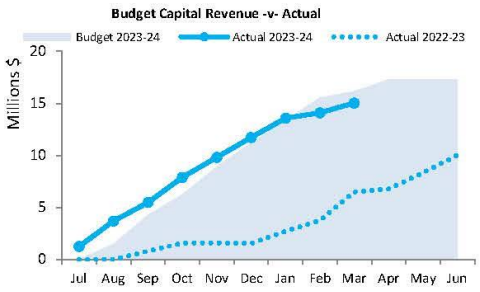


Rates | Grants, subsidies and contribution | Fees and charges | Interest revenue | Other revenue | Profit on asset disposals

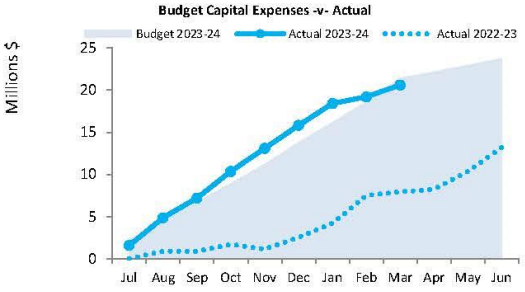
Employee costs | Materials and contracts | Utility charges | Depreciation | Finance costs | Insurance | Other expenditure | Loss on asset disposals

INVESTING ACTIVITIES

CAPITAL REVENUE



CAPITAL EXPENSES



Closing funding surplus / (deficit)

This information is to be read in conjunction with the accompanying Financial Statements and Notes.

TOWN OF EAST FREMANTLE
STATEMENT OF FINANCIAL ACTIVITY
FOR THE PERIOD ENDED 31 MARCH 2024

	Note	Current Budget (a)	YTD Budget (b)	YTD Actual (c)	Variance* $ (c) - (b)	Variance* % ((c) - (b))/(b)	Var.
		$	$	$	$	%	
OPERATING ACTIVITIES							
Revenue from operating activities							
Rates	8	9,125,610	9,124,003	**9,124,003**	0	0.00%	
Grants, subsidies and contributions	10	848,836	777,028	**757,485**	(19,543)	(2.52%)	▼
Fees and charges		1,472,963	1,215,485	**1,224,975**	9,490	0.78%	
Interest revenue		479,440	464,577	**523,840**	59,263	12.76%	▲
Other revenue		56,000	51,750	**73,681**	21,931	42.38%	▲
Profit on asset disposals	6	103,000	103,000	**26,785**	(76,215)	(74.00%)	▼
		12,085,849	**11,735,843**	**11,730,769**	(5,074)	(0.04%)	
Expenditure from operating activities							
Employee costs		(4,969,094)	(3,653,791)	**(3,503,003)**	150,788	4.13%	▼
Materials and contracts		(4,410,704)	(2,979,553)	**(3,184,954)**	(205,401)	(6.89%)	▲
Utility charges		(243,950)	(172,711)	**(160,696)**	12,015	6.96%	▼
Depreciation		(2,166,530)	(1,624,897)	**(1,353,021)**	271,876	16.73%	▼
Finance costs		(134,490)	(5,157)	**(8,927)**	(3,770)	(73.10%)	▲
Insurance		(258,240)	(258,240)	**(229,133)**	29,107	11.27%	▼
Other expenditure		(789,901)	(682,751)	**(609,593)**	73,158	10.72%	▼
Loss on asset disposals	6	0	0	**0**	0	0.00%	
		(12,972,909)	**(9,377,100)**	**(9,049,327)**	327,773	3.50%	
Non-cash amounts excluded from operating activities	2(b)	2,063,530	1,521,897	**1,330,493**	(191,404)	(12.58%)	▼
Amount attributable to operating activities		**1,176,470**	**3,880,640**	**4,011,935**	131,295	3.38%	
INVESTING ACTIVITIES							
Proceeds from capital grants, subsidies and contributions	10	17,294,491	17,277,654	**15,040,542**	(2,237,112)	(12.95%)	▼
Proceeds from disposal of assets	6	171,401	41,145	**41,145**	0	0.00%	
Payments for property, plant and equipment	5	(23,361,912)	(20,875,728)	**(20,248,184)**	627,544	3.01%	▼
Payments for construction of infrastructure	5	(610,000)	(464,901)	**(370,335)**	94,566	20.34%	▼
Amount attributable to investing activities		**(6,506,020)**	**(4,021,830)**	**(5,536,831)**	(1,515,001)	(37.67%)	
FINANCING ACTIVITIES							
Proceeds from new debentures	9	4,800,000	4,800,000	**4,800,000**	0	0.00%	
Transfer from reserves	4	1,557,424	10,609	**10,609**	0	0.00%	
Repayment of borrowings	9	(77,534)	(3,713)	**(3,713)**	0	0.00%	
Payments for principal portion of lease liabilities		(49,807)	(43,901)	**(43,901)**	0	0.00%	
Transfer to reserves	4	(1,460,078)	(671,402)	**(671,402)**	(0)	(0.00%)	
Amount attributable to financing activities		**4,770,005**	**4,091,593**	**4,091,592**	(0)	(0.00%)	
MOVEMENT IN SURPLUS OR DEFICIT							
Surplus or deficit at the start of the financial year		751,732	751,732	**751,732**	0	0.00%	
Amount attributable to operating activities		1,176,470	3,880,640	**4,011,935**	131,295	3.38%	▲
Amount attributable to investing activities		(6,506,020)	(4,021,830)	**(5,536,831)**	(1,515,001)	(37.67%)	▼
Amount attributable to financing activities		4,770,005	4,091,593	**4,091,592**	(0)	(0.00%)	
Surplus or deficit after imposition of general rates		**192,187**	**4,702,135**	**3,318,428**	(1,383,707)	(29.43%)	▼

KEY INFORMATION

▲▼ Indicates a variance between Year to Date (YTD) Budget and YTD Actual data as per the adopted materiality threshold.

* Refer to Note 1 for an explanation of the reasons for the variance.

This statement is to be read in conjunction with the accompanying Financial Statements and Notes.

TOWN OF EAST FREMANTLE
STATEMENT OF FINANCIAL POSITION
FOR THE PERIOD ENDED 31 MARCH 2024

	Note	30 June 2023	31 March 2024
		$	$
CURRENT ASSETS			
Cash and cash equivalents	3	14,631,561	9,036,534
Trade and other receivables		741,694	933,476
Contract assets		6,829	0
Other assets		160,902	0
TOTAL CURRENT ASSETS		15,540,986	9,970,010
NON-CURRENT ASSETS			
Trade and other receivables		96,650	92,393
Other financial assets		81,490	81,490
Investment in associate		871,324	871,324
Property, plant and equipment		41,422,143	60,961,099
Infrastructure		45,730,099	45,489,204
Right-of-use assets		208,607	161,684
TOTAL NON-CURRENT ASSETS		88,410,313	107,657,194
TOTAL ASSETS		103,951,299	117,627,204
CURRENT LIABILITIES			
Trade and other payables		4,750,979	1,232,429
Other liabilities		6,642,115	1,363,126
Lease liabilities		44,114	213
Borrowings	9	5,068	1,355
Employee related provisions		757,227	756,298
Other provisions	11	268,434	268,434
TOTAL CURRENT LIABILITIES		12,467,937	3,621,855
NON-CURRENT LIABILITIES			
Lease liabilities		198,300	198,300
Borrowings	9	94,112	4,894,112
Employee related provisions		125,624	125,624
TOTAL NON-CURRENT LIABILITIES		418,036	5,218,036
TOTAL LIABILITIES		12,885,973	8,839,891
NET ASSETS		**91,065,326**	**108,787,313**
EQUITY			
Retained surplus		38,114,941	55,176,135
Reserve accounts	4	2,638,933	3,299,726
Revaluation surplus		50,311,452	50,311,452
TOTAL EQUITY		**91,065,326**	**108,787,313**

This statement is to be read in conjunction with the accompanying notes.

Movement in Equity	**17,721,987**
Explained by:	
Amount attributed to operating activities	4,011,940
Proceeds from capital activities	14,370,840
Net reserves movement	(660,794)
	17,721,987

TOWN OF EAST FREMANTLE
NOTES TO THE STATEMENT OF FINANCIAL ACTIVITY
FOR THE PERIOD ENDED 31 MARCH 2024

1 EXPLANATION OF MATERIAL VARIANCES

The material variance thresholds are adopted annually by Council as an indicator of whether the actual expenditure or revenue varies from the year to date actual materially.
The material variance adopted by Council for the 2023-24 year is $10,000 or 10.00% whichever is the greater.

Description	Var. $	Var. %	Var.	Timing / Permanent	Explanation
	$	%			
Revenue from operating activities					
Rates	0	0.00%		Timing	No material variance
Grants, subsidies and contributions	(19,543)	(2.52%)	▼	Timing	No material variance
Fees and charges	9,490	0.00%		Timing	No material variance
Interest revenue	59,263	12.76%	▲	Permanent	Interest on municipal investments higher than expected at this point in time. Interest received from rates higher than budgeted.
Other revenue	21,931	42.38%	▲	Timing	Unbudgeted Workcover compensation claims
Profit on asset disposals	(76,215)	(74.00%)	▼	Timing	Schedule of disposal of vehicles and plant delayed.
Expenditure from operating activities					
Employee costs	150,788	4.13%	▼	Timing	Favourable
Materials and contracts	(205,401)	(6.89%)	▲	Timing	Unfavourable - No material variance
Utility charges	12,015	6.96%	▼	Timing	Favourable
Depreciation	271,876	16.73%	▼	Timing	
Finance costs	(3,770)	(73.10%)	▲	Timing	No material variance
Insurance	29,107	11.27%	▼	Timing	Favourable
Other expenditure	73,158	10.72%	▼	Timing	Councillor training expenses below budget to date $34.8k Building service levy below expected budget by $29k Contributions for regional waste mangement below budget by $8k
Loss on asset disposals	0	0.00%		No variance	
Non-cash amounts excluded from operating activities	(191,404)	(12.58%)	▼	Timing	No material variance
Investing Activities					
Proceeds from capital grants, subsidies and contributions	(2,237,112)	(12.95%)	▼	Timing	See Note 10 Grants & Contributions for more detailed information
Proceeds from disposal of assets	0	0.00%		Timing	Schedule of disposal of vehicles and plant delayed.
Payments for property, plant and equipment	627,544	3.01%	▼	Timing	See Note 5 Capital Acquisitions for more detailed information
Payments for construction of infrastructure	94,566	20.34%	▼	Timing	See Note 5 Capital Acquisitions for more detailed information
Financing Activities					
Proceeds from new debentures	0	0.00%		No variance	
Transfer from reserves	0	0.00%		No variance	
Repayment of borrowings	0	0.00%		No variance	
Payments for principal portion of lease liabilities	0	0.00%		No variance	
Transfer to reserves	0	0.00%		No variance	
Surplus or deficit at the start of the financial year	0	0.00%		Permanent	Pending finalisation of annual report
Surplus or deficit after imposition of general rates	(1,383,707)	(29.43%)	▼	Timing	Due to variances described above

TOWN OF EAST FREMANTLE
NOTES TO THE STATEMENT OF FINANCIAL ACTIVITY
FOR THE PERIOD ENDED 31 MARCH 2024

2 STATEMENT OF FINANCIAL ACTIVITY INFORMATION

(a) Net current assets used in the Statement of Financial Activity

	Note	Current Budget Closing 30 June 2024	Last Year Closing 30 June 2023	Year to Date 31 March 2024
Current assets		$	$	$
Cash and cash equivalents	3	5,074,702	14,631,561	9,036,534
Trade and other receivables		252,401	741,694	933,476
Contract assets	8	0	6,829	0
Other assets	8	52,099	160,902	0
		5,379,202	15,540,986	9,970,010
Less: current liabilities				
Trade and other payables	9	(1,854,815)	(4,750,979)	(1,232,429)
Other liabilities	11	(71,910)	(6,642,115)	(1,363,126)
Lease liabilities	10	0	(44,114)	(213)
Borrowings	9	(4,820,670)	(5,068)	(1,355)
Employee related provisions	11	(675,173)	(757,227)	(756,298)
Other provisions	11	(43,530)	(268,434)	(268,434)
		(7,466,098)	(12,467,937)	(3,621,855)
Net current assets		**(2,086,896)**	**3,073,049**	**6,348,155**
Less: Total adjustments to net current assets	2(c)	2,279,083	(2,321,317)	(3,029,725)
Closing funding surplus / (deficit)		**192,187**	**751,732**	**3,318,428**

(b) Non-cash amounts excluded from operating activities

The following non-cash revenue and expenditure has been excluded from operating activities within the Statement of Financial Activity in accordance with *Financial Management Regulation 32*.

Non-cash amounts excluded from operating activities		Current Budget	YTD Budget (a)	YTD Actual (b)
		$	$	$
Adjustments to operating activities				
Less: Profit on asset disposals	6	(103,000)	(103,000)	(26,785)
Add: Loss on asset disposals	6	0	0	0
Add: Depreciation		2,166,530	1,624,897	1,353,021
- Pensioner deferred rates		0	0	4,257
Total non-cash amounts excluded from operating activities		**2,063,530**	**1,521,897**	**1,330,493**

(c) Current assets and liabilities excluded from budgeted deficiency

The following current assets and liabilities have been excluded from the net current assets used in the Statement of Financial Activity in accordance with *Financial Management Regulation 32* to agree to the surplus/(deficit) after imposition of general rates.

		Current Budget Opening 30 June 2024	Last Year Closing 30 June 2023	Year to Date 31 March 2024
		$	$	$
Adjustments to net current assets				
Less: Reserve accounts	4	(2,541,587)	(2,638,933)	(3,299,727)
- Current portion of borrowings	9	4,820,670	5,068	1,355
- Current portion of lease liabilities	10	0	44,114	213
- Current provision for equity contribution - Investment in Associate			268,434	268,434
Total adjustments to net current assets	2(a)	**2,279,083**	**(2,321,317)**	**(3,029,725)**

CURRENT AND NON-CURRENT CLASSIFICATION

In the determination of whether an asset or liability is current or non-current, consideration is given to the time when each asset or liability is expected to be settled. Unless otherwise stated assets or liabilities are classified as current if expected to be settled within the next 12 months, being the Council's operational cycle.

TOWN OF EAST FREMANTLE
SUPPLEMENTARY INFORMATION
FOR THE PERIOD ENDED 31 MARCH 2024

3 CASH AND CASH INVESTMENTS

Description	Unrestricted	Restricted	Total Cash	Institution	Risk Rating (LT)	Interest Rate	Maturity Date
	$	$	$				
Cash Deposits							
Municipal Bank Account	1,320,465	0	1,320,465	CBA	AA-		At Call
Municipal Bonds & Deposits Account	607,187	0	607,187	CBA	AA-		At Call
Cash On Hand	800	0	800	Petty Cash/Till Float			On Hand
Term Deposits							
Pooled (Muni, Reserves, Bonds and Grants)	2,445,229	4,662,853	2,048,970	SUNCORP	A-	4.90%	Jun 24
Pooled (Muni, Reserves, Bonds and Grants)			3,059,112	NAB	AA-	4.25%	Apr 24
Pooled (Muni, Reserves, Bonds and Grants)			1,000,000	NAB	AA-	4.25%	Apr 24
Pooled (Muni, Reserves, Bonds and Grants)			1,000,000	CBA	AA-	4.41%	Apr 24
Total	**4,373,681**	**4,662,853**	**9,036,534**			**4.46%**	
Comprising							
Cash and cash equivalents	4,373,681	4,662,853	9,036,534				
	4,373,681	**4,662,853**	**9,036,534**				

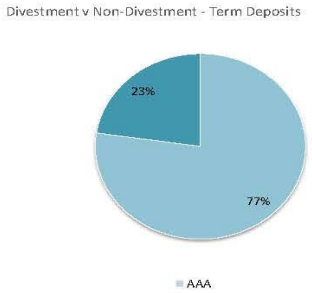
Financial assets at amortised cost held with registered financial institutions are listed in this note other financial assets at amortised cost are provided in Note 4 - Other assets.

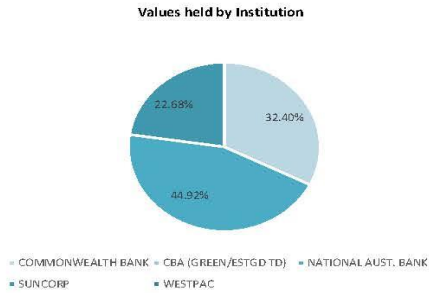
Comments/Notes - Investments and Cash Deposits

INSTITUTION	$	(LT) RISK	%
COMMONWEALTH BANK	$2,927,652	AA-	32.40%
CBA (GREEN/ESTGD TD)	$0	AA-	0.00%
NATIONAL AUST. BANK	$4,059,112	AA-	44.92%
SUNCORP	$2,048,970	AA-	22.68%
WESTPAC	$0	AA-	0.00%
	$9,035,734		**100.00%**

(LT) RISK RATING	PORTFOLIO	$	%
AAA	MAX 100%	$0	0%
AA-	MAX 100%	$6,986,764	77%
AA (GREEN TERM DEPOSITS)	MAX 100%	$0	0%
A- (DIVESTMENT)	MAX 100%	$2,048,970	23%
BBB+ (DIVESTMENT)	MAX 80%	$0	0%
		$9,035,734	100%

The Town obtains quotes from three (3) financial institutions prior to placing investments. This ensures the Town is receiving the best return on investment possible. The amount the Town invests is dependent on cash flow requirements for business operations and capital works for upcoming months. As the financial year progresses, the Town's cash holdings decreases which means less investment of Municipal funds.
The current monetary policy imposed by the Reserve Bank of Australia (RBA) is driving the interest rate environment.
The Town's investment policy precludes investing in term deposits for more than 12 months.

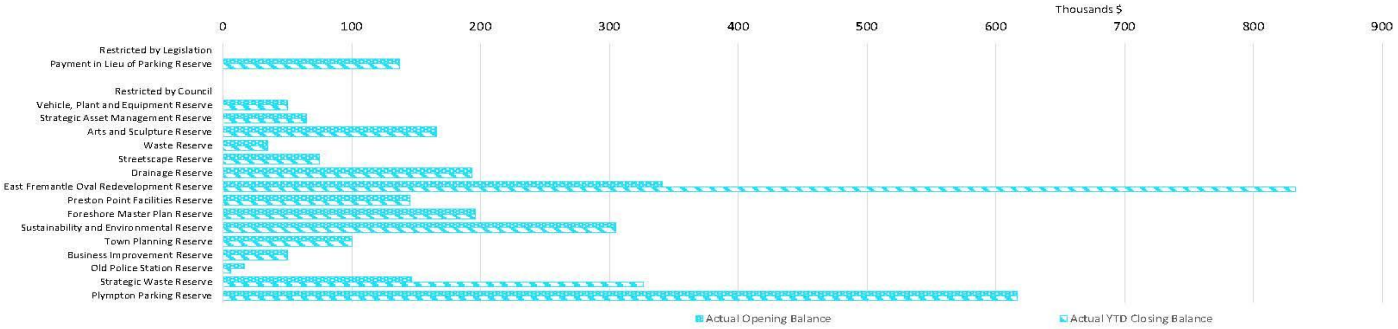




TOWN OF EAST FREMANTLE
SUPPLEMENTARY INFORMATION
FOR THE PERIOD ENDED 31 MARCH 2024

4 RESERVE ACCOUNTS

	ORIGINAL				CURRENT								
Reserve name	Budget Opening Balance	Budget Transfers In (+)	Budget Transfers Out (-)	Budget Closing Balance	Actual Opening Balance	Budget Transfers In (+)	Budget Transfers Out (-)	Budget Closing Balance	Actual Opening Balance	Actual Interest Earned	Actual Transfers In (+)	Actual Transfers Out (-)	Actual YTD Closing Balance
	$	$	$	$	$	$	$	$	$	$	$	$	$
Restricted by Legislation													
Payment in Lieu of Parking Reserve	137,010	0	0	137,010	137,010	0	0	137,010	137,010	0	0	0	137,010
Restricted by Council													
Vehicle, Plant and Equipment Reserve	50,407	0	0	50,407	50,407	0	(50,407)	0	50,407	0	0	0	50,407
Strategic Asset Management Reserve	64,920	0	0	64,920	64,920	0	(64,920)	0	64,920	0	0	0	64,920
Arts and Sculpture Reserve	165,664	30,000	(45,000)	150,664	165,664	30,000	(45,000)	150,664	165,664	0	0	0	165,664
Waste Reserve	35,000	0	0	35,000	35,000	0	0	35,000	35,000	0	0	0	35,000
Streetscape Reserve	75,000	0	0	75,000	75,000	0	0	75,000	75,000	0	0	0	75,000
Drainage Reserve	216,000	0	0	216,000	193,293	0	(60,000)	133,293	193,293	0	0	0	193,293
East Fremantle Oval Redevelopment Reserve	532,641	936,111	(688,879)	779,873	341,431	936,111	(848,879)	428,663	341,431	441,581	49,821	(0)	832,833
Preston Point Facilities Reserve	65,290	0	(30,000)	35,290	145,290	0	(145,290)	0	145,290	0	0	0	145,290
Foreshore Master Plan Reserve	213,618	0	0	213,618	196,344	0	0	196,344	196,344	0	0	0	196,344
Sustainability and Environmental Reserve	304,723	133,830	(310,000)	128,553	304,723	133,830	0	438,553	304,723	0	0	0	304,723
Town Planning Reserve	100,000	50,000	0	150,000	100,000	50,000	0	150,000	100,000	0	0	0	100,000
Business Improvement Reserve	50,000	100,000	0	150,000	50,000	100,000	0	150,000	50,000	0	0	0	50,000
Old Police Station Reserve	16,500	30,137	(16,244)	30,393	16,500	30,137	(16,244)	30,393	16,500	0	0	(10,609)	5,891
Strategic Waste Reserve	146,684	180,000	(326,684)	0	146,684	180,000	(326,684)	0	146,684	0	180,000	0	326,684
Plympton Parking Reserve	616,666	0	0	616,666	616,667	0	0	616,667	616,667	0	0	0	616,667
	2,790,123	**1,460,078**	**(1,416,807)**	**2,833,394**	**2,638,933**	**1,460,078**	**(1,557,424)**	**2,541,587**	**2,638,933**	**441,581**	**229,821**	**(10,609)**	**3,299,727**



TOWN OF EAST FREMANTLE
SUPPLEMENTARY INFORMATION
FOR THE PERIOD ENDED 31 MARCH 2024

5 CAPITAL ACQUISITIONS

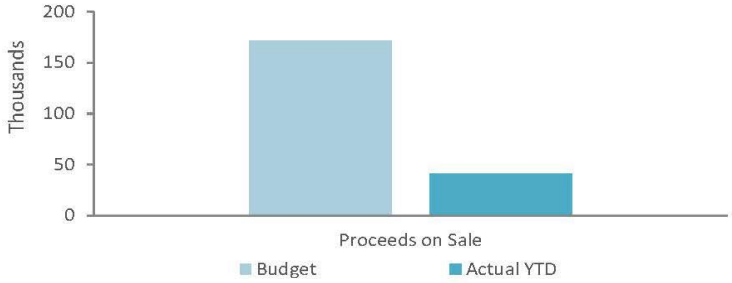
	Account Description	Adopted Budget	Current Budget	YTD Budget	YTD Actual	Order Value	Total Actual	Variance (Under)/Over	Completion	Comments
		$	$				$	$		
Plant & Equipment		**706,200**	**370,705**	**229,660**	**42,295**	**214,944**	**257,239**	**113,466**	**11%**	
E04629	VW Tiguan SUV (CEO)	46,200	0	0	0	0	0		0%	Vehicle sold, not for replacement
E04629	Mitsubishi Eclipse Cross (EMCS)	40,000	0	0	0	0	0		0%	
E07405	Ford Focus Trend Sedan (EV vehicle)	40,000	38,341	38,341	38,341	0	38,341		100%	EV arrived Aug 2023
E08607	Vehicle Replacement CHSP	0	42,364	42,364	0	45,437	45,437		0%	Vehicles due for arrival April 2024
E10648	VW Golf Alltrack Wagon (EMRS)	40,000	0	0	0	0	0		0%	
E11716	Mustang R165 Skidsteer	75,000	77,000	(64,045)	3,955	71,619	75,574		5%	Seeking quotes
E11716	Ford Ranger Single Cab Ute	35,000	35,000	35,000	0	0	0		0%	Vehicle due for arrival April 2024
E11716	Cage Trailer	5,000	5,000	5,000	0	0	0		0%	Trailer delivered Nov 2023
E11716	Works Supervisor Ute	0	28,000	28,000	0	0	0		0%	Vehicle due for arrival April 2024
E11720	Torro Master 7000	0	30,000	30,000	0	26,067	26,067		0%	Mower ordered, due for arrival July 2024
E11685	Public Art	45,000	45,000	45,000	0	0	0		0%	
E12810	Upgrade Street Lights LED Project	310,000	0	0	0	0	0		0%	Project likely 24/25
E12812	Isuzu 4.5T Tipper	70,000	70,000	70,000	0	71,820	71,820		0%	Truck ordered, due for delivery July 2024
Furniture & Equipment		**25,000**	**49,500**	**19,500**	**18,730**	**990**	**19,720**	**29,780**	**38%**	
E04634	Furniture & Equipment - IT Equipment - Capex - New - Administration	25,000	30,000	0	0	0	0		0%	
E04635	EV Charging Station	0	19,500	19,500	18,730	990	19,720		96%	Installed in Feb 2024
Buildings		**21,021,316**	**23,046,707**	**20,713,868**	**20,274,458**	**1,816,280**	**22,090,738**	**955,969**	**88%**	
E14604	Buildings - Depot Administration Building and Surrounds	0	105,000	87,300	105,744	0	105,744		101%	
E14605	Buildings - Specialised - Capex - Renewal - Unclassified Property	80,000	100,000	100,000	113,704	1,678	115,382		114%	
E11623	Buildings - EFJFF and EFJCC Clubroom - Henry Jeffrey Pavillion	0	15,000	15,000	0	0	0		0%	
E11736	EF Yacht Club - Dinghy Storage and Training Facility CSRFF Cont.	30,000	30,000	30,000	30,552	0	30,552		102%	
E11738	Buildings - East Fremantle Oval Precinct Redevelopment	19,776,296	21,366,808	19,765,666	19,747,220	929,565	20,676,785		92%	
E11747	East Fremantle Oval Precinct - Advanced trees and bushes	20,000	20,000	20,000	3,185	0	3,185		16%	Trees ordered, due for arrival April 2024
E11746	East Fremantle Oval Precinct - Off Leash Dog Exercise Area	195,020	333,000	206,204	206,204	18,087	224,290		62%	Turf due for installation April 2024
E11748	East Fremantle Oval Precinct - Solar Installation	0	110,000	0	0	0	0			
E11739	Buildings - Specialised - Capex - Fremantle Women's Football Club	920,000	966,899	489,698	67,850	866,950	934,800		7%	Works progressing, due for completion Aug 2024
Infrastructure - roads		**80,000**	**0**	**0**	**0**	**0**	**0**	**0**	**0%**	
INF620R	Penhurst Road resurfacing project between Fraser Street and Pier Street	80,000	0	0	0	0	0		0%	
Infrastructure - drainage		**100,000**	**60,000**	**17,601**	**17,601**	**0**	**17,601**	**42,399**	**29%**	
E12833	Capex - Drainage Rationalisation - Foreshore	100,000	60,000	17,601	17,601	0	17,601		29%	Works completed
Infrastructure - parks & ovals		**207,000**	**175,000**	**105,000**	**29,740**	**51,320**	**81,060**	**93,940**	**17%**	
E11743	Infrastructure - Parks & Ovals - Playground - Various Upgrades	20,000	20,000	20,000	0	9,988	9,988		0%	Parts ordered, waiting delivery
E11742	Infrastructure - Parks & Ovals - Retic Controllers	32,000	10,000	0	0	0	0		0%	Completed
E11741	Infrastructure - Parks & Ovals - Retic Upgrades	70,000	60,000	0	15,653	15,058	30,710		26%	To be completed before June 2024
E11726	Infrastructure - Parks & Ovals - Bores and Pumps - Stratford Street Park	50,000	50,000	50,000	0	0	0		0%	To be completed before June 2024
E11734	Capex - BBQ Replacement	10,000	10,000	10,000	0	10,175	10,175		0%	Completed
E11735	Capex - Bench Seats - Various Locations	15,000	15,000	15,000	0	16,099	16,099		0%	Completed
E11745	Infrastructure - Parks & Ovals - Ancillary - Drink Fountains	10,000	10,000	10,000	14,087	0	14,087		141%	Completed
Infrastructure - car parks		**15,000**	**15,000**	**0**	**11,501**	**0**	**11,501**	**3,499**	**77%**	
INF660R	Carparks - General Allocation	15,000	15,000	0	11,501	0	11,501		77%	Completed
Infrastructure - footpaths		**270,000**	**255,000**	**255,000**	**224,194**	**0**	**224,194**	**30,806**	**88%**	
E12740	Footpath Renewal - Clayton St	55,000	55,000	55,000	53,333	0	53,333		97%	Completed
	Footpath Renewal - Clayton St (west side)	115,000	100,000	100,000	102,603	0	102,603		103%	Completed
E12801	George Street - general paving repairs	30,000	30,000	30,000	2,535	0	2,535		8%	Completed
E12837	Footpaths - Canning Highway (south side), between Bedford and Moss	70,000	70,000	70,000	65,723	0	65,723		94%	Completed
		22,424,516	**23,971,912**	**21,340,629**	**20,618,519**	**2,083,534**	**22,702,052**	**1,269,860**	**86%**	

Total Actual < Current Budget
No Current Budget
No YTD Actual
Total Actual > Current Budget

TOWN OF EAST FREMANTLE
SUPPLEMENTARY INFORMATION
FOR THE PERIOD ENDED 31 MARCH 2024

6 DISPOSAL OF ASSETS

Asset Ref.	Asset description	Budget Net Book Value	Budget Proceeds	Budget Profit	Budget (Loss)	YTD Actual Net Book Value	YTD Actual Proceeds	YTD Actual Profit	YTD Actual (Loss)
		$	$	$	$	$	$	$	$
	Plant and equipment								
PEMV273	CEO Vehicle	14,360	30,495	22,340	0	14,360	30,495	16,135	0
PEMV272	EMRS Vehicle	8,658	0	0	0	0	0	0	0
PEMV268	EMCS Vehicle	5,682	18,000	15,318	0	0	0	0	0
PEMV264	PEHO Vehicle (Pooled Vehicle)	0	10,650	11,000	0	0	10,650	10,650	0
PEMV265	Isuzu 4.5T Tipper	20,000	30,000	10,000	0	0	0	0	0
PE278	Mustang R165 Skidsteer	37,914	37,914	0	0	0	0	0	0
PEMV262	Ford Ranger Single Cab Ute	0	11,200	11,200	0	0	0	0	0
PEMV266	Works Supervisor Vehicle	0	21,142	21,142	0	0	0	0	0
PE268	Toro Z Master 7000	0	12,000	12,000	0	0	0	0	0
		86,614	**171,401**	**103,000**	**0**	**14,360**	**41,145**	**26,785**	**0**

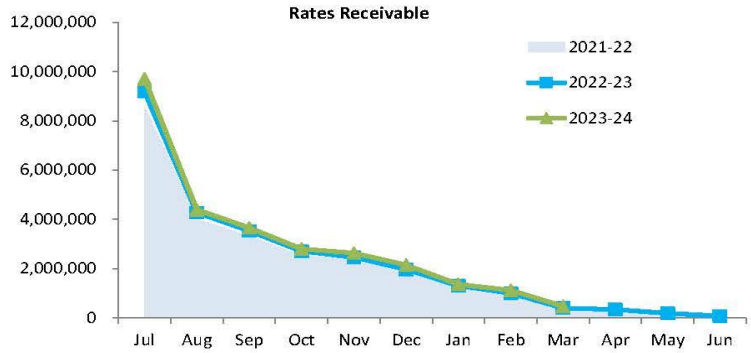


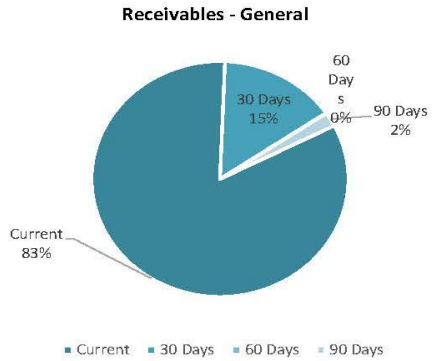
TOWN OF EAST FREMANTLE
SUPPLEMENTARY INFORMATION
FOR THE PERIOD ENDED 31 MARCH 2024

7 RECEIVABLES

Rates receivable	30 June 2023	31 Mar 2024
	$	$
Opening arrears previous years	44,860	77,232
Levied this year	10,504,457	10,965,894
Less - collections to date	(10,472,085)	(10,571,640)
Net rates collectable	**77,232**	**471,486**
% Collected		95.7%

Other Receivables	Current	30 Days	60 Days	90+ Days	Total
	$	$	$	$	$
Receivables - general	83,739	14,996	50	1,964	100,749
Receivables - infringements					54,837
East Fremantle Lawn & Tennis Club					15,000
Total receivables general outstanding					**170,586**
Amounts shown above include GST (where applicable)					



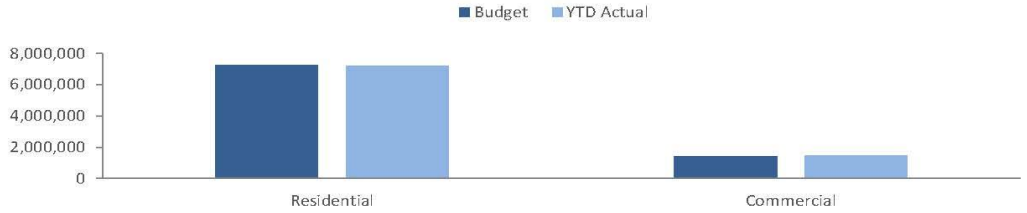


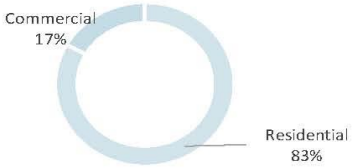
TOWN OF EAST FREMANTLE
SUPPLEMENTARY INFORMATION
FOR THE PERIOD ENDED 31 MARCH 2024

8 RATE REVENUE

General rate revenue

					Budget			YTD Actual	
	Rate in $ (cents)	Number of Properties	Rateable Value	Rate Revenue	Reassessed Rate Revenue	Total Revenue	Rate Revenue	Reassessed Rate Revenue	Total Revenue
RATE TYPE				$	$	$	$	$	$
Gross rental value									
Residential	0.068930	2,964	104,528,640	7,205,159	50,000	7,255,159	7,205,159	16,564	7,221,723
Commercial	0.116840	119	12,639,425	1,439,790	0	1,439,790	1,439,790	31,829	1,471,619
Sub-Total		**3,083**	**117,168,065**	**8,644,949**	**50,000**	**8,694,949**	**8,644,949**	**48,393**	**8,693,342**
Minimum payment	**Minimum Payment $**								
Gross rental value									
Residential	1,243.00	336	5,242,540	417,648	0	417,648	417,648	0	417,648
Commercial	1,859.00	7	62,500	13,013	0	13,013	13,013	0	13,013
Sub-total		**343**	**5,305,040**	**430,661**	**0**	**430,661**	**430,661**	**0**	**430,661**
Total						**9,125,610**			**9,124,003**





TOWN OF EAST FREMANTLE
SUPPLEMENTARY INFORMATION
FOR THE PERIOD ENDED 31 MARCH 2024

9 BORROWINGS

Repayments - borrowings

Information on borrowings			New Loans		Principal Repayments		Principal Outstanding		Interest Repayments	
Particulars	**Loan No.**	**1 July 2023**	**Actual**	**Budget**	**Actual**	**Budget**	**Actual**	**Budget**	**Actual**	**Budget**
		$	$	$	$	$	$	$	$	$
EF Oval Precinct Redevelopment	185	0	4,800,000	4,800,000	0	(72,634)	4,800,000	4,727,366	0	121,333
SMRC - Administration Building*	2-6	99,180	0	0	(3,713)	(4,900)	95,467	94,280	3,312	0
Total		**99,180**	**4,800,000**	**4,800,000**	**(3,713)**	**(77,534)**	**4,895,467**	**4,821,646**	**3,312**	**121,333**
Current borrowings		1,355					1,355			
Non-current borrowings		97,825					4,894,112			
		99,180					**4,895,467**			

All debenture repayments were financed by general purpose revenue.
* The SMRC Administration Building loan is funded from the participants quarterly contributions towards the Office Project. The Town's share of liability is 5.41%.

New borrowings 2023-24

Particulars	Amount Borrowed Actual	Amount Borrowed Budget	Institution	Loan Type	Term Years	Total Interest & Charges	Interest Rate	Amount (Used) Actual	Amount (Used) Budget	Balance Unspent
	$	$				$	%	$	$	$
EF Oval Precinct Redevelopment	4,800,000	4,800,000	WATC	Fixed	20	3,131,329	4.82	4,800,000	4,800,000	0
	4,800,000	**4,800,000**				**3,131,329**		**4,800,000**	**4,800,000**	**0**

A firm loan quote has been executed and the loan funding date is 1 November 2023.

Unspent borrowings

The Town has no unspent debenture funds as at 30th June 2023, nor is it expected to have unspent funds as at 30th June 2024.

TOWN OF EAST FREMANTLE
SUPPLEMENTARY INFORMATION
FOR THE PERIOD ENDED 31 MARCH 2024

10 GRANTS, SUBSIDIES AND CONTRIBUTIONS

OPERATING CAPITAL GRANTS, SUBSIDIES AND CONTRIBUTIONS

Program	Grant Provider	Purpose of Grant	Acquittal Date	Acquittal Requirement	Original Budget Revenue	Current Budget Revenue	YTD Budget	YTD Revenue Actual
					$	$	$	$
General Purpose Funding								
Grants Commission - General	WALGGC	Untied - General Purpose	NA	NA	191,670	8,596	6,447	6,447
Grants Commission - Roads	WALGGC	Untied - Road	NA	NA	85,665	4,665	3,498	3,499
Education and Welfare								
Commonwealth Home Support Programme	Commonwealth Dep. Health	Commonwealth Home Support Programme	44,135	Financial Declaration Acquittal	668,578	668,578	612,886	612,886
Carers Association of WA	Carers Association of WA	Carers Week Activity				0	0	700
Recreation and Culture								
East Fremantle Festival	Port Authority/LotteryWest	East Fremantle Festival Funding	NA	NA	38,000	28,000	28,000	27,273
Sea Wall Works	DBCA	Foreshore Erosion Control and Seawalls			0	75,000	75,000	75,000
CHRMAP Funding					0	17,046	17,046	7,496
Community Amenities								
Bus Shelter - Maintenance Assistance Scheme	Public Transport Authority	Bus Shelter Maintenance	NA	NA	4,100	4,100	4,100	0
Better Bins - GO:FOGO	State Government				0	7,550	7,550	1,684
Transport								
Direct Grant	Main Roads	Direct Grant	July	Certificate of completion	19,245	22,501	22,501	22,501
Street Lighting Subsidy	Main Roads	Street Lighting Subsidy	NA		4,800	4,800	0	0
Stirling Bridge Verge Maintenance Agreement	Main Roads	Stirling Highway Verge Maint. Agreement	NA		8,000	8,000	0	0
					1,020,058	**848,836**	**777,028**	**757,485**

CAPITAL GRANTS, SUBSIDIES AND CONTRIBUTIONS

Program	Grant Provider	Purpose of Grant	Acquittal Date	Acquittal Requirement	Original Budget Revenue	Current Budget Revenue	YTD Budget	YTD Revenue Actual
Recreation and Culture					$	$	$	$
East Fremantle Oval Redevelopment	State Government	Election Commitment - EF Oval Redevelopment	NA	NA	14,053,237	14,690,969	14,690,969	13,546,258
East Fremantle Oval Redevelopment	Lotterywest	Towards a multi-use community space and nature playground	45,462	Completion of grant manageme	672,530	1,305,147	1,305,147	1,240,293
East Fremantle Oval Redevelopment	AFL Facilities Fund				250,000	250,000	250,000	0
East Fremantle Oval Redevelopment	East Fremantle Football Club	Contribution for joinery works			0	58,706	58,706	72,587
Fremantle City Womens Football Club	State Government	Election Commitment			800,000	775,738	895,737	61,682
Fremantle City Womens Football Club	Soccer Club Contribution				120,000	120,000	0	0
Transport								
Federal Government Stimulus Payment (Phase 4)	Department of Infrastructure	Local Roads and Community Infrastructure Program	31/10/21 and 3	Audited financial statement	84,181	84,181	67,345	119,721
Administration								
Charge Up Project	State Government - Department of Mines, Industry Regulation and Safety	Town Hall EV Charger	31/10/21 and 3	Audited financial statement	0	9,750	9,750	0
					15,979,948	**17,294,491**	**17,277,654**	**15,040,542**

TOWN OF EAST FREMANTLE
SUPPLEMENTARY INFORMATION
FOR THE PERIOD ENDED 31 MARCH 2024

11 BUDGET AMENDMENTS

Amendments to original budget since budget adoption. Surplus/(Deficit)

Description	Date	Increase / (Decrease) to Net Surplus	Amended Budget Running Balance
		$	$
Annual Budget Adoption			0
General Purpose Grants - Grants Commission	15 Aug 23	-191,670	-191,670
General Purpose Grants (Roads) - Grants Commission	15 Aug 23	-85,665	-277,335
EF Oval Redevelopment Project			
Capex - EF Oval Redevelopment	15 Aug 23	-1,271,806	-1,549,141
DLGSC Grant - EF Oval Redevelopment	15 Aug 23	1,394,962	-154,179
LotteryWest Grant - EF Oval Redevelopment	15 Aug 23	158,620	4,441
AFL Facilities Funding	15 Aug 23	-95,518	-91,077
Loan Borrowings	15 Aug 23	0	-91,077
Transfer to EF Oval Redevelopment Reserve	15 Aug 23	-148,068	-239,145
Transfer from EF Oval Redevelopment Reserve	15 Aug 23	67,802	-171,343
Fremantle Womens Soccer Club Project			
Capex - Fremantle Womens Soccer Club Project	15 Aug 23	53,311	-118,032
Non-Operating Grants and Contributions	15 Aug 23	-122,184	-240,216
Transfer from Preston Point Reserve	15 Aug 23	80,000	-160,216
Seawall Reinstatement Works			
Operating Grants - Sea Wall Works	15 Aug 23	75,000	-85,216
Foreshore Erosion Control and Seawalls	15 Aug 23	-75,000	-160,216
General			
EFBC Operating Subsidy	15 Aug 23	-22,000	-182,216
Election Expenses	15 Aug 23	-40,000	-222,216
Town Planning Consulting	15 Aug 23	-28,474	-250,690
CHRMAP Funding	15 Aug 23	17,046	-233,644
Strategic and Business Planning Consultancy	15 Aug 23	-17,000	-250,644
Insurance Expenses - Administration	15 Aug 23	14,983	-235,661
Mooring Jetty Maintenance	15 Aug 23	-40,000	-275,661
Better Bins Funding	15 Aug 23	7,550	-268,111
Plant and Equipment - Light Fleet	15 Aug 23	-28,000	-296,111
Plant and Equipment - Mobile Plant	15 Aug 23	-30,000	-326,111
Proceeds from Sale of Plant	15 Aug 23	33,142	-292,969
Transfer from Plant Reserve	15 Aug 23	50,407	-242,562
Rates and Services Billing			
Rates Levied	15 Aug 23	1,627	-240,935
Swimming Pool Inspection Fees	15 Aug 23	7,565	-233,370
Commercial Waste Charges	15 Aug 23	2,177	-231,193
Additional Residential Waste Charges	15 Aug 23	4,509	-226,684
Sporting Club Waste Charges	15 Aug 23	935	-225,749
Financial Assistance Grants			
General Purpose Grants - Grants Commission	19 Sep 23	8,596	-217,153
General Purpose Grants (Roads) - Grants Commission	19 Sep 23	4,665	-212,488
Depot hardstand extension and drainage			
Capex - Depot hardstand extension and drainage	19 Sep 23	-87,000	-299,488
Capex - Buildings (general)	19 Sep 23	27,000	-272,488
Transfer from Drainage Reserve	19 Sep 23	60,000	-212,488
EV Charger			
Capex - EV charger	19 Sep 23	-19,500	-231,988
Non-Operating Grants and Contributions	19 Sep 23	9,750	-222,238
Henry Jeffrey Pavilion			
Capex - Henry Jeffrey Pavilion	19 Sep 23	-15,000	-237,238
Transfer from Preston Point Reserve	19 Sep 23	15,000	-222,238
General			
Strategic and Business Planning Consultancy	19 Sep 23	-14,030	-236,268
Plant and Equipment - Light Fleet			
Plant and Equipment - CHSP	19 Sep 23	-42,364	-278,632
DLGSC Grant - EF Oval Redevelopment	17 Oct 23	-757,230	-1,035,862
LotteryWest Grant - EF Oval Redevelopment	17 Oct 23	473,997	-561,865
AFL Facilities Funding	17 Oct 23	95,518	-466,347
Non-Operating Grants and Contributions	17 Oct 23	97,922	-368,425
Capex - EF Oval Redevelopment	17 Oct 23	-523,706	-892,131
Transfer from EF Oval Redevelopment Reserve	17 Oct 23	465,000	-427,131
Non-Operating Contribution - EFFC	17 Oct 23	58,706	-368,425
Interest Earnings - Reserves	17 Oct 23	200,000	-168,425
Transfer to EF Oval Redevelopment Reserve	17 Oct 23	-200,000	-368,425
Capex - Fremantle Womens Soccer Club Project	21 Nov 23	-100,210	-468,635
Transfer from Preston Point Reserve	21 Nov 23	20,290	-448,345
Transfer from Strategic Asset Management Reserve	21 Nov 23	64,920	-383,425
Drainage Maintenance	21 Nov 23	15,000	-368,425
Mid-year adopted adjustments	19 Mar 24		
Rates levied		30,601	-337,824
Operating grants and contributions		-6,744	-344,568
Fees and charges		-86,788	-431,356
Interest revenue		90,000	-341,356
Other revenue		14,000	-327,356
Materials and contracts		-175,904	-503,260
Utility charges		14,000	-489,260
Other expenditure		21,799	-467,461
Proceeds from disposal of assets		-33,555	-501,016
Property plant and equipment		322,879	-178,137
Infrastructure		152,000	-26,137
Transfer from reserves		-150,000	-176,137
Borrowings		-4,900	-181,037
23/24 Budget Opening Surplus	**378,508**		
23/24 Actual B/F Surplus (as per AFS)	**751,732**	**373,224**	**192,187**

13.2 LIST OF ACCOUNTS MARCH 2024

Report Reference Number	OCR-2699
Prepared by	Natalie McGill Senior Finance Officer
Supervised by	Phil Garoni Finance Manager
Meeting date	Tuesday, 16 April 2024
Voting requirements	Simple Majority
Documents tabled	Nil

Attachments

1. List of Payments – March 2024
2. Fuel Summary – March 2024

PURPOSE

That Council, in accordance with regulation 13(1) of the Local Government (Financial Management) Regulations 1996, receives the list of payments made under delegated authority for the month ending 31 March 2024.

EXECUTIVE SUMMARY

Council has an Executive role in receiving the list of payments pursuant to Regulation 13(1) of the Local Government (Financial Management) Regulations 1996. It is therefore recommended that Council receives the List of Accounts paid for the period 1 March to 31 March 2024, as per the summary table.

BACKGROUND

The Chief Executive Officer has delegated authority to make payments from the Municipal and Trust Accounts in accordance with budget allocations.

The Town provides payments to suppliers by electronic funds transfer, cheque, or credit card. Attached are itemised lists of all payments made under delegated authority during the said period.

The bulk of payments are processed by electronic funds transfer (EFT) with the exception of occasional reimbursements and refunds.

CONSULTATION

Nil.

STATUTORY ENVIRONMENT

Regulation 13: Local Government (Financial Management) Regulations 1996 (as amended) requires local governments to prepare a list of payments made under delegated authority to be prepared and presented to Council monthly.

A new regulation has been added to the Local Government (Financial Management) Regulations 1996 to increase transparency and accountability in local government, through greater oversight of incidental spending.

Regulation 13A covers purchasing cards issued by local governments to their employees. Purchasing cards use a local government approved line of credit that allows for the timely payment of goods and services acquired in the ordinary course of business.

Purchasing cards include the following:

- business or corporate credit cards
- debit cards
- store cards
- fuel cards
- taxi cards

Other than debit cards, purchasing cards all require a separate payment to the card provider.

Purchasing cards do not include:

- non-reloadable gift cards – these cards are not connected to a local government account or intended to be used as a means of making ordinary business transactions
- pre-loaded purchase or credit card advances – these are cash advances and should be recorded and acquitted accordingly
- SmartRider cards that are centrally controlled for general use – if these cards are managed under the cash advance provisions.

POLICY IMPLICATIONS

Policy 2.1.3 Purchasing. All supplier payments are approved under delegated authority pursuant to the authorisation limits outlined in Council's Purchasing Policy.

FINANCIAL IMPLICATIONS

All expenditure is incurred by authorised officers and made in accordance with the adopted Annual Budget.
All amounts quoted in this report are inclusive of GST.

STRATEGIC IMPLICATIONS

A proactive, approachable Council which values community consultation, transparency and accountability
5.1 Strengthen organisational accountability and transparency
5.2 Strive for excellence in leadership and governance.

RISK IMPLICATIONS

RISKS

Risk	Risk Likelihood (based on history & with existing controls)	Risk Impact / Consequence	Risk Rating (Prior to Treatment or Control)	Principal Risk Theme	Risk Action Plan (Controls or Treatment proposed)
That Council does not accept the list of payments	Rare (1)	Moderate (3)	Low (1-4)	COMPLIANCE Minor regulatory or statutory impact	Accept Officer Recommendation

RISK MATRIX

Consequence / Likelihood		Insignificant	Minor	Moderate	Major	Extreme
		1	2	3	4	5
Almost Certain	5	**Moderate (5)**	**High (10)**	**High (15)**	**Extreme (20)**	**Extreme (25)**
Likely	4	**Low (4)**	**Moderate (8)**	**High (12)**	**High (16)**	**Extreme (20)**
Possible	3	**Low (3)**	**Moderate (6)**	**Moderate (9)**	**High (12)**	**High (15)**
Unlikely	2	**Low (2)**	**Low (4)**	**Moderate (6)**	**Moderate (8)**	**High (10)**
Rare	1	**Low (1)**	**Low (2)**	**Low (3)**	**Low (4)**	**Moderate (5)**

A risk is often specified in terms of an event or circumstance and the consequences that may flow from it. An effect may be positive, negative or a deviation from the expected and may be related to the following objectives: occupational health and safety, financial, service interruption, compliance, reputation and environment. A risk matrix has been prepared and a risk rating is provided below. Any items with a risk rating over 16 will be added to the Risk Register, and any item with a risk rating over 16 will require a specific risk treatment plan to be developed.

RISK RATING

Risk Rating	3
Does this item need to be added to the Town's Risk Register	No
Is a Risk Treatment Plan Required	No

SITE INSPECTION

N/A

COMMENT

Payments for the period include the following significant items.

Payee	Particulars	Amount (GST inc)
COOPER & OXLEY GROUP PTY LTD - GENERAL	RFT08-2021/22 EF OVAL REDEVELOPMENT PRINCIPAL CONTRACTOR - CERTIFICATE 15	$ 2,018,924.62
DEPARTMENT OF FIRE AND EMERGENCY SERVICES	2023/24 ESL B 3RD QUARTER CONTRIBUTION	$ 459,107.90
ADCO SERVICES	SUMPTON GREEN BUILDING WORKS - REPLACEMENT OF JARRAH DECK MATERIALS & LABOUR. REPLACE TWO TERMITE DAMAGED POSTS TO MAIN BUILDING. LIFT BUILDING, REMOVE EXISTING POSTS AND REPLACE. RAMP EXTENSION TO COMPLY WITH MINIMUM GRADIENTS & 4 STEP STAIRCASE REPLACEMENT & VERMIN BOARDS WITH SUB-FLOOR ACCESS. ADDITIONAL DECKING FRAME SUPPORT WORKS - CONSTRUCT & INSTALL BALUSTRADES, SUPPLY & INSTALL VERANDAH POSTS	$ 66,279.58
CITY OF FREMANTLE	CO-CONTRIBUTION FOR RESIDENT UTILISATION OF FREMANTLE RECYCLING CENTRE	$ 58,841.20
RESOURCE RECOVERY GROUP (SMRC)	WASTE & RECYCLING FEES – FEBRUARY 24	$ 45,087.52
CARABINER PTY LTD (ATF THE SANDOVER PINDER UNIT TRUST)	RFT03-2021/22 ARCHITECTURAL SERVICES - EF OVAL PRECINCT REDEVELOPMENT PROJECT - DECEMBER & JAN 24	$ 40,933.44
VEOLIA RECYCLING & RECOVERY	WASTE & RECYCLING FEES – FEBRUARY 24	$ 39,784.82
WA FENCEWORKS PTY LTD	FINAL SECTION OF THE DEPOT FENCING DUE TO OVAL WORKS, CHAINMESH FENCING - EF OVAL DOG PARK - CLAIM 1 FEB 24, EF OVAL - OFF LEASH DOG EXERCISE AREA SUPPLY & INSTALL CHAINMESH SECURITY - CLAIM 1 FEB 24	$ 37,318.95
HOST DIRECT (HOST CORPORATION PTY LTD)	PROVISION OF TABLETOP EQUIPMENT FOR THE EAST FREMANTLE COMMUNITY PARK	$ 35,626.05
THE TRUSTEE FOR BELGRAVIA LEISURE UNIT TRUST	OPERATOR AGREEMENT - EAST FREMANTLE OVAL PRECINCT - PRE-OPENING SERVICES FEE - MARCH 24	$ 27,007.42

CONCLUSION

Nil

13.2 OFFICER RECOMMENDATION / COUNCIL RESOLUTION

Council Resolution 021604

OFFICER RECOMMENDATION:

Moved Cr Natale, seconded Cr Wilson

That Council in accordance with regulation 13(1) of the *Local Government (Financial Management) Regulations 1996*, receives the list of payments made under delegated authority for the month ended 31 March 2024.

March 2024		
Voucher No.	**Account**	**Amount**
Cheque	**Municipal (Cheques)**	**$0.00**
EFT 36991—37171	**Municipal (EFT)**	**$3,262,223.41**
Payroll	**Municipal (EFT)**	**$321,273.10**
	Municipal (Direct Debit March 2024)	**$1,059,360.62**
	Credit Card (March 2024)	**$6,440.33**
	Total Payments	**$4,649,297.46**

(CARRIED UNANIMOUSLY 9:0)

For: **Mayor O'Neill, Crs Wilson, Collinson, Donovan, Harrington, Natale, Maywood, White & McPhail.**

Against: **Nil**

REPORT ATTACHMENTS

Attachments start on the next page

TOWN OF EAST FREMANTLE

List of Accounts paid by the Chief Executive for March 2024 submitted for the information of the Council Meeting to be held on Tuesday 16th April 2024

Cheque	Payment Date	Supplier	Description	Inv Amount	Cheque
			NO CHEQUES ISSUED IN MARCH 24		
				-	-
EFTS		**Supplier**	**Description**	**Inv Amount**	**EFT**
EFT36991	07/03/2024	EVEREST BUILDING COMPANY	INFRASTRUCTURE BOND REFUND	5,000.00	5,000.00
EFT36992	07/03/2024	M GAUSHON	INFRASTRUCTURE BOND REFUND	3,000.00	3,000.00
EFT36993	07/03/2024	L HESKETH MOUSLI	INFRASTRUCTURE BOND REFUND	1,500.00	
			INFRASTRUCTURE BOND REFUND	3,500.00	5,000.00
EFT36994	07/03/2024	DSL DESIGN & BUILDING	INFRASTRUCTURE BOND REFUND	3,000.00	3,000.00
EFT36995	07/03/2024	L LEE	INFRASTRUCTURE BOND REFUND	1,500.00	1,500.00
EFT36996	14/03/2024	AUSTRALIA POST	MONTHLY POSTAL CHARGES FEBRUARY 24	1,799.32	1,799.32
EFT36997	14/03/2024	APACE AID (INC)	WEED MANAGEMENT NIERGARUP TRACK - 29/01/24	412.50	412.50
EFT36998	14/03/2024	CHILD SUPPORT AGENCY	PAYROLL DEDUCTIONS MARCH 24	476.87	476.87
EFT36999	14/03/2024	BUNNINGS BLDG SUPPLIES LTD	10 X BAGS OF RAPID SET AND VARIOUS ITEMS	662.45	662.45
EFT37000	14/03/2024	BOC LIMITED	CONTAINER SERVICE - NOV 2023 & FEB 2024	21.12	21.12
EFT37001	14/03/2024	CITY OF COCKBURN	TIP FEES - FEBRUARY 2024	1,190.00	1,190.00
EFT37002	14/03/2024	IT VISION	APACHE TOMCAT UPGRADE V9.0.81	554.40	554.40
EFT37003	14/03/2024	MCLEODS	LEGAL SERVICES BY MCLEODS FOR REGULATORY SERVICES - PLANNING COMPLIANCE ISSUES	2,081.30	
			LEGAL SERVICES BY MCLEODS FOR REGULATORY SERVICES - BUILDING COMPLIANCE ISSUES	1,429.45	
			LEGAL SERVICES BY MCLEODS FOR REGULATORY SERVICES - PROPOSED ADDITIONS	2,169.20	5,679.95
EFT37004	14/03/2024	MELVILLE TOYOTA	SERVICE ON 1CGQ228 27/02/24	140.25	140.25
EFT37005	14/03/2024	WATER CORPORATION	SERVICE CHARGES 01/01/24 29/02/24 - JP MCKENZIE	135.47	135.47
EFT37006	14/03/2024	WA FIRE PROTECTION	FIRE EQUIPMENT INSPECTIONS & MAINTENANCE MARCH 2023 - VARIOUS SITES	1,701.56	1,701.56
EFT37007	14/03/2024	SYNERGY	POWER SUPPLY VARIOUS LOCATIONS	24,709.55	24,709.55
EFT37008	14/03/2024	ZIPFORM PTY LTD	RATES PRINTING AND DISTRIBUTION SERVICES 2023/2024 - 4TH INSTALMENTS	1,455.96	1,455.96
EFT37009	14/03/2024	YOUNGS PLUMBING SERVICE P/L	EFLTC - TESTING & INSPECTION OF SEWER PUMP	750.00	750.00
EFT37010	14/03/2024	FLEXI STAFF PTY LTD	LABOUR HIRE OPERATIONS 19/02/24 - 23/02/24	2,441.62	
			LABOUR HIRE OPERATINS 26/02/24 - 01/03/24	2,395.94	4,837.56
EFT37011	14/03/2024	DEPT OF MINES, INDUSTRY REGULATION & SAFETY	BSL COLLECTED NOVEMBER 23 & ADJUSTMENT TO SEPTEMBER 23	2,114.41	2,114.41
EFT37012	14/03/2024	LOCAL GOVERNMENT PROFESSIONALS AUSTRALIA WA	2023-24 FULL MEMBERSHIP - 1 X STAFF MEMBER	265.51	
			1 X STAFF MEMBER REGISTRATION - FINANCE PROFESSIONALS CONFERENCE	1,360.00	
			1 x STAFF REGISTRATION - CUSTOMER COMPLAINTS	945.00	2,570.51
EFT37013	14/03/2024	WATERLOGIC AUSTRALIA PTY LTD	RENTAL & SERVICE - FREESTANDING WATER FILTER - MARCH APRIL MAY 2024	209.22	209.22
EFT37014	14/03/2024	HOST DIRECT (HOST CORPORATION PTY LTD)	PROVISION OF TABLE TOP EQUIPMENT FOR THE EAST FREMANTLE COMMUNITY PARK	35,626.05	35,626.05
EFT37015	14/03/2024	DEPARTMENT OF FIRE AND EMERGENCY SERVICES	2023/24 ESL B 3RD QUARTER CONTRIBUTION	459,107.90	459,107.90
EFT37016	14/03/2024	NUMERO UNO CATERING	CATERING FOR 23/24 - 30/01, 13/02 & 20/02	1,232.00	1,232.00
EFT37017	14/03/2024	WOOLWORTHS GROUP LIMITED	WOOLWORTHS PURCHASES - CHSP - 12/02/24	6.00	
			WOOLWORTHS PURCHASES DEPOT 27/02/24	4.50	
			WOOLWORTHS PURCHASES DEPOT 29/02/24	4.50	
			WOOLWORTHS PURCHASES - CHSP 05/03/24	71.45	
			WOOLWORTHS PURCHASES DEPOT - 06/03/24	40.84	
			WOOLWORTHS PURCHASES - CHSP 12/03/24	37.65	
			WOOLWORTHS PURCHASES - CHSP 12/03/24	17.25	182.19
EFT37018	14/03/2024	ENVIROLAB SERVICES WA PTY LTD	TESTING OF SOIL AND MATERIALS FROM EASTERN BANK EFCP	304.96	304.96
EFT37019	14/03/2024	ASSA ABLOY ENTRANCE SYSTEMS AUSTRALIA PTY LTD	TOWN HALL - AUTOMATIC DOOR QUARTERLY MAINTENANCE - JANUARY 2024	174.00	174.00
EFT37020	14/03/2024	HYDRO JET	GRAFFITI REMOVAL - GEORGE STREET UNDERPASS & RIVERSIDE ROAD	1,243.00	1,243.00
EFT37021	14/03/2024	LANDSCAPE YARD O'CONNOR	8 CUBIC METRES OF SAND	501.60	
			4 CUBIC METRES OF SAND	250.80	
			MATERIAL FOR TOPPING UP OF ULRICH PARK SAND PIT	222.30	974.70
EFT37022	14/03/2024	KONICA MINOLTA BUSINESS SOLUTIONS	PRINTING AND COPYING FOR CHSP 01/02/24 - 29/02/24	49.58	49.58
EFT37023	14/03/2024	DEPARTMENT OF TRANSPORT	VEHICLE REGISTRATION DETAILS REQUEST FEES - FEB 24	365.20	365.20
EFT37024	14/03/2024	FOCUS NETWORKS	QU 7404G 1 x DOCKING STATION	255.20	
			RFT04-2021/22 - MANAGED PROACTIVE SERVICE (IT SUPPORT SERVICES) - FEBRUARY 24	7,202.80	
			QU-7419G DATA DESTRUCTION	55.00	
			RFT04-2021/22 MANAGED ICT SERVICES -23/24 FINANCIAL YEAR -SOFTWARE AS A SERVICE (SAAS) AND MANAGED HARDWARE - MARCH 24	10,294.98	
			QU - 7482G 1 EXCHANGE ONLINE PLAN 2	11.11	17,819.09
EFT37025	14/03/2024	OMNIBUS SERVICES	REPAIR MITSUBISHI ROSA BUS STEP	742.50	742.50
EFT37026	14/03/2024	ENVIRO SWEEP	STREET SWEEPING - RFQ12-2020/21 - FEBRUARY 2024	4,841.41	4,841.41
EFT37027	14/03/2024	THE TURBAN INDIAN RESTURANT	CATERING TOWN PLANNING COMMITTEE MEETING - 21/11/23	354.80	

			CATERING TOWN PLANNING COMMITTEE MEETING 05/12/23	235.50	
			CATERING FOR AUDIT COMMITTEE 27/02/24	386.80	977.10
EFT37028	14/03/2024	LANDGATE	LAND ENQUIRIES - 80 GLYDE STREET	91.50	91.50
EFT37029	14/03/2024	VOCUS COMMUNICATIONS	VOIP SLIP LINES/SERVICES MONTHLY CHARGES - TO 29/02/24	379.83	379.83
EFT37030	14/03/2024	SNAP PRINTING	EAST FREMANTLE COMMUNITY PARK - PRINTING - SNAP - FUNDS TO BE RECOUPERATED FROM BELGRAVIA	1,071.70	1,071.70
EFT37031	14/03/2024	APARC AUSTRALIAN PARKING & REVENUE CONTROL PTY LTD	ONGOING MONTHLY CHARGES - HOST CMS INCLUDING LICENSE & COMMUNICATION COSTS, COMPREHENSIVE MAINTENANCE & PARTS PER MONTH - FEBRUARY 24	176.55	
			PAYABLE CREDIT CARD TRANSACTIONS VIA TILL PER MONTH - FEBRUARY 24	359.32	535.87
EFT37032	14/03/2024	BLING TRIO	CHSP CHRISTMAS CLIENT PARTY ENTERTAINMENT	200.00	200.00
EFT37033	14/03/2024	VEOLIA RECYCLING & RECOVERY	GENERAL WASTE REMOVAL 46 EAST STREET - FEBRUARY 24	749.23	
			FOGO - GREEN BINS - RESIDENTIAL & PRIORITY , GENERAL WASTE - RED BINS -RESIDENTIAL & PRIORITY, PARKS & RESERVES, STREET LITTER BINS, RECYCLING - YELLOW BINS - RESIDENTIAL& PRIORITY, STREET LITTER BINS, GENERAL WASTE - RED BINS - COMMERCIAL, RECYCLING - YELLOW BINS - COMMERCIAL, 48 - 50 ALEXANDRA ROAD - RECYCLING & GENERAL WASTE- FEBRUARY 24	39,035.59	39,784.82
EFT37034	14/03/2024	FREMANTLE PICTURE FRAMERS	PRINT/PLAQUE FRAMING OF NEW AND PREVIOUS CEOs FOR TOWN HALL	597.30	597.30
EFT37035	14/03/2024	LINXIO (READY TRACK PTY LTD)	GPS VEHICLE TRACKING - DEC 2023 & FEB 2024	155.10	155.10
EFT37036	14/03/2024	H DICKSON	CHSP VOLUNTEER MEAL REIMBURSEMENT 28/02/24	15.00	
			CHSP VOLUNTEER MEAL REIMBURSEMENT 01/03/24	15.00	
			CHSP VOLUNTEER MEAL REIMBURSEMENT 06/03/24	15.00	
			CHSP VOLUNTEER MEAL REIMBURSEMENT 08/03/24	15.00	60.00
EFT37037	14/03/2024	EASY ACCESS LIFTS	CALLOUT TO REPAIR TOWN HALL LIFT AFTER POWER FAULT	539.00	539.00
EFT37038	14/03/2024	JAYBRO GROUP PTY LTD	SPILL KITS FOR DEPOT AND VEHICLES, FLEXDRIVE PUMP, DELIVERY	2,746.70	2,746.70
EFT37039	14/03/2024	CONTRA-FLOW PTY LTD	TRAFFIC MANAGEMENT FOR KERBING REPAIR WORKS 21/02 - 22/02	1,996.14	1,996.14
EFT37040	14/03/2024	PTC IRRIGATION	SWAP OUT RETIC CONTROLLER AND CHECK ELECTRICS AT GOURLEY PARK	277.75	
			INSTALLATION OF IRRIGATION TO EASTERN BANK AT EF COMMUNITY PARK - CLAIM 3 26/02/24 - 06/03/24	13,898.50	14,176.25
EFT37041	14/03/2024	GRACE RECORDS MANAGEMENT (AUSTRALIA)	STANDING ORDER FOR DOCUMENT SCANNING - DATA STORAGE, USER LICENCES AND HOSTING- FEBRUARY 24	866.31	
			STANDING ORDER FOR STORAGE FEES 01/03/24 - 31/03/24 AND FILE RETRIEVAL - FEBRUARY 24	378.15	1,244.46
EFT37042	14/03/2024	WA FENCEWORKS PTY LTD	FINAL SECTION OF THE DEPOT FENCING DUE TO OVAL WORKS (AS QUOTED), CONTINUE AND INSTALL 27.3M OF COLORBOND FENCING CORDERILLED INTO EXISTING LIMESTONE WALL (AS QUOTED)	8,305.50	
			280 LINEAL M 1500MM BLACK POWDERCOATED CHAINMESH	19,938.25	
			EAST FREMANTLE OVAL - OFF LEASH DOG EXERCISE AREA SUPPLY & INSTALL CHAINMESH SECURITY FECING & GATES AS QUOTED - CLAIM 1 FEB 24	9,075.20	37,318.95
EFT37043	14/03/2024	DRAFFIN STREET FURNITURE	SINGLE BAY RECYCLING BIN SURROUNDS FOR EFFC OVAL	7,893.60	7,893.60
EFT37044	14/03/2024	FRESH PROVISIONS BICTON	NEIGHBOURHOOD LINK CLIENT AND VOLUNTEER LUNCHES 06/02/24	96.16	
			NEIGHBOURHOOD LINK CLIENT AND VOLUNTEER LUNCHES 13/02/24	88.15	
			NEIGHBOURHOOD LINK CLIENT AND VOLUNTEER LUNCHES 27/02/24	123.69	308.00
EFT37045	14/03/2024	KYOCERA DOCUMENT SOLUTIONS	PRINTING COSTS 2023/24 - FINANCE & REG SVS - FEB 24	166.40	
			1 x KYOCERA PRINTER AND PAPERCUT SOFTWARE - OPERATIONS	872.85	
			1 x KYOCERA PRINTER AND PAPERCUT SOFTWARE - OPERATIONS	413.60	1,452.85
EFT37046	14/03/2024	PAATSCH CONSULTING PTY LTD	RFT01-2020/21 CONTRACT VARIATION 3 - CLIENT LEAD & ASSISTANT CLIENT LEAD FEBRUARY 24	11,825.00	11,825.00
EFT37047	14/03/2024	M2M ONE PTY LTD	TOWN HALL LIFT EMERGENCY SIM CARD - MARCH 24	18.70	18.70
EFT37048	14/03/2024	TPG NETWORK PTY LTD	INTERNET CHARGES 01/01/24 - 29/02/24	1,920.60	1,920.60
EFT37049	14/03/2024	KAMBARANG SERVICES PTY LTD	WELCOME TO COUNTRY 05/02/24 - CITIZENSHIP CEREMONY	385.00	385.00
EFT37050	14/03/2024	J ENGLAND	CHSP VOLUNTEER MEAL REIMBURSEMENT 29/02/24	15.00	
			CHSP VOLUNTEER MEAL REIMBURSEMENT 07/03/24	15.00	30.00
EFT37051	14/03/2024	K MCDONALD	CHSP VOLUNTEER MEAL REIMBURSMENT 29/02/24	13.00	
			CHSP VOLUNTEER MEAL REIMBURSEMENT 07/03/24	15.00	28.00
EFT37052	14/03/2024	DONALD CANT WATTS CORKE (WA) PTY LTD	RFT05-2021/22 QUANTITY SURVEYING SERVICES EF OVAL PRECINCT REDEVELOPMENT PROJECT - CONTRACT ADMINISTRATION TO 100%	880.00	880.00
EFT37053	14/03/2024	TASSIE DEVIL LINEMARKING	RE MARKING OF VARIOUS FADED LINE MARKING AROUND THE TOWN - DOME CARPARK, CARPARK UNDER STIRLING BRIDGE, JOHN TONKIN CAR PARK	1,206.70	
			RE MARKING OF VARIOUS FADED LINE MARKING AROUND THE TOWN - FRASER STREET	1,861.20	
			RE MARKING OF VARIOUS FADED LINE MARKING AROUND THE TOWN - JERRAT DRIVE & FRASER ST	1,651.10	4,719.00
EFT37054	14/03/2024	T ABELHA	CHSP VOLUNTEER MEAL REIMBURSEMENT 11/03/24	15.00	15.00

EFT37055	14/03/2024	SWAN LOCK SERVICE (RAMSAY & SONS PTY LTD)	PRESTON POINT RESERVE - CRICKET CLUB / LACROSSE BUILDING DOOR HANDLE REPAIRS DUE TO VANDALISM	1,098.00	1,098.00
EFT37056	14/03/2024	MARKETLIFE PTY LTD (PERTH MAKERS MARKET, ERIN MADELEY CONSULTING)	2023 GEORGE STREET FESTIVAL STALLHOLDER COORDINATOR AS PER RFQ09 22/23 - CLAIM 1 - FIRST 25%	3,609.10	3,609.10
EFT37057	14/03/2024	SPORTENG	RFQ05-2021/22 EAST FREMANTLE OVAL REDEVELOPMENT - FIELD OF PLAY CONSULTANCY - CONSTRUCTION PHASE SERVICES	8,605.47	8,605.47
EFT37058	14/03/2024	ALL FENCE U RENT	TEMP FENCE HIRE FOR PLAYGROUND WORKS 21/02/24 - 06/03/24	550.00	550.00
EFT37059	14/03/2024	CARABINER PTY LTD (ATF THE SANDOVER PINDER UNIT TRUST)	RFT03-2021/22 ARCHITECTURAL SERVICES - EF OVAL PRECINCT REDEVELOPMENT PROJECT - DECEMBER & JAN 24	40,933.44	40,933.44
EFT37060	14/03/2024	FOCUS TRANSPORT SOLUTIONS	FOOTPATH CONDITION RANKING 2023/24 AS QUOTED	3,850.00	3,850.00
EFT37061	14/03/2024	NDY MANAGEMENT PTY LIMITED T/A NORMAN DISNEY & YOUNG	RFQ14-2021/22 ELECTRIAL ENGINEERING - SERVICES 29/01/24 - 23/01/24	1,521.54	
			RFQ13-2021/22 - EF OVAL -MECHANICAL ENGINEERING SERVICES 29/01/24 - 23/02/24	933.63	
			RFQ15-2021/22 HYDRAULIC ENGINEERING SERVICES 29/01/24 - 23/01/24	1,600.50	4,055.67
EFT37062	14/03/2024	FORTH CONSULTING PTY LTD	RFQ19 STRUCTURAL ENGINEERING SERVICES - EAST FREMANTLE OVAL REDEVELOPMENT - FEBRUARY 24	1,100.00	1,100.00
EFT37063	14/03/2024	LO-GO APPOINTMENT (Helene Pty Ltd)	TEMPORARY REPLACEMENT FOR COMMUNICATIONS AND MARKETING POSITION W/E 02/03/24	1,739.90	1,739.90
EFT37064	14/03/2024	SCOUTTA PTY LTD	CONSULTING SERVICES - INVOICE 1, - DEVELOPMENT OF A PREDICTIVE ASSET RENEWABLE MODEL (PARM) IN MS EXCEL AS PER TEMPLATE PROVIDED, - UPDATING OF FINANCIAL INFORMATION AND TABLES IN EACH OF THE TOWN'S AMPS BASED ON THE PARM DATA	2,818.75	2,818.75
EFT37065	14/03/2024	P TSEN	CHSP VOLUNTEER MEAL REIMBURSEMENT 09/02/24	7.00	
			CHSP VOLUNTEER MEAL REIMBURSEMENT 01/03/24	15.00	22.00
EFT37066	14/03/2024	J & V EARTHMOVING CONTRACTORS	OVAL WORKS SUMP GRADING WORKS INC HEADWALL & MACHINERY RFT02-2022/23 - 01/03/24	1,907.06	
			OVAL WORKS - DISPOSAL OF EXCESS EASTERN BANK MATERIAL RFT02-2022/23 - 29/02/24	4,037.00	
			INITIAL KERBING WORKS FOR 23/24	16,313.00	22,257.06
EFT37067	14/03/2024	PHOENIX CONTAINERS PTY LTD	SOCCER CLUB SEA CONTAINER HIRE - MARCH 2024	144.93	
			SEA CONTAINER HIRE - BOWLING CLUB TEMPORARY RELOCATION FOR EFFC REDEVELOPMENT - MARCH 2024	170.50	315.43
EFT37068	14/03/2024	CGM COMMUNICATIONS PTY LTD T/A REGEN STRATEGIC	COMMUNITY DEVELOPMENT STRATEGY - 50% OF FINAL INSTALMENT	6,600.00	6,600.00
EFT37069	14/03/2024	WDJ PEST CONTROL	TERMITE TREATMENT AT SUMPTON GREEN	1,900.00	
			ANNUAL PEST CONTROL INSPECTION & TREATMENT 2024 - TOWN HALL , DOVENBY HOUSE, DEPOT, OLD POLICE STATION, GLYDE-IN , CAMP WALLER SCOUTS, PRESTON POINT / LACROSSE, SUMPTON GREEN, HURRICANES	3,157.00	
			SNNUAL PEST CONTROL INSPECTION & TREATMENT - TRICOLORE, GEORGE BOOTH PARK, MARJORIE GREEN, RACEWAY PARK, WW WAYMAN, NORM MCKENZIE, JOHN TONKIN, J DOLAN , MERV COWAN, ALLEN STREET UNITS	2,935.90	7,992.90
EFT37070	14/03/2024	BRITESHINE CLEANING & MAINTENANCE SERVICES PTY LTD	TOWN HALL CLEANING - FEBRUARY 2024 - RFT07-2021/22, DEPOT CLEANING - FEBRUARY 2024 - RFT07-2021/22, DOVENBY HOUSE CLEANING - FEBRUARY 2024 - RFT07-2021/22, SUMPTON GREEN CLEANING - FEBRUARY 2024 - RFT07-2021/22, GLASSON PARK CLEANING & CONSUMABLES - FEBRUARY 2024 - RFT07-2021/22	7,971.10	7,971.10
EFT37071	14/03/2024	DMG PROPERTY PTY LTD	PROJECT MANAGEMENT SERVICES - FREMANTLE WOMENS FOOTBALL CLUB UPGRADE - DECEMBER 23 & JANUARY 24	2,002.00	2,002.00
EFT37072	14/03/2024	PEACEFUL EARTH WELLBEING	NEIGHBOURHOOD LINK CLIENT ACTIVITY - 27/02/24	50.00	50.00
EFT37073	14/03/2024	ILLION TENDERLINK	TENDER PORTAL ANNUAL LICENCING FEES 13/03/24 - 13/03/25	2,750.00	2,750.00
EFT37074	14/03/2024	S DOUGLAS	CHSP VOLUNTEER MEAL REIMBURSMENT 23/02/24	15.00	
			CHSP VOLUNTEER MEAL REIMBURSEMENT 29/02/24	15.00	30.00
EFT37075	14/03/2024	SOUTHERN BINS PTY LTD	BULK BINS - WAUHOP ROAD - FEBRUARY 2024 - 27/02/24	1,280.00	1,280.00
EFT37076	14/03/2024	J MUIR	CHSP VOLUNTEER MEAL REIMBURSEMENT 29/02/24	13.00	
			CHSP VOLUNTEER MEAL REIMBURSEMENT 07/03/24	15.00	28.00
EFT37077	14/03/2024	VOCUS COMMUNICATIONS (AMCOM PTY LTD)	MANAGED HARDWARE UC ACCESS- -01/04/24 - 30/04/24	202.40	202.40
EFT37078	14/03/2024	EASI PACKAGING PTY LTD	PAYROLL DEDUCTIONS MARCH 24	2,223.52	2,223.52
EFT37079	14/03/2024	INFORMATION PROFICIENCY	RFQ001-2023/24 STATUTORY REVIEW OF RECORD KEEPING PLAN AND OTHER RELATED PROJECTS - MILESTONE 3 - IMPROVEMENT PROCESS (25%)	3,850.00	3,850.00
EFT37080	14/03/2024	THE TRUSTEE FOR BELGRAVIA LEISURE UNIT TRUST	OPERATOR AGREEMENT - EAST FREMANTLE OVAL PRECINCT - PRE OPENING SERVICES FEE - MARCH 24	27,007.42	27,007.42
EFT37081	14/03/2024	K ANDREWS	REIMBURSEMENT OF COST OF OBTAINING POLICE CLEARANCE - CHSP VOLUNTEER	34.00	34.00
EFT37082	14/03/2024	M WARD	BUILDING SURVEYOR SERVICES PROVIDED TO THE TOWN - 20/02 & 27/02 8 HOURS	800.00	800.00
EFT37083	14/03/2024	S TWEEDIE	REVIEW OF DELEGATION REGISTER AND REQUISITE TRAINING - PART 1 - REVIEW AND UPDATE TOEF DELEGATION REGISTER $3000+GST	3,300.00	3,300.00
EFT37084	14/03/2024	INTEGRITY MANAGEMENT SOLUTIONS PTY LTD	ATTAIN COMPLIANCE SOFTWARE - ANNUAL SUBSCRIPTION - QUOTE QU-0228 - STARTER PACK, DELEGATION MODULE, COMPLIANCE CALENDAR	14,850.00	14,850.00

EFT37085	14/03/2024	SJR CIVIL CONSULTING PTY LTD	BOLTON STREET - ROAD ASSESSMENT - FORMAL SHORT REPORT WITH PHOTOS	3,432.00	3,432.00
EFT37086	14/03/2024	R & H PLUMBING AND GAS PTY LTD	DRAINAGE JETTING AND INSPECTIONS FOR INVESTIGATIONS - 11/03/24 & 27/02/24	1,452.00	
			INSPECTION AND REPAIR OF VARIOUS DRINK FOUNTAINS - 08/03/24	539.83	1,991.83
EFT37087	14/03/2024	J CHAUVEL	MEETING ATTENDANC FEE - AUDIT COMMITTEE 28/02/24	215.00	215.00
EFT37088	14/03/2024	J O'KEEFE	PARTIAL REFUND OF DOG REGO - NOW STERILISED	30.00	30.00
EFT37089	14/03/2024	COASTLINE MOWERS	KUBOTA 3960 - 9X BLADES	438.60	438.60
EFT37090	14/03/2024	S MATHEWS	REFUND OF OVERPAYMENT OF PARKING FEES - LEEUWIN LAUNCHING RAMP 10/03/24	94.00	94.00
EFT37091	14/03/2024	AMPOL AUSTRALIA	FUEL USE 01/02/24 - 29/02/24	5,995.72	5,995.72
EFT37092	15/03/2024	RESOURCE RECOVERY GROUP (SMRC)	REPAYMENT OF OFFICE PROJECT LOAN	2,227.74	2,227.74
EFT37093	15/03/2024	H DICKSON	CHSP VOLUNTEER MEAL REIMBURSEMENT 13/04/24	15.00	15.00
EFT37094	15/03/2024	K MCDONALD	CHSP VOLUNTEER MEAL REIMBURSEMENT 14/03/24	15.00	15.00
EFT37095	15/03/2024	LO-GO APPOINTMENTs	TEMPORARY REPLACEMENT FOR COMMUNICATIONS AND MARKETING POSITION - W/E 09/03/24	1,694.97	1,694.97
EFT37096	15/03/2024	COOPER & OXLEY GROUP PTY LTD - RETENTIONS	RFT03-2021/22 EF OVAL REDEVELOPMENT PRINCIPAL CONTRACTOR, RETENTION AMOUNT - CERTIFICATE 15	7,504.97	7,504.97
EFT37097	15/03/2024	COOPER & OXLEY GROUP PTY LTD - GENERAL	RFT08-2021/22 EAST FREMANTLE OVAL REDEVELOPMENT PRINCIPAL CONTRACTOR, CONTRACT VARIATIONS - AS PER COST REPORT # 9 - CERTIFICATE 15,	2,018,924.62	2,018,924.62
EFT37098	27/03/2024	APACE AID (INC)	WEED MANAGEMENT NIERGARUP TRACK - 12/03/24	330.00	330.00
EFT37099	27/03/2024	CHILD SUPPORT AGENCY	PAYROLL DEDUCTIONS MARCH 24	476.87	476.87
EFT37100	27/03/2024	BUNNINGS BLDG SUPPLIES LTD	MATERIALS FOR PATH REPAIR WORKS - ASPHALT	348.50	348.50
EFT37101	27/03/2024	CITY OF FREMANTLE	CO-CONTRIBUTION FOR RESIDENT UTILISATION OF FREMANTLE RECYCLING CENTRE	58,841.20	58,841.20
EFT37102	27/03/2024	FREMANTLE HERALD	STANDING ORDER FOR FREMANTLE HERALD FOR ADVERTISING FOR REGULATORY SERVICES - 09/03/24	284.90	284.90
EFT37103	27/03/2024	MCLEODS	PROFESSIONAL FEES - TERMINATION OF MOORING PEN LEASE	2,369.95	
			PROFESSIONAL FEES - MOORING PEN SEA BED LEASE AND RELATED MATTERS	1,800.70	4,170.65
EFT37104	27/03/2024	MAYOR O'NEILL	SITTING FEES , ICT ALLOWANCE & MAYORAL ALLOWANCE - MARCH 24	5,693.34	5,693.34
EFT37105	27/03/2024	TELSTRA LIMITED	CEO MOBILE PHONE USE 02/03/24 - 01/04/24	133.98	
			DEPOT MOBILE BACKUP 04/03/24 - 03/04/23	38.00	
			MONTHLY DATA FEES FOR OPERATIONS & RANGERS TABLETS AND PHONES, RETIC AND VMS TRAILER - TO 03/03/24	943.00	
			SUMTON GREEN PHONES TO 07/04/24	100.00	1,214.98
EFT37106	27/03/2024	SYNERGY	POWER SUPPLY TOWN HALL 21/02/24 - 18/03/24	1,187.85	1,187.85
EFT37107	27/03/2024	YOUNGS PLUMBING SERVICE P/L	PRESTON POINT RESERVE - INSTALLATION OF DRINK FOUNTAIN INC CONCRETE PAD	2,880.00	2,880.00
EFT37108	27/03/2024	FLEXI STAFF PTY LTD	LABOUR HIRE OPERATIONS -05/03- 08/03	1,888.56	
			LABOUR HIRE OPERATIONS -11/03- 15/03	2,395.94	4,284.50
EFT37109	27/03/2024	TOTAL PACKAGING (WA) PTY LTD	10 CARTONS (400 Boxes) OF BIODEGRADABLE DOG BAGS	2,516.80	2,516.80
EFT37110	27/03/2024	RESOURCE RECOVERY GROUP (SMRC)	DIVERSIONS TO SUEZ/VEOLIA - FEBRUARY 24	13,825.77	
			RRRC OVERHEADS & WCF FIXED COSTS CONTRIBUTIONS - FEBRUARY 24	8,280.80	
			MRF GATE FEES FOR FEBRUARY 324 - RECYCLABLES	4,857.44	
			GREEN WASTE GATE FEES FOR FEBRUARY 24	420.66	
			FOGO GATE FEES FOR FEB 2024	17,702.85	45,087.52
EFT37111	27/03/2024	LOCAL GOVERNMENT PROFESSIONALS AUSTRALIA WA	ESP NETWORK & GOVERNANCE NETWORK COLLAB: DELEGATION AND AUTHORITY 18/4/24 - JANINE MAY	100.00	100.00
EFT37112	27/03/2024	THE TRUSTEE FOR THE MACRI PARTNERS UNIT TRUST (MACRI PARTNERS)	2022/2023 DEFERRED INTEREST AUDIT CERTIFICATION (AND 2019/20, 2020/21 & 2021/22)	1,320.00	1,320.00
EFT37113	27/03/2024	WESTERN AUSTRALIA LOCAL GOVERNMENT ASSOCIATION (WALGA)	2 X Cr REGISTRATION FOR WALGA ABORIGINAL ENGAGEMENT FORUM- 20/3/24	380.00	380.00
EFT37114	27/03/2024	HOST DIRECT (HOST CORPORATION PTY LTD)	PROVISION OF TABLE TOP EQUIPMENT FOR THE EAST FREMANTLE COMMUNITY PARK	3,207.60	3,207.60
EFT37115	27/03/2024	RENOWN TYRE COMPANY	TYRE REPAIR / REPLACEMENT 1GBT981	165.00	165.00
EFT37116	27/03/2024	CR. HARRINGTON	SITTING FEES & ICT ALLOWANCE - MARCH 24	1,710.84	1,710.84
EFT37117	27/03/2024	WOOLWORTHS GROUP LIMITED	WOOLWORTHS PURCHASES DEPOT - 12/03/24	9.00	
			WOOLWORTHS PURCHASES - ADMIN - 13/03/24	135.55	
			WOOLWORTHS PURCHASES DEPOT - 15/03/24	12.85	
			WOOLWORTHS PURCHASES DEPOT - 21/03/24	51.00	
			WOOLWORTHS PURCHASES - CHSP 22/03/24	105.70	
			WOOLWORTHS PURCHASES - CHSP 25/03/24	28.40	342.50
EFT37118	27/03/2024	ENVIROLAB SERVICES WA PTY LTD	TESTING OF MATERIAL FOR SUMPTON GREEN	110.00	110.00
EFT37119	27/03/2024	CR.COLLINSON	SITTING FEES & ICT ALLOWANCE - MARCH 24	1,710.84	1,710.84
EFT37120	27/03/2024	KONICA MINOLTA BUSINESS SOLUTIONS	PRINTING AND COPYING FOR CHSP - 01/01/24 - 31/01/24	42.33	
			KONICA BIZHUB C224E HARD DRIVE RESET IN PREPARATION FOR DECOMISSIONING OF PHOTOCOPIER	231.00	273.33
EFT37121	27/03/2024	GLOBAL SPILL CONTROL PTY LTD	REPLACEMENT OF ITEMS IN MARINE SPILL KIT LOCATED AT MOORING PENS.	99.73	99.73
EFT37122	27/03/2024	SEEK LIMITED	ADVERTISING - MANAGER COMMUNITY ENGAGEMENT	484.00	
			ADVERTISING - COMMUNICATIONS OFFICER	484.00	968.00
EFT37123	27/03/2024	FOCUS NETWORKS	RFT04-2021/222 - PROJECT WORK RATE FOR OUT OF SCOPE WORKS - FEBRUARY 24	423.50	423.50
EFT37124	27/03/2024	ADCO SERVICES	SUMPTON GREEN - DECKING REPLACEMENT VARIATION - 4 STEP STAIRCASE REPLACEMENT & VERMIN BOARDS WITH SUB-FLOOR ACCESS	6,459.34	

			SUMPTON GREEN - TO REPLACE TWO TERMINATE DAMAGED POSTS TO MAIN BUILDING. LIFT BUILDING, REMOVE EXISTING POSTS AND REPLACE. RAMP EXTENSION TO COMPLY WITH MINIMUM GRADIENTS. EXTRA 6LM OF RAMP AND LADING WITH BALUSTRADE.	4,139.71	
			SUMPTON GREEN - ADDITIONAL DECKING FRAME SUPPORT WORKS - CONSTRUCT & INSTALL BALUSTRADES, SUMPTON GREEN - ADDITIONAL DECKING FRAME SUPPORT WORKS - SUPPLY & INSTALL VERANDAH POSTS	10,500.60	
			SUMPTON GREEN BUILDING WORKS - REPLACEMENT OF JARRAH DECK MATERIALS & LABOUR	26,950.00	
			SUMPTON GREEN - DECK FRAME REMOVAL & REPLACEMENT	18,229.93	66,279.58
EFT37125	27/03/2024	LOCALISE PTY LTD	QUOTE 245 - PROFESSIONAL SERVICES - IPR CURRENT STATE ASSESSMENT	6,600.00	6,600.00
EFT37126	27/03/2024	CR. MCPHAIL	SITTING FEES & ICT ALLOWANCE - MARCH 24	1,710.84	1,710.84
EFT37127	27/03/2024	CR. WHITE	SITTING FEES & ICT ALLOWANCE - MARCH 24	1,710.84	1,710.84
EFT37128	27/03/2024	CR. NATALE	SITTING FEES, ICT ALLOWANCE & DEPUTY MAYORAL ALLOWANCE - MARCH 24	2,511.84	2,511.84
EFT37129	27/03/2024	WINC	A4 COPYING PAPER & OFFICE STATIONARIES ORDERED ON 12/03/2024	229.44	229.44
EFT37130	27/03/2024	AMBIUS (RENTOKIL INITIAL PTY LTD)	TOWN HALL PLANT HIRE 27/04/24 - 26/05/24	342.20	342.20
EFT37131	27/03/2024	LINXIO (READY TRACK PTY LTD)	GPS VEHICLE TRACKING - MARCH 2024	155.10	155.10
EFT37132	27/03/2024	H DICKSON	CHSP VOLUNTEER MEAL REIMBURSEMENT 15/03/24	15.00	
			CHSP VOLUNTEER MEAL REIMBURSEMENT 20/03/24	15.00	30.00
EFT37133	27/03/2024	CONTRA-FLOW PTY LTD	EFFC - OVAL FOOTPATH UPGRADES 3X PERSONNEL + VEHICLE 22 MARCH	1,942.18	1,942.18
EFT37134	27/03/2024	PTC IRRIGATION	LOCATE AND REPAIR SHORT CIRCUIT ON WAUHOP IRRIGATION	679.25	679.25
EFT37135	27/03/2024	COLLEAGUESNAGELS	ZEBRA ZQ510 INFRINGEMENT ROLLS	2,346.94	2,346.94
EFT37136	27/03/2024	LEE SYMINTON ARCHITECT	PROFESSIONAL FEES - ARCHITECTURAL DRAWING VARIATION - EF WOMENS	1,100.00	1,100.00
EFT37137	27/03/2024	FRESH PROVISIONS BICTON	CATERING - RICHMOND PRIMARY SCHOOL VISITS 20/3/24	179.00	
			CATERING - RICHMOND PRIMARY SCHOOL VISITS 21/3/24	179.00	358.00
EFT37138	27/03/2024	CR DONOVAN	SITTING FEES & ICT ALLOWANCE - MARCH 24	1,710.84	1,710.84
EFT37139	27/03/2024	INSPIRED DEVELOPMENT SOLUTIONS	ORGANISATIONAL REVIEW AND DEVELOPMENT OF ORGANISATIONAL DEVELOPMENT PLAN AS PER WRITTEN QUOTE - OD REPORT QRITING AND ID REPORT DE-BRIEF 26/02/24 & 13/03/24	9,460.00	9,460.00
EFT37140	27/03/2024	PAPERSCOUT	DESIGN HALF PAGE PRESS AD BASED ON SUPPLIED LAYOUT, COPY & IMAGES - FEB 24	385.00	
			FIX TOEF LOGO - HORIZONTAL VERSION	154.00	539.00
EFT37141	27/03/2024	PROTEC ASPHALT	BOX OUT ASPHALT FOOTPATH AREAS ~114sqm, SUPPLY RED ASPHALT TO FOOTPATH AREAS ~19 tonne, BOX OUT ASPHALT FOOTPATH AREA (GEORGE ST) ~31sqm, SUPPLY RED ASPHALT TO FOOTPATH AREA (GEORGE ST) ~4 tonne	15,119.50	
			SUMPTON GREEN - LIFT & REMOVE PAVING TO RAMP ON WEST OF BUILDING - 18M2	495.00	
			EAST FREMANTLE YACHT CLUB - PATCHING WORKS 50M2 CUT & REMOVE ASPHALT, EAST FREMANTLE YACHT CLUB - 8T BLACK	4,983.80	20,598.30
EFT37142	27/03/2024	ATF MAXIMUS TRUST T/AS ASSET INFRASTRUCTURE MANAGEMENT PTY LTD	MRRG FUNDING ASSESSMENT FOR RIVERSIDE ROAD - 2025-26	3,509.00	3,509.00
EFT37143	27/03/2024	SMART OFFICE SYSTEMS	OFFICE 365 PROFESSIONAL SERVICES - FEBRUARY 24	288.75	288.75
EFT37144	27/03/2024	J ENGLAND	CHSP VOLUNTEER MEAL REIMBURSEMENT 14/03/24	15.00	15.00
EFT37145	27/03/2024	TASSIE DEVIL LINEMARKING	VARIOUS NO STOPPING LINE MARKING - ADMIN CAR PARK, ALENANDRA RD, WINDSOR RD & FRASER ST	984.50	
			VARIOUS NO STOPPING LINE MARKING	850.30	1,834.80
EFT37146	27/03/2024	T ABELHA	CHSP VOLUNTEER MEAL REIMBURSEMENT 18/03/24	15.00	
			CHSP VOLUNTEER MEAL REIMBURSEMENT 25/03/24	15.00	30.00
EFT37147	27/03/2024	MARKET CREATIONS AGENCY PTY LTD	PURCHASE 20 ADDITIONAL SUPPORT AND MAINTENANCE HOURS - COUNCIL CONNECT WEBSITE SOLUTION	3,300.00	3,300.00
EFT37148	27/03/2024	CR. WILSON	SITTING FEES & ICT ALLOWANCE - MARCH 24	1,710.84	1,710.84
EFT37149	27/03/2024	JACKSON MCDONALD BARRISTERS & SOLICITORS	LEGAL FEES JACKSON MCDONALD - EAST FREMANTLE OVAL REDEVELOPMENT 2023/24 - FEBRUARY 24	21,692.29	21,692.29
EFT37150	27/03/2024	FOCUS TRANSPORT SOLUTIONS	FOOTPATH CONDITION RANKING 2023/24	385.00	385.00
EFT37151	27/03/2024	CALL ASSOCIATES PTY LTD	SERVICE AGREEMENT FOR AFTER HOURS CALL CETRE SERVICES 23/24 - FEBRUARY 24	340.40	340.40
EFT37152	27/03/2024	R TETI	REIMBURSEMENT OF COST OF CATERING - CLIENT OUTING 22/03/24	80.00	80.00
EFT37153	27/03/2024	LO-GO APPOINTMENT (Helene Pty Ltd)	TEMPORARY REPLACEMENT FOR COMMUNICATIONS AND MARKETING POSITION - W/E 16/03/24	1,521.62	1,521.62
EFT37154	27/03/2024	SCOUTTA PTY LTD	CONSULTING SERVICES- DEVELOPMENT OF A PREDICTIVE ASSET RENEWABLE MODEL (PARM) IN MS EXCEL AS PER TEMPLATE PROVIDED, - UPDATING OF FINANCIAL INFORMATION AND TABLES IN EACH OF THE TOWN'S AMPS BASED ON THE PARM DATA	7,562.50	7,562.50
EFT37155	27/03/2024	J & V EARTHMOVING CONTRACTORS	FOOTPATH MAINTENANCE 18/03/24	3,951.20	3,951.20
EFT37156	27/03/2024	DMG PROPERTY PTY LTD	PROPERTY MANAGEMENT SERVICES - FREMANTLE WOMENS FOOTBALL CLUB UPGRADE - FEBRUARY 24	2,189.00	2,189.00
EFT37157	27/03/2024	GREEN START CONSULTING	PROFESSIONAL FEES - CERTIFICATION OF DESIGN COMPLIANCE ASSESSMENT - EFFC BUILDING UPGRADES	2,750.00	2,750.00
EFT37158	27/03/2024	DORIAN ENGINEERING CONSULTANTS	FCFC BUILDING UPGRADE - VARIATIONS - ENGINEERING & DRAFTING	891.00	891.00
EFT37159	27/03/2024	PEACEFUL EARTH WELLBEING	NEIGHBOURHOOD LINK CLIENT ACTIVITY - 12/03/24	50.00	50.00

EFT37160	27/03/2024	NISBETS AUSTRALIA PTY LTD	FURNITURE FITTINGS & EQUIPMENT FOR THE HOSPITALITY AREA OF THE EAST FREMANTLE COMMUNITY PARK	11,160.94	11,160.94
EFT37161	27/03/2024	S DOUGLAS	CHSP VOLUNTEER MEAL REIMBURSEMENT 21/03/24	15.00	15.00
EFT37162	27/03/2024	J MUIR	CHSP VOLUNTEER MEAL REIMBURSEMENT 14/03/24	14.00	
			CHSP VOLUNTEER MEAL REIMBURSEMENT 21/03/24	10.00	24.00
EFT37163	27/03/2024	N PATTERSON	CHSP VOLUNTEER MEAL REIMBURSEMENT19/03/24	15.00	15.00
EFT37164	27/03/2024	EASI PACKAGING PTY LTD	PAYROLL DEDUCTIONS MARCH 24	2,223.52	2,223.52
EFT37165	27/03/2024	CR. MAYWOOD	SITTING FEES & ICT ALLOWANCE - MARCH 24	1,710.84	1,710.84
EFT37166	27/03/2024	K ANDREWS	CHSP VOLUNTEER MEAL REIMBURSEMENT 18/03/24	15.00	15.00
EFT37167	27/03/2024	M WARD	BUILDING SURVEYOR SERVICES PROVIDED BY TO THE TOWN - 05/03 & 12/03 - 8 HOURS TOTAL	800.00	800.00
EFT37168	27/03/2024	COASTLINE MOWERS	SUPPLY 1 X STIHL MS362 CHAINSAW WITH SPARE CHAIN AND SHARPENING FILE	1,450.05	
			REPAIR MS293 CHAINSAW & 3X 3/16 FILES	32.40	
			INSPECT AND REPORT/REPAIR ON 2 X STIHL MS 261 CHAINSAWS	63.00	
			INSPECT AND REPORT/REPAIR ON 2 X STIHL MS 261	325.20	1,870.65
EFT37169	27/03/2024	S ALTIERI	REFUND OF OVERPAYMENT OF PARKING FEES LEEUWIN LAUNCHING RAMP 12/03/24	94.00	94.00
EFT37170	27/03/2024	S CHAMBERS	REFUND OF ARCHIVE SEARCH FEES - NO PLANS AVAILABLE	170.50	170.50
EFT37171	27/03/2024	S MEDCALF	PARTAL REFUND OF LIFETIME DOG REGISTRATION FEES - DOG NOW STERILISED	150.00	150.00
			EFT TOTAL	3,262,223.41	3,262,223.41
	Direct Debit - March 2024	Supplier	Description	Inv Amount	EFT
		CBA	INTEREST ADJUSTMENT	0.16	0.16
		CBA	OVERDRAFT LINE FEE	498.63	498.63
		CBA	MERCHANT FEE	269.08	269.08
		CBA	MERCHANT FEE	238.15	238.15
		FLEETCARE	FLEETCARE PAYMENT	2,560.53	2,560.53
		AMEX	AMEX FEE	28.60	28.60
		TILL	TILL SIMPLEPAY FEE	693.50	693.50
		SUPERCHOICE	EMPLOYEE SUPERANNUATION - FEBRUARY 24	53,244.73	53,244.73
		CBA	ACCOUNT SERVICE TRANSACTION FEES	8.50	8.50
		CBA	REJECT RETURN FEE	7.50	7.50
		CBA	BPOINT TRANSACTION FEES	32.56	32.56
		CBA	BPAY TRANSACTION FEES	220.95	220.95
		CBA	COMMBIZ TRANSACTION FEES	54.73	54.73
		NAB	TERM DEPOSIT INVESTMENT	1,000,000.00	1,000,000.00
		SHERRIFS OFFICE PERTH	FER LODGEMENT FEES	1,503.00	1,503.00
				1,059,360.62	1,059,360.62
	Credit Cards - March 2024	Supplier	Description	Inv Amount	EFT
		CREDIT CARD - NICK KING	CBA - ANNUAL FEE	40.00	40.00
			DOMINOS EAST FREMANTLE - CATERING	127.00	127.00
		CREDIT CARD - PETER KOCIAN	BROWNES DAIRY - MILK	19.85	19.85
			CBA - ANNUAL FEE	40.00	40.00
			BROWNES DAIRY - MILK	19.85	19.85
			HELLO VISITOR - SUBSCRIPTION	0.01	0.01
			MAILCHIMP - SUBSCRIPTION	87.79	87.79
			BROWNES DAIRY - MILK	19.85	19.85
			CPA AUSTRALIA - MEMBERSHIP RENEWALL	431.18	431.18
			MELVILLE MG - REPAIRS TO TOEF EV	1,284.75	1,284.75
			BROWNES DAIRY - MILK	19.85	19.85
			TOWN OF EAST FREMANTLE -FREMANTLE WOMENS FOOTBALL CLUB WORKS - BUILDING PERMIT FEES	3,416.00	3,416.00
			BROWNES DAIRY - MILK	19.85	19.85
		CREDIT CARD - ANDREW MALONE	CBA - ANNUAL FEE	40.00	40.00
			FACEBOOK - ADVERTISING EF COMMUNITY PARK	28.40	28.40
			FACEBOOK - ADVERTISING EF COMMUNITY PARK	33.00	33.00
			AMPOL EAST FREMANTLE - MILK	9.55	9.55
			FRESH PROVISIONS - CATERING	184.00	184.00
			FRESH PROVISIONS - CATERING	85.00	85.00
		CREDIT CARD - REGINA TETI	CBA - ANNUAL FEE	40.00	40.00
			FARMER JACKS SUBIACO - CLIENT ACTIVITY CATERING	55.27	55.27
		CREDIT CARD - JANINE MAY	REJECT SHOP - CARDS	8.00	8.00
			DOMINOS EAST FREMANTLE - CATERING	60.00	60.00
			LS PICOBELO - CATERING	43.00	43.00
			FRESH PROVISIONS - CATERING	11.18	11.18
			CBA - ANNUAL FEE	40.00	40.00
			WALDECKS MYAREE - PLANT GIFT	69.99	69.99
			LEEMING LOTTERY CENTRE - CARDS & WRAP	32.00	32.00
			TROPHY CHOICE - ENGRAVING	15.00	15.00
			LEEMING IGA - CATERING	39.98	39.98
			LEEMING IGA - CATERING	39.98	39.98
		CREDIT CARD - ANDREW DRIVER	CBA - ANNUAL FEE	40.00	40.00
		CREDIT CARD - JONATHAN THROSSELL	CBA - ANNUAL FEE	40.00	40.00
			CREDIT CARD TOTAL	**6,440.33**	**6,440.33**
			Description	***GROSS PAY***	***EFT***
			PAYROLL FORTNIGHT ENDING 05/03/24	162,346.37	162,346.37
			PAYROLL FORTNIGHT ENDING 19/03/24	158,926.73	158,926.73

Attachment -1

			PAYROLL TOTALS	**321,273.10**	**321,273.10**
			AMPOL FUEL CARDS- FEBRUARY 24	**5,995.72**	**5,995.72**
			GRAND TOTAL	**4,649,297.46**	**4,649,297.46**

AmpolCard

Tax Invoice

⊢ 000056 000
[redacted]
TOWN OF EAST FREMANTLE
PO BOX1097
FREMANTLE WA 6959

Need help?

Self Service:
https://cards.ampol.com.au

Email:
ampolcard@ampol.com.au

Call:
1300 365 096
Ampol Customer Service:
8:30am - 6:00pm EST, Mon to Fri

Invoice date: 29/02/2024

Your account details	Due date	Total due inc GST
Invoice ref no: 0000132161 Account no: [redacted]	21/03/2024	$5,995.72

Your AmpolCard invoice summary

01/02/2024 – 29/02/2024

Description	Product	Quantity	Amount $ excl GST	GST amount	Total inc GST $
FLEET	Unleaded	1,279.52	2,080.77	208.06	2,288.83
	Premium 95 A	116.60	195.98	19.60	215.58
	Oils/Lubricants		47.27	4.73	52.00
	Premium Diesel A	1,719.41	3,126.65	312.66	3,439.31
	Total for Fleet		**5,450.67**	**545.05**	**5,995.72**
	Total		**5,450.67**	**545.05**	**5,995.72**

Payment options

BPAY
Biller Code: 858753
Ref: [redacted]

EFT Direct Payment
BSB [redacted]
Account [redacted]

Credit Card
Visit pay.ampol.com.au or
Phone: 1300 138 469. Surcharges apply.

Breakdown of fleet summary

Details of fleet transactions processed from 01/02/2024 - 29/02/2024 **Invoice ref no:** 0000132161 **Account no:** 0200402776 **Invoice date:** 29/02/2024

Card details / Location	Date	Time	Trans no	Odo reading	Product	Quantity	Unit $ inc GST	Amount $ inc GST	Trn fee inc GST	Total $ inc GST	GST on supply	GST on trn fee
[redacted] 1207 Rego 1GUV822 Crd Holder AMINISTRATION												
Ampol Foodary Fremantle East	06/02	19:05	E15212	77775	Premium 95 A	35.00	185.40	64.89	0.00	64.89	5.90	0.00
Ampol Foodary Fremantle East	13/02	20:52	E15369	78130	Premium 95 A	30.00	183.40	55.02	0.00	55.02	5.00	0.00
Ampol Foodary Fremantle East	27/02	20:37	E15661	78771	Premium 95 A	51.60	185.40	95.67	0.00	95.67	8.70	0.00
					Card total	**116.60**		**215.58**	**0.00**	**215.58**	**19.60**	**0.00**
Domestic 3451												
[redacted] 6884 Rego X Crd Holder WORKS												
Ampol Foodary Fremantle East	16/02	14:29	E21149	0	Unleaded	129.92	191.40	248.67	0.00	248.67	22.61	0.00
					Card total	**129.92**		**248.67**	**0.00**	**248.67**	**22.61**	**0.00**
Domestic 4063												
[redacted] 2506 Rego 1DTJ953 Crd Holder HACC												
Ampol Foodary Fremantle East	31/01	11:07	E20591	91030	Unleaded	61.47	192.52	118.34	0.00	118.34	10.76	0.00
Ampol Foodary Fremantle East	07/02	06:48	E20830	91411	Unleaded	67.31	191.63	128.99	0.00	128.99	11.73	0.00
Ampol Foodary Fremantle East	13/02	10:15	E21024	91743	Unleaded	62.78	168.40	105.72	0.00	105.72	9.61	0.00
Ampol Foodary Fremantle East	20/02	14:23	E15480	92045	Unleaded	59.58	172.40	102.72	0.00	102.72	9.34	0.00
Ampol Foodary Fremantle East	27/02	14:20	E15639	92388	Unleaded	65.42	170.40	111.48	0.00	111.48	10.13	0.00
					Card total	**316.56**		**567.25**	**0.00**	**567.25**	**51.57**	**0.00**
Domestic 4085												
[redacted] 0483 Rego 1GBT981 Crd Holder HACC												
Ampol Foodary Yangebup	05/02	17:15	E24448	126259	Unleaded	53.69	173.40	93.10	0.00	93.10	8.46	0.00
Ampol Foodary O'Connor	12/02	13:02	E84678	126580	Unleaded	41.89	167.40	70.12	0.00	70.12	6.37	0.00
Ampol Foodary O'Connor	19/02	12:54	E85325	126990	Unleaded	46.02	169.40	77.96	0.00	77.96	7.09	0.00
Ampol Foodary O'Connor	23/02	16:29	E85861	127375	Unleaded	47.75	169.40	80.89	0.00	80.89	7.35	0.00
					Card total	**189.35**		**322.07**	**0.00**	**322.07**	**29.27**	**0.00**

Card details / Location	Date	Time	Trans no	Odo reading	Product	Quantity	Unit $ inc GST	Amount $ inc GST	Trn fee inc GST	Total $ inc GST	GST on supply	GST on trn fee
Domestic 4088												
[redacted] 0467 Rego 1GCQ228 Crd Holder HACC												
Ampol Foodary O'Connor	01/02	15:19	E83685	176258	Unleaded	22.77	167.40	38.12	0.00	38.12	3.47	0.00
Ampol Foodary O'Connor	06/02	14:46	E84141	176496	Unleaded	31.64	169.40	53.60	0.00	53.60	4.87	0.00
Ampol Foodary Fremantle East	12/02	11:42	E20987	176728	Unleaded	30.04	174.40	52.39	0.00	52.39	4.76	0.00
Ampol Foodary O'Connor	15/02	13:36	E85023	176992	Unleaded	36.17	167.40	60.55	0.00	60.55	5.50	0.00
Ampol Foodary Fremantle East	21/02	11:13	E21295	177261	Unleaded	33.55	194.36	65.21	0.00	65.21	5.93	0.00
Ampol Foodary Fremantle East	27/02	15:02	E21456	177493	Unleaded	31.88	170.40	54.32	0.00	54.32	4.94	0.00
					Card total	**186.05**		**324.19**	**0.00**	**324.19**	**29.47**	**0.00**
Domestic 4089												
[redacted] 0475 Rego 1GCQ227 Crd Holder HACC												
Ampol Foodary Fremantle East	06/02	16:12	E20826	83733	Unleaded	42.50	170.40	72.42	0.00	72.42	6.58	0.00
Ampol Foodary Fremantle East	12/02	14:27	E20993	83950	Unleaded	37.45	174.40	65.31	0.00	65.31	5.94	0.00
Ampol Foodary Fremantle East	15/02	14:56	E15388	84160	Unleaded	37.02	193.18	71.52	0.00	71.52	6.50	0.00
Ampol Foodary Fremantle East	20/02	14:53	E15483	84327	Unleaded	28.30	172.40	48.79	0.00	48.79	4.44	0.00
Ampol Foodary Fremantle East	26/02	08:29	E21408	84476	Unleaded	29.58	173.40	51.29	0.00	51.29	4.66	0.00
Ampol Foodary Fremantle East	28/02	15:02	E21491	84759	Unleaded	41.02	192.00	78.76	0.00	78.76	7.16	0.00
					Card total	**215.87**		**388.09**	**0.00**	**388.09**	**35.28**	**0.00**
Domestic 4091												
[redacted] 6959 Rego 1GDV315 Crd Holder												
Ampol Foodary Fremantle East	12/02	07:08	E20963	62991	Premium Diesel A	72.07	199.64	143.88	0.00	143.88	13.08	0.00
Ampol Foodary Fremantle East	28/02	14:06	E21488	63500	Premium Diesel A	73.21	198.24	145.13	0.00	145.13	13.19	0.00
					Card total	**145.28**		**289.01**	**0.00**	**289.01**	**26.27**	**0.00**
Domestic 4096												
[redacted] 6967 Rego 1GFU278 Crd Holder WORKS												
Ampol Foodary Fremantle East	07/02	09:06	E20841	48321	Premium Diesel A	70.85	199.30	141.20	0.00	141.20	12.84	0.00
					Card total	**70.85**		**141.20**	**0.00**	**141.20**	**12.84**	**0.00**

Card details Location	Date	Time	Trans no	Odo reading	Product	Quantity	Unit $ Inc GST	Amount $ Inc GST	Trn fee Inc GST	Total $ Inc GST	GST on supply	GST on trn fee
Domestic 4098												
[redacted] **6983 Rego 1GHV402 Crd Holder GARDENS**												
Ampol Foodary Fremantle East	06/02	13:44	E20816	126881	Premium Diesel A	68.61	199.99	137.22	0.00	137.22	12.47	0.00
Ampol Foodary Fremantle East	20/02	11:10	E21269	127654	Premium Diesel A	70.75	201.90	142.84	0.00	142.84	12.99	0.00
					Card total	**139.36**		**280.06**	**0.00**	**280.06**	**25.46**	**0.00**
Domestic 5000												
[redacted] **7122 Rego 1GIY952 Crd Holder WORKS**												
Ampol Foodary Fremantle East	28/02	07:02	E21469	423	Premium Diesel A	23.50	198.24	46.59	0.00	46.59	4.24	0.00
					Card total	**23.50**		**46.59**	**0.00**	**46.59**	**4.24**	**0.00**
Domestic 5002												
[redacted] **7015 Rego 1GKM815 Crd Holder WORKS**												
Ampol Foodary Fremantle East	15/02	14:09	E15381	57850	Premium Diesel A	111.99	202.49	226.77	0.00	226.77	20.62	0.00
					Card total	**111.99**		**226.77**	**0.00**	**226.77**	**20.62**	**0.00**
Domestic 5008												
[redacted] **8765 Rego 1GQD688 Crd Holder GARDENS**												
Ampol Foodary Fremantle East	12/02	09:11	E20974	56815	Premium Diesel A	69.73	199.64	139.21	0.00	139.21	12.66	0.00
					Card total	**69.73**		**139.21**	**0.00**	**139.21**	**12.66**	**0.00**
Domestic 5009												
[redacted] **2809 Rego 1GQJ387 Crd Holder RANGERS SERVICES**												
Ampol Foodary Fremantle East	04/02	11:08	E20727	86855	Premium Diesel A	60.76	199.31	121.10	0.00	121.10	11.01	0.00
Ampol Foodary Fremantle East	11/02	07:00	E20938	87140	Premium Diesel A	42.20	199.64	84.25	0.00	84.25	7.66	0.00
Ampol Foodary Fremantle East	18/02	07:06	E21191	87521	Premium Diesel A	57.44	200.90	115.40	0.00	115.40	10.49	0.00
Ampol Foodary Fremantle East	25/02	06:55	E21378	87831	Premium Diesel A	44.37	199.18	88.38	0.00	88.38	8.03	0.00
					Card total	**204.77**		**409.13**	**0.00**	**409.13**	**37.19**	**0.00**
Domestic 5020												
[redacted] **3076 Rego 1HMC350 Crd Holder WORKS**												
Ampol Foodary Fremantle East	31/01	14:27	E15114	24897	Premium Diesel A	105.39	196.79	207.40	0.00	207.40	18.85	0.00
Ampol Foodary Fremantle East	15/02	14:21	E15385	2546	Premium Diesel A	121.44	202.49	245.90	0.00	245.90	22.35	0.00
					Card total	**226.83**		**453.30**	**0.00**	**453.30**	**41.20**	**0.00**

Card details Location	Date	Time	Trans no	Odo reading	Product	Quantity	Unit $ inc GST	Amount $ inc GST	Trn fee inc GST	Total $ inc GST	GST on supply	GST on trn fee
Domestic 5021												
[redacted] **3159 Rego 1HLR056 Crd Holder WORKS**												
Ampol Foodary Fremantle East	14/02	14:53	E21080	14575	Premium Diesel A	64.24	201.30	129.32	0.00	129.32	11.76	0.00
					Card total	**64.24**		**129.32**	**0.00**	**129.32**	**11.76**	**0.00**
Domestic P5003												
[redacted] **4055 Rego 1GMR567 Crd Holder**												
Ampol Foodary O'Connor	31/01	16:02	E83583	90191	Unleaded	27.87	167.40	46.65	0.00	46.65	4.24	0.00
Ampol Foodary Fremantle East	21/02	08:22	E21288	90815	Unleaded	46.21	194.36	89.81	0.00	89.81	8.16	0.00
					Card total	**74.08**		**136.46**	**0.00**	**136.46**	**12.40**	**0.00**
Domestic P5015												
[redacted] **7072 Rego 1GYB392 Crd Holder**												
Ampol Foodary Fremantle East	31/01	08:37	E20580	1075	Premium Diesel A	31.63	196.79	62.25	0.00	62.25	5.66	0.00
Ampol Foodary Fremantle East	06/02	08:31	E20795	1082	Premium Diesel A	24.15	199.99	48.30	0.00	48.30	4.39	0.00
Ampol Foodary Fremantle East	13/02	07:15	E21008	1087	Premium Diesel A	20.58	200.65	41.29	0.00	41.29	3.75	0.00
Ampol Foodary Fremantle East	22/02	07:03	E21305	1095	Premium Diesel A	20.08	201.26	40.41	0.00	40.41	3.67	0.00
Ampol Foodary Fremantle East	26/02	11:42	E21415	1102	Premium Diesel A	24.51	199.18	48.82	0.00	48.82	4.44	0.00
					Card total	**120.95**		**241.07**	**0.00**	**241.07**	**21.91**	**0.00**
Domestic P5016												
[redacted] **7106 Rego 1GYB393 Crd Holder**												
Ampol Foodary Fremantle East	31/01	10:38	E20589	717	Premium Diesel A	29.93	196.79	58.90	0.00	58.90	5.35	0.00
Ampol Foodary Fremantle East	07/02	07:02	E20833	721	Premium Diesel A	29.93	199.30	59.65	0.00	59.65	5.42	0.00
Ampol Foodary Fremantle East	14/02	08:15	E21055	726	Premium Diesel A	31.74	201.30	63.89	0.00	63.89	5.81	0.00
Ampol Foodary Fremantle East	21/02	07:16	E21283	731	Premium Diesel A	32.57	202.24	65.87	0.00	65.87	5.99	0.00
Ampol Foodary Fremantle East	28/02	09:36	E21477	735	Premium Diesel A	29.63	198.24	58.74	0.00	58.74	5.34	0.00
					Card total	**153.80**		**307.05**	**0.00**	**307.05**	**27.91**	**0.00**
Domestic P5018												
[redacted] **7406 Rego 1HHZ552 Crd Holder**												
Ampol Foodary Fremantle East	01/02	15:14	E20630	89679	Premium Diesel A	42.23	197.71	83.49	0.00	83.49	7.59	0.00
Ampol Foodary Fremantle East	05/02	15:08	E20784	59897	Premium Diesel A	44.29	200.19	88.66	0.00	88.66	8.06	0.00

Card details Location	Date	Time	Trans no	Odo reading	Product	Quantity	Unit $ Inc GST	Amount $ Inc GST	Trn fee Inc GST	Total $ Inc GST	GST on supply	GST on trn fee
Ampol Foodary Fremantle East	09/02	08:24	E20888	60125	Oils/Lubricants			52.00	0.00	52.00	4.73	0.00
Ampol Foodary Fremantle East	09/02	08:24	E20888	60125	Premium Diesel A	38.65	199.55	77.13	0.00	77.13	7.01	0.00
Ampol Foodary Fremantle East	12/02	14:42	E15309	60361	Premium Diesel A	44.46	199.64	88.76	0.00	88.76	8.07	0.00
Ampol Foodary Fremantle East	16/02	08:25	E21128	60591	Premium Diesel A	38.75	202.90	78.62	0.00	78.62	7.15	0.00
Ampol Foodary Fremantle East	16/02	15:54	E21160	60706	Premium Diesel A	28.72	202.90	58.27	0.00	58.27	5.30	0.00
Ampol Foodary Fremantle East	22/02	08:28	E21311	60957	Premium Diesel A	48.10	201.26	96.81	0.00	96.81	8.80	0.00
Ampol Foodary Fremantle East	23/02	15:29	E15566	61150	Premium Diesel A	37.78	199.73	75.46	0.00	75.46	6.86	0.00
Ampol Foodary Fremantle East	26/02	15:33	E15630	61333	Premium Diesel A	31.11	199.18	61.96	0.00	61.96	5.63	0.00
Ampol Foodary Fremantle East	28/02	14:49	E21490	61537	Premium Diesel A	34.02	198.24	67.44	0.00	67.44	6.13	0.00
					Card total	388.11		828.60	0.00	828.60	75.33	0.00
Domestic P5022												
[redacted] 5194 Rego 1HSK094 Crd Holder												
Ampol Foodary Midvale	04/02	14:28	E21486	36899	Unleaded	39.83	175.40	69.86	0.00	69.86	6.35	0.00
Ampol Foodary Cockburn Centr	12/02	17:00	E100664	37515	Unleaded	48.45	179.40	86.92	0.00	86.92	7.90	0.00
Ampol Foodary Midvale	18/02	17:20	E23427	38138	Unleaded	34.91	177.40	61.93	0.00	61.93	5.63	0.00
Ampol Foodary Midvale	23/02	17:22	E24239	38985	Unleaded	44.50	187.40	83.39	0.00	83.39	7.58	0.00
					Card total	167.69		302.10	0.00	302.10	27.46	0.00

13.3 2024-25 BUDGET PARAMETERS

Report Reference Number	OCR-2697
Prepared by	Peter Kocian, Executive Manager Corporate Services
Supervised by	Jonathan Throssell, Chief Executive Officer
Meeting date	Tuesday, 16 April 2024
Voting requirements	Simple
Documents tabled	Nil

Attachments

1. WALGA Economic Briefing March 2024
2. Statement of Rating Objects and Reasons 2024/25
3. Notice of Intention to Impose Differential Rates

PURPOSE

This report recommends endorsement by Council for advertising of the proposed differential general rates and minimum payments, for which public submissions are sought over a period of not less than 21 days (to commence no earlier than 1 May), prior to Council striking the rates in the Annual Budget

EXECUTIVE SUMMARY

Under Section 6.36 of the *Local Government Act 1995*, before imposing any differential general rates or a minimum payment applying to a differential rate category under section 6.35(6)(c), a local government is to give local public notice of its intention to do so including an invitation for submissions to be made by an elector or a ratepayer in respect of the proposed rate or minimum payment and any related matters within 21 days of the notice.

It is recommended that Council resolves to endorse the following differential general rates and minimum payments with a general yield increase of **4.25%** across all rating categories and calls for public submissions under Section 6.36 of the *Local Government Act 1995*.

4.25% Model - 24/25

RATE TYPE	Rate in	Number of Properties	Rateable Value	Rate Revenue
Differential General Rate	$		$	$
Residential GRV	0.071860	2,966	104,808,540	7,531,492
Commercial GRV	0.121806	120	12,621,985	1,537,430
Sub-Totals		**3,086**	**117,430,525**	**9,068,922**
	Minimum			
Minimum Payment	$			
Residential GRV	1,296.00	336	4,962,640	435,456
Commercial GRV	1,938.00	7	79,940	13,566
Sub-Totals		**343**	**5,042,580**	**449,022**
		3,429	**122,473,105**	**9,517,944**
Amount from General Rates				
Less Concessions				
Totals				**9,517,944**

BACKGROUND

At the Ordinary Meeting of 18 April 2023, Council resolved as follows:

> **Council Resolution** 051804
>
> **OFFICER RECOMMENDATION:**
>
> **Moved Cr McPhail, seconded Cr Wilson**
>
> **That Council, with respect to its role under 2.7 (2) of the *Local Government Act 1995* to oversee the allocation of the local government's finances and resources, resolves to endorse the following:**
>
> 1. **the attached Strategic Resource Plan (Long Term Financial Plan) for the period 2023/24 – 2032/33, and the key underlying assumptions as follows, noting that these assumptions will be reviewed annually as part of the budget process:**
>
>   - **Inflation 2.5% (generally applied to materials and contracts)**
>   - **Annual increase of 4.5% in rate yield for 2023/24, 4% increase in 2024/25 and 3.5% per annum thereafter.**
>   - **Wage indexation of 5% in 2023/24**
>   - **Annual Increase of 4.5% in discretionary fees and charges in 2023/24**
>
> **(Noting that the Strategic Resource Plan will be rebalanced following endorsement of key assumptions)**
>
> 2. **the attached Town of East Fremantle Revenue Strategy, which underpins the Strategic Resource Plan, and which includes an annual transfer of 1% of rate revenue to the Sustainability and Environmental Reserve.**
> 3. **the 2023/24 Capital Works Program as itemised in the Strategic Resource Plan, to enable Officer's to commence project planning, noting that Officer's cannot incur expenditure until after the 2023/24 Budget is adopted.**
> 4. **the Statement of Rating Objects and Reasons for the 2023/24 financial year as per attachment 4.**
> 5. **the following differential general rates and minimum payments with a 4.5% increase in total rate yield from the previous financial year, for all rating categories and calls for public submissions pursuant to section 6.36 of the *Local Government Act* 1995:**

The adopted Revenue Strategy incorporated a 4.25% increase in rate yield for 2024/25. This proposed rate increase forms the basis of the information presented in this report.

CONSULTATION

Council Workshop 10 April 2024.
Further workshops are scheduled on the 23 April, 8 May and 22 May to discuss the matters raised in this report.
Thus, this report is a reflection of the preliminary starting point for budget discussions.

STATUTORY ENVIRONMENT

Section 6.33 and 6.36 of the *Local Government Act 1995* reads:

6.33. Differential general rates

(1) A local government may impose differential general rates according to any, or a combination, of the following characteristics —

(a) the purpose for which the land is zoned, whether or not under a local planning scheme or improvement scheme in force under the Planning and Development Act 2005;

(b) a purpose for which the land is held or used as determined by the local government;

(c) whether or not the land is vacant land; or

(d) any other characteristic or combination of characteristics prescribed.

(2) A local government is required to ensure that a notice referred to in subsection (1) is published in sufficient time to allow compliance with the requirements specified in this section and section 6.2(1).

(3) In imposing a differential general rate a local government is not to, without the approval of the Minister, impose a differential general rate which is more than twice the lowest differential general rate imposed by it.

6.36. Local government to give notice of certain rates

(1) Before imposing any differential general rates or a minimum payment applying to a differential rate category under section 6.35(6)(c) a local government is to give local public notice of its intention to do so.

(2) A local government is required to ensure that a notice referred to in subsection (1) is published in sufficient time to allow compliance with the requirements specified in this section and section 6.2(1).

(3) A notice referred to in subsection (1) —

(a) may be published within the period of 2 months preceding the commencement of the financial year to which the proposed rates are to apply on the basis of the local government's estimate of the budget deficiency;

(b) is to contain —

(i) details of each rate or minimum payment the local government intends to impose;

(ii) an invitation for submissions to be made by an elector or a ratepayer in respect of the proposed rate or minimum payment and any related matters within 21 days (or such longer period as is specified in the notice) of the notice; and

(iii) any further information in relation to the matters specified in subparagraphs (i) and (ii) which may be prescribed; and

(c) is to advise electors and ratepayers of the time and place where a document describing the objects of, and reasons for, each proposed rate and minimum payment may be inspected.

(4) The local government is required to consider any submissions received before imposing the proposed rate or minimum payment with or without modification.

(5) Where a local government —

(a) in an emergency, proposes to impose a supplementary general rate or specified area rate under section 6.32(3)(a); or

(b) proposes to modify the proposed rates or minimum payments after considering any submissions under subsection (4),

it is not required to give local public notice of that proposed supplementary general rate, specified area rate, modified rate or minimum payment.

Section 5.63 (1) of the *Local Government Act 1995* specifically excludes the need to declare a financial interest where matters; have an interest in common to a significant number of ratepayers/electors; relate to the imposition of any rate, charge or fee; relate to a fee, reimbursement of an expense or an allowance payable to elected members.

POLICY IMPLICATIONS

There are no Council Policies relevant to this item.

FINANCIAL IMPLICATIONS

A 4.25% increase on the 2023/24 forecast rate yield has been applied in the 2024/25 Rates Model, yielding a total of circa $9,517,944 in rates plus budgeted interim rate revenue of $20,000 (total rate revenue $9,537,944). This is the amount that is anticipated to meet the net funding requirements of the Town.

STRATEGIC IMPLICATIONS

Strategic Priority 5: Leadership and Governance

5.1 Strengthen organisational accountability and transparency.

5.3 Strive for excellence in leadership and governance.

RISK IMPLICATIONS

RISKS

Risk	Risk Likelihood (based on history & with existing controls)	Risk Impact / Consequence	Risk Rating (Prior to Treatment or Control)	Principal Risk Theme	Risk Action Plan (Controls or Treatment proposed)
Pricing decisions around rates can often be a political consideration, opposing Councils fundamental role to ensure the financial sustainability of the local government. Thus, annual rate increases may be below what is required to achieve this objective.	Likely (4)	Major (4)	Extreme (17-25)	FINANCIAL IMPACT More than $1,000,000	Accept Officer Recommendation

RISK MATRIX

Consequence / Likelihood		Insignificant	Minor	Moderate	Major	Extreme
		1	2	3	4	5
Almost Certain	5	**Moderate (5)**	**High (10)**	**High (15)**	**Extreme (20)**	**Extreme (25)**
Likely	4	**Low (4)**	**Moderate (8)**	**High (12)**	**High (16)**	**Extreme (20)**
Possible	3	**Low (3)**	**Moderate (6)**	**Moderate (9)**	**High (12)**	**High (15)**
Unlikely	2	**Low (2)**	**Low (4)**	**Moderate (6)**	**Moderate (8)**	**High (10)**
Rare	1	**Low (1)**	**Low (2)**	**Low (3)**	**Low (4)**	**Moderate (5)**

A risk is often specified in terms of an event or circumstance and the consequences that may flow from it. An effect may be positive, negative or a deviation from the expected and may be related to the following objectives: occupational health and safety, financial, service interruption, compliance, reputation and environment. A risk

matrix has been prepared and a risk rating is provided below. Any items with a risk rating over 16 will be added to the Risk Register, and any item with a risk rating over 16 will require a specific risk treatment plan to be developed.

RISK RATING

Risk Rating	16
Does this item need to be added to the Town's Risk Register	Yes
Is a Risk Treatment Plan Required	No

SITE INSPECTION

Not Applicable.

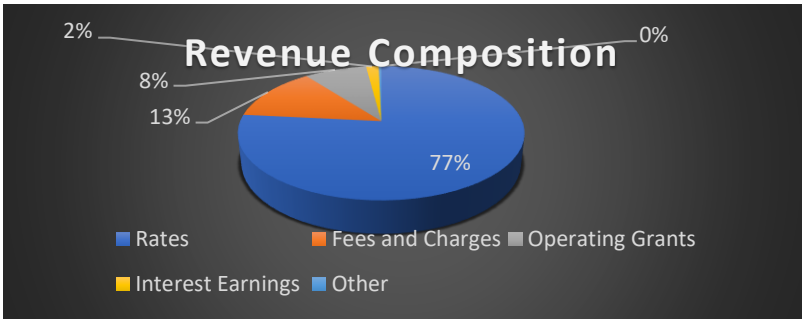
COMMENT

Strategic Role of Council

Council has a statutory role under section 2.7 (2) of the *Local Government Act 1995* to oversee the allocation of the local government's finances and resources. To assist Council in fulfilling this function, the following high-level assessment of the Town's financial health is provided (this overview was formally presented to Council at its meeting of 21 June 2022 when Council adopted the current Long-Term Financial Plan and Revenue Strategy).

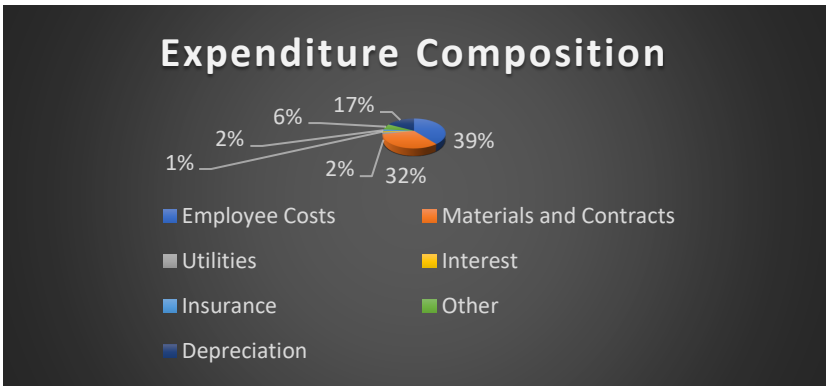
The following illustrations provide an overview of key financial information for the Town. The information is extracted from historical financial information as well from the parameters in the LTFP.

Operating Revenue



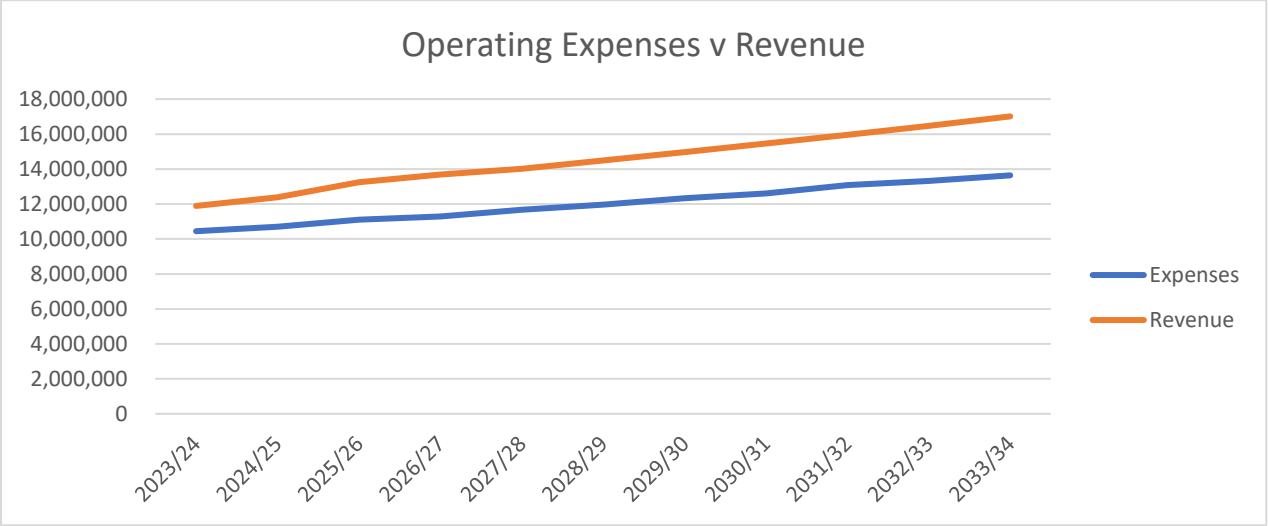
Conclusion: The Town derives 90% of operating revenue from rates and fees and charges (own source revenue). Thus, pricing decisions provides Council with considerable control over the Town's financial health and sustainability.

Operating Expenditure



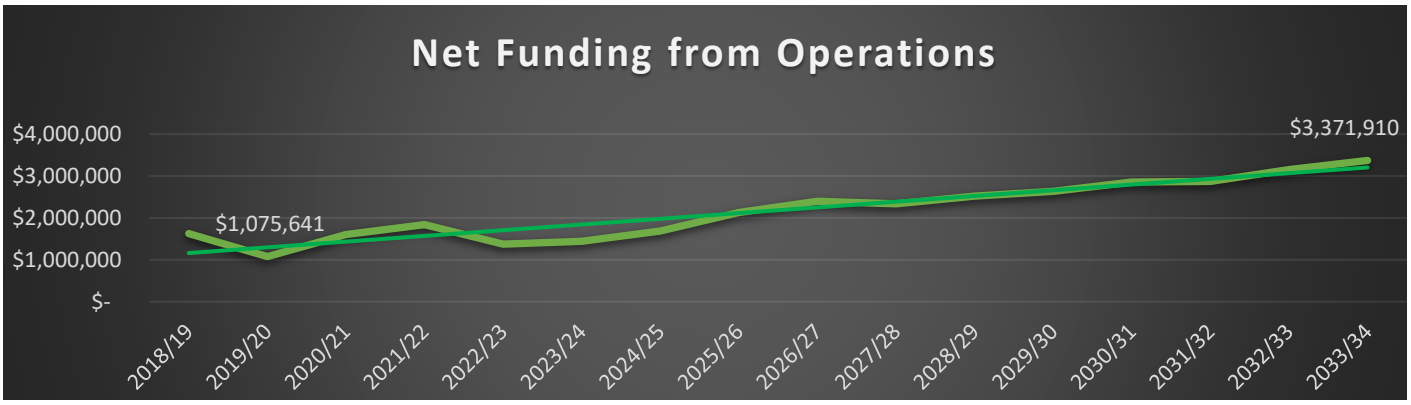
Conclusion: Employee Costs represent 39% of the Town's Operating Expenditure. This is consistent with the industry average (as illustrated on the My Council website). Local Governments are a service organisation, and thus there is a direct correlation between the level of service and employee costs. The profile of the Town's operating expenditure is fixed in nature unless Council wishes to amend the level of service.

Operating Expenses (Cash) versus Operating Revenue



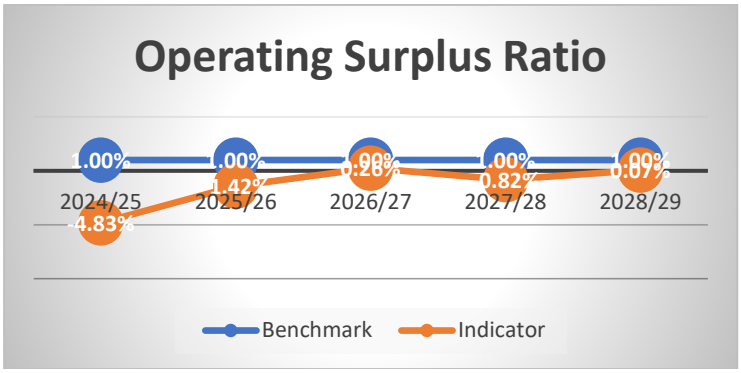
Conclusion: Council should ensure that operating revenue grows at a faster pace than operating expenditure to release more funding for investing activities. This is achieved through a combination of cost restraint and efficiencies as well as a stable rates pricing pathway.

Net Funding from Operations



Conclusion: in 2019/20 the Town derived just over $1million in net funding after operations, indicating limited ability to service public assets and invest in new projects. Net funding from operations is forecast to increase significantly over the next ten years. There is a direct relationship between rates pricing decisions and the Towns ability to service public assets.

Operating Surplus Ratio



Conclusion: The Town is forecast to have a negative Operating Surplus Ratio for the next 5 years, below the benchmark set by the Department of Local Government. The negative ratio illustrates the indicative rate increase that is required over and above the assumed annual rate increase to fully cash back depreciation on assets from own source revenue.

The negative ratio is attributable to relatively high depreciation expense as a proportion of total operating expenditure (circa 17%). The relevance of this ratio is somewhat diminished by the application of accounting standards relating to depreciation expense. But the ratio does highlight an asset funding renewal gap.

It should also be noted that another flaw with this ratio is it excludes any external funding sources in the calculation but still accounts for the matching expenditure that relates to that funding.

Financial Planning Framework

Long term financial and asset management planning is a key element of the Integrated Planning and Reporting Framework. It provides the planning tool which enables local governments to determine their capacity to sustainably deliver the assets and services required by the community.

Council has adopted a rolling long-term financial plan in the last two years as part of the Corporate Business Planning and Budgeting Process.

The Forecast Statement of Financial Activity demonstrates the Town's capacity to meet short-term community and infrastructure needs as well as providing a level of asset renewal predictability in the longer term. It is revised and updated annually. The annual update will review the assumptions, take into consideration economic conditions and inflation, and use current available financial information and forecasts. For these reasons, it is not a static document. Its purpose is to provide broad financial projections to assist in making key decisions.

The Statement below has been updated by applying previously endorsed assumptions against the 2023-24 mid-year budget forecasts. A preliminary 10-year capital works program has also been prepared for modelling purposes. Whilst the forecast statement illustrates a cumulative surplus over a 10-year period, this is not a true result as Council is still to review operating budgets (linked to the Corporate Business Plan), the 10-year capital works program (linked to the Predictive Asset Renewal Model) and reserve financing. It is provided for illustrative purposes but does indicate that the Town's financial health improves in outward years (subject to realising cash dividends from the operations of the East Fremantle Community Park).

The forecast statement also illustrates a balanced budget position for 2024-25, confirming that the proposed 4.25% pricing pathway for rates is required to meet the net funding requirements of the Town.

TOWN of EAST FREMANTLE

Town of East Fremantle
Forecast Statement of Financial Activity 2024/25 - 2033/34

		2023/24 Adopted Budget	2023/24 Forecast (Mid Year Review)	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34
Surplus 1 July		**378,508**	**751,732**	**192,187**	**9,905**	**128,002**	**483,862**	**900,922**	**1,715,620**	**2,460,390**	**3,392,756**	**4,347,863**	**5,693,896**
Revenue													
Rates	76%	9,093,382	9,125,610	9,537,944	9,895,617	10,241,963	10,600,432	10,971,447	11,355,448	11,752,948	12,164,301	12,590,052	13,030,704
Fees and Charges	13%	1,544,565	1,472,963	1,610,209	1,670,083	1,728,536	1,789,035	1,851,651	1,916,459	1,983,535	2,052,959	2,124,812	2,199,181
Operating Grants	8%	1,020,058	848,836	1,034,250	1,451,192	1,462,454	1,348,174	1,376,239	1,387,062	1,387,062	1,387,062	1,387,062	1,387,062
Interest Earnings	2%	189,440	479,440	209,648	235,882	262,308	287,432	308,263	329,308	350,576	372,074	393,812	415,798
Other	1%	42,000	56,000	93,500	96,340	99,307	102,406	103,646	105,033	108,575	112,280	114,157	118,214
		11,889,445	**11,982,849**	**12,485,552**	**13,349,114**	**13,794,568**	**14,127,480**	**14,611,247**	**15,093,311**	**15,582,697**	**16,088,677**	**16,609,896**	**17,150,960**
Expenditure													
Employee Costs	39%	-4,969,094	-4,969,094	-5,217,548	-5,374,075	-5,535,297	-5,701,356	-5,872,397	-6,048,569	-6,230,026	-6,416,926	-6,609,434	-6,807,717
Materials and Contracts	32%	-4,020,296	-4,410,704	-3,798,291	-4,031,178	-4,008,555	-4,199,062	-4,282,884	-4,431,620	-4,472,419	-4,726,842	-4,726,497	-4,798,316
Utilities	2%	-257,950	-243,950	-359,511	-368,499	-377,711	-387,154	-396,833	-406,753	-416,922	-427,345	-438,029	-448,980
Interest	1%	-134,490	-134,490	-272,562	-264,076	-255,268	-246,033	-236,422	-226,182	-215,526	-204,354	-192,698	-180,338
Insurance	2%	-273,223	-258,240	-289,623	-307,000	-325,420	-344,946	-365,642	-387,581	-410,836	-435,486	-461,615	-489,312
Other	6%	-789,700	-789,901	-807,457	-814,186	-832,838	-851,958	-871,555	-891,643	-912,231	-933,336	-954,967	-977,139
Depreciation	17%	-2,166,530	-2,166,530	-2,231,539	-2,298,486	-2,367,440	-2,438,463	-2,511,617	-2,586,966	-2,664,575	-2,744,512	-2,826,847	-2,911,653
		-12,611,283	**-12,972,909**	**-12,976,533**	**-13,457,500**	**-13,702,530**	**-14,168,972**	**-14,537,350**	**-14,979,314**	**-15,322,535**	**-15,888,802**	**-16,210,088**	**-16,613,454**
Depreciation		2,166,530	2,166,530	2,231,539	2,298,486	2,367,440	2,438,463	2,511,617	2,586,966	2,664,575	2,744,512	2,826,847	2,911,653
Net Funding from Operational Activities (exc Depn)		**1,444,692**	**1,176,470**	**1,740,559**	**2,190,100**	**2,459,478**	**2,396,972**	**2,585,515**	**2,700,963**	**2,924,737**	**2,944,388**	**3,226,655**	**3,449,158**
** This is the critical number as it identies how much own source funding is available to service capital expenditure, debt repayments and reserve transfers													
Capital Expenditure													
East Fremantle Oval Redevelopment		-19,991,316	-21,611,828	0	0	0	0	0	0	0	0	0	0
Buildings		-1,030,000	-1,329,879	-770,000	-81,500	-80,800	-80,000	-76,000	-80,000	-90,500	-83,000	-78,500	-86,000
Plant and Equipment		-706,200	-390,205	-245,000	-189,000	-177,000	-235,000	-95,000	-225,000	-230,000	-250,000	-200,000	-131,000
Furniture and Equipment		-25,000	-30,000	-78,000	-50,000	-50,000	-50,000	-50,000	-50,000	-50,000	-50,000	-50,000	-50,000
Roads		-80,000	0	-483,733	-360,000	-370,000	-234,000	-397,800	-198,000	-175,000	-160,000	-230,000	-144,900
Drainage		-100,000	-60,000	-155,000	-140,000	-190,000	-140,000	-130,000	-130,000	-130,000	-125,000	-115,000	-115,000
Parks and Ovals		-207,000	-280,000	-330,000	-275,000	-345,000	-300,000	-270,000	-300,000	-300,000	-300,000	-300,000	-300,000
Carparks		-15,000	-15,000										
Footpaths		-270,000	-255,000	-325,400	-215,000	-197,000	-185,000	-180,000	-180,000	-205,000	-160,000	-205,000	-165,000
Non-Operating Grants - EF Oval		14,975,767	16,304,822										
Non-Operating Grants - RRG/R2R (Roads)		0	0	483,733	240,000	273,333	156,000	265,200				153,333	96,600
Non-Operating Grants - Other		1,004,181	989,669	690,000									
Net Capital Program		**-6,444,568**	**-6,677,421**	**-1,213,400**	**-1,070,500**	**-1,136,467**	**-1,068,000**	**-933,600**	**-1,163,000**	**-1,180,500**	**-1,128,000**	**-1,025,167**	**-895,300**
Proceeds from new Loan Borrowings		4,800,000	4,800,000	0	0	0	0	0	0	0	0	0	0
Loan Repayments		-72,634	-77,534	-150,564	-157,911	-165,617	-173,698	-182,174	-191,064	-200,387	-210,165	-220,421	-231,177
Net Borrowings		4,727,366	4,722,466	-150,564	-157,911	-165,617	-173,698	-182,174	-191,064	-200,387	-210,165	-220,421	-231,177
Net Reserve Transfers From/(to)		-228,005	97,346	-589,828	-819,032	-823,066	-777,242	-631,565	-636,038	-640,669	-645,461	-650,420	-655,553
Proceeds from Sale of Assets		171,814	171,401	83,000	29,700	78,100	98,000	38,000	98,000	96,000	64,000	88,000	55,800
Lease Payments		-49,807	-49,807	-52,049	-54,261	-56,568	-58,972	-61,478	-64,091	-66,815	-69,654	-72,615	-75,701
Surplus 30 June		**0**	**192,187**	**9,905**	**128,002**	**483,862**	**900,922**	**1,715,620**	**2,460,390**	**3,392,756**	**4,347,863**	**5,693,896**	**7,341,125**

The key assumptions in the Forecast Financial Statements are detailed below. These assumptions will be fully discussed with elected members during the upcoming workshops (and adjusted if required), but as they have been endorsed previously, they have been used to update the long-term financial plan and inform the recommended rate increase for advertising purposes.

Operating revenue

- 4.25% increase in rate yield in 24/25, 3.75% in 25/26 and 3.5% year on year thereafter inclusive of base interim rates $20kpa.
- No population growth/increase in rateable assessments has been modelled – difficult to estimate (creates risk/uncertainty in the model).
- Fees and charges increase uniform with rate increases.
- Waste fees haven't been separately modelled. If waste fees are introduced, it assumed that fees will be offset by a reduction in rates (i.e., cost neutral for ratepayers).
- No specific purpose operating grants have been identified in outward years.
- No advance payment of the Financial Assistance Grants budgeted.
- CHSP Block Funding continues until 30 June 2027.
- Operating Dividend from EF Community Park in accordance with the tendered budget submitted by Belgravia – this is a critical assumption that needs to be assessed; based on the forecast profits provided by Belgravia, a total of $4.3million in income is assumed from the operations of the EF Community Park over a 10-year period. Should this income not be realised, it will create a budget deficiency.
- Interest on Investments 3% pa.

Operating expenses

- 5% gross increase in employee costs in 24/25 (forecast wage price index). 3% pa in outward years.
- While there are no new staff positions included at this time, it is anticipated there will be a requirement for new positions which will be identified in Corporate Business Plan/Workforce Plan and considered by Council when the Corporate Business Plan is presented for adoption in June.
- 3% (LGCI/CPI) annual increase in materials and contracts budget (i.e., service contracts).
- The Town has withdrawn from the Regional Council and there are no overhead contributions.
- LGCI increase in utilities 2.5%.
- LGCI increase in insurance 3.6% pa.
- It is assumed that new EF Oval Facility will commence operations May 2024.

Capex

- Any future capex on EF Oval will be funded from Reserve (sinking fund contributions).
- A draft 10-year capital works program has been developed as well as a review of the 10-year plant replacement program.

Capital Income

- Funding from Main Roads (Regional Road Group) and Roads to Recovery has been applied.
- No further capital grants budgeted.

Reserve Transfers

- Reserves transfers are in keeping with the Rating Strategy and the Cash Back Reserves Policy including an annual transfer into the Sustainability and Environmental Reserve.
- $275,000pa budgeted from 25/26 as a transfer to Reserve (Sinking Fund). This is funded as a contribution from the operating result of the precinct.
- 1% of gross rate revenue pa transferred to the Sustainability and Environmental Reserve.

Loan Borrowings

- As per the Loan 185 Schedule.
- No further borrowings assumed.

Rates Modelling

Forecast actual rates revenue at 30 June 2024 is $9,129,922. This is the base amount against which the % increase in rate yield will be applied. A 1% increase in rate yield is therefore approximate to an additional $91,300 in revenue. The average rates (inclusive of the cost of waste services) for a non-minimum rated residential property in 2023/24 is $2430.89, so a 1% increase is approximate to $24.31.

Five rating models are provided below for illustrative purposes:

% increase in Rate Yield	23/24 Forecast Rate Yield	24/25 Forecast Rate Yield	Total Increase in Revenue	Average $ increase in residential rates
3.50	$9,129,922	$9,449,469	$319,547	$85
4.00	$9,129,922	$9,495,119	$365,197	$97
4.25	$9,129,922	$9,517,944	$388,022	$103
5.00	$9,129,922	$9,586,418	$456,496	$122
6.00	$9,129,922	$9,677,718	$547,795	$146

As the adopted Revenue Strategy and Long-term Financial Plan are premised on a 4.25% increase in rate yield for the 2024/25 financial year, it is recommended that Council endorse this model for advertising purposes. Council can choose to amend the rate in the dollar when striking the budget, as it has done in the last financial years (2023/24 advertised a 4.5% increase/adopted 5% increase; 2022/23 advertised a 3.5% increase/adopted 4% increase).

General rate yield increases in prior years were:

2016/17 – 4.15%
2017/18 – 2.0%
2018/19 – 2.5%
2019/20 – 2.4%
2020/21 – 0%
2021/22 – 2.9%
2022/23 – 4.0%
2023/24 – 5.0%

It is evident that the level of rate increases in recent years was in response to prevailing economic conditions as well as compensating for below average increases over a five-year period. The above variability further supports the philosophy of a stable rates pricing pathway to provide certainty for ratepayers and smooth out any potential rate spikes.

WALGA Economic Briefing March 2024

This document is presented as attachment 1 to this report. The following information is considered pertinent when determining budget parameters for 2024/25:

- The Local Government Cost Index is forecast at 3.1% for 24/25.
- Wages are continuing to grow quickly, up 4.7% in WA in the last 12 months. This is attributable to public sector wages playing catch up to the rate of inflation to maintain real wages.
- The 23/24 WALGA Salary and Workforce Survey identified that employee costs represented 40.3% of total revenue for Band 3 Local Governments. The Town is consistent with this benchmark.

It is important to note that the above statistics are a reflection of the current economic climate, and that a longer-term planning horizon is recommended as per the long-term financial plan and revenue strategy.

CONCLUSION

Under Section 6.36 of the *Local Government Act 1995*, before imposing any differential general rates or a minimum payment applying to a differential rate category under section 6.35(6)(c), a local government is to give local public notice of its intention to do so including an invitation for submissions to be made by an elector or a ratepayer in respect of the proposed rate or minimum payment and any related matters within 21 days of the notice. Council will have opportunity to amend the advertised rates when striking the Budget should there be justification to do so. The reasons for amending the rate in the dollar from that which was advertised need to be disclosed in the Statutory Budget.

Given the scheduled Council Workshops over the next two months, further adjustments will be made to the long-term financial plan which may or may not impact the rates pricing pathway:

Council Workshop 23 April – discussion on the 10-year capital works program including outputs from the predictive asset renewal model. Preliminary assessment of the asset renewal model indicates that required asset funding levels can be achieved under the current rating strategy without further increasing rates. Reserve transfers will also be assessed in the context of required asset funding.

Council Workshop 8 May – discussion on operating budgets and the corporate business plan. Key expenditure and revenue assumptions will need to be reviewed as any change to these assumptions will have an impact on the Forecast Statement of Financial Activity. The forecast revenue from the operations of the East Fremantle Community Park presents the greatest degree of financial risk.

Council Workshop 22 May – an updated long term financial plan will be presented based on discussion from the earlier workshops. This discussion will seek to confirm key assumptions including the rates pricing pathway. A draft Corporate Business Plan will also be presented which will recommend priorities and assess resourcing requirements, including any recommended changes to staffing levels.

Ordinary Council Meeting 18 June – the Corporate Business Plan, Long term Financial Plan, Revenue Strategy and Annual Budget will be presented to Council for adoption. As part of the budget adoption, Council will be requested to strike the rates for the 24/25 financial year.

13.3 OFFICER RECOMMENDATION / COUNCIL RESOLUTION

Council Resolution 031604

OFFICER RECOMMENDATION:

Moved Cr Natale, seconded Cr Wilson

That Council, with respect to its role under 2.7 (2) of the *Local Government Act 1995* to oversee the allocation of the local government's finances and resources, resolves to endorse the following:

1. **the Statement of Rating Objects and Reasons for the 2024/25 financial year as per attachment 2.**
2. **the following differential general rates and minimum payments with a proposed 4.25% increase in the rate in the dollar and minimum payment from the previous financial year, for all rating categories and calls for public submissions pursuant to section 6.36 of the *Local Government Act* 1995:**

4.25% Model - 24/25

RATE TYPE	Rate in	Number of Properties	Rateable Value	Rate Revenue
Differential General Rate	$		$	$
Residential GRV	0.071860	2,966	104,808,540	7,531,492
Commercial GRV	0.121806	120	12,621,985	1,537,430
Sub-Totals		3,086	117,430,525	9,068,922
	Minimum			
Minimum Payment	$			
Residential GRV	1,296.00	336	4,962,640	435,456
Commercial GRV	1,938.00	7	79,940	13,566
Sub-Totals		343	5,042,580	449,022
		3,429	122,473,105	9,517,944
Amount from General Rates				
Less Concessions				
Totals				9,517,944

(CARRIED UNANIMOUSLY 9:0)

For: **Mayor O'Neill, Crs Wilson, Collinson, Donovan, Harrington, Natale, Maywood, White & McPhail.**

Against: **Nil**

REPORT ATTACHMENTS

Attachments start on the next page


Economic Briefing
March 2024
WALGA
Influence. Support. Expertise.

Overview

Global uncertainty, persistent cost of living pressures and slowing growth mean that the outlook for Australia's economy is in the balance and the path to avoiding recession remains narrow.

The Reserve Bank remains focussed on bring inflation back to within its 2-3 per cent target, however the impact of the prolonged period of high interest rates is now evident as unemployment increases and economic growth stalls. The dilemma for the RBA is that lowering interest rates too quickly risks inflation staying higher for longer, but moving too slowly risks turning a soft landing into a hard one which comes with its own set of problems.

WA's powerful resources sector and strong budget position provides a buffer from the economic slowdown, but as has been seen in the past, the reliance on the mining sector is a double-edged sword with employment and the economy exposed to movements in the economies of our trading partners, in particular China. Other trading partners have already felt the impact of the global economic downturn with the United Kingdom and Japan both in recession.

The **Local Government Cost Index (LGCI)** increased 0.8% in the December quarter and 3.5% in the last year. The LGCI is forecast to fall to 3.1% in 2024-25 and then 2.8% in both 2025-26 and 2026-27. As construction cost growth eases, employee costs are the main driver of cost growth in for local governments.

The **Australian economy continues to slow**, increasing just 0.2% in the December quarter. Per capita growth has gone backwards 1.0% in the last year. Households have suffered most from the rise in interest rates with living standards falling, however wages are starting to climb and tax cuts will begin in July. The WA economy is in a better shape due the strong resources sector and robust business and public investment. The global slowdown is an ongoing risk to the economy but economic growth is expected to continue in the coming years at a slower pace.

The **labour market is slowly turning** with unemployment starting to rise. Despite the loosening labour market, wages continue to grow quickly, up 4.7% in WA in the last 12 months. Wages growth is positive for employees but this will present a challenge for Local Government budget setting.

Inflation fell to 4.1% in December, the lowest level in two years. Whilst goods inflation has fallen faster than forecast, services inflation remains high. The RBA has indicated it will not reduce interest rates until it is confident that inflation will reach its target band.

Construction costs have steadied as demand weakens and the supply-chain constraints ease. While the costs of materials are easing, construction wages are rising rapidly. A strong pipeline of projects is expected to support the construction sector in the near-term even as economic growth slows.

Growth in insurance and risk financing costs are expected to ease from the recent highs. Costs of insurance for infrastructure projects is high due to the risk of project delays and increased costs. Drivers of increased insurance and risk financing costs include the elevated levels of inflation, increasing number of severe weather events and slower economic growth.

Note

The significant challenges of forecasting in the current economic environment, mean **the LGCI should be used with caution**. The LGCI will be subject to revisions in coming months, as the impact of major economic shocks such as the pandemic, wars in Ukraine and the Middle East, and the impact of recent rate rises become clearer. An increase in wage pressures may also see the index revised higher.

It is important that Local Governments take into account their own local issues and experiences when considering cost pressures. It would also be prudent for Local Governments to prepare for multiple scenarios for cost increases in coming years.

Local Government Cost Index

Key points

- **The Local Government Cost Index increased 0.8% in the December quarter and 3.5% in the last year.**
- **The LGCI is forecast to fall to 3.1% in 2024-25 and then 2.8% in both 2025-26 and 2026-27.**
- **As construction cost growth eases, employee costs are the main driver of cost growth in for local governments.**

The Local Government Cost Index (LGCI) increased by 0.8% in the December quarter, down from 1.3% in September. Over the year to December, the LGCI increased by 3.5%, down from the 4.8% recorded in December 2022.

In recent quarters, the drivers of growth in the LGCI have shifted from construction costs which make up around a quarter of the index, to wages costs which is around one third. The growth in construction costs was largely driven by challenges in the supply of materials due to the impact of the pandemic and the war in Ukraine on supply chains as well as the elevated levels of demand from the post-pandemic stimulus. As the market has moved closer to a balance between supply and demand, price rises have eased, with construction costs settling at the new, higher level (see Construction section).

Road and bridge construction costs are forecast to increase 1.8% in 2024-25 before increasing 2.2% in 2025-26 and 2.7% in 2026-27. Non-residential building costs are expected to rise 2.6% in 2024-25, 1.0% in 2025-26 and 1.1% in 2026-27. Non-road infrastructure is forecast to increase around 2% for the next three years. Key risks to the forecast include the risk of an ongoing tight labour market driving up construction wages as well as future geopolitical shocks impacting construction material supply chains.

Wages across all sectors have responded to the tight labour market to increase rapidly with the WA Wage Price Index up 4.7% in the year to December. Whilst WA public sector wages have sat above 4.2% growth in annual terms for the last five quarters, public sector wages have caught up in the last two quarters to now sit at 5.2% growth in the year to December. The RBA expects that wages growth is around its peak and WA Treasury's Mid-Year review, released in December, forecast wages to end the financial year up 4.25% although this figure may be revised upwards in the May budget if current trends continue (see Labour Market and Wages section).

Materials and contracts expenditure has been largely influenced by the widespread inflation impacting goods and services across the economy. Costs are forecast to end the year up 4.5% before slowing to annual growth of around 3% in the coming years. One risk to this forecast is if the labour market remains tight, demand continues to be elevated and wages grow strongly, services that Local Governments use such as real estate, research, legal and financial services may grow faster than inflation.

Insurance and risk management costs have increased across the economy and Local Governments have not been immune with price rises in double-digits in recent years. It is expected that growth in these costs will slow in aggregate in 2024-25, although the increasing frequency of extreme weather events and the sustained impact of inflation will lead to elevated insurance and risk management costs in 2024-25. (See Insurance and Risk Financing section in conjunction with LGIS.)

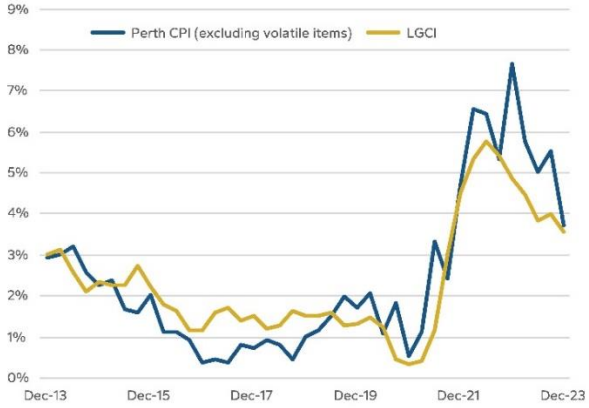
Local Governments are encouraged to prepare for multiple scenarios through their budgeting process and be ready to respond to changing economic conditions. The LGCI uses statewide data and regional variances will impact each Local Government. Liaising with suppliers to understand the local economic conditions and constraints will enable Local Governments to effectively plan the timing of their projects.

LGCI Table

Component	Weighting	2022-23 (a)	2023-24 (f)	2024-25 (f)	2025-26 (f)	2026-27 (f)
Employee costs	35%	4.2	4.3	3.8	3.5	3.3
Materials and contracts	28%	4.3	4.5	3.1	2.8	2.8
Furniture	1%	5.8	1.8	1.4	1.4	1.4
Non-residential building	5%	1.0	3.5	2.6	1.0	1.1
Machinery and Equipment	5%	11.5	3.4	2.8	2.5	2.5
Non-road infrastructure	9%	3.3	2.8	2.2	1.8	2.2
Road and bridge construction	10%	3.8	2.0	1.8	2.2	2.7
Utilities	3%	2.5	2.5	2.5	2.5	2.5
Insurance	1%	12.4	11.6	8.5	5.0	3.0
Other	3%	6.2	4.0	3.0	2.8	2.5
LGCI	**100%**	**4.4**	**3.9**	**3.1**	**2.8**	**2.8**

LGCI vs CPI (excluding volatile items), Annual % Change

SOURCE: ABS; WALGA



Domestic and Global Economy

Key points

- **The Australian economy grew narrowly, with GDP increasing just 0.2% in the December quarter. Per capita GDP has fallen 1.0% in the last year.**
- **Households have felt the impact of the rise in interest rates with disposable income falling. Looking forward, wages are rising and tax cuts are on the horizon which ease some of the pressure on household budgets.**
- **The WA economy is leading the nation due the strong resources sector and robust business and public investment.**
- **The global slowdown is an ongoing risk to the economy but economic growth is expected to remain positive in the coming years albeit at a slower pace.**

The Australian economy continues to slow, with Gross Domestic Product (GDP) growing just 0.2% in the December quarter and 1.5% in the last year. With the population growing faster than the economy, per capita GDP has shrunk for three consecutive quarters to be down 1.0% over the last year – effectively a per capital GDP recession.

The Reserve Bank of Australia (RBA) has often talked about the 'narrow path to a soft landing' as it seeks to tame inflation without the economy going backwards. There is reason to be optimistic about the first step as inflation fell to 4.1% in December, its lowest level in two years (see Inflation and Interest Rates section). However, the soft landing also requires the economy to slow just enough to avoid large increases in unemployment until inflation is back in the target band of 2% to 3% and interest rates can be lowered from their current restrictive setting.

The prolonged period of high interest rates on households is evident, with consumption flat and falling in per capita terms. Real household disposable income, a measure of living standards, increased just 0.3% in 2023 after falling 3.7% in 2022 (see chart). Households are spending more on interest payments than they have for a decade, with around 7% of household disposable income spent on mortgage interest and credit card interest payments, up 3.25% since the cash rate began to climb. The RBA expects that this figure peak at around 8% of household disposable income – a level not seen since 2010-11.

But there is some light at the end of the tunnel for households. In the second half of 2024, employees will see more of their wages hit their bank accounts as tax cuts are implemented for 13.6 million taxpayers. On the current trajectory, it is expected that the RBA will begin to cut interest rates from the middle of the year which will improve consumer sentiment and lower the burden of interest rates on mortgage holders. At the same time, wages are expected to continue to outstrip inflation and this growth in real wages will also underpin consumer spending and support jobs growth. On top of this, both State and Federal Governments have flagged additional cost-of-living support in their upcoming May Budgets.

Risks to inflation returning to the target band include ongoing geopolitical conflicts and tensions in Ukraine and the Middle East with possible impacts on energy and commodity prices; the increased frequency of extreme weather events; and increasing shipping costs as a result of the Red Sea attacks and capacity constraints in the Panama Canal.

As covered in detail in December's Economic Briefing, the availability and affordability of housing continues to be a key issue for the economy with high population growth and an undersupply of housing leading to record low vacancy rates and booming rents and house prices. While the State Government is adamant it is pulling all possible levers to increase housing supply, the ongoing shortage is acting as a handbrake on economic growth and is having an impact on communities across the State. A key challenge is balancing the need for more construction workers with the required to find adequate numbers of dwellings to house them.

According to REIWA, a balanced rental market sees vacancy rates of 2.5-3.5 per cent. All cities tracked by REIWA have vacancy rates below this threshold with Albany sitting at 0.4%, Perth 0.7%, Geraldton 0.9%, Kalgoorlie 1.9% and Bunbury 2.3%.

Housing loan commitments spiked during the pandemic as Government stimulus was rolled out. As this stimulus was phased out, housing loan commitments fell. However, since the February 2023 trough, housing loan commitments have increased by 20 per cent. This has led to an increase in housing credit growth easing fears of a slump in housing construction.

Although similar concerns to the national economy are present, the WA economy continues to outperform the national economy in most measures thanks largely to the strong resources sector. The WA domestic economy measured by State Final Demand grew 0.8% in the December quarter and 5.5% over the last 12 months (see chart). Household consumption has slowed to 1.7% for the year compared with the near flat national figure of 0.1%. Importantly, business investment, a key driver of jobs growth, is at its highest level since 2016 and up 14.9% for the year. Government investment in transportation, energy and utilities remains a large contributor to growth, up 5.9% for the quarter and 23.9% over the year. So whilst the WA economy's growth rate is slowing, it is not yet at the critical level that is seen elsewhere in the nation.

In WA, there are risks to the resources industry retaining its strong position in an increasingly competitive global market, demonstrated recently by a fall in the nickel price driven by cheaper Indonesian supply leading to job losses. This has been compounded with job losses in other sectors such as lithium and alumina. Mitigating this risk is the high demand for workers in the mining and construction sectors with elevated job vacancies providing an alternate path to employment. Whilst this can be devastating for individuals and their communities, on a state level, the impacts are expected to be modest provided there is not a broader and deeper downturn.

As it stands, the resources sector is again expected to deliver a large surplus to the WA Government with revenue up $1.8 billion in the first half of 2023-24 from the previous year. This is driven by higher royalty income (+$1.1b) and higher taxation revenue

WA Treasury Economic Forecasts

Economic Forecasts	2022-23 % Actual	2023-24 % Forecast	2024-25 % Forecast	2025-26 % Forecast	2026-27 % Forecast
Gross State Product	3.5	1.75	2.0	2.0	1.75
Household Consumption	3.5	2.5	2.25	2.5	2.5
Business Investment	4.3	8.5	5.5	4.75	3.75
Dwelling Investment	-2.5	12.0	7.75	0.25	2.0
Good Exports	4.7	-0.5	1.75	1.75	0.75
Good Imports	7.8	3.25	2.5	2.25	2.0
Employment Growth	2.8	2.5	1.75	1.25	1.5
Unemployment Rate	3.5	3.75	4.0	4.25	4.5
Wage Price Index	4.2	4.25	3.5	3.25	3.0
Population	3.1	2.4	1.7	1.7	1.7

SOURCE: WA TREASURY

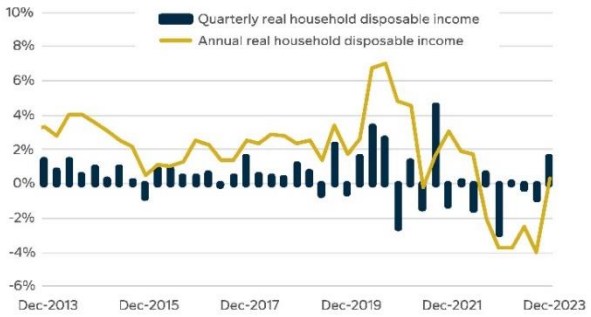
Domestic and Global Economy CONTINUED

(+0.7b). Conservative estimates from the WA Treasury are key to this outperformance with the iron ore price budgeted for 2023-24 at $US74.1/tonne in May adjusted to $US104.2/tonne in December's mid-year review and sitting at $US94/tonne at the time of writing. This windfall will provide the State Government with the fiscal space to provide cost-of-living relief, continue their program of public investment and pay down State debt.

The performance of the WA economy is closely tied to that of its largest trading partner, China. China is the biggest consumer of WA good exports accounting for 55% of the total and its economic growth has been a key driver of WA's economic rise. As recently as 1992-93, China accounted for just 6% of WA goods exports. Recently however, China's rise appears to be slowing. Cracks have appeared in China's property market which has been underpinned by WA iron ore, there is low consumer and business confidence and it is experiencing price deflation. At the recent Annual National People's Congress in Beijing, the Chinese Government committed to a target of 5% economic growth for 2024. If the Chinese economy does grow at this rate, the WA economy will continue to be a benefit from this strong economic relationship.

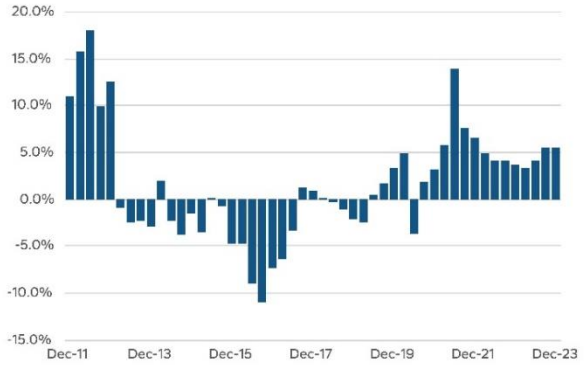
Real Household Disposable Income, Australia, Annual v Quarterly % Change

SOURCE: ABS; WALGA



State Final Demand, WA, Annual % Change

SOURCE: ABS; WALGA



Inflation and Interest Rates

Key points

- **Inflation fell to 4.1% in December, the lowest level in two years.**
- **Whilst goods inflation has fallen faster than forecast, services inflation remains high.**
- **The RBA will not reduce rates from their restrictive setting until they are convinced that inflation will reach its target band.**

Inflation continues to moderate in Australia, falling to 4.1% in December, the lowest level since December 2021. The Reserve Bank of Australia's (RBA) preferred measure, the Trimmed Mean, sat at 4.2%. In Western Australia, the Perth Consumer Price Index (CPI) fell to 3.6% as the impact of the State Government's Electricity Credit washed through. Removing the impact of the volatile Food and Energy groups, the Perth CPI fell from 4.5% in September to 3.8% in December – a similar level to the Australian CPI (ex Food and Energy) of 3.7%.

A key driver of inflation in the Perth CPI is housing costs. Rents are continuing to squeeze households, increasing 8.9% in 2023, following increases of 8.0% in 2022 and 7.9% in 2021. With rental vacancy rates in Perth and across the State at record lows, it is expected that increasing rents will continue to hamper the drive to lower inflation. The cost of new dwellings is also included in the CPI calculation with prices up 8.8% in 2023 following on from a massive increase of 26.4% in 2022 and 5.2% in 2021. How quickly the growth in the cost of new dwellings will slow will depend on capacity constraints in the building sector.

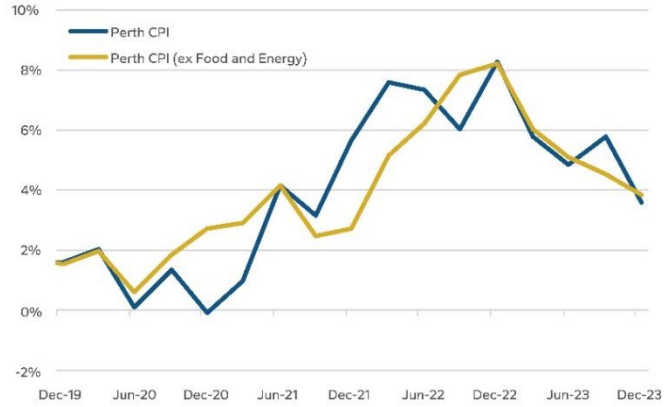
Despite the promising trajectory of the CPI, the Reserve Bank continues to stress that the battle against inflation is not yet over. In its February Statement on Monetary Policy, the RBA forecast that inflation will fall to 3.2% by December 2024 and drop into the 2% to 3% target band by December 2025, when it will reach 2.8%.

The slowdown in prices for goods has been the key factor influencing falling inflation, with Goods CPI falling for five consecutive quarters and now sitting at 3.8%. This has been driven both by the ongoing easing of supply chain constraints and a slowing in demand for goods. Services have been slower to fall but have dropped for the second consecutive quarter to reach 4.6% growth. The RBA expects services inflation to continue to fall, but at a slower pace, as demand for services reduces due to a slowing domestic economy. Labour costs are generally a greater concern for the services sector due to their comparatively labour-intensive composition. As wages growth reaches its peak and starts to moderate it is expected that this will flow through to the services sector, further reducing services inflation which is required for inflation to return to the RBA's target band.

The RBA Board next meets on March 19, after the release of this Economic Briefing. Whilst it is expected that the Board will hold the cash rate target at 4.35%, the RBA is clear that its priority is to return inflation to the target range in line with its projected timeline. Risks to this include, uncertainty around the outlook for the Chinese economy; geopolitical conflicts in Ukraine and the Middle East with implications for price shocks for oil and other commodities; and the pace of the slowdown in domestic household consumption.

Based on the current trajectory of inflation, the broad consensus is that the RBA will look to cut interest rates in the second half of 2024 as inflation eases in order to avoid the economy slowing too much, with consequent impacts on business investment and household consumption and increasing unemployment to a level higher than their target of full employment.

CPI vs CPI (ex Food and Energy), Perth, Annual % Change



SOURCE: ABS; WALGA

Labour Market and Wages

Key points

- **Wages continue to grow quickly, up 4.7% in WA in the last 12 months.**
- **Wages growth is positive for employees but will be a challenge for Local Governments setting their budgets.**
- **The labour market is slowly turning with unemployment starting to rise**

Wages growth continued in the December quarter with the WA Wage Price Index (WPI) increasing by 4.7% over the last year, up slightly from the September figure of 4.6% and above the national figure of 4.3%. On a quarterly basis, wages growth slowed from 1.9% in September to 0.8%. This was in line with forecasts, as the September quarter typically records the largest increase due to the impact of pay increases through awards, enterprise agreements and individual agreements that are effective at the start of July.

Public sector wages continued to play catch up in December with quarterly growth of 1.0% leading to an annualised figure of 5.2% wages growth over the last 12 months. The recent rapid rise in public sector wages contrasts with 2022 where public sector wages grew just 1.1%.

In contrast, private sector wages increased 0.8% over the December quarter and 4.6% over the year. Growth in private sector wages in WA has plateaued, sitting between 4.2% and 4.6% in annual terms for each of the last five quarters. This is in line with expectations from the RBA and the WA Treasury that wages growth is around its peak and is expected to gradually slow through 2024 as the labour market loosens.

The Seek Advertised Salary Index, which tracks changes in advertised salaries for jobs posted on the SEEK platform, tells a similar story with WA advertised salaries increasing 4.4% over the last 12 months to January 2024. In-line with the Wage Price Index the pace of growth in advertised salaries has slowed, increasing 0.6% in the past quarter.

WA Average Weekly Earnings (AWE) for full-time adults in WA was $2,107.70 in November, compared with the Australian AWE of $1,888.80. This is largely due to the prevalence of high paying industries in WA, in particular mining where the average weekly ordinary time earnings for full-time adults in Australia was $2,951.80. In WA, AWE for full-time adults increased 6.0% in 2023 compared with the national increase of 4.5% with the AWE rising at its fastest pace in a decade. It should be noted that AWE is not directly comparable to the WPI although the two indicators do track each other closely. AWE is influenced by changes in hours worked and changes in the performance of work, whereas the WPI considers the changes in remuneration over time for the same job.

In its Mid-year Review the WA Treasury revised its forecast for wages growth in 2023-24 upwards from 4.0% to 4.25%. Wages are then expected to ease to 3.5% in 2024-25, 3.25% in 2025-26 and 3.0% in 2026-27. While real wages growth (that is, above inflation) is positive after a period going backwards, it does increase pressure on local government budgets, given approximately one-third of the sector's cost base are employee costs.

A key driver of wages growth has been the persistent tight labour market across the country and particularly in WA. In 2023, 53,200 jobs were created in WA, an increase of 3.5% in seasonally adjusted terms. Whilst this demonstrated significant growth in the number of total jobs, there was a very notable shift from full time jobs (down 1,900) to part time jobs (up 54,900). This shift to part time work was reflected in the total number of hours worked in 2023 (+2.6%) which grew slower than the increase in total jobs (+3.5%).

Whilst the composition of jobs being created shifted towards part-time jobs, the participation rate remains historically high at 69.4% in January. The participation rate measures the proportion of the working-age population that is engaged in the labour market and is a good indicator of how much spare capacity exists in the labour market. For the last three years, WA's participation rate, at between 68% and 70% has been the highest in the nation.

Despite the increase in part-time jobs, WA's underemployment rate, which measures the proportion of workers who would like to work more hours, remains the lowest in Australia at 6.0% in January. This suggests that the increase in part-time jobs is reflecting the demand for part-time jobs rather than substituting for full-time work.

The State's unemployment rate is 4.2%, narrowly above the national figure of 4.1%. If the unemployment rate continues to climb, it is expected that the WA Treasury will revise their forecast of 4.0% in 2024-25 upwards in May's budget. The underemployment rate added to the unemployment rate shows the underutilisation of workers in the labour market. At 10.2%, WA's underutilisation is the lowest in the country.

Job vacancies are continuing to fall slowly, with 49,500 jobs available in December 2023. This is still well above the pre-pandemic level of 20,000 – 30,000 job vacancies in WA at any given time.

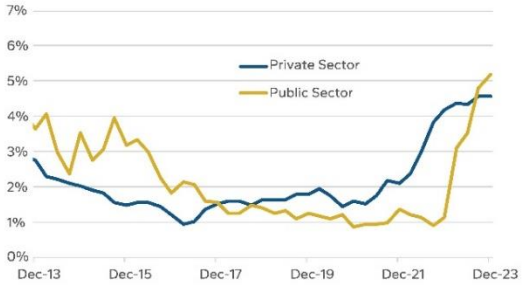
So far in 2023-24, job creation has exceeded the WA Treasury's expectations from the May Budget, with its jobs growth forecast revised upwards from 1.0% to 2.5% in the Mid-year Review. This rate is similar to its updated population growth forecast of 2.4% in 2023-24, suggesting that the labour market is able to absorb the increasing population and avoiding placing upwards pressure on unemployment.

Looking forward, Treasury is forecasting jobs growth to struggle to keep pace with population growth with the unemployment rate shifting upwards as a result. Local Governments should expect to continue to find attracting and retaining staff challenging in the short term, however this challenge will ease in the medium term as the labour market loosens.

The 2023-24 WALGA Salary and Workforce Survey is now available to subscribers. Of the 78 Local Governments that participated in the survey, the median rate for employment costs was 36.0% of total revenue. This ranged from 29.3% for Band 4 to 40.3% for Band 3. Over the past five years, the proportion of full-time employees decreased 2.5% to 54.9%; part-time employees increased 1.5% to 19.2%; and casual employees increased 1.0% to 25.9%. Median annual employee turnover was 25.1% in June 2023, compared with 27.6% the year before. To find out more about the Salary and Workforce Survey, Members can log into their portal or subscribe to WALGA's Employee Relations service here.

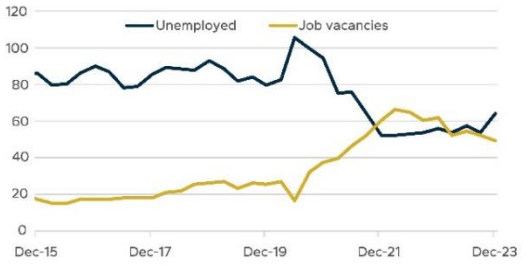
Wage Price Index Private vs Public, WA, Annual % Change

SOURCE: ABS; WALGA



Job Vacancies vs Unemployed Persons, WA, '000s

SOURCE: ABS; WALGA



Construction Costs

Key points

- **Construction costs have steadied after the recent increases as demand weakens and the supply-chain constraints ease.**
- **Whilst the cost of material is easing, construction wages are rising rapidly.**
- **A strong pipeline of projects is expected to support the construction sector in the near-term even as economic growth slows.**

The period of unprecedented rises in construction costs in WA rapidly appears to have ended, with growth in construction costs now slower than inflation. This can largely be attributed to an improvement in supply chains and shipping rates; a decline in commodity prices that were driving the increases such as oil and metals; and weakening demand due to the higher interest rates and a slowing of the residential building market after the stimulus-led surge in previous years.

Some upwards pressure on prices remains, which suggests modest increases in construction costs will persist in coming years. These include rising construction wages due to the continuing tight labour market; capacity constraints in the provision of construction materials; a caution around business investment due to an uncertain business environment; and a rising cost in imports from the falling Australian Dollar.

The interaction between all of these factors is likely to play out differently depending on the type of construction project and location. The cost of materials for road and bridge construction is easing from the double-digit growth experienced in the last two years, with price rises of 3.1% forecast for the current financial year. The price of bitumen closely tracks the oil price, which has fallen from its recent highs driven by the post-pandemic stimulus and the geopolitics surrounding the war in Ukraine.

Forecasts in 2023-24 for cost increases for bitumen (+5.1%) and asphalt (+4.7%) are more modest and are expected to continue to grow at a slower pace in the coming years.

Steel products surged even more during the post-pandemic period, up 11.2% in 2020-21 and 35.4% in 2021-22, again influenced by stimulus and impact of the war on Russian and Ukrainian steel exports. This was followed by a small decline in 2022-23 of 2.7% with further small price decreases expected in 2023-24 (-3.5%) and 2024-25 (-2.6%) as global demand weakens. Looking ahead, steel is also expected to return to its usual pattern of modest growth, subject to further geopolitical shocks.

For the construction of buildings, bricks and tiles have been a key driver of increased materials costs with prices rising 32.0% in 2021-22 and 29.4% in 2022-23. This price increase was driven by an increase in domestic demand from the post-pandemic stimulus and the impact of supply-chain disruptions. Price increases have begun to moderate, forecast to end 2023-24 up 10.0% before returning to more normal rates of 2% to 3% in the following years.

Timber prices have followed a similar path with price increases of 20.5% in 2021-22 and 8.5% in 2022-23 easing to a price fall of 2.1% forecast for 2023-24. The drivers of this dynamic are similar with stimulus-led demand coinciding with supply challenges from disruptions to shipping, the slowdown in international trade and the impact of the war in Ukraine. The fall in the timber price is not expected to be long-lived as prices are forecast to rise in the coming years supported by ongoing construction activity.

As the cost increases of construction materials slow, construction wage pressure remains (see Labour Market and Wages section). Construction wages have been growing quickly due to the uptick in demand in WA and shortages in the skilled workforce. There may be some impact on the workforce from the recent surge in immigration and the State Government's efforts to grow the construction workforce through wage subsidies, support for apprentices and investment in TAFE. However, in the short-term it is expected that construction wages will continue to grow at elevated levels.

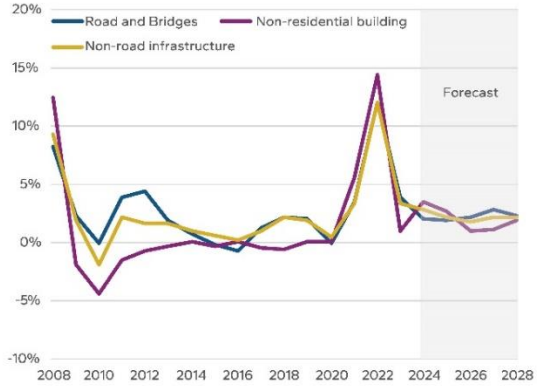
Looking forward, there remains a strong pipeline of construction in Western Australia, with Deloitte Access Economics reporting $47 billion worth of projects under construction, around the same as the last quarter. Engineering work done increased 23% in 2023, led by the transportation and resources industries. This is the fifth consecutive quarter annual growth has been above 20%.

Commercial work increased by 14% in 2023 and the value of work commenced increased by 14%. This suggests that the construction sector will remain strong in the coming years, although looking further ahead the appetite for new major projects will be subject to shifts in global demand and the shape of the domestic economy.

There is a risk that the elevated level of demand in the construction sector may lead to costs staying higher for longer, which could lead to an upwards revision of the LGCI. This may be particularly evident in regional areas where a limited number of suppliers and workers, as well as the impact of major infrastructure projects, can drive up project costs and blow out timelines.

Construction Cost Indexes, WA, Annual % Change

SOURCE: ABS; MACROMONITOR; WALGA



Insurance and Risk Financing

(in conjunction with LGIS)

Key points

- **It is expected that insurance and risk financing costs will ease from the recent highs.**
- **Costs of insurance for infrastructure projects is high due to the risk of project delays and increased costs.**
- **Drivers of increased insurance and risk financing costs include the high levels of inflation, increasing number of severe weather events and slower economic growth.**

The trend of price hardening has eased due to the recent lift in investment gains by insurers and a period of natural events in 2023 that was less severe than expected.

However, economic factors such high inflation and slower growth continue to have a negative impact on the LGISWA Scheme and the cost of capital. Insurers, including the Scheme, are particularly vulnerable to the impacts of extreme weather events associated with climate change become more frequent and severe. This will result in higher claims costs challenges in underwriting.

Despite decreasing inflationary pressure, the recent period of inflation still affects the Scheme across all areas of protection provided through LGIS.

It is expected that the severity and frequency of **workers' compensation** will increase as the cost of living challenges continue and wages rise. Changes in legislation will further compound the economic impact.

The increased costs of repairs and manufacturing challenges are forecast to contribute to increased severity of **motor vehicle** claims.

Property claims are impacted by the heightened costs of construction materials and labour supply constraints, increasing the severity of claims. They are also impacted by the increasing frequency of weather events.

Higher **liability** claims are expected due to the rising cost of living, increased litigation expenses, and an overall increase in claim frequency during challenging economic conditions

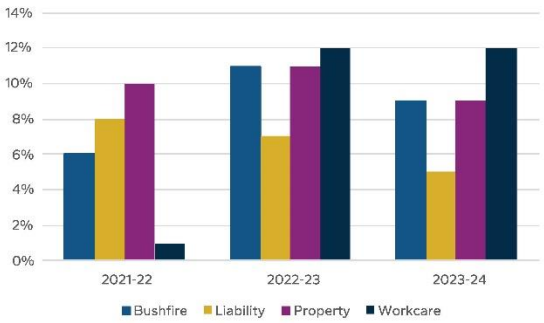
Apart from the Scheme protections, it is important for councils to consider the impact of insurance costs on their infrastructure programs. Insurers are facing significant cost increases due to supply chain delays and labour shortages, which drive up project costs and extend project durations. These challenges also affect repair times, further increasing expected claim costs. As a result, insurers are targeting increases of 10% to 20% for infrastructure projects before considering individual client performance.

Despite the moderation in pricing increases, it is expected that (re)insurers will continue to drive change through technical underwriting, focusing on coverage reductions and pricing. During the budgeting process, it is important for councils to take into account various factors such as exposure to weather events, claims, population, wages, asset values, and changes in operations.

Overall, a positive outlook for 2024-25 is maintained with pricing expected to land in the mid-high single digits, subject to scheme performance and the global claims outlook.

Local Governments can discuss protection and pricing with their LGIS account manager or find out more at https://www.lgiswa.com.au

LGIS Protection, Annual % Change



SOURCE: LGIS

Questions

If you have any questions on the contents of this report, please direct them to the WALGA Economics Team.

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TOWN OF EAST FREMANTLE

DIFFERENTIAL GENERAL RATES AND MINIMUM PAYMENTS – OBJECTS & REASONS FOR THE 2024/25 RATING YEAR

In accordance with section 6.36 of the *Local Government Act 1995* and Council's 'Notice of Intention to Levy Differential General Rates and Minimum Payments', the following information details the objectives and reasons for those proposals.

EXECUTIVE SUMMARY

The following rating principles are proposed in this Statement of Rating Objects and Reasons for the 2024/25 rating year:

- Gross Rental Values apply to the following differential general rate categories; Residential and Commercial.
- Properties are rated according to Town Planning zoning and predominant land use with each having a separate calculated rate in the dollar to achieve greater equity across all sectors.
- The Town of East Fremantle currently charges rates to four sporting clubs that are categorized as 'Sporting Clubs – Commercial' and rated under the Commercial GRV category. They are the East Fremantle Lawn Tennis Club, Fremantle Rowing Club, East Fremantle Yacht Club and Swan Yacht Club.
- The current Gross Rental Values have a date of valuation of 1 August 2021 – that is, the Town received a general valuation with valuations coming into force on 1 July 2023.
- It is very important for both ratepayers and Council to recognize that changes in land values do not automatically drive changes to individual rate bills. Council amends the rate in the dollar to offset any significant movement in aggregate valuations to maintain the rate yield, and the relative rates burden placed on each category.
- The rate in the dollar for Residential GRVs has been amended from 6.893 cents to 7.186 cents.
- The rate in the dollar for Commercial GRVs has been amended from 11.684 cents to 12.1806 cents.
- The proposed rates model will yield $9,517,944 in gross rate revenue, which is a 4.25% increase in total rate yield on rate revenue from the prior year.

- The Town has considered the Department of Local Governments Rating Policy and the rating principles of objectivity, fairness and equity, consistency, transparency and administrative efficiency when setting the rate in the dollar. Unfortunately, the Town does not have a mechanism to smooth individual residential valuations, which are determined by Landgate, which is a State Government Statutory Authority.

WHAT ARE RATES?

Rates are a tax levied on all rateable properties within the boundaries of the Town of East Fremantle in accordance with the *Local Government Act 1995.*

The overall objective of the proposed rates in the 2024/25 Budget is to provide for the net funding requirements of the Town's services, activities, financing costs and the current and future capital requirements of the Town, after considering all other forms of revenue.

The formulation of a rating system is about achieving a means by which Council can raise sufficient revenue to pay for the services it provides. Throughout Australia, the basis of using property valuations has been found to be the most appropriate means of achieving rating equity; however, the achievement of a wholly equitable rating system for all properties, in all areas, is a difficult task if it is based on the property valuations alone. For this reason, there are refinement options made available, such as differential rating, the Town of East Fremantle has elected to use.

In Western Australia, land is valued by Landgate Valuation Services and those values are forwarded to each local government for rating purposes. Two types of values are calculated – Gross Rental Value (GRV) which generally applies for urban areas; and Unimproved Value (UV) which generally applies for rural land. GRV means the gross annual rental that the land might reasonably be expected to realise if let on a tenancy from year to year upon condition that the landlord was liable for all rates, taxes and other charges thereon and the insurance and outgoings necessary to maintain the value of the land.

LOCAL GOVERNMENT ACT 1995 – RATING PROVISIONS

The *Local Government Act 1995* sets out the basis on which differential general rates may be based as follows:

Section 6.32 (1) of the *Local Government Act 1995* states:

(1) When adopting the annual budget, a local government –

a. In order to make up the budget deficiency, is to impose* a general rate on rateable land within its district, which rate may be imposed either –
   i. Uniformly; or
   ii. Differentially

DIFFERENTIAL GENERAL RATES

(1) A local government may impose differential general rates according to any, or a combination, of the following characteristics —
  (a) the purpose for which the land is zoned, whether or not under a local planning scheme or improvement scheme in force under the *Planning and Development Act 2005*; or
  (b) a purpose for which the land is held or used as determined by the local government; or
  (c) whether or not the land is vacant land; or
  (d) any other characteristic or combination of characteristics prescribed.

(2) Regulations may —
  (a) specify the characteristics under subsection (1) which a local government is to use; or
  (b) limit the characteristics under subsection (1) which a local government is permitted to use.

(3) In imposing a differential general rate a local government is not to, without the approval of the Minister, impose a differential general rate which is more than twice the lowest differential general rate imposed by it.

(4) If during a financial year, the characteristics of any land which form the basis for the imposition of a differential general rate have changed, the local government is not to, on account of that change, amend the assessment of rates payable on that land in respect of that financial year but this subsection does not apply in any case where section 6.40(1)(a) applies.

(5) A differential general rate that a local government purported to impose under this Act before the *Local Government Amendment Act 2009* section 39(1)(a) came into operation is to be taken to have been as valid as if the amendment made by that paragraph had been made before the purported imposition of that rate.

MINIMUM PAYMENTS

(1) Subject to this section, a local government may impose on any rateable land in its district a minimum payment which is greater than the general rate which would otherwise be payable on that land.

(2) A minimum payment is to be a general minimum but, subject to subsection (3), a lesser minimum may be imposed in respect of any portion of the district.

(3) In applying subsection (2) the local government is to ensure the general minimum is imposed on not less than —
  (a) 50% of the total number of separately rated properties in the district; or
  (b) 50% of the number of properties in each category referred to in subsection (6),

on which a minimum payment is imposed.

(4) A minimum payment is not to be imposed on more than the prescribed percentage of —
  (a) the number of separately rated properties in the district; or
  (b) the number of properties in each category referred to in subsection (6),
unless the general minimum does not exceed the prescribed amount.

(5) If a local government imposes a differential general rate on any land on the basis that the land is vacant land it may, with the approval of the Minister, impose a minimum payment in a manner that does not comply with subsections (2), (3) and (4) for that land.

(6) For the purposes of this section a minimum payment is to be applied separately, in accordance with the principles set forth in subsections (2), (3) and (4) in respect of each of the following categories —
  (a) to land rated on gross rental value; and
  (b) to land rated on unimproved value; and
  (c) to each differential rating category where a differential general rate is imposed.

2024/25 BUDGET PROPOSAL

The following are the proposed Differential General Rates and Minimum Payments for the Town of East Fremantle for the 2024/25 financial year, to be effective from 1 July 2024:

4.25% Model - 24/25

RATE TYPE	Rate in	Number of Properties	Rateable Value	Rate Revenue
Differential General Rate	$		$	$
Residential GRV	0.071860	2,966	104,808,540	7,531,492
Commercial GRV	0.121806	120	12,621,985	1,537,430
Sub-Totals		**3,086**	**117,430,525**	**9,068,922**
	Minimum			
Minimum Payment	$			
Residential GRV	1,296.00	336	4,962,640	435,456
Commercial GRV	1,938.00	7	79,940	13,566
Sub-Totals		**343**	**5,042,580**	**449,022**
		3,429	**122,473,105**	**9,517,944**
Amount from General Rates				
Less Concessions				
Totals				**9,517,944**

Residential Improved and Not Improved

Characteristics: This differential general rate category imposes a general rate on land valued on a gross rental value basis, which is zoned, held or used for residential purposes and having improvements erected on it.

Reasons and Objects: The object of this proposed rate is to apply a base differential general rate to land zoned and used for residential purposes and to act as the Town's benchmark differential rate by which all other GRV rated properties are assessed. The reason for this rate is to ensure that all ratepayers make a reasonable or minimum contribution towards the ongoing maintenance and provision of works, services and facilities throughout the Town. The proposed rate in the dollar of GRV value for this category is 0.07186 with a minimum payment amount of $1,296. 10% of residential properties will receive the minimum payment.

Commercial Improved and Not Improved

Characteristics: This differential rate category imposes a rate on land valued on a gross rental value basis, which is zoned, held or used for commercial purposes and having improvements erected on it. This category also includes 'Sporting Clubs – Commercial'. They are the East Fremantle Lawn Tennis Club, Fremantle Rowing Club, East Fremantle Yacht Club and Swan Yacht Club. These clubs generate income through food and beverage, as well as hire facilities.

Reasons and Objects: The object of this differential rate category is to apply a rate to Commercial properties to raise additional revenue to offset the costs associated higher levels of services to properties in this category, such as parking infrastructure, road construction, maintenance (including building maintenance) and refurbishment including road drainage systems, urban style guides and parking compliance. The proposed rate in the dollar of GRV value for this category is 0.121806 with a minimum payment amount of $1,938. 6% of commercial properties will receive the minimum payment.

SUBMISSIONS:

Submissions are invited from any elector or ratepayer with respect to the proposed rates and any related matter within 21 days of the date of this notice. Submissions should be addressed to the Chief Executive Officer, Town of East Fremantle, PO Box 1097, FREMANTLE WA 6959.

Submissions should be clearly marked 'Submission – 2024/25 Differential Rates'.

Jonathan Throssell
Chief Executive Officer

TOWN of EAST FREMANTLE

NOTICE OF INTENTION TO IMPOSE DIFFERENTIAL GENERAL RATES AND MINIMUM PAYMENTS

The Town of East Fremantle is in the process of preparing the 2024/25 annual budget. In accordance with Section 6.*36 of the Local Government Act 1995*, the Town invites public submissions in respect of the intention to Levy Differential General Rates and Minimum Payments.

The overall objective of the proposed rates in the 2024/25 Budget is to provide for the net funding requirements of the Town's services, activities, financing costs, and the current and future capital requirements of the Town, after considering all other forms of revenue.

The following are the proposed Differential General Rates and Minimum Payments for the 2024/25 financial year.

4.25% Model - 24/25

RATE TYPE Differential General Rate	Rate in $	Number of Properties	Rateable Value $	Rate Revenue $
Residential GRV	0.071860	2,966	104,808,540	7,531,492
Commercial GRV	0.121806	120	12,621,985	1,537,430
Sub-Totals		**3,086**	**117,430,525**	**9,068,922**
	Minimum			
Minimum Payment	$			
Residential GRV	1,296.00	336	4,962,640	435,456
Commercial GRV	1,938.00	7	79,940	13,566
Sub-Totals		**343**	**5,042,580**	**449,022**
		3,429	**122,473,105**	**9,517,944**
Amount from General Rates				
Less Concessions				
Totals				**9,517,944**

A statement of the Rating Objects and Reasons has been prepared and is available to view on the Town's website www.eastfremantle.wa.gov.au and a hard copy is available from the Town Administration Centre located at 135 Canning Highway, East Fremantle.

Submissions are invited from any elector or ratepayer with respect to the proposed rates, and any related matter, within 21 days of the date of this notice. They should be clearly marked 'Submission – 2024/25 Differential Rates' and emailed to admin@eastfremantle.wa.gov.au or received by the CEO, Town of East Fremantle, PO Box 1097, FREMANTLE WA 6959, by 4.00pm Friday 24 May 2024.

Jonathan Throssell
Chief Executive Officer

13.4 TOWN OF EAST FREMANTLE COASTAL HAZARD RISK MANAGEMENT AND ADAPTATION PLAN - FINAL ENDORSEMENT

Report Reference Number	OCR-2695
Prepared by	Stacey Towne
Supervised by	Andrew Malone
Meeting date	Tuesday, 16 April 2024
Voting requirements	Simple majority
Documents tabled	Nil
Attachments	

1. Draft Town of East Fremantle Coastal Hazard Risk Management and Adaptation Plan

PURPOSE

The purpose of this report is for Council to consider endorsement of the Draft Coastal Hazard Risk Management and Adaptation Plan (CHRMAP) report for the Town of East Fremantle (the Town) in the light of the submissions received, following the public advertising period.

EXECUTIVE SUMMARY

Baird Consultants, on behalf of the Town, has prepared a Draft CHRMAP report (Attachment 1) to identify estuarine coastal hazards; provide a framework for adaptation to guide decision making in the short to medium term (next 10-20 years); and provide management and adaptation strategies to mitigate hazard in future planning periods (next 100 years).

The Draft CHRMAP has been developed in consultation with a Technical Steering Committee and the community (including a community and business reference group) to develop a greater understanding of the Town's River areas and support its future estuarine coastal management and planning decisions.

It is requested that council members receive the submissions received during the advertising period and consider the Draft CHRMAP report for endorsement.

BACKGROUND

The Town, in conjunction with the State Government, initiated a project to develop a CHRMAP in 2021, to identify key assets along the river foreshore and measures to be taken to preserve them against the impact of coastal hazards.

Consultants Baird and Associates (in association with element) were appointed to carry out the study for the area comprising of approximately 3km of foreshore between Petra Street to the north-east and East Street to the south. The foreshore has interactions with many landmarks and recreational features including the John Tonkin Reserve, Swan Yacht Club, East Fremantle Yacht Club, several outdoor sporting grounds, hospitality venues and several boating moorings and jetties.

To help the Town guide the development of the CHRMAP, a Steering Committee was established including representatives from the Department of Planning, Lands and Heritage; Department of Biodiversity, Conservation and Attractions; and Department of Transport. This Steering Committee has overseen the development of all draft chapters of the CHRMAP.

The Town also established a Community and Business Reference Group (CBRG) to help guide and provide advice around key milestones of the project. The members of the CBRG act as conduits between the community and the project team, helping to share important information and knowledge.

The Draft CHRMAP was advertised for public comment for a period of four weeks and four submissions were received. Details of the submissions are shown in the following Schedule of Submissions:

SCHEDULE OF SUBMISSIONS TOWN OF EAST FREMANTLE DRAFT COASTAL HAZARD RISK MANAGEMENT AND ADAPTATION PLAN				
No.	**Name/Address**	**Description of Affected Property**	**Submission**	**Officer Recommendation**
1	Local resident	NA	Much of the report is about staying dry. Consideration needs to include tidying up bits that get wet e.g. removing hazards (concrete, tree stumps, breakwaters etc) below the waterline from retreat areas.	That the submission be noted.
2	Tim Stead Department of Transport 5 Newman Court Fremantle WA 6160	NA	I have reviewed this and am broadly happy with the contents. However, we would like to see one change please: 1. An important outcome of the hazard assessment component was the knowledge gap regarding sea level rise hazard at estuarine shores, with current policy guidance unable to account for this issue. This was acknowledged in the report body on pdf pg. 45/pg. 22 of numbered pages. Given this important knowledge gap, we would like that quote to be included in the Executive Summary as well, specifically added to the hazard assessment overview on pdf pg. 3/pg. ii of numbered pages: "*DoT have accepted that 50m erosion setback for the study area is appropriate for coastal hazard due to the heavily engineered shorelines in the study area limiting the exposure areas. Whilst this is the case for the Town's shoreline areas this should not be seen as a precedent for river shorelines in other locations*."	That the submission be supported and the Draft CHRMAP be amended accordingly.
3	Peter Halliday General Manager East Fremantle Yacht Club PO Box 26 Palmyra WA 6957	East Fremantle Yacht Club	We believe the TOEF and Baird have prepared a comprehensive report. Reference 17.4 Item 2 *"Jerrat Drive escarpment foreshore stability study: The Jerrat Drive foreshore area is a location which is highly valued by the community in the Natural Zone. The study will summarise the current condition of the foreshore and assess the risks to the location in future with consideration of the local site survey, vegetation, geotechnical information, drainage and local access pathways.*	That the submission be noted.

SCHEDULE OF SUBMISSIONS TOWN OF EAST FREMANTLE DRAFT COASTAL HAZARD RISK MANAGEMENT AND ADAPTATION PLAN				
			Recommendations for the management of the location to inform future foreshore management approaches which include consideration of revegetation of the foreshore and use of nature [1] based solutions in the shoreline to improve resilience." The club would like to receive a copy of the report as it is very material to our mooring lease area and western pens.	
4	Michael Shaughnessy and Greg Comiskey Department of Biodiversity, Conservation & Attractions Locked Bag 104 Bentley Delivery Centre WA 6983	NA	… I can confirm no objections or proposed changes. … Noting that this is the first CHRMAP to be developed within the Estuary, so it represents a substantial step forward in developing an appropriate planning response to management of coastal/estuarine hazards (particularly in the context of the increasing challenges of climate change). So this is a job well done by the Town of East Fremantle. It is also a very important funding initiative for our future project across the estuary. …As discussed, we will need to explore our application of this document within our policy framework. This can be done after Council has endorsed the document.	That the submission be noted.

In addition, the Executive Manager of Technical Services has advised that it would be beneficial to include the most recent set of survey data relating to levels along the riverfront in the final CHRMAP report, which was more recently acquired. This data does not change outcomes for flooding in the CHRMAP report. However, the updated survey data will be useful as baseline data to monitor changes to the shoreline in the future.

It is recommended that the Draft CHRMAP be amended to:

- include the changes put forward in the submission from the Department of Transport; and
- include the most up to date survey data relating to levels around the foreshore.

CONSULTATION

A Community and Stakeholder Engagement Plan was prepared to ensure that the community and stakeholders were effectively and actively involved in the CHRMAP preparation. Delivery of this was partially affected by the Covid-19 outbreak however, a range of activities have been delivered including information sessions, workshops, a survey and meetings with the CBRG.

The Steering Committee has overseen development of the draft chapters of the CHRMAP and the CBRG has been engaged at various times during the project development.

The Draft CHRMAP was presented to elected members and the CBRG in February 2024 and March 2024, respectively and was advertised for public comment for a period of four weeks (from approximately 9 March 2024) via the

Town's usual communication channels. In addition, the CBRG was involved with delivering information to the community and seeking comments on the final draft.

The advertising period closed on 9 April 2024 and four submissions were received as detailed in the Schedule of Submissions in the previous Background section of this report. The submissions raised no objections to the Draft CHRMAP.

STATUTORY ENVIRONMENT

Metropolitan Region Scheme.
Swan and Canning Rivers Act, 2006.
Local Planning Scheme No. 3 (LPS 3).

POLICY IMPLICATIONS

State Planning Policy 2.6 – State Coastal Planning Policy and associated guidelines.

The recommendations of the Draft CHRMAP include the future adoption of a local planning policy to guide development decisions within the identified area prone to inundation over the next 100-year planning period. This would be in addition to a Special Control Area over zoned land within LPS 3 and the Development Control Area that already exists under the *Swan and Canning Rivers Management Act*.

FINANCIAL IMPLICATIONS

The CHRMAP project is co-funded by the Town and a grant received from the Western Australian Planning Commission's (WAPC) Coastal Management Plan Assistance Programme 2021/22.

There are budget implications for future works and actions recommended in the Draft CHRMAP. The implementation budget over the 12-year short-term period from 2024 to 2035 is estimated at approximately $596,000. Grant funding options have also been identified that can support the funding of coastal management activities. These funding mechanisms generally require a 50% co-funded approach.

STRATEGIC IMPLICATIONS

"Town of East Fremantle Strategic Community Plan 2020-2030".
Strategic Priority 4 - Natural Environment – Maintaining and enhancing the River foreshore and other green, open spaces with a focus on environmental sustainability and community amenity.

4.3 Acknowledge the change in our climate and understand the impact of those changes.
4.3.1 Improve systems and infrastructure standards to assist with mitigating climate change impacts.

RISK IMPLICATIONS

RISKS

Risk	Risk Likelihood (based on history & with existing controls)	Risk Impact / Consequence	Risk Rating (Prior to Treatment or Control)	Principal Risk Theme	Risk Action Plan (Controls or Treatment proposed)
That Council don't endorse the CHRMAP, resulting in gaps for future strategies and plans.	Unlikely (2)	Minor (2)	Low (1-4)	ENVIRONMENT Contained, reversible impact managed by external agencies	Accept Officer Recommendation
That Council don't endorse the CHRMAP, resulting in potential strategic risks	Unlikely (2)	Moderate (3)	Moderate (5-9)	PROPERTY Localised damage requiring external resources to rectify	Accept Officer Recommendation

regarding future flooding events and loss of assets.					

RISK MATRIX

Consequence / Likelihood		Insignificant	Minor	Moderate	Major	Extreme
		1	2	3	4	5
Almost Certain	5	Moderate (5)	High (10)	High (15)	Extreme (20)	Extreme (25)
Likely	4	Low (4)	Moderate (8)	High (12)	High (16)	Extreme (20)
Possible	3	Low (3)	Moderate (6)	Moderate (9)	High (12)	High (15)
Unlikely	2	Low (2)	Low (4)	Moderate (6)	Moderate (8)	High (10)
Rare	1	Low (1)	Low (2)	Low (3)	Low (4)	Moderate (5)

A risk is often specified in terms of an event or circumstance and the consequences that may flow from it. An effect may be positive, negative or a deviation from the expected and may be related to the following objectives: occupational health and safety, financial, service interruption, compliance, reputation and environment. A risk matrix has been prepared and a risk rating is provided below. Any items with a risk rating over 16 will be added to the Risk Register, and any item with a risk rating over 16 will require a specific risk treatment plan to be developed.

RISK RATING

Risk Rating	6
Does this item need to be added to the Town's Risk Register	No
Is a Risk Treatment Plan Required	No

SITE INSPECTION

NA

COMMENT

The Draft CHRMAP is shown separately as Attachment 1. The following is provided as a summary:

Shoreline Management Units

The CHRMAP study area is considered in three distinct shoreline management units (SMU) termed:

1. Walled Zone – East Street to Niergarup Reserve (Leeuwin Boat Ramp)
2. Reclaimed Zone – Niergarup Reserve (Leeuwin Boat Ramp) to W Wayman Reserve eastern end
3. Natural Zone – W Wayman Reserve to Petra Street

Coastal Hazard Assessment

A Coastal Hazard Assessment (CHA) was completed according to State Planning Policy which provides mapping of coastal hazard to assess the impact of erosion and inundation on coastal assets in current and future planning periods in the CHRMAP. The planning timeframes examined in the hazard assessment 2025, 2035, 2050, 2075 and 2125. Sea level rise allowance is applied across the planning timeframes based on projection of +1.05m increase in sea level by the year 2125.

Mapping of the coastal erosion hazard across the planning timeframes is presented with existing control structures maintained to their present function and with structures removed. Flood mapping associated with the extreme 500-yr return period storm is also shown.

Risk Assessment and Treatment

Coastal asset types through the study area have been identified in the general categories of Social, Economic, Environmental and Heritage and Culture assets. Stakeholder views captured through the community engagement activities have been used to define the coastal asset function, service and values.

The risk assessment framework for the project has been based on the WAPC's guidelines and considers the impact to coastal assets in the shoreline areas based on the projected coastal hazard in the present and future timeframes. The framework assesses the likelihood and consequence of coastal hazard impacts and considers the adaptive capacity of the respective coastal assets.

The level of coastal hazard risk for the coastal assets through the study area is generally low for the present day, however this risk is projected to increase associated with sea level rise in future years.

Residual risk and priority assets for risk treatment are presented in the report for each SMU and summarised as follows:

1. Walled Zone:
   The continuous shoreline protection along the shoreline of the Walled Zone is assumed to be maintained in future years and assumed to continue to provide erosion protection afforded to the coastal assets presently. The Marine Education boatshed is rated as Highly vulnerable in 2035 and Extreme in the 2075 period. The risk from inundation for the Carpark at the Dome Café is rated as Highly vulnerable by 2050. Riverside Road is rated as Highly vulnerable by 2125.
2. Reclaimed Zone:
   The areas of focus are the natural shorelines without any current erosion protection. This includes the beach at Niergarup Reserve, Norm McKenzie and W Wayman Reserve foreshore reserves and coastal pathways which are all rated as Highly vulnerable to erosion in 2035. The 8 Knots Tavern is rated at Highly vulnerable to inundation in 2035 and Extreme in 2050. The buildings of the Navy cadets, Cool Beans café and Rowing Club are all rated as Highly Vulnerable to inundation in 2075. Riverside Road is rated as Highly vulnerable to inundation in 2075. There are six carparks around the area which are rated as Highly vulnerable from 2075 onwards. At the 2075 to 2125 planning timeframe the sea level rise projections of +0.5m to +1.05m lead to many assets becoming Highly vulnerable or Extremely vulnerable.
3. Natural Zone:
   The foreshore, beach and stairs at the base of Jerrat Drive are rated as Highly vulnerable to erosion by 2035. For inundation the buildings at the Sea Scouts and East Fremantle Yacht Club and the lower carpark areas at the East Fremantle Yacht Club are rated Highly vulnerable in 2075

Swan Canning Development Control Area

The Swan and Canning Rivers Management Act 2006 (SCRM Act) makes provision for the protection of the Swan and Canning Rivers to ensure ecological values and community benefits are maintained. Under the SCRM Act, the Swan Canning Development Control Area (DCA) has been established which covers the land and waters adjacent to the Swan River in the study area. The DBCA, SRT, WAPC and State and local governments are responsible for the effective planning and management of land use and development within, abutting and affecting the waters and associated land within the DCA, at all stages of the planning process.

The DCA covers the majority of the shoreline area affected by coastal hazard in the study area, with the DBCA the key decision maker for development in this vicinity. A discussion with representatives from the DBCA regarding adaptation approaches was undertaken which provided the following guidance:

1. Walled Zone:
   - Maintaining shoreline revetments and riverwalls to ensure the protection of Riverside Road and raising the height at shoreline in response to future sea level rise needs to be done in balance with the viability of the

road over the long term. In this CHRMAP, maintaining the current extent of river walls to provide protection to the foreshore and Riverside Road has been adopted.
- Under projected sea level rise the inundation hazard for Riverside Road will increase in extreme events in the future. At present the risk is manageable. At the time when sea level rise of approximately 0.5m to 1m above the present-day level is realised (projected to be in the 2075 to 2125 period) the risk management will be more difficult (expensive). The coastal hazard risk to Riverside Drive and the foreshore area will be reviewed in future revisions of the CHRMAP.

2. Reclaimed Zone
   - There is presently 'hard engineering' river walls and revetments that offer protection; however, it is not a given that this type of foreshore edge treatment will continue to be used in the future. As the infrastructure ages in the shoreline areas there will need to be consideration and discussion on what is appropriate in terms of replacement. The intention will be to deliver an outcome that satisfies the community need whilst being environmentally sensitive. For the Reclaimed Zone, using fill in the foreshore areas to address inundation risk is not supported. There may be nature-based options or engineering alternatives that are yet to emerge that could provide the right solution.
   - In future there may be a point where it becomes too difficult and expensive to provide protection to the shoreline areas from erosion and inundation hazard (with rising sea level) and planning the process of Managed Retreat may be required. A future scenario could be to retreat the foreshore areas back to Riverside Road and use this as the interface to the shoreline, due to the land levels being generally higher from this section landward.
   - For the foreseeable future the Leeuwin Barracks site will remain under the ownership of the Department of Defence. Any changes to the use of the site with regard to residential development would need to consider the coastal hazard from the CHRMAP.

3. Natural Zone
   - For the Jerrat Drive escarpment section of foreshore, this is highly regarded as a key coastal asset for the Community as a site of recreation and environmental importance. Further understanding of the processes driving changes in this area is required – assessment of the present state of the foreshore (vegetation cover, habitat, drainage, underscoring at the shoreline and tree loss) and development and update to the existing foreshore management plan to guide future actions is considered a priority of the CHRMAP.

For areas outside of the DCA, the Town would be responsible for planning controls to manage coastal hazard risk. The CHRMAP recommends the use of Local Structure Plans, a Special Control Area (SCA) within the local planning scheme (LPS 3) and a CHRMAP Local Planning Policy (LPP). The Town has minimal statutory planning control over property within the study area however, has an advisory and strategic role which can be guided by LPP.

Multi- criteria Analysis

A multi-criteria analysis (MCA) of adaptation options and an economic analysis of assets in the reclaimed Zone was completed to support decision making. The MCA incorporates community and stakeholder feedback gained through the engagement process. The outcomes inform selection of adaptation pathways in future planning periods for each of the SMU.

The economic analysis in the Reclaimed Zone evaluates impacts from inundation hazard associated with projected sea level rise, using the value of assets to assist in understanding the economic costs of a Managed Retreat approach. The results provide a preliminary estimate of the magnitude of the economic cost of sea level rise and timing of asset loss within the Reclaimed Zone. The total undiscounted cost of sea level rise on the Reclaimed Zone is conservatively estimated at $46.2 million.

The economic analysis has been used to inform selection of adaptation pathways in future planning periods for each of the SMU. The pathways and triggers are provided across the planning timeframes present to 2035, 2035 to 2050, 2050 to 2075 and 2075 to 2125.

Summary of Adaptation Approaches and Recommendations

- The recommendations in the CHRMAP include:
- Avoid development on land within the erosion hazard area over the 100-year planning period.
- Accommodate coastal hazard risk from inundation to commercial and habitable buildings through improved building design and the use of planning controls (minimum floor levels).
- Accommodate coastal hazard risk to infrastructure in the foreshore areas until such time that a managed retreat pathway may be required, as a result of sea level rise.
- Protect foreshore area and assets landward in the Walled Zone from erosion through maintaining present riverwalls and revetments.
- Accommodate flood risk to Riverside Road through periodic incremental raising of the road level in accordance with the rate of sea level rise and general road upgrade / maintenance schedule.
- Implement nature-based solutions to provide resilience to shorelines including Niergarup Reserve, Jerrat Drive foreshore, John Tonkin Reserve, supported through grant funding and local volunteer groups.
- For the Reclaimed Zone, the short to medium term adaptation pathway is to maintain existing erosion protection along the foreshore areas through traditional 'hard engineering' methods currently in place - river walls, revetments and detached groynes. Examine alternative methods of protection that can be achieved through other 'soft engineering' methods (e.g. Nature Based Solutions) and look for opportunities to implement as part of the asset replacement lifecycle.
- For the Reclaimed Zone the long-term adaptation pathway is expected to require a managed retreat approach, triggered by the difficulty and cost of mitigating inundation hazard with projected sea level rise of 1.05m in the 100-yr planning period. This scenario is driven by future sea level rise where the current foreshore areas are inundated regularly in the general tides and it is too difficult and/or expensive to maintain the current extent of the foreshore. There is a general presumption against using fill in the foreshore areas to address inundation risk.
- A future scenario of Managed Retreat of the foreshore area and associated infrastructure along the Reclaimed Zone should consider retreat to the area landward of Riverside Road. This decision is contingent on the future of the Leeuwin Barracks site and potential for land being made available.
- If there is a future change in the land use at the Leeuwin Barracks site to redevelop the location for residential and commercial property, then this would need to address the risk from erosion and inundation across the 100-years planning timeframe through planning-based approaches.
- For the shoreline area at the base of the Jerrat Drive escarpment use of nature-based solutions to increase resilience of the shoreline area.
- Update foreshore management plans for the Town's foreshore areas. Foreshore management plans can be a key tool for communication and engagement with the community as they include detailed planning for community places and facilities. They provide a strategy to deliver the recommendations of this CHRMAP for foreshore reserves throughout the Town.

Recommended Planning Controls

The CHRMAP may be used to inform the next iteration of the local planning strategy, any future structure planning for the Leeuwin Barracks site (should it be redeveloped), future amendments to LPS 3 or its review (including introduction of a Special Control Area or similar for land subject to inundation over the 100-year planning period) and future associated local planning policy (including development controls).

Additional Studies Recommended

The CHRMAP recommends the following studies to support the understanding of the shoreline areas:

- A geophysical and/or geotechnical study of the Jerrat Drive foreshore area to ascertain stability of this highly valued section of the coast and a detailed foreshore management plan be prepared to guide its management.
- Update the current foreshore management plan for each of the SMUs to guide ongoing management of foreshore reserves, monitoring or assets and the triggers for the managed retreat of assets and infrastructure at risk of erosion and inundation.

Long Term Pathways
Long term adaptation pathways for the key at risk assets are identified in each of the SMU in terms of Avoid, Planned or Managed Retreat, Accommodate, Protect, No Regrets, and Do Nothing. Sea level rise plays a key role in triggering actions on the adaptation pathways.

Short Term
Short-term CHRMAP implementation actions over the period to 2035 include recommendations for:

- Planning Actions;
- Annual Monitoring Program;
- Additional Technical Studies; and
- Adaptation Actions in Shoreline Areas.

Budget
The implementation budget over the 12-year short-term period from 2024 to 2035 is estimated at approximately $596,000. This will cover the cost of annual monitoring, complete the additional technical / planning studies recommended including two reviews of the CHRMAP (2028, 2033) and undertake nature-based work in the shoreline areas. All figures quoted are order of magnitude estimates and exclude GST.

Of this, $427,500 is estimated for the short-term implementation actions for the period over the first 5-years 2024 to 2028 inclusive. This comprises of annual monitoring, technical studies and planning studies and funding for nature-based adaptation approaches.

The CHRMAP identifies grant funding options that can support the funding of coastal management activities. These funding mechanisms generally require a co-funded approach whereby 50% of the funding is to be matched.

CONCLUSION

The Town's Draft CHRMAP is the first of its kind relating to an estuarine situation (rather than coastal) in Metropolitan Perth. It identifies hazard risk scenarios within planning timeframes to assist decision makers when considering development options as well as guiding the Town in if, where and when to take mitigating actions to protect its assets.

The Draft CHRMAP has been developed over the past two years involving input from the general community; local businesses and community groups located on the riverfront; and technical feedback from State Government agencies associated with the Swan River and its management.

The low number and nature of submissions indicates a level of satisfaction with the Draft CHRMAP. Subject to the minor amendment suggested by the Department of Transport, it is recommended that the Draft CHRMAP be finally endorsed. Once endorsed, the CHRMAP will need to be regularly reviewed and updated and any changes to recommended actions will be presented to Council. However, it is recommended that Council authorises the Town's Administration to update the CHRMAP with any new technical data and information should it become available.

13.4 OFFICER RECOMMENDATION / COUNCIL RESOLUTION

Council Resolution 041604

OFFICER RECOMMENDATION:

Moved Cr Natale, seconded Cr White

That:

1. **Council notes the submissions received as detailed in the Schedule of Submissions contained within the Officer report;**
2. **Council supports the submission from the Department of Transport and amends the Draft Coastal Hazard Risk Management and Adaptation Plan (CHRMAP) by including the following in the Executive summary: "*DoT have accepted that 50m erosion setback for the study area is appropriate for coastal hazard due to the heavily engineered shorelines in the study area limiting the exposure areas. Whilst this is the case for the Town's shoreline areas this should not be seen as a precedent for river shorelines in other locations*.";**
3. **Council amends the Draft Coastal Hazard Risk Management and Adaptation Plan (CHRMAP) by including the survey data levels for the Swan River shoreline provided by Rob Roach, Engineering Surveyor (2022);**
4. **subject to the modification as detailed in 2 and 3 above, Council finally endorses the Draft CHRMAP, as shown separately as Attachment 1 to the Agenda; and**
5. **Council authorises the Town's Administration to update technical data and information within the endorsed CHRMAP as it comes to hand and/or is required.**

(CARRIED UNANIMOUSLY 9:0)

For: **Mayor O'Neill, Crs Wilson, Collinson, Donovan, Harrington, Natale, Maywood, White & McPhail.**

Against: **Nil**

REPORT ATTACHMENTS

Attachments start on the next page


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Town of East Fremantle
Coastal Hazard Risk Management and Adaptation Plan (CHRMAP)
16 February 2024 | 13668.101.R8.Rev1
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Town of East Fremantle

Coastal Hazard Risk Management and Adaptation Plan (CHRMAP)

Prepared for:

TOWN of EAST FREMANTLE

Town Hall
135 Canning Highway
East Fremantle
PO Box 1097
Fremantle 6158

Prepared by:

Baird. Innovation Engineered.

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13668.101.R8.Rev1

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Revision	Date	Status	Comments	Prepared	Reviewed	Approved
RevA	29/9/23	Draft	Issued for Stakeholder Review	JC	RW	JC
Rev0	30/11/23	Final	Issued for general release	JC	RW	JC
Rev1	16/2/24	Final	Issued Final	JC	RW	JC

Acknowledgement of Country

The Town of East Fremantle respectfully acknowledges the Whadjuk people of Nyoongar Nation, the traditional owners and custodians of this land, and we pay our respects to Elders past and present. The Town of East Fremantle is committed to building a deeper level of understanding and respect for all Aboriginal and Torres Strait Islander peoples as we continue on our journey of conciliation.

Executive Summary

The Town of East Fremantle (the Town) is undertaking a Coastal Hazard Risk Management and Adaptation Planning (CHRMAP) project to develop a greater understanding of its river areas and support its future coastal management and planning decisions. The purpose of the CHRMAP is to identify coastal hazards (eg erosion and inundation) in the Town and to provide a framework for adaptation that can guide decision making in the short to medium term (next 10-20 years) and provide management and adaptation strategies to mitigate hazard in future planning periods (next 100 years).

The study area encompasses all of the East Fremantle foreshore area and is considered in three distinct shoreline management units (SMU) as shown in Figure E.1 termed:

1. Walled Zone – East Street to Niergarup Reserve (Leeuwin Boat Ramp)
2. Reclaimed Zone – Niergarup Reserve (Leeuwin Boat Ramp) to W Wayman Reserve eastern end
3. Natural Zone – W Wayman Reserve to Petra Street

The CHRMAP has been developed under WAPC (2019) guidelines with input from stakeholders and the local community. A Steering Group was appointed to review project milestones and technical deliverables with representatives from the Town, Department of Planning, Lands & Heritage (DPLH), Department of Transport (DoT), Department of Water and Environmental Regulation (DWER) and Department of Biodiversity, Conservation and Attractions (DBCA). A Community and Stakeholder Engagement Plan (CSEP) was prepared to guide the engagement process and ensure that the community and stakeholders were effectively and actively involved in the CHRMAP preparation. A range of engagement activities were delivered during the project including information sessions, workshops a survey and meetings with the Community and Business reference group (CBRG).

A Coastal Hazard Assessment (CHA) was completed for the study area (Baird 2023) in accordance with the requirements of the State Coastal Planning Policy, State Planning Policy 2.6 (SPP2.6). The CHA has provided mapping of coastal hazard to assess the impact of erosion and inundation on coastal assets in current and future planning periods in the CHRMAP. The planning timeframes examined in the hazard assessment 2025, 2035, 2050, 2075 and 2125 and these are carried into the CHRMAP. Sea level rise is incorporated into the hazard assessment. The sea level rise allowance is applied across the planning timeframes based on projection of +1.05m increase in sea level by the year 2125. Mapping of the coastal erosion hazard across the planning timeframes is presented with existing control structures maintained to their present function and with structures removed (Appendix B). Flood mapping associated with the SPP2.6 extreme 500-yr return period storm (S4) is shown in Appendix C.

Coastal asset types through the study area have been identified in the general categories of Social, Economic, Environmental and Heritage and Culture assets. Stakeholder views captured through the community engagement activities (Appendix A) have been used to define the coastal asset function, service and values.

The risk assessment framework for the project has been developed based on WAPC (2019) and considers the impact to coastal assets in the shoreline areas based on the projected coastal hazard in the present and future timeframes (2025, 2035, 2050, 2075 and 2125). The framework assesses likelihood and consequence of coastal hazard impacts and considers the adaptive capacity of the respective coastal assets.

The level of coastal hazard risk for the coastal assets through the study area is generally low for the present day, however this risk is projected to increase associated with sea level rise in future years.

Figure E.1: Shoreline Management Units for the CHRMAP project. The Walled Zone, Reclaimed Zone and Natural Zone.

Residual risk and priority assets for risk treatment are presented in Section 11 of the report for each SMU, summarised as follows:

1. In the Walled Zone the continuous shoreline protection along the shoreline of the Walled Zone is assumed to be maintained in future years and assumed to continue to provide erosion protection afforded to the coastal assets presently. The Marine Education boatshed is rated as Highly vulnerable in 2035 and Extreme in the 2075 period. The risk from inundation for the Carpark at the Dome Café is rated as Highly vulnerable by 2050. Riverside Road is rated as Highly vulnerable by 2125.
2. In the Reclaimed Zone the areas of focus are the natural shorelines without any current erosion protection. This includes the beach at Niergarup Reserve, Norm Mckenzie and W Wayman Reserve foreshore reserves and coastal pathways which are all rated as Highly vulnerable to erosion in 2035. The 8 Knots Tavern is rated at Highly vulnerable to inundation in 2035 and Extreme in 2050. The buildings of the Navy cadets, Cool Beans café and Rowing Club are all rated as Highly Vulnerable to inundation in 2075. Riverside Road is rated as Highly vulnerable to inundation in 2075. There are six carparks around the area which are rated as Highly vulnerable from 2075 onwards. At the 2075 to 2125 planning timeframe the sea level rise projections of +0.5m to +1.05m lead to many assets becoming Highly vulnerable or Extremely vulnerable.
3. In the Natural Zone The foreshore, beach and stairs at the base of Jerrat Drive are rated as Highly vulnerable to erosion by 2035. For inundation the buildings at the Sea Scouts and East Fremantle Yacht Club and the lower carpark areas at the East Fremantle Yacht Club are rated Highly vulnerable in 2075

The Swan and Canning Rivers Management Act 2006 (SCRM Act) makes provision for the protection of the Swan and Canning Rivers to ensure ecological values and community benefits are maintained. Under the SCRM Act, the Swan Canning Development Control Area (DCA) has been established which covers the land and waters adjacent the Swan River in the study area. The DBCA, SRT, WAPC and State and local governments are responsible for the effective planning and management of land use and development within, abutting and affecting the waters and associated land within the DCA, at all stages of the planning process.

The DCA covers the majority of the shoreline area affected by coastal hazard in the study area, with the DBCA the key decision maker. A discussion with representatives from the DBCA regarding adaptation approaches was undertaken which provided the following guidance:

For the Walled Zone

- Maintaining shoreline revetments and riverwalls to ensure the protection of Riverside Road and raising the height at shoreline in response to future sea level rise needs to be done in balance with the viability of the road over the long term. In this CHRMAP, maintaining the current extent of river walls to provide protection to the foreshore and Riverside Road has been adopted.
- Under projected sea level rise the inundation hazard for Riverside Road will increase in extreme events in the future. At present the risk is manageable. At the time when sea level rise of approximately 0.5m to 1m above the present-day level is realised (projected to be in the 2075 to 2125 period) the risk management will be more difficult (expensive). The coastal hazard risk to Riverside Drive and the foreshore area will be reviewed in future revisions of the CHRMAP.

Within the Reclaimed Zone

- there is presently 'hard engineering' river walls and revetments that offer protection; however, it is not a given that this type of foreshore edge treatment will continue to be used in the future. As the infrastructure ages in the shoreline areas there will need to be consideration and discussion on what is appropriate in terms of replacement. The intention will be to deliver an outcome that satisfies the community need whilst being environmentally sensitive. For the Reclaimed Zone, using fill in the

foreshore areas to address inundation risk is not supported. There may be nature-based options or engineering alternatives that are yet to emerge that could provide the right solution.

- In future there may be a point where it becomes too difficult and expensive to provide protection to the shoreline areas from erosion and inundation hazard (with rising sea level) and planning the process of Managed Retreat may be required. A future scenario could be to retreat the foreshore areas back to Riverside Road and use this as the interface to the shoreline, due to the land levels being generally higher from this section landward.
- For the foreseeable future the Leeuwin Barracks site will remain under the ownership of the Department of Defence. Any changes to the use of the site with regard to residential development would need to consider the coastal hazard from the CHRMAP.

Within the Natural Zone

- For the Jerrat Drive escarpment section of foreshore, this is highly regarded as a key coastal asset for the Community as a site of recreation and environmental importance. Further understanding of the processes driving changes in this area is required – assessment of the present state of the foreshore (vegetation cover, habitat, drainage, underscoring at the shoreline and tree loss) and development and update to the existing foreshore management plan to guide future actions is considered a priority of the CHRMAP.

For areas outside of the DCA, the Town would be responsible for planning controls to manage coastal hazard risk. A detailed review of the planning controls applicable to land use and development within the Town was completed (Section 10.2). Based on the review, the use of Local Structure Plans, a Special Control Area (SCA) within the local planning scheme (LPS 3) and a CHRMAP Local Planning Policy (LPP) are recommended.

A multi-criteria analysis (MCA) of adaptation options and an economic analysis of assets in the reclaimed Zone was completed to support decision making. The MCA incorporates community and stakeholder feedback gained through the engagement process. The outcomes are used to inform selection of adaptation pathways in future planning periods for each of the SMU. The economic analysis in the Reclaimed Zone evaluates impacts from inundation hazard associated with projected sea level rise, using the value of assets to assist in understanding the economic costs of a Managed Retreat approach. The results provide a preliminary estimate of the magnitude of the economic cost of sea level rise and timing of asset loss within the Reclaimed Zone. The total undiscounted cost of sea level rise on the Reclaimed Zone is conservatively estimated at $46.2 million. The economic analysis has been used to inform selection of adaptation pathways in future planning periods for each of the SMU in Section 15. The pathways and triggers are summarised across the planning timeframes present to 2035, 2035 to 2050, 2050 to 2075 and 2075 to 2125.

The recommendations in this CHRMAP include:

- Avoid development on land within the erosion hazard area over the 100-year planning period.
- Accommodate coastal hazard risk from inundation to commercial and habitable buildings through improved building design and the use of planning controls (minimum floor levels).
- Accommodate coastal hazard risk to infrastructure in the foreshore areas until such time that a managed retreat pathway may be required, as a result of sea level rise.
- Protect foreshore area and assets landward in the Walled Zone from erosion through maintaining present riverwalls and revetments.
- Accommodate flood risk to Riverside Road through periodic incremental raising of the road level in accordance with the rate of sea level rise and general road upgrade / maintenance schedule.
- Implement nature-based solutions to provide resilience to shorelines including Niergarup Reserve, Jerrat Drive foreshore, John Tonkin Reserve, supported through grant funding and local volunteer groups.

- For the Reclaimed Zone, the short to medium term adaptation pathway is to maintain existing erosion protection along the foreshore areas through traditional 'hard engineering' methods currently in place - river walls, revetments and detached groynes. Examine alternative methods of protection that can be achieved through other 'soft engineering' methods (eg Nature Based Solutions) and look for opportunities to implement as part of the asset replacement lifecycle.
- For the Reclaimed Zone the long-term adaptation pathway is expected to require a managed retreat approach, triggered by the difficulty and cost of mitigating inundation hazard with projected sea level rise of 1.05m in the 100-yr planning period. This scenario is driven by future sea level rise where the current foreshore areas are inundated regularly in the general tides and it is too difficult and/or expensive to maintain the current extent of the foreshore. There is a general presumption against using fill in the foreshore areas to address inundation risk.
- A future scenario of Managed Retreat of the foreshore area and associated infrastructure along the Reclaimed Zone should consider retreat to the area landward of Riverside Road. This decision is contingent on the future of the Leeuwin Barracks site and potential for land being made available.
- If there is a future change in the land use at the Leeuwin Barracks site to redevelop the location for residential and commercial property, then this would need to address the risk from erosion and inundation across the 100-years planning timeframe through planning-based approaches.
- For the shoreline area at the base of the Jerrat Drive escarpment use of nature-based solutions to increase resilience of the shoreline area.
- Update foreshore management plans for the Town's foreshore areas. Foreshore management plans can be a key tool for communication and engagement with the community as they include detailed planning for community places and facilities. They provide a strategy to deliver the recommendations of this CHRMAP for foreshore reserves throughout the Town.

Long term adaptation pathways for the key at risk assets identified in each of the SMU are summarised in Table E.1 for the Walled Zone, Table E.2 for the Reclaimed Zone and Table E.3 for the Natural Zone.

The colour legend in the table is based on the general adaptation categories in the table on the right. Sea level rise plays a key role in triggering actions on the adaptation pathways, and the projections associated with each planning period are noted at the top of the table.

Avoid
Planned or Managed Retreat
Accommodate
Protect
No Regrets
Do Nothing

Table E.1: Risk management pathway and triggers for the Walled Zone (SMU1)

Planning Timeframe	Now – 2035	2035 - 2050	2050 - 2075	2075 - 2125
Sea Level Rise projection. End of period	0.1m	0.2m	0.5m	1.05m
Assets	Foreshore Areas and All Assets Landward – Erosion Hazard			
Pathway	Protect against Erosion Hazard using Riverwalls and Revetments (Pr.4)			
Pathway	Protection Structure Audits (NR.4)			
Assets	Carparks and Coastal Pathway – Inundation Hazard			

Planning Timeframe	Now – 2035	2035 - 2050	2050 - 2075	2075 - 2125
Pathway	Accommodate inundation hazard. • Design to withstand impacts (AC2) • Raise level in step with SLR (AC3)			Managed Retreat Remove and relocate the assets at a distance appropriate for the asset design life / lifecycle (MR1, MR2).
Trigger	T4 - Asset lies seaward of the most up to date 100-year coastal erosion hazard line or coastal inundation hazard extent			T5: Damaged/ unsafe T6: Highly Vulnerable T7: Lack public support T9: Economic feasibility
Assets	**Riverside Road – Inundation Hazard**			
Pathway	Accommodate inundation hazard. • Design to withstand impacts (AC2) • Raise surface level in step with SLR (AC3)			
Trigger	T4 - Asset lies seaward of the most up to date 100-year coastal inundation hazard extent			
Pathway	Develop emergency planning for use of Riverside Road in extreme events (NR.4)			
Assets	**Residential Properties (Riverside Road near Pier St and East St). Inundation Hazard**			
Pathway	Accommodate Inundation (Ac.1, Ac.2, Ac.3, Ac.4) • Amend local planning scheme to include Special Control Area which encompasses all areas affected by either erosion or inundation hazard over the 100-year planning period. • Establish planning-based controls that only allow development in the SCA that can address coastal hazard.			
Trigger	Property lies seaward of 100-year planning period erosion and/or inundation extent (T4,T10)			
Assets	**Dome Café and Marine Education Boatshed. Inundation Hazard**			
Pathway	Accommodate inundation hazard. • Design to withstand impacts (AC2) • Raise floor level in step with SLR (AC3)		Managed Retreat Remove and relocate the assets (MR1, MR2).	
Trigger	Property lies seaward of 100-year planning period erosion and/or inundation extent (T4)		T5: Damaged/ unsafe T6: Highly Vulnerable T9: Economic feasibility	
Assets	**Minor Infrastructure – Inundation Hazard**			
Pathway	Accommodate inundation hazard. • Design to withstand impacts (AC2)		Managed Retreat	

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Planning Timeframe	Now – 2035	2035 - 2050	2050 - 2075	2075 - 2125
			Remove and relocate the assets at a distance appropriate for the asset design life / lifecycle (MR1, MR2).	
Trigger	T4 - Asset lies seaward of the most up to date 100-year coastal erosion hazard line or coastal inundation hazard extent		T5: Damaged/ unsafe T6: Highly Vulnerable Next 10-yrs T9: Economic feasibility	

Table E.2 Risk management pathway and triggers for the Reclaimed Zone (SMU2)

Planning Timeframe	Now – 2035	2035 - 2050	2050 - 2075	2075 - 2125
Sea Level Rise projection. End of period	**0.1m**	**0.2m**	**0.5m**	**1.05m**
Assets	**Foreshore Areas and All Assets Landward – Erosion Hazard**			
Pathway	Protect against Erosion Hazard using offshore detached groyne field, riverwalls and revetments (Pr.4) where currently in use. Apply Nature based solutions (Pr.2) to areas that are currently unprotected			Managed Retreat Remove and relocate the assets at a distance appropriate for the asset design life / lifecycle (MR1, MR2).
Pathway	Protection Structure Audits (NR.4)			T9: Economic feasibility
Assets	**Carparks and Coastal Pathway – Inundation Hazard**			
Pathway	Accommodate inundation hazard. • Design to withstand impacts (AC2) • Raise level in step with SLR (AC3)			Managed Retreat Remove and relocate the assets at a distance appropriate for the asset design life / lifecycle (MR1, MR2).
Trigger	T4 - Asset lies seaward of the most up to date 100-year coastal erosion hazard line or coastal inundation hazard extent			T5: Damaged/ unsafe T6: Highly Vulnerable T7: Lack public support T9: Economic feasibility

Planning Timeframe	Now – 2035	2035 - 2050	2050 - 2075	2075 - 2125
Assets	**Riverside Road – Inundation Hazard**			
Pathway	Accommodate inundation hazard. • Design to withstand impacts (AC2) • Raise surface level in step with SLR (AC3)			
Trigger	T4 - Asset lies seaward of the most up to date 100-year coastal inundation hazard extent			
Pathway	Develop emergency planning for use of Riverside Road in extreme events (NR.4)			
Assets	**Commercial Properties - Inundation Hazard**			
Pathway	Accommodate Inundation (Ac.1, Ac.2, Ac.3, Ac.4) • Amend local planning scheme to include Special Control Area which encompasses all areas affected by either erosion of inundation hazard over the 100-year planning period. • Establish planning-based controls that only allow development that can address coastal hazard.			
Trigger	Property lies seaward of 100-year planning period erosion and/or inundation extent (T4,T10)			
Assets	**Minor Infrastructure – Inundation Hazard**			
Pathway	Accommodate inundation hazard. • Design to withstand impacts (AC2)		Managed Retreat Remove and relocate the assets at a distance appropriate for the asset design life / lifecycle (MR1, MR2).	
Trigger	T4 - Asset lies seaward of the most up to date 100-year coastal erosion hazard line or coastal inundation hazard extent		T5: Damaged/ unsafe T6: Highly Vulnerable Next 10-yrs T9: Economic feasibility	

Table E.3: Risk management pathway and triggers for the Natural Zone (SMU3)

Planning Timeframe	Now – 2035	2035 - 2050	2050 - 2075	2075 - 2125
Sea Level Rise projection. End of period	0.1m	0.2m	0.5m	1.05m
Assets	**Foreshore Areas - East Fremantle Yacht Club and Sea Scouts – Erosion Hazard**			
Pathway	Protect against Erosion Hazard using Riverwalls and Revetments (Pr.4)			
Pathway	Protection Structure Audits (NR.4)			
Assets	**Jerrat Drive Escarpment Foreshore Area – Erosion Hazard**			
Pathway	Protect against Erosion Hazard using Nature Based Solutions (Pr.2)			
Pathway	Shoreline Monitoring (NR.1)			
Assets	**Carparks and Coastal Pathway adjacent East Fremantle Yacht Club – Inundation Hazard**			
Pathway	Accommodate inundation hazard. • Design to withstand impacts (AC2) • Raise level in step with SLR (AC3)			Managed Retreat Remove and relocate the assets at a distance appropriate for the asset design life / lifecycle (MR1, MR2).
Trigger	T4 - Asset lies seaward of the most up to date 100-year coastal erosion hazard line or coastal inundation hazard extent			T5: Damaged/ unsafe T6: Highly Vulnerable T7: Lack public support T9: Economic feasibility
Assets	**Sea Scouts Building and East Fremantle Yacht Club Building - Inundation**			
Pathway	Accommodate Inundation (Ac.1, Ac.2, Ac.3, Ac.4) • Amend local planning scheme to include Special Control Area which encompasses all areas affected by either erosion of inundation hazard over the 100-year planning period. • Establish planning-based controls that only allow development in the SCA that can address coastal hazard.			

Planning Timeframe	Now – 2035	2035 - 2050	2050 - 2075	2075 - 2125
Trigger	Property lies seaward of 100-year planning period erosion and/or inundation extent (T4,T10)			
Assets	**Minor Infrastructure – Inundation Hazard**			
Pathway	Accommodate inundation hazard. • Design to withstand impacts (AC2)		Managed Retreat Remove and relocate the assets at a distance appropriate for the asset design life / lifecycle (MR1, MR2).	
Trigger	T4 - Asset lies seaward of the most up to date 100-year coastal erosion hazard line or coastal inundation hazard extent		T5: Damaged/ unsafe T6: Highly Vulnerable Next 10-yrs T9: Economic feasibility	

In Section 17 of the report the short-term implementation actions over the period to 2035 are presented which include recommendations for:

1. Planning Actions;
2. Annual Monitoring Program;
3. Additional Technical Studies; and
4. Adaptation Actions in Shoreline Areas.

It is recommended that an annual monitoring program commence following the adoption of the CHRMAP. This will be used to support the CHRMAP and to further develop the understanding of the shoreline dynamics in the key locations where the risk from erosion and / or inundation has been identified. The annual monitoring report will combine desktop analysis with collection of locally captured data from:

- Photo Monitoring.
- Capture of survey and aerial oblique photos using unmanned aerial vehicle (UAV).

The monitoring program would be used to target key locations in the Town's shoreline areas to improve understanding of coastal erosion and inundation impacts in the coming years. It will also provide the mechanism to assess where established triggers are being approached, to provide early indication of a change in management.

The cost for the monitoring activities is estimated at approximately $15,500 (ex GST) annually, with a five-year total of $77,500 ex GST. Co-funding of up to 50% of the cost of the program could be made available if the Town is successful in grant funding opportunities outlined in Section 19.

In conjunction with annual monitoring activities, a general review of the CHRMAP approximately every 5-years would be used to implement the findings from the monitoring program and address updates to the CHRMAP recommendations where required.

The following technical studies and planning based studies are recommended over the short term (by 2035):

- Jerrat Drive escarpment foreshore stability study.
- Catchment based flooding study based on the existing stormwater network.
- Study to determine appropriate Nature Based Solutions for target shoreline areas.

- Update and implement actions in the Foreshore Management Plan.
- Update to Emergency Response and Evacuation Plan.

Adaptation options for implementation of nature-based solutions are recommended over the next 10-years to improve the resilience of the natural shoreline areas through the Reclaimed Zone and the Natural Zone. The selection of nature-based solutions is supported by the outcomes of the MCA, discussion with DBCA and the community engagement.

Budget estimates for the short-term implementation actions for the period over the first 5-years 2024 to 2028 inclusive is estimated at $427,500. This is comprised annual monitoring, technical studies and planning studies and funding for nature-based adaptation approaches.

The implementation budget over the 12-year short-term period from 2024 to 2035 is estimated at approximately $596,000. This will cover the cost of annual monitoring, complete the additional technical / planning studies recommended including two reviews of the CHRMAP (2028, 2033) and undertake nature-based work in the shoreline areas. All figures quoted are order of magnitude estimates and are excluding GST.

The grant funding options that can support the funding of coastal management activities is summarised in Section 18. These funding mechanisms generally require a co-funded approach whereby 50% of the funding which is matched.

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Figures

1. Introduction

1.1 Introduction

The Town is developing a Coastal Hazard Risk Management and Adaptation Plan (CHRMAP) for the shoreline areas along the edge of the Swan River. The CHRMAP is being prepared based upon the understanding of coastal hazard risk (eg inundation and erosion) over the next 100-year planning timeframe and the coastal values held by the community for both natural and built assets along the foreshore area.

The objectives of the CHRMAP are to:

- improve understanding of coastal and riverine features, processes and hazards in the study area;
- identify significant vulnerability trigger points and respective timeframes to mark the need for immediate or medium-term risk management measures;
- identify assets (natural and man-made) and the services and functions they provide situated in the coastal zone;
- gain an understanding of asset vulnerability;
- identify the value of the assets that are vulnerable to adverse impacts from coastal hazards;
- determine the consequence and likelihood of coastal hazards on the assets, and assign a level of risk;
- identify possible (effective) risk management measures (or 'actions') and how these can be incorporated into short and longer-term decision-making; and
- engage stakeholders and the community in the planning and decision-making process.

The Western Australian Government has accepted that climate change and sea level rise are issues that will affect the State in the coming century and an allowance for sea level rise must be adopted for coastal planning purposes. For the current study, an allowance of +1.05m over the next 100-yrs has been adopted. The projected sea level rise in the coming century is expected to increase the vulnerability of assets in the Town to coastal hazards such as inundation and erosion.

In accordance with Western Australia's State Planning Policy 2.6 – State Coastal Planning Policy (SPP2.6), coastal areas (including tidally influenced riverine areas) identified as being at risk of coastal hazard require coastal hazard risk management and adaptation planning (CHRMAP). The CHRMAP process is a risk-based approach to ensure that the coastal hazard is factored into decision-making for future planning requirements and has been established in Western Australia for the past decade, with guidelines published by the Department of Planning, Lands and Heritage (DPLH, WAPC 2019). Ultimately, the CHRMAP will provide strategic guidance for coordinated, integrated and sustainable land use planning and management decision-making by the Town. The CHRMAP will also guide necessary changes to the Local Planning Strategy, Local Planning Scheme No. 3 and other relevant strategies and local planning policies.

1.2 Study Location

The subject site is located on Whadjuk Nyoongar land with the focus of the study on a section of the Swan River approximately 3.5km in length, that lies between Petra Street to the north-east and East Street to the south (Figure 1.1). Bordered by the residential suburb of East Fremantle, the subject site has interactions with many landmarks and recreational features including the John Tonkin Reserve, Swan Yacht Club, East Fremantle Yacht Club, several outdoor sporting grounds, hospitality venues and several boat moorings and jetties. The significant Leeuwin Barracks site (closed to the general public) is a nearby land area

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Figure 1.1: Study Area for the Town of East Fremantle CHRMAP project

currently undergoing consideration for a divestment process by Department of Defence, should the land no longer be required for Defence purposes.

1.3 Project Delivery

The CHRMAP project has been developed in consultation with the Town, the local community and a range of stakeholders, and is delivered in accordance with local and national guidelines and standards (WAPC 2019, AS5334-2013).

The CHRMAP examines erosion and inundation within the study area to understand coastal hazard risk presently affecting the river shoreline areas, and the impacts forecast over the next 100 years (to 2125) under projected sea level rise.

A coastal hazard study to determine coastal erosion and coastal inundation hazard informs the CHRMAP and was completed in accordance with SPP2.6 requirements (Baird 2022). A range of planning timeframes are considered over future planning periods (2025, 2035, 2050, 2075, 2125) with erosion and inundation outcomes presented based on these timeframes.

Community Engagement activities have supported the project delivery, with the aim of developing the understanding of the project within the community and fostering local input to the CHRMAP process. The process with stakeholders and community sought engagement on:

- Potential risks arising from hazards in the river shoreline areas;
- Key shoreline infrastructure and assets at risk within these areas;
- Community and cultural values within these areas; and
- Adaptation pathways and management options that the Town and other stakeholders can pursue to address the risks from coastal hazard over time.

The CHRMAP has been developed in a manner consistent with the views of the stakeholders and community. Identification of adaptation pathways and management options were guided by an economic assessment of alternatives, with the options presented to the community and stakeholders for discussion and approval.

1.4 Project Team

The Town is the key Client, with a project team appointed to work with the multi-disciplinary consultant team composed of:

- Baird Australia (Coastal Hazard Risk and Adaptation Planning, Lead Consultant);
- element (Statutory and Strategic Planning, Stakeholder and Community Engagement); and
- Rhelm (Economic Analysis).

A 'Steering Group' was appointed to review project milestones and technical deliverables and includes representatives from:

- Town of East Fremantle (ToEF);
- Department of Planning, Lands & Heritage (DPLH);
- Department of Transport (DoT);
- Department of Water and Environmental Regulation (DWER); and
- Department of Biodiversity, Conservation and Attractions (DBCA).

A Community and Business Reference Group (CBRG) was appointed following an Expressions of Interest (EoI) that was advertised in July 2022.

Meetings with the Steering Group and the CBRG have been scheduled as part of the project delivery at key stages.

1.5 Coastal Management Framework in Western Australia

The key documents that guide coastal hazard assessment and coastal planning in Western Australia are:

1. State Planning Policy No. 2.6, State Coastal Planning Policy (SPP2.6, WAPC 2013).
2. Coastal Hazard Risk Management and Adaptation Planning Guidelines (CHRMAP guidelines, WAPC 2019).
3. State Coastal Planning Guidelines (WAPC 2020).

The purpose of these documents and their application in this project is discussed briefly in this section.

1.5.1 State Coastal Planning Policy (SPP2.6)

SPP2.6 draws on and is supported by several WAPC state planning policies, development control policies and guidelines relevant to the coastal zone. For coastal matters, SPP2.6 is the prevailing policy.

The stated purpose of SPP2.6 is to provide guidance for decision-making within the coastal zone including managing development and land use change, establishment of foreshore reserves, and to protect, conserve and enhance coastal values. This policy recognises and responds to regional diversity in coastal types, requires that coastal hazard risk management and adaptation is appropriately planned for, and encourages innovative approaches to managing coastal hazard risk and provides public ownership of coastal foreshore reserves.

Schedule one of SPP2.6 provides guidance for calculating the component of the coastal foreshore reserve required to allow for coastal processes. The component of the coastal foreshore reserve to allow for coastal processes should be sufficient to mitigate the impacts of coastal hazards (including erosion and inundation). An appropriate coastal foreshore reserve will include a component to allow for coastal processes and be of an appropriate width to ensure a coastal foreshore reserve continues to provide the values, functions and uses prescribed to it should the adverse impact of coastal processes be realised over the planning timeframe.

It is recognised that development may need to occur within an area identified to be potentially impacted by physical coastal processes within the planning time frame. Such development should always be considered within a coastal hazard risk management and adaptation planning process (CHRMAP).

1.5.2 Coastal Hazard Risk Management and Adaptation Planning Guidelines

Coastal areas identified as at risk of being affected by coastal hazards require a CHRMAP to address this coastal hazard. A CHRMAP provides a risk management approach to decision making in the coastal zone, which assesses the risk to assets in the coastal zone for current and future planning periods, through consideration of the likelihood and consequence of coastal hazard impact.

The CHRMAP process is developed in consultation with community members and a range of stakeholders and in accordance with SPP2.6 requirements, WAPC guidelines and relevant Australian Standards (AS5334-2013). It is not a one-off linear process, but a continual cyclical process. Ongoing review is essential to ensure that the management plan remains relevant. Factors that may affect the likelihood and consequences of an outcome may change, as may the factors that affect the suitability or cost of the treatment options. It is therefore necessary to repeat the risk management cycle regularly.

1.5.3 State Coastal Planning Guidelines

These guidelines assist the interpretation and practical application of SPP 2.6 and provide information for decision-making authorities, planners, landowners, proponents, and referral agencies to achieve the SPP 2.6 objectives and implement the SPP 2.6 measures.

These guidelines provide detail on how land use and development is to be addressed when planning, designing and assessing a proposal in the coastal zone.

1.6 Scope – Project Stages

The seven stages that make up the CHRMAP project are shown in Figure 1.2 and the tasks within each of the stages outlined in Table 1.1. After each stage, a Chapter Report was issued for review by the steering committee and key findings shared with the CBRG.

Table 1.1: CHRMAP Project Stages and Tasks

Stage	Tasks
Stage 1 – Establish the Context	• Task 1 – Establish the Context Report Chapter • Task 2 – Develop Stakeholder and Community Engagement Plan • Task 3 – Undertake Coastal Values Assessment
Stage 2 – Risk Identification	• Task 4 – Coastal Hazard Assessment • Task 5 – Asset Identification
Stage 3 – Vulnerability Analysis	• Task 6 – Develop Likelihood and Consequence Scales • Task 7 – Develop Level of Risk Matrix and Risk Tolerance Scale • Task 8 – Adaptive Capacity and Asset Vulnerability
Stage 4 – Risk Evaluation	• Task 9 – Existing Controls • Task 10 – Priorities for Risk Treatment
Stage 5 – Risk Treatment	• Task 11 – Identify Risk Treatment Options • Task 12 – Multi-Criteria Analysis • Task 13 – Cost Benefit Analysis • Task 14 – Benefit Distribution Analysis • Task 15 – Identification of Long-Term Adaptation Pathways
Stage 6 – Implementation Plan	• Task 16 – Short Term Implementation Plan • Task 17 – Medium and Long-term Implementation Plan • Task 18 – Land Use Planning, Local Laws and other relevant Instruments • Task 19 – Funding

Stage	Tasks
Stage 7 – Monitoring Reporting and Review	• Task 20 – Monitoring and Reporting Plan
Final CHRMAP	• Task 21 – Draft CHRMAP • Task 22 – Review of draft CHRMAP • Task 23 – Preparation of Final Draft CHRMAP and Public Comment • Task 24 – Finalisation of CHRMAP

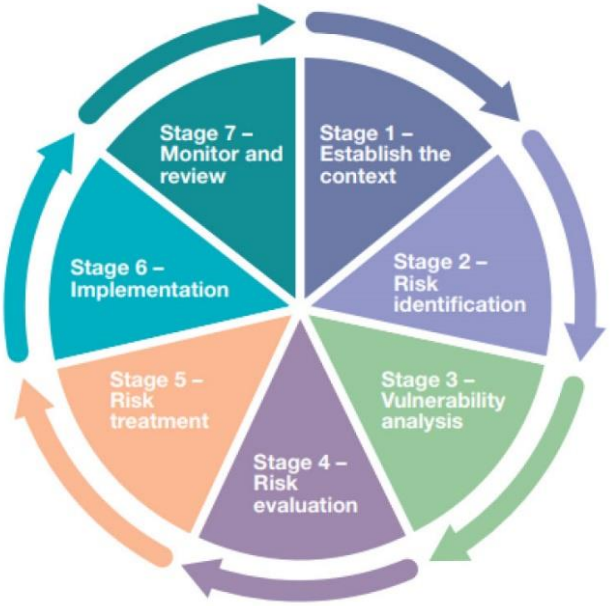

Figure 1.2: CHRMAP Stages (WAPC 2019)

2. Establish the Context

2.1 Background

The Town has a population of approximately 8,000 people and is bounded to the north and west by the Swan River. The river shorelines host a variety of uses including hospitality venues, sporting clubs, parks and recreational facilities and are highly valued by the local community and visitors alike.

Through its recently endorsed *Climate Emergency Action Plan 2023-2033*, the Town has acknowledged that we are living in a time of a Climate Emergency and need to urgently reduce or limit emissions to avoid potentially irreversible warming and environmental damage. Climate change, including rising sea levels, is predicted to increase the level of erosion of sandy coastlines and inundation (flooding) of low-lying areas, including the East Fremantle Foreshore.

In recent years the foreshore has experienced an increase in flood events and inundation within the study area, further highlighting the need for the Town, alongside the community, to consider how to mitigate these hazards. These coastal assets, including recreational spaces, businesses and environmental assets, will face increased pressure in the future from the effects of human and environmental events. Governments at all levels and private parties (individuals, businesses and the community) each have important, complementary and differentiated roles in managing risk arising from coastal hazards.

2.2 Purpose

The purpose of the CHRMAP is to identify coastal hazards in the Town and to provide a framework for adaptation that can guide decision making in the short to medium term (next 10-20 years) and provide management and adaptation strategies to mitigate hazard in future planning periods (next 100 years).

2.3 Objectives

The objectives of the CHRMAP are to:

- improve understanding of shoreline features, natural processes and hazards in the study area;
- identify significant vulnerability trigger points and respective timeframes to mark the need for immediate or medium-term risk management measures;
- identify assets (natural and man-made) and the services and functions they provide situated in the river shorelines;
- gain an understanding of asset vulnerability;
- identify the value of the assets that are vulnerable to adverse impacts from hazards;
- determine the consequence and likelihood of hazards on the assets, and assign a level of risk;
- identify possible (effective) risk management measures (or 'actions') and how these can be incorporated into short and longer-term decision-making; and
- engage stakeholders and the community in the planning and decision-making process.

The project objectives are consistent with SPP2.6 and the Western Australian Planning Commission (WAPC) CHRMAP Guidelines (WAPC 2019).

2.4 Study Area – Shoreline Management Units

The study area is considered in three distinct shoreline management units (SMU), as shown in Figure 2.1. These are consistent with the zones identified in the Town's Foreshore Master Plan (Ecoscape 2016) termed:

1. Walled Zone – East Street to Niergarup Reserve (Leeuwin Boat Ramp).
2. Reclaimed Zone – Niergarup Reserve (Leeuwin Boat Ramp) to W Wayman Reserve eastern end.
3. Natural Zone – W Wayman Reserve to Petra Street.

Figure 2.1: Shoreline Management Units for the CHRMAP project (SMU). Walled Zone, Reclaimed Zone and Natural Zone.

3. Community and Stakeholder Engagement

A Community and Stakeholder Engagement Plan (CSEP) was prepared to guide the engagement process and ensure that the community and stakeholders were effectively and actively involved in the CHRMAP preparation process (element 2022a).

3.1 Level of Engagement

The CSEP outlines how the community and stakeholder participation, and engagement process aligns within the inform, consult, involve and collaborate levels of IAP2 Public Participation Spectrum. The goals of each level of engagement are described in Table 3.1.

Table 3.1: Levels of Engagement for the Project (based on IAP2 Public Participation Spectrum)

Level	Inform	Consult	Involve	Collaborate	Empower
Goal	To provide balanced and objective information in a timely manner.	To obtain feedback on analysis, issues, alternatives, and decisions.	To work with the public to make sure that concerns and aspirations are considered and understood.	To partner with the public in each aspect of the decision making	To place final decision-making in the hands of the public.
Promise	We will keep you informed.	We will listen to and acknowledge your concerns.	We will work with you to ensure your concerns and aspirations are directly reflected in the decisions made.	We will look to you for advice and innovation and incorporate this in decisions as much as possible.	We will implement what you decide.

The engagement objectives and the engagement tools are summarised in the sections that follow based on the information in the CSEP.

3.2 Engagement objectives

The CSEP details the key stages of the project and guides stakeholders and the wider community on the CHRMAP process and their involvement in the determination of the final outcomes. The engagement objectives are to:

- Utilise reliable communication channels to ensure information is shared with interested stakeholders.
- Identify stakeholders and understand the nature of their interest and potential to contribute towards success of the project or otherwise.
- Establish early in the project opportunities to have authentic conversations with people. Particularly those most affected by potential change from future coastal adaptation measures.
- Inform key community member and stakeholders to develop understanding and alignment with the goals of coastal hazard risk assessment within the East Fremantle community.
- Ensure adjacent neighbours (residents and businesses) to the project site are kept informed and are invited to undertake targeted engagement as required, giving sufficient notice to do so.
- Inform, consult and involve the community in identifying suitable adaptation options.

- Collect and collate the community and stakeholders' coastal values and aspirations for the long term.
- Understand the level of tolerance of specific risks within the community for specific assets, or groups of assets.
- Develop a shared vision between the Town, landowners and surrounding community for the future CHRMAP recommendations.

3.3 Engagement Tools

The key engagement methods and activities used during the engagement process outlined in the CSEP are discussed in this section.

Engagement methods included:

- Project Website.
- Project Posters, flyers.
- Project emails.
- Local Media Advertising.

The engagement Activities involved:

- Council / Town staff briefings.
- CBRG meetings.
- Coastal Values Survey.
- Popup Information sessions.
- Community Workshop as part of the George Street Festival 2022.

3.3.1 Online engagement tool – Project Webpage

The project webpage (Figure 3.1) hosted information about the CHRMAP process and project, an up-to-date timeline of project milestones.

Figure 3.1: Project webpage

3.3.2 Community and Business Reference Group

A Community and Business Reference Group (CBRG) was established to meet periodically through the delivery of the CHRMAP. By engaging the local knowledge and insights of the CBRG, the project demonstrates a greater level of transparency, collaboration and willingness to take on board concerns, values and ideas of local businesses and the community, via selected representatives. The CBRG members were selected via an Expression of Interest process which aimed to ensure a diverse mix of local business and community members.

3.3.3 Pop-Up Information Sessions

Two pop-up information sessions were held to introduce the CHRMAP process and provide information about the project including;

- Why does a CHRMAP need to be prepared.
- Outline of foreshore zones to be included in the study.
- Identification of coastal assets.
- Explanation of coastal hazards.

- Overview of management options.

The information sessions were held on Wednesday 31 September 2022 from 5pm to 7pm and 2 October 2022 from 10am to 12pm at the East Fremantle town Hall. The 2 sessions were visited by 14 people who came to view the information and chat to the project team to gather more information about the project.

3.3.4 Coastal values Survey

The Foreshore Values survey was composed of 21 questions and considered the East Fremantle foreshore as three separate zones; the Walled Zone, the Reclaimed Zone and the Natural Zone (refer Figure 2.1). The survey was hosted online via the Town's webpage and was open from 1 August to 6 September 2022. A total of 152 respondents undertook the Foreshore Values survey.

An outline of the questions in the Coastal Values survey is shown in Table 3.2 with results presented in Section 4.

Table 3.2: Foreshore Values Survey - Questions

Number	Question
	About you – Respondent Demographic Information
1	Please tell us your current residential suburb
2	What is your connection to the East Fremantle foreshore project area (between Petra Street and East Street)?
3	Are you of Aboriginal and/or Torres Strait Islander descent?
	CHRMAP Awareness and Interactions with the Foreshore
4	Before taking this survey, how familiar are you with the CHRMAP project currently being undertaken by the Town of East Fremantle?
5	Thinking about your interactions and experiences with the East Fremantle Foreshore (between Petra Street and East Street) what are three words that come to mind?
	Values and Activities
6	Below is a list of values that can apply to a variety of coastline and foreshore environments. Please tell us how important each value is to you in the context of the East Fremantle foreshore.
7	Roughly how close do you live to the East Fremantle Foreshore project area?
8	Please indicate below whether you personally undertake any of these activities and where you undertake them.
	Activities in the Walled Zone
9	How often do you participate in these activities in the Walled Zone?
10	Why do you choose to undertake these activities in the Walled Zone as opposed to other areas? (You may select more than one option)
	Activities in the reclaimed Zone
11	How often do you participate in these activities in the Reclaimed Zone?

Number	Question
12	Why do you choose to undertake these activities in the Reclaimed Zone as opposed to other areas? (You may select more than one option)
	Activities in the Natural Zone
13	How often do you participate in these activities in the Natural Zone?
14	Why do you choose to undertake these activities in the Natural Zone as opposed to other areas? (You may select more than one option)
	Impact of Hazards
15	If you were unable to do these activities along the East Fremantle foreshore, how much would this impact your life?
16	From your experience, within the project area have you noticed any areas along the foreshore that may be affected by, or increasingly impacted by, inundation and/or erosion hazards over the past 5 years. Please tell us more below, including the location/s of concern
	Other demographics and comments
17	Please tell us how you heard about this survey
18	How young are you?
19	What is your gender?
20	Would you like to receive project updates via email?
21	Please let us know if you had any further questions or comments about the project for the CHRMAP Team here:'

4. Coastal Values Assessment

4.1 Coastal Foreshore Survey – Overview of Responses

The foreshore values survey was used to determine the coastal values assessment for the CHRMAP. An overview of the key findings from the survey is presented here.

Respondent summary:

- The majority of respondents were residents from within the Town of East Fremantle (n=101) whilst most of the remaining respondents were from nearby suburbs, particularly Bicton. A smaller number of respondents were from a variety of other metropolitan suburbs.
- Approximately 7% owned property in East Fremantle but did not live in the area, whilst 14.5% worked in East Fremantle. A significant amount attended a sporting or community group (35%) while 65% used the area for recreational purposes.
- Well over half (58%) lived within 1km of the site, while a further (31.5%) lived up to 5km away. The remaining (10.5%) lived more than 5km away.
- The majority of respondents (60%) were over 55 years of age, with 27% aged 35-54 and 10% 34 years or below. Most respondents were male (56%).

When asked about what three words they associated with the East Fremantle foreshore based on their experiences and interactions the survey responses reflected the natural setting, community aspects and recreation activities as captured in word cloud form in Figure 4.1. In summary:

- Almost a quarter of respondents (22%) described the foreshore using beautiful (or beauty). Peaceful/tranquil/serene (15%) and nature/natural (13%) were mentioned often, along with recreation (9%), walking (9%) and relaxing (8%).

Figure 4.1: Perceptions of the foreshore area – word cloud of survey responses

The values and importance question in the survey is summarised in Figure 4.2.

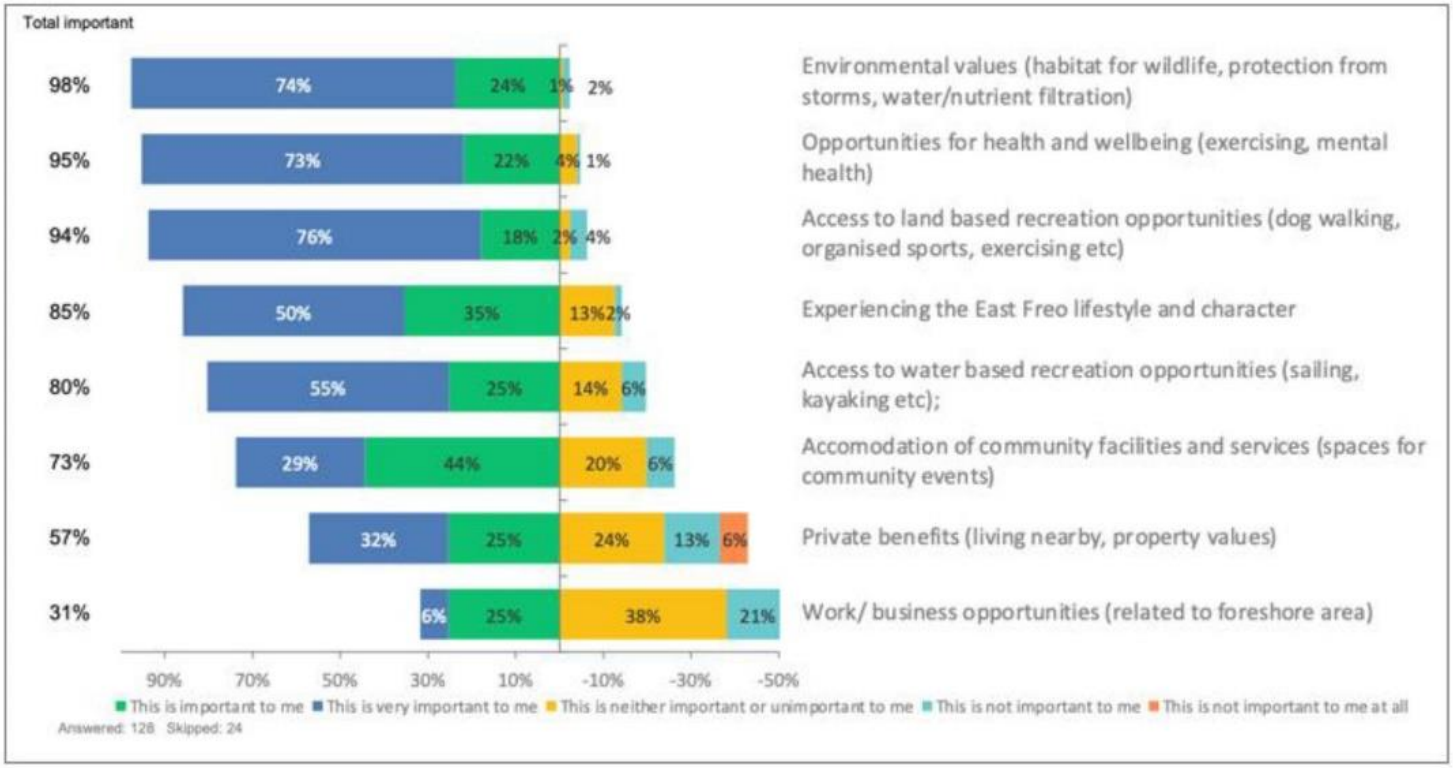

Figure 4.2: Survey Outcomes – Importance and Values

The responses in Figure 4.2 show:

- the Environment as the most highly rated (98% combined importance). Other high rating aspects were 'Opportunities for health & well-being' (95% combined importance) and 'Access to Land-based recreation opportunities' (94% combined importance).
- 'Work/ business opportunities were seen as the least important value (31% overall importance).

The highest ranked types of activities that were cited by respondents using the East Fremantle foreshore were walking, visiting a restaurant or café, being in nature and outdoor socialising/picnics.

There were some differences noted between the zones:

- Outdoor socialising/picnics were more likely to occur in the Reclaimed Zone than other zones (67% vs 48% and 47% for the Reclaimed and Walled Zones)
- Sporting or community group activities were more likely to occur in the Natural Zone than other zones (40% vs 26% and 16% for the Natural and Walled Zones)
- Visiting a restaurant or café were least likely occur in the Natural zone (37% vs 72% and 73% for the Reclaimed and Walled Zones)

The use of the foreshore for activities and the frequency of the usage for various activities indicates the high use of the foreshore for activities such as walking, running, cycling, community activities at least once a week.

For most activities across the zones the most common reasons were 'I live nearby so it is more convenient for me' and 'Proximity to an attractive, natural setting'.

Detailed presentations of the foreshore usage are presented in the Engagement Summary (Appendix A).

A total of 46 responses were received to the question on whether respondents have noticed any areas along the foreshore that may be affected by, or increasingly impacted by, inundation and/or erosion hazards over the past 5 years. Areas most cited in the responses included the walking paths, EFYC, river walls, rowing club foreshore, Zephyrs foreshore and the area near the Dome (carpark).

In summary, the coastal values survey confirms there is a strong connection from the community to the river's foreshore areas. The community value the environment and natural setting very highly and regularly use the foreshore areas for recreation activities, social gatherings and access to the restaurants and cafés.

4.2 Community Workshop – George Street Festival

The annual George Street Festival offered a good opportunity to canvas a broader and greater amount of community members due to good attendance numbers. The George Street Festival is an outdoor event that incorporates the length of George Street. It is a free event that features a range of stalls, music and activities.

The event occurred on the 4 December, 2022 from 11am – 6pm. An East Fremantle CHRMAP stall was set up for the day and a total of 92 people attended the CHRMAP stall. The purpose of the stall was to share information about the CHRMAP and to encourage attendees to participate in activities to identify important community assets, prioritise these assets and understand the preferred adaptation options for them. This also allowed information sharing to occur with community members who were not already aware of the East Fremantle CHRMAP (Figure 4.3).

The utilisation of the George Street Festival to obtain feedback meant that the number of community members exposed to the information and involved in the process was maximised. However, the stall format also meant that the time available to explain the CHRMAP concept and obtain feedback was

reduced in comparison to a workshop. To accommodate this, the tasks that participants undertook were split into two sessions for the day.

The format for activities was tested with the CBRG and the feedback from the group helped to refine the final activities that were undertaken with the community at the 2022 George Street Festival.

Two structured sessions were delivered during the course of the day at the Festival. Display Boards were utilised during the day to provide information about the CHRMAP, outline the instructions for the activities and gather feedback from the community.

Session One: Coastal Assets Identification and Prioritisation

- The tasks that occurred during session one were undertaken between 11am – 2.30pm. These tasks required participants to identify the assets along the foreshore that were of importance to them by placing 3 dots on the maps displayed to indicate their top 3 assets. (Participants from session 2 of the day were also asked to provide input for this). Participants from session one were also required to state why these assets were important to them.

Session Two: Coastal Asset Adaptation Options

- Session two was undertaken between 2.30pm – 6.00pm. Similarly to session one, participants were required participants to identify the assets along the coast that were of importance to them by placing 3 dots on the maps. Participants were then also asked to decide on the preferred adaptation option for each of their priority assets. Relevant adaptation approaches and examples were shown on Display Boards and each participant had the adaptation options explained to them individually. They then wrote their top three assets on a piece of paper and allocated them to an adaptation option by placing them in the appropriately labelled container. Additional descriptions of the adaptation options were next to the containers for each of the options.

Figure 4.3: Workshop sessions presented as part of the George Street Festival 2022

4.3 Success Criteria

The engagement activities were used to determine the success criteria. Success criteria determine if the objectives of the CHRMAP are achievable and sustainable. The success of the CHRMAP will be determined by the coastal asset(s) continuing to provide their present function, service and values in future.

Based on the coastal values discussed in the previous section the following success criteria have been defined:

1. Ensure the natural environment is protected and sustained in its current condition or an improved condition.
2. Preserve the function and opportunity for land-based health & well-being and recreation activities along the foreshore and access to water-based activities such as walking (the dog), sailing and kayaking.
3. Preserve the existing hospitality and recreation venues along the coastline and access to them.
4. Maintain services that maximise community benefit for all.
5. Consider management and protection of foreshore areas that have current inundation and erosion issues.
6. Develop solutions to riverine processes that are sustainable (financially, socially and built form) and locally responsive.
7. Revisit regularly with community and key stakeholders their values in relation to development adjacent the foreshore.

5. Coastal Hazard Assessment

5.1 Coastal Planning Policy Overview

In accordance with SPP2.6 coastal areas (including tidally influenced riverine areas) identified as being at risk of coastal hazard require a CHRMAP.

A coastal hazard assessment (CHA) was completed for the Town study area in Baird (2023) in accordance with the requirements of SPP2.6. The hazard assessment has defined coastal erosion allowances and inundation associated with extreme flood events across a 100-year planning timeframe with key findings presented in this section.

5.2 Summary - Hazard Assessment

5.2.1 Planning Timeframes and Sea Level Rise Allowances

The planning timeframes that will be adopted in the CHRMAP over the 100-year planning period are 2025 (present day), 2035, 2050, 2075 and 2125. Coastal hazard from erosion and inundation are calculated for each respective timeframe.

The sea level rise recommendations for Western Australia applicable at a planning level are outlined in DoT (2010). Sea level rise must be factored into future coastal planning with vertical sea level rise recommendations from DoT (2010) applied in the current study shown in Table 5.1 and Figure 5.1.

Table 5.1: Sea level rise allowances over the planning timeframe for the CHRMAP study (values rounded to nearest 0.05m).

Planning Year	2025	2035	2050	2075	2125
Sea Level Rise	0m	+0.1m	+0.2m	+0.5m	+1.05m

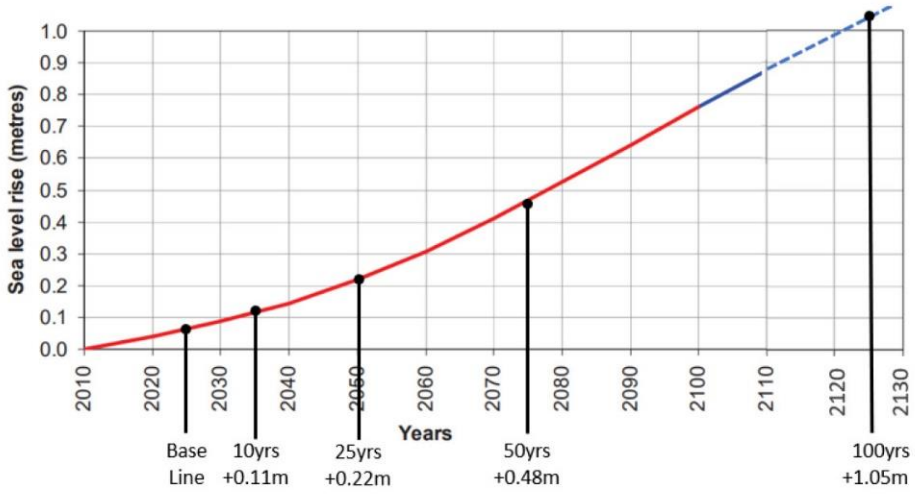

Figure 5.1: Sea level rise recommendation for coastal planning (based on DoT 2010). Graph extended to cover the period to 2125 consistent with the present study.

5.2.2 Study Area – Shoreline Management Units

The study area was considered in three distinct shoreline management units (SMU's) as discussed in Section 2 and presented in Figure 2.1. The SMU are:

1. Walled Zone – East Street to Niergarup Reserve.
2. Reclaimed Zone – Niergarup Reserve to W Wayman Reserve eastern end.
3. Natural Zone – W Wayman Reserve to Petra Street.

The delineation of the SMU's is based on recognising similar shoreline characteristics and features within each respective section. The shoreline areas are consistent with the zones adopted in the Town's Foreshore Master Plan (Ecoscape 2016).

5.2.3 Horizontal Shoreline Datum (HSD)

The horizontal shoreline datum (HSD) is a term used in SPP2.6 to define the active limit of the shoreline under storm activity, determined against the physical and biological features of the coast (WAPC 2019). It represents the point on the shoreline from which coastal erosion allowances are measured in the mapping presented in this report. For the river shorelines of the study area the HSD has been assumed at the level of highest astronomical tide (HAT) which is 0.6m AHD.

5.2.4 Coastal Structures

There are notable protection structures through the study area, which influence the coastal processes in the study area and serve to protect the shorelines from erosion. In Appendix B.1 mapping is presented indicating the protection features in each of the SMU's. Within the three zones the protection features are summarised in Table 5.2.

Table 5.2: Over

SMU	Protection Structures
Walled Zone	The entire section of river frontage is protected by hard engineered structures
Reclaimed Zone	Isolated sections of unprotected shoreline along the baech in front of Niergarup Reserve, the beach in front of McKenzie Park and a small section at the west end of W Wayman Park. Low seawall constructed in front of Zephyrs café, the Leeuwin Boat Ramp and a sloped revetment to the south of the boat ramp that all serve to protect this section of shoreline. Five detached groyne features and the Preston Point Groyne along the west facing section of shoreline in front of John Tonkin Reserve. The beach in the lee of the groynes has been stabilised following the installment of the groynes. Almost continuous seawall along the north facing shorelines of the Reclaimed Zone through the sites of the Swan Yacht Club, Aquarama Marina and W Wayman Park.
Natural Zone	There are engineered structures (seawalls) along the river sections occupied by the Department of Defence, the sea scouts and the East Fremantle Yacht Club.

In the coastal hazard assessment (Baird 2023) the respective shoreline sections are assessed in each SMU based on two separate assumptions:

- protection structures remain in place and are maintained in the future; and
- protection structures are removed.

This approach is used to understand the role of the protection structures in the shoreline.

5.2.5 Allowance for Erosion

The allowance for erosion of the shoreline areas adopted the following assumptions:

- The SPP2.6 coastal classification for the study area of the lower Swan River is generally considered as "Tidal reaches of inland waters".
- For the majority of the shoreline areas there are walls and coastal protection structures in place to protect the shoreline from erosion (refer Appendix B.1) to indicate the sections of shoreline currently protected.
- For the Jerrat Drive escarpment in the Natural Zone where limestone is present through the shoreline, this has been classified as 'rocky' for the purposes of the coastal processes allowance under SPP2.6. The erosion allowances have been determined by calculating the annual rate of change over the past 75-years from analysis of aerial imagery through this section and applying this rate of change in future planning periods.
- In shoreline regions not afforded protection currently, the erosion allowances have been assessed based on estuary and river guidance in State Planning Policy 2.9 Water Resources (SPP2.9) as outlined in Baird (2023).
    - The coastal setback extent is assumed to be 50m over the 100-year planning period factored in the 2035, 2050, 2075 and 2125 planning periods by the relative sea level rise (Table 5.1).
    - This includes several sections of natural shoreline in the Reclaimed Zone such as the Niergarup Reserve shoreline and the shoreline areas at W. Wayman Reserve and Norm McKenzie Park.

DoT have accepted that 50m erosion setback for the study area is appropriate for coastal hazard due to the heavily engineered shorelines in the study area limiting the exposure areas. Whilst this is the case for the Town's shoreline areas this should not be seen as a precedent for river shorelines in other locations.

Mapping is presented in Appendix B showing the coastal processes allowances through the three SMU based on two scenarios:

- Appendix B.2- with the present structures in place, under the assumption these are maintained; and
- Appendix B.3 - scenario where all structures are removed immediately.

The projected erosion allowance in each planning period is applied in the risk assessment process for CHRMAP. Erosion risk is assessed likelihood in each planning period in the risk assessment of coastal assets, with further discussion in the Vulnerability Analysis (Section 7).

5.2.6 Coastal Inundation Allowance (S4)

The extreme water levels that will be used to examine inundation impacts in the shoreline areas in CHRMAP at each return period are shown in Table 5.3. These are presented over the 100-yr planning timeframe (to 2125) with the appropriate sea level rise allowances from Baird (2023).

Table 5.3: Design Water Levels for planning periods to 2125

	Present Day 2025	10-yr Plan 2035	25-yr Plan 2050	50-yr Plan 2075	100-yr Plan 2125
Sea Level Rise Return Period	0m	+0.1m	+0.2m	+0.5	+1.05m
2-yr	1.0	1.1	1.2	1.5	2.1
10-yr	1.1	1.2	1.3	1.6	2.2
100-yr	1.3	1.4	1.5	1.8	2.4
500-yr	1.4	1.5	1.6	1.9	2.5

The coastal hazard from inundation (S4) is defined in SPP2.6 guidelines as the storm event that has a 0.2 percent or one-in-five hundred probability of being equaled or exceeded in any given year over the planning time frame. In the coastal hazard assessment this is the 500-yr ARI event and for CHRMAP this is the most severe storm event that is assessed.

As well as the 500-yr return period case, lower return period water levels will be required in the CHRMAP analysis. These have been defined at return periods of 2-yr and 10-yr ARI from the analysis of the Fremantle tide gauge, and at the 100-yr ARI and 500-yr ARI return period defined from modelling of extreme events reported in BMT (2017).

Flood mapping has been developed using elevation defined in LiDAR data captured over the area (Fugro 2008). The flood mapping represents the peak water depth over the land surface in each respective event and has been defined using a simple 'bathtub flooding' approach.

In Appendix C flood depth mapping for the 500-yr ARI scenarios is presented for the planning year 2025, 2035, 2050, 2075 and 2125.

5.3 Assumptions and Limitations

The assumptions and limitations of the hazard mapping are summarised in Table 5.4.

Table 5.4: Hazard Mapping Assumptions and Limitations

Data Source / Feature	Assumptions and Limitations
LiDAR capture date and accuracy	The LiDAR data (Fugro 2008). that describes the land surface through the study area was acquired in 2008. Modification to ground levels as a result of development post 2008 are not described. The stated accuracy of the dataset is +/- 0.15m.
Geotechnical Conditions	Detailed geotechnical data is not available for the study area. For the Jerrat Drive escarpment there is noted presence of limestone – the extent has not been confirmed through any historical geotechnical reporting.
Bathtub Flood Mapping	The 'bathtub' flood mapping approach does not account for frictional losses for overland flow during flood events (e.g. roughness, structures / obstacles). Stormwater connectivity is not considered in this type of assessment, whereby stormwater could be directed through the drainage network. The method is contingent on the accuracy of the LiDAR data stated as +/- 0.15m.
Flood Velocity	Velocity of flood waters in extreme events has not been determined.
Catchment Flooding	The localised land based flooding impact from catchment runoff and extreme rainfall has not been considered in the flood mapping presented.
Joint Occurrence	Joint occurrence with elevated ocean level / river level in the extreme is incorporated in the 100yr and 500yr flood mapping as defined from modelling of extreme events reported in BMT (2017).
Finished Floor Levels	The finished floor levels of built structures are not considered in the flood mapping. The flood depth is shown in mapping based on ground level data as defined in the LiDAR. Consideration of finished floor level for risk management is presented in Section 10 as part of the assessment of existing controls.
Groundwater	Groundwater is not considered in the study.
Boat Wakes	The contribution of boat wakes to the process of erosion has not been assessed in the present study. A separate study is being completed by SRT to determine the impact of boat wakes through the area and may be used to inform future understanding of the influence on erosion of shorelines.

5.4 Sediments

The sediment properties are important for understanding of coastal processes and recommendations for management of shoreline areas.

5.4.1 Sediment Type

The general soil and rock description in the study area is shown in Figure 5.2 from Ecoscape (2016). There has not been any sediment sample data located in the historical information to provide a description of sediment size in the shoreline areas (PSD).

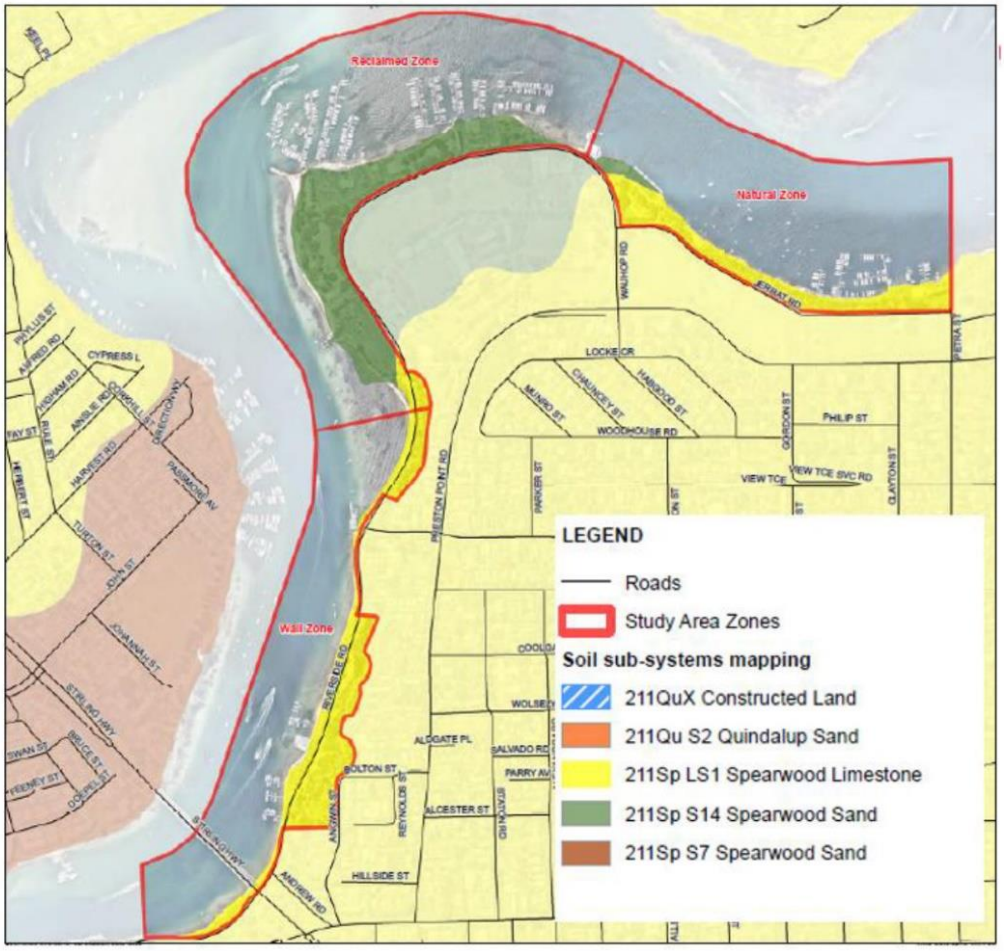

Figure 5.2: Soil Sub-Systems (Ecoscape 2016)

5.4.2 Contaminated Sediments

Between 2007 and 2012 the Swan River Trust (SRT) undertook studies which detected contaminant tributyltin (TBT) within the sediments of the wash down areas, slip areas and pens of the Swan Yacht club, East Fremantle Yacht Club and Aquarama Marina as noted in Baird (2023). CHRMAP recommendations in these areas will need to recognise the risk posed by these contaminated sediments.

The Acid Sulphate Soil Risk is summarised for the study area in Figure 5.3 from Ecoscape 2016. The river shoreline areas are rated at 'High to Moderate Risk'. The land areas across the Reclaimed Zone are rated at 'Moderate to Low Risk'. CHRMAP recommendations will need to recognise the risk from ASS.

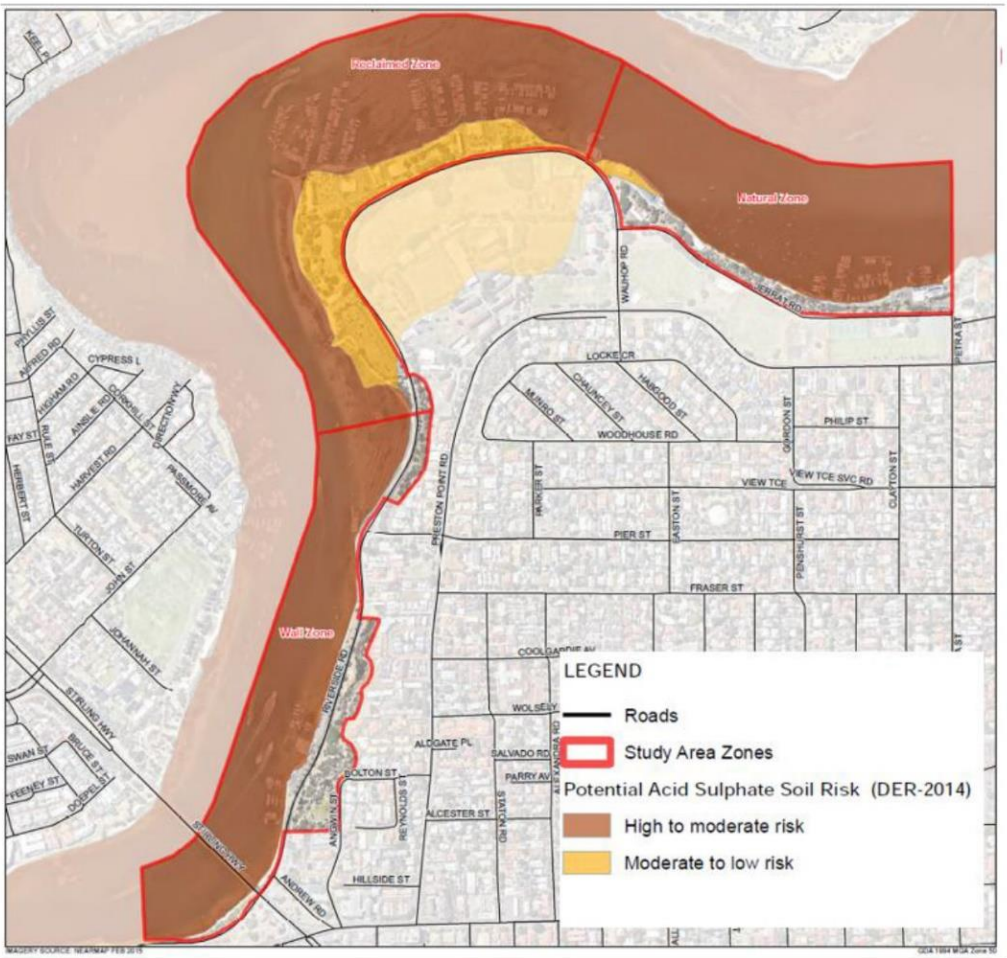

Figure 5.3: Potential Acid Sulphate Soil Risk (Ecoscape 2016)

6. Asset Identification

6.1 Coastal Assets

6.1.1 Asset Types

There are a range of coastal assets through the SMU that will be impacted by coastal erosion and/or inundation in future planning periods. Coastal assets are broadly described in the following categories:

- Social - examples include community use of coast, recreation along the coast.
- Economic – examples include facilities, services, jobs, industry, private property including infrastructure.
- Environmental – examples include environmental values, coastal flora and fauna, ecosystem, dunes.
- Heritage and Culture – significant sites and places of historical or cultural importance.

6.1.2 Asset Identification

The coastal assets in the study area were defined through the community engagement process which has included information sessions, meetings with the CBRG, the open workshop at the George Street Festival and the online coastal values survey.

6.1.3 Coastal Asset Functions, Services and Value

Coastal asset types through the study area and their functions, services and values are presented in Table 6.1, adapted from WAPC (2019) and informed by the stakeholder views captured through the community engagement activities (Appendix A).

6.2 Coastal Asset Register

6.2.1 Compilation of Asset Data

The coastal assets that are within the coastal hazard extent were identified and assigned a data type category as either Environment, Social, Economic or Heritage and Culture.

Maps showing the overview of each SMU and key assets are presented in Figure 6.1 to Figure 6.6.

Coastal Asset Services, functions and values are presented for each SMU in Table 6.2, Table 6.3 and Table 6.4.

Table 6.1: Overview of Coastal Asset functions, services, value (based on WAPC 2019)

Asset	Function, Service, Value
	Environment
Foreshore Reserve and Beaches	Coastal access, recreation, and conservation. Habitat for flora and fauna. Supports biodiversity and ecosystem benefits. Provides a place of tranquility and peace. Access to land based and river recreation activities.
	Social
Foreshore reserve amenity – dual use paths, toilet/picnic facilities,	Access to community facilities and services including community events. Opportunities for health and well-being. Social/family recreation.
Buildings for clubs (eg Yacht clubs, Sea Scout, Rowing clubs)	Strong community attachment and service.
Residential (existing/future) development	Provides housing for resident population and future population.
	Economic
Private Property	Housing / shelter. Financial investment.
Jetties and Boat Ramps	Provides recreation facilities. Provides local employment. Contributes to local economy. Community use for boating/fishing.
Foreshore reserve infrastructure – dual use paths, toilet/picnic facilities	Provides recreation facilities.
Roads	Access. Facilitates transport.
Commercial / Industrial Development and Infrastructure	Provides employment and contributes to economy. Serves community and provides recreational benefits.
	Heritage and Culture
Significant Sites e.g., Niergarup Trail	Significant site and place of historical importance. Historical value, tourist attraction, culture.

Table 6.2: Coastal Asset Identification. SMU1 – Walled Zone

Asset Type	Asset
Environmental	J Dolan Park
	Street Trees
	River walls protecting shoreline
Social	Coastal Pathways
	Residential homes
	River access through boat ramps and jetties
	Cycle Pathway on Riverside Road
Economic	Residential Properties
	Marine Education Boatshed
	Riverside Road and road connections
	Dome Café
	Town Infrastructure (eg bins, signage, shelters, fencing, water fountains, exercise equipment, beach access)
	Jetties and Moorings
	Carparks - Public Carpark No 4, J Dolan Park
	Left Bank
	Playground Equipment – north of Dome Café
	Shelters, seating and picnic tables – J Dolan Park, north of Dome Cafe
	Footpaths
	Drainage features (pits, pipes, culverts, stormwater outlets)
Heritage and Culture	Niergarup Trail
	Artwork along the riverfront (pink flower).
	Sites on the Town's heritage list: • Kitson Park & Plympton Steps, the Boatshed and Merv Cowan Reserve.
	Sites on Local Heritage Survey (Category E, low management level): • Kirkham and Cowan Parks and (Canary) Palms near the Dome carpark, a limestone wall on Canning Highway (at rear of No. 13 Riverside Road) and the Stirling Bridge and parklands.

Figure 6.1: Overview of key sites located in the shoreline section of the 'Wall Zone' (SMU1).

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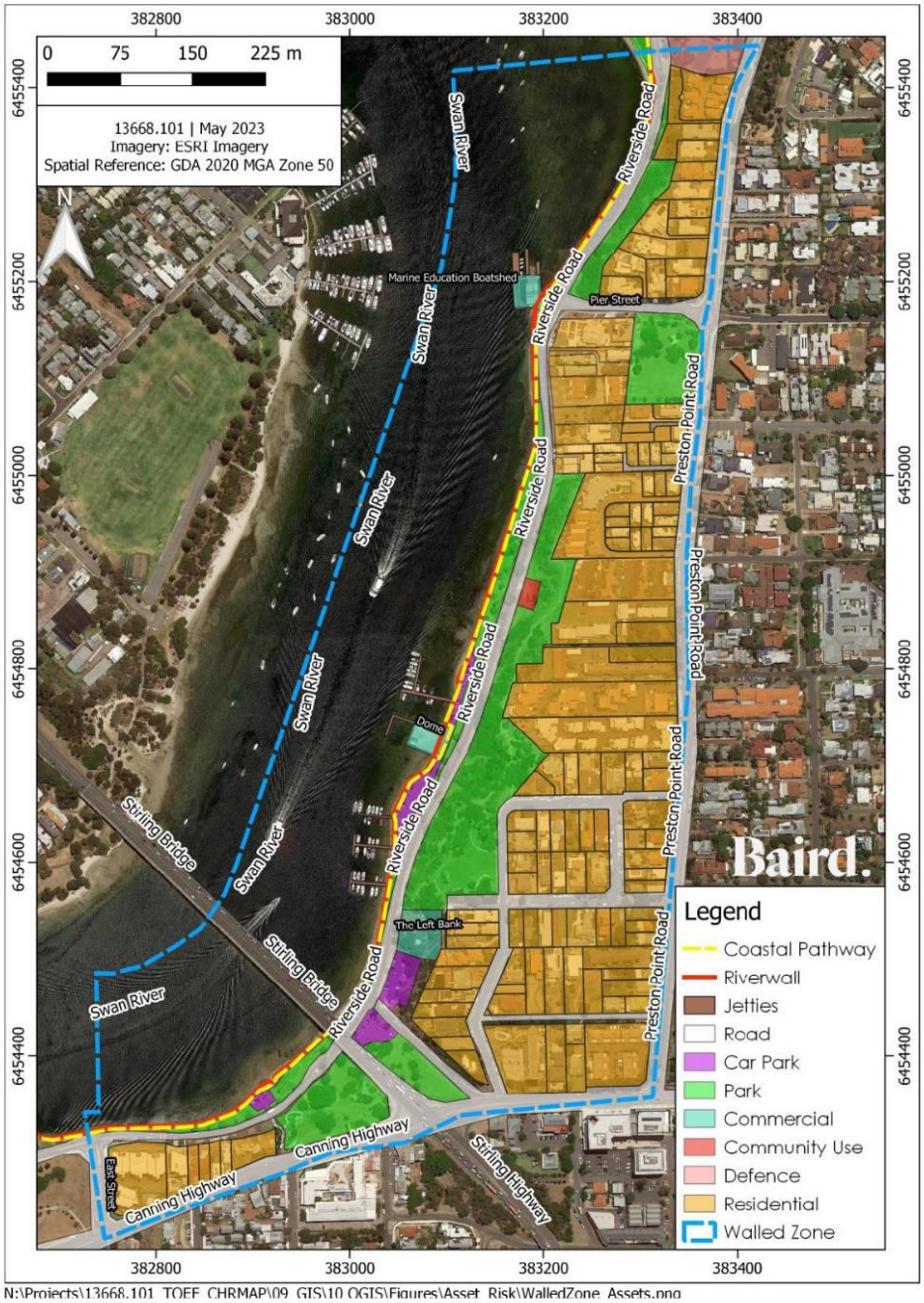

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Figure 6.2: Land use and coastal assets in the Walled Zone

Table 6.3: Coastal Asset Identification. SMU2 – Reclaimed Zone

Asset Type	Asset
Environmental	W Wayman Reserve
	Norm McKenzie Park
	Street Trees
	Detached groyne field
	Niergarup Reserve
	John Tonkin Reserve
	Coastal protection along shoreline areas
Social	Coastal Pathways
	Cycle Pathway on Riverside Road
	Boat Ramp
	Community and Sporting Groups (Swan Yacht Club, Rowing Club, Navy Cadets)
	Beach access pathways
Economic	Aquarama Marina
	8 Knots Tavern
	Rowing Club
	Town Infrastructure (bins, signage, shelters, fencing, water fountains, exercise equipment, beach access)
	Jetties and Moorings
	Cool Beans Café
	Swan Yacht Club
	Zephyr Cafe
	Toilet facilities in John Tonkin Park near Zephyrs.
	Boat Ramp
	Riverside Road and road connections
	Car parks – Public Car Park Nos 1, 2 and 5, John Tonkin Reserve, Zephyr Café, and within Swan Yacht Club, Fremantle Rowing Club and Aquarama precincts.
	Playground equipment – John Tonkin Reserve, W Wayman Reserve
	Shelters, seating and picnic tables – John Tonkin Reserve, Public Car Park No 1, W Wayman Reserve
	Leeuwin Barracks Site (Department of Defence)
	Drainage features (pits, pipes, culverts, stormwater outlets)

Asset Type	Asset
Heritage and Culture	Sculpture of the lady and dog in John Tonkin reserve
	Interpretation boardwalk and signs
	Historic river crossing point for the original road between Fremantle and Perth near W Wayman Reserve

Figure 6.3: Overview of key sites located in the shoreline section of the 'Reclaimed Zone' (SMU2).

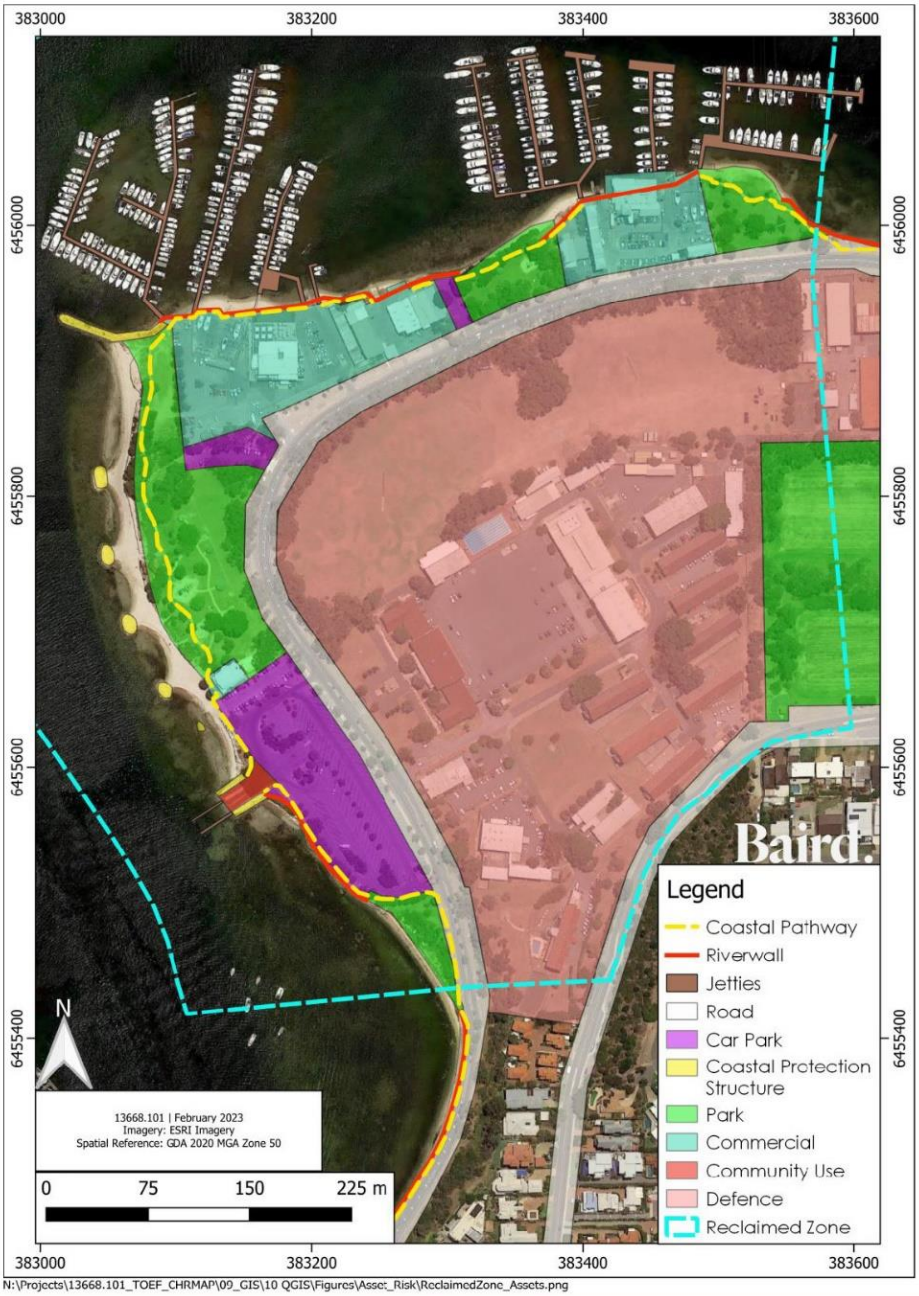

Figure 6.4: Land use and coastal assets in the Reclaimed Zone

Table 6.4: Coastal Asset Identification. SMU3 – Natural Zone.

Asset Type	Asset
Environmental	River walls
	Street Trees
	Beaches within Jerrat Drive escarpment
Social	Coastal Pathways
	Cycle Pathway on Riverside Road
	Community and Sporting Groups (EFYC, Sea Scouts, Sports grounds, Tennis Club etc)
	Beach access
Economic	East Fremantle Yacht Club, including car park
	Department of Defence buildings and wharves
	Riverside Drive, Jerrat Drive and road connections
	Boat ramps, moorings and jetties
	Town Infrastructure (bins, signage, shelters, fencing, water fountains, beach access stairs)
	Drainage features (pits, pipes, culverts, stormwater outlets)
	Minor carpark and seating at entrance to Jerrat Drive
	Drainage features (pits, pipes, culverts, stormwater outlets)
Heritage and Culture	The limestone cliffs near the East Fremantle Yacht Club are listed on the Town's Heritage List for conservation

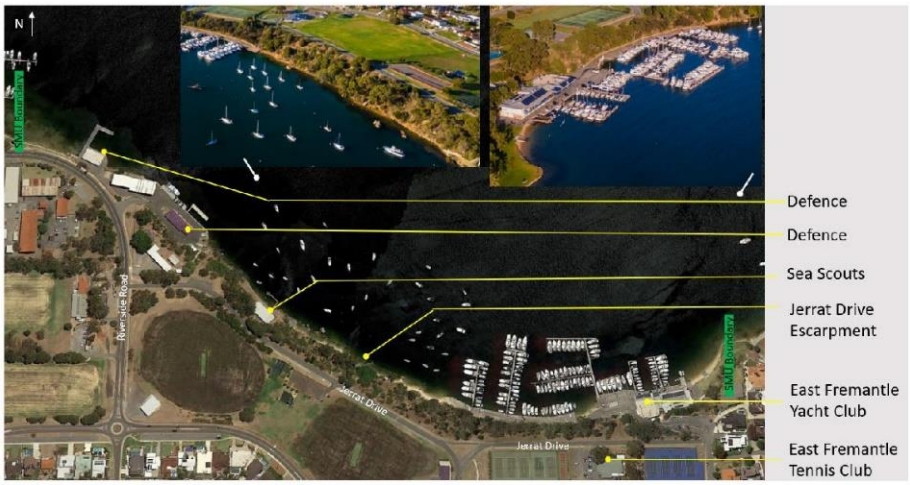

Figure 6.5: Overview of key sites located in the shoreline section of the 'Natural Zone' (SMU3)

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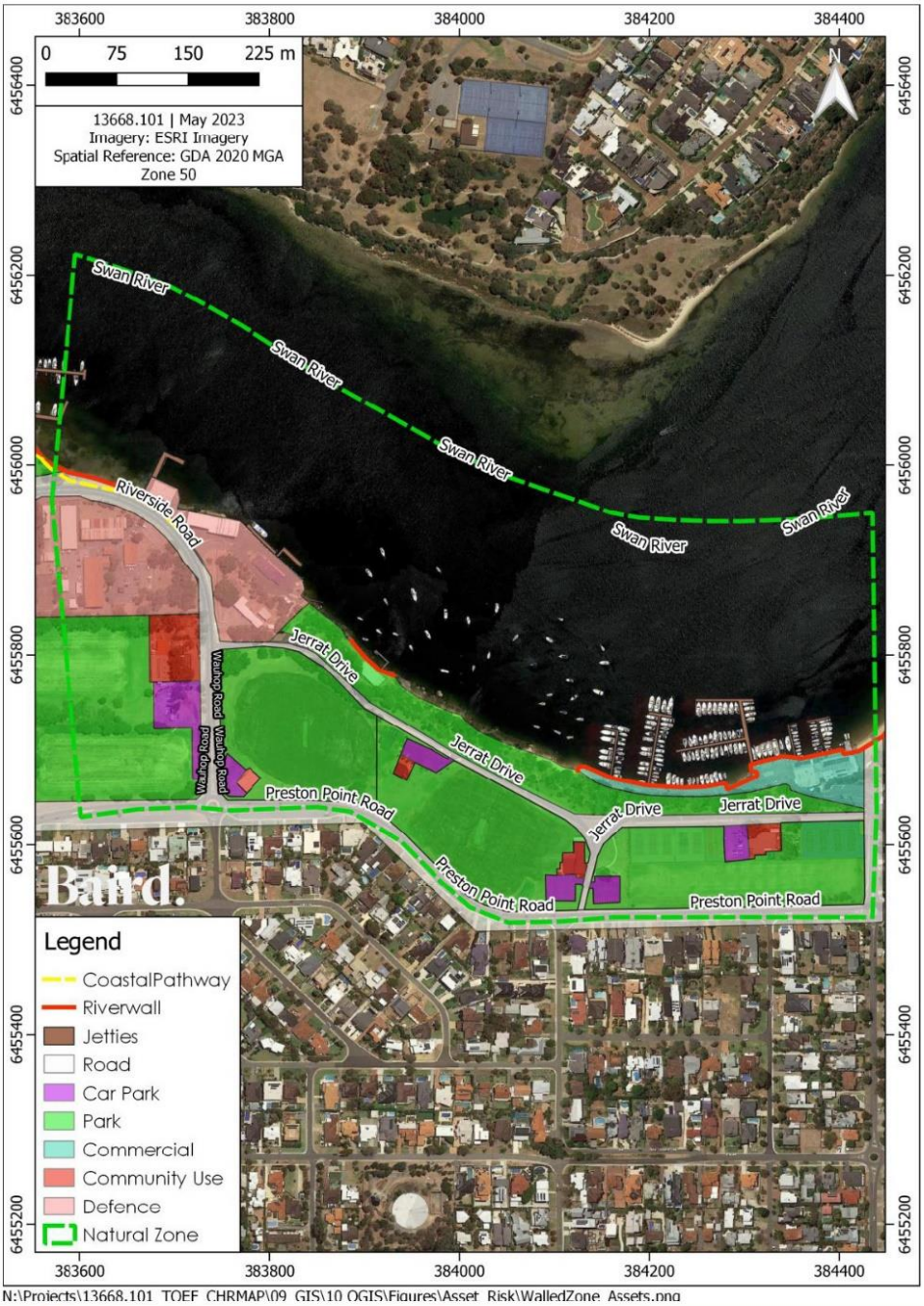

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Figure 6.6: Land use and coastal assets in the Natural Zone

7. Risk Assessment Framework

7.1 Vulnerability Assessment

To determine the coastal assets that are most vulnerable to coastal hazard requires consideration of the asset's exposure to coastal hazard, the sensitivity of the asset to the impacts from exposure and its adaptive capacity.

For the coastal assets identified in each of the shoreline management units (SMU's) in the previous Section, a vulnerability assessment has been undertaken to determine how the effects of coastal hazards are predicted to impact assets in current and future planning periods.

The CHRMAP vulnerability assessment first considers the potential impact to coastal assets as a combination of the *likelihood* and the *consequence* of that hazard occurring. The vulnerability assessment then considers the adaptive capacity of coastal assets; that is, the ability of a coastal asset to accommodate coastal hazard impact.

The vulnerability assessment process is presented in Figure 7.1 (WAPC 2019).

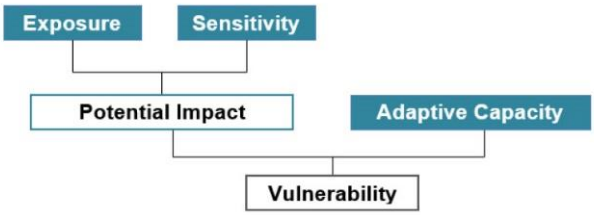

Figure 7.1: Vulnerability Assessment Flowchart (from WAPC 2014).

The key components in the vulnerability assessment are:

- Exposure = *Likelihood* of coastal hazard occurring
- Sensitivity = *Consequence* of coastal asset being impacted
- Potential impact = *Risk* to coastal assets as a product of likelihood and consequence
- Adaptive Capacity = The ability for an asset to accommodate the coastal hazard impact and recover
- Vulnerability = Final risk rating which incorporates the adaptive capacity of the asset

The application of the key components in the vulnerability assessment is explained in the following sections of this report.

7.2 Likelihood

7.2.1 Likelihood Definitions

In risk management terms, 'likelihood' is the chance of something happening, and is similar to the concept of probability. The likelihood scale that has been developed for the CHRMAP follows the guidance presented in WAPC (2019). The definitions for the likelihood scale are shown on Table 7.1 with each category associated in terms of a generalised description and approximate Annual Exceedence Probability (AEP).

Table 7.1: Likelihood Scale Definitions (WAPC 2019, AS5334-2013)

Rating	Description	Indicative Annual Exceedance Probability (AEP)
Almost Certain	The event is expected to occur in most circumstances	Has a greater than 95% chance of occurring in the identified time period if the risk is not mitigated
Likely	The event will probably occur in most circumstances	Has a 63-95% chance of occurring in the identified time period if the risk is not mitigated
Possible	The event should occur at some time	Has a 20-63% chance of occurring in the identified time period if the risk is not mitigated
Unlikely	The event could occur at some time	Has a 5-20% chance of occurring in the identified time period if the risk is not mitigated
Rare	The event may only occur in exceptional circumstances	May occur in exceptional circumstances, i.e. less than 5% chance of occurring in the identified time period if the risk is not mitigated

7.2.2 Likelihood Scale – Coastal Erosion

The erosion hazard for the shoreline areas is based on the coastal process allowances that have been calculated in the Coastal Hazard Assessment (Baird 2023). The planning timeframes adopted are 2025, 2035, 2050, 2075 and 2125. The CHRMAP erosion likelihood scale is developed based on the following:

- Coastal process allowances are considered as the 'Possible' category in each respective planning year.
- It is assumed that a level of erosion risk that is 'Possible' today becomes more likely in future time periods (i.e. 'Likely' or 'Almost Certain').
- Lower categories of likelihood ('Unlikely', 'Rare') can be defined by the scenarios defined at a future time frame.

Through this approach the likelihood scale has been developed. An example is given for the planning year 2050:

- Almost Certain — Coastal Processes Allowance line 2025
- Likely — Coastal Processes Allowance line 2035
- Possible — Coastal Processes Allowance line 2050
- Unlikely — Coastal Processes Allowance line 2075
- Rare — Coastal Processes Allowance line 2125

The application of this process through all planning periods is presented in Table 7.2.

Table 7.2: Town of East Fremantle CHRMAP Likelihood Scale for Coastal Erosion

Likelihood Category	2025 Planning Period	2035 Planning Period	2050 Planning Period	2075 Planning Period	2125 Planning Period
Almost Certain	-	-	2025 Erosion	2035 Erosion	2050 Erosion
Likely	-	2025 Erosion	2035 Erosion	2050 Erosion	2075 Erosion
Possible	2025 Erosion	2035 Erosion	2050 Erosion	2075 Erosion	2125 Erosion
Unlikely	2035 Erosion	2050 Erosion	2075 Erosion	2125 Erosion	-
Rare	2050 Erosion	2075 Erosion	2125 Erosion	-	-

7.2.3 Coastal Inundation Likelihood Scale

The inundation likelihood scale is developed using the coastal hazard inundation levels calculated for the study area at return periods 2 yr, 10yr, 100 yr and 500 yr ARI. Each respective return period is assigned a likelihood category generally based on the probability of occurrence (refer Table 7.1).

In future planning periods sea level rise (SLR) is included in the likelihood scale. The SLR recommendations for Western Australia applicable at a planning level are outlined in DoT (2010) and have been adopted over the 2025 to 2125 period as summarised in Table 7.3.

Table 7.3: Sea level rise allowances over the planning timeframe of the CHRMAP study.

Planning Year	2025	2035	2050	2075	2125
Sea Level Rise	0m	+0.1m	+0.2m	+0.5m	+1.05m

The coastal inundation likelihood scale categories are shown in Table 7.4 and the corresponding level is shown in Table 7.5:

- The ARI categories selected to represent the likelihood categories 'Likely', 'Possible', 'Unlikely' and 'Rare' are based on the 2 yr, 10yr, 100 yr and 500 yr ARI respectively and include the SLR corresponding to the planning year.
- The Almost Certain category has been established based on the highest astronomical tide level (HAT).

Table 7.4: Inundation Likelihood Categories

Rating	2025	2035 +0.1m SLR	2050 +0.2m SLR	2075 +0.5m SLR	2125 +1.05m SLR
Almost Certain	2025 HAT	2035 HAT	2050 HAT	2075 HAT	2125 HAT
Likely	2025 2yr ARI	2035 2yr ARI	2050 2yr ARI	2075 2yr ARI	2125 2yr ARI
Possible	2025 10yr ARI	2035 10yr ARI	2050 10yr ARI	2075 10yr ARI	2125 10yr ARI
Unlikely	2025 100yr ARI	2035 100yr ARI	2050 100yr ARI	2075 100yr ARI	2125 100yr ARI
Rare	2025 500yr ARI	2035 500yr ARI	2050 500yr ARI	2075 500yr ARI	2125 500yr ARI

Table 7.5: Inundation Likelihood for East Fremantle - Water Level (Vertical Datum m AHD)

Rating	2025 Water Level (m AHD)	2035 Water Level (m AHD)	2050 Water Level (m AHD)	2075 Water Level (m AHD)	2125 Water Level (m AHD)
Almost Certain	<=0.6m	<=0.7m	<=0.8m	<=1.1m	<=1.7m
Likely	>0.6 to 1.0m	.>0.7 to 1.1m	>0.8 to 1.2m	>1.1 to <1.5m	>1.7 to 2.1m
Possible	>1.0 to 1.1m	>1.1 to 1.2m	>1.2 to 1.3m	>1.5m to 1.6m	>2.1 to 2.2m
Unlikely	>1.1 to 1.3m	>1.2 to 1.4m	>1.3 to 1.5m	>1.6m to 1.8m	>2.2 to 2.4m
Rare	>1.3m	>1.4m	>1.5m	>1.8m	>2.4m

7.3 Consequence

7.3.1 Consequence Scale

Consequence is used to describe the impact to assets when coastal hazard is realised. The consequence of coastal hazard is considered across a range of categories representing severity: 'Insignificant, Minor, Moderate, Major, Catastrophic'.

The consequence scale considers impact in terms of Physical, Environmental and Social impact and is shown in Table 7.6.

Table 7.6: Consequence Scale

Rating	Economic Impact	Environmental Impact	Social / Cultural Impact	Infrastructure
Catastrophic	Permanent loss or damage > $5 million	Permanent loss of flora and fauna – will not recover	Long-term or permanent loss of function >75% of community affected	Damage to majority of infrastructure (>75%)
Major	Permanent loss or damage $2 - $5 million	Long term loss of flora and fauna, limited chance of recovery	Medium-term disruption to function <50% of community affected	Damage to significant proportion of infrastructure (50% to 75%)
Moderate	Permanent loss or damage $200k -$2mil	Medium term loss of flora and fauna. Recovery likely	Minor long Term or major Short-Term loss of function <25% of community affected	Damage to up to half the infrastructure (25% to 50%)
Minor	Permanent loss or damage $20k - $200k	Short term loss of flora and fauna. Strong Recovery	Small to medium disruption to function <10% of community affected	Minor damage (10 to 25%)
Insignificant	Permanent loss or damage < $ 20k	Negligible to no loss of flora and fauna	Minimal short-term inconvenience <5% of community affected	Little or no damage (<10%)

The consequence scale was presented in the information boards of the George Street Festival engagement sessions (December 2022), with community discussion and feedback welcomed on the rating scale for erosion and inundation within each of the SMUs.

7.3.2 Safety and Structural Considerations

For the Town study area the risk of inundation will be an important consideration for the council owned and commercial structures in the shoreline areas. Inundation depth in extreme events and the safety and stability limits for people and structures in floodwaters generally requires consideration of flood depth and velocity. Safety limits for people and infrastructure based on velocity and depth is presented in Figure 7.2 (from Smith et al 2014).

A limitation of the flooding results available to the CHRMAP study is that velocity is not available for the extreme events. In the absence of velocity information, the flood hazard curve is used as follows:

- A flood level of 1m over the finished floor level has been adopted as representing a threshold where structures would fail, unless specifically constructed to withstand flooding (category H5 in Figure 7.2).
- At a depth of 1m, there is a risk posed to the safety of people. For the consequence rating for inundation of houses, a depth of flooding greater than 1.0m above the finished floor level is categorised as major consequence, below this depth the rating is moderate.

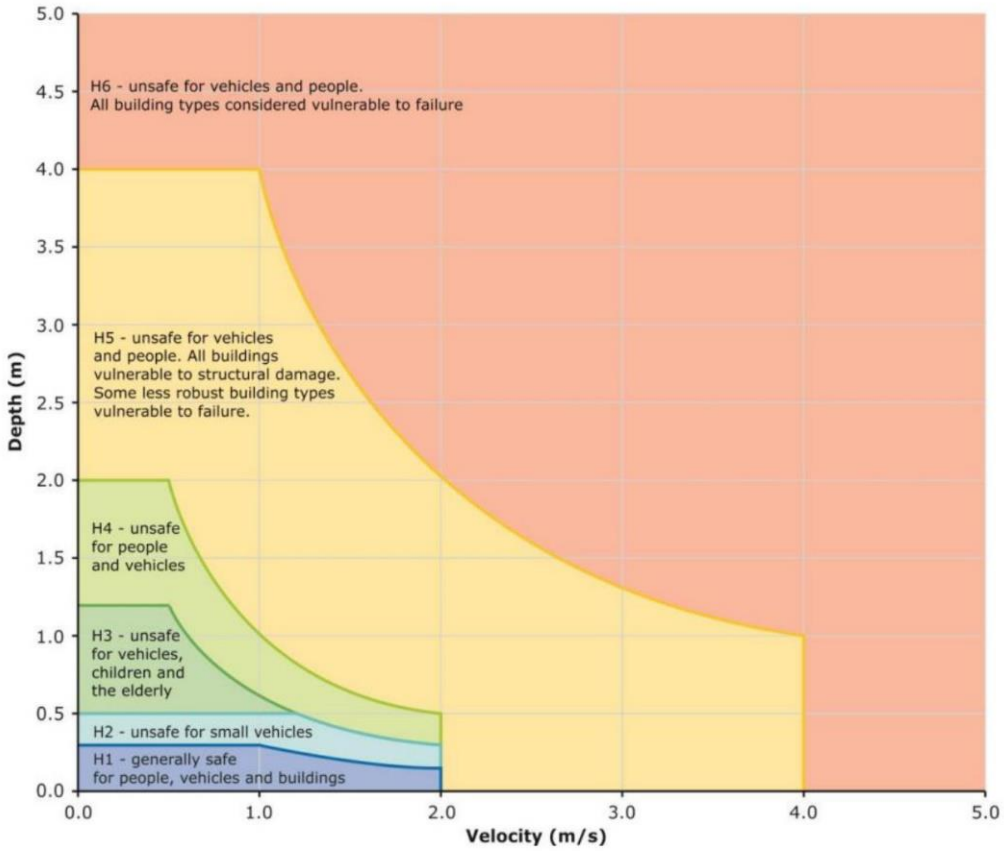

Figure 7.2: Flood Hazard Curve – Vulnerability thresholds as a Product of Inundation Depth and Velocity (from Smith et al 2014)

7.3.3 Consequence Rating – Coastal Asset Register

The consequence of coastal hazard impact is different for each respective coastal asset and severity of impact is dependent on the hazard type – as an example the consequence of erosion for a shoreline is much more severe than that of inundation.

The consequence rating is shown in Table 7.7 for each of the assets identified in the SMU's (refer Section 6). Separate ratings are presented for consequence of erosion and for consequence of inundation.

It is noted that the consequence rating in Table 7.7 overleaf is the 'worst' rating across the categories Economic, Environmental, Social/Cultural and Infrastructure for each respective asset.

Table 7.7: Consequence Rating for Coastal assets – Erosion and Inundation

Asset Type	Erosion	Inundation
	Consequence	Consequence
Houses	Major	Moderate[1]
Vacant Land (Residential)	Moderate	Minor
Commercial / Community Structures[2]	Major	Moderate[1]
Riverside Road	Major	Moderate
Carparks	Moderate	Minor
Beaches	Major	Insignificant
Riverbanks	Major	Insignificant
Foreshore Reserve	Moderate	Minor
Riverwalls and Revetments	Not Assessed	Minor
Jetties and Boat Ramps	Moderate	Minor
Park Furniture (Benches, Gazebo, BBQ, Play equipment)	Minor	Minor
Minor Infrastructure (signage, shelters, fencing)	Insignificant	Insignificant
Coastal Pathway / cycle paths	Moderate	Minor
Stormwater pipes / outlets, culverts	Moderate	Minor
Toilets	Minor	Minor
Footpaths	Minor	Minor

Notes

1. For buildings with depth of flooding >1.0m over the Finished Floor level the consequence is rated as major. Below this level the rating is moderate.
2. Swan Yacht Club, East Fremantle Yacht Club, Zephyrs, Sea Scouts, Marine Boatshed, Dome Café, The Left Bank, 8 Knots Tavern, Navy Cadets, Cool Beans, Rowing Club

8. Level of Risk

8.1 Potential Impact

The assessment of potential impact to coastal assets uses the product of the likelihood and consequence to determine a level of risk.

Risk ratings are designated in four categories based on WAPC (2019):

1. Extreme - risks are intolerable, requiring immediate implementation of risk management measures.
2. High - risks are the most severe that can be tolerated and need monitoring in the short term as risk management measures are likely to be needed in the short-term.
3. Medium - risk can be tolerated and need monitoring in the short to medium term.
4. Low - risk can be accepted, no risk management measures will be required in the short to medium term other than monitoring.

The risk level matrix is presented in Table 8.1.

Table 8.1: Potential Impact Scale - Likelihood / Consequences matrix to assess level of risk

		CONSEQUENCE				
		Insignificant	Minor	Moderate	Major	Catastrophic
LIKELIHOOD	Almost Certain	Medium	High	Extreme	Extreme	Extreme
	Likely	Low	Medium	High	Extreme	Extreme
	Possible	Low	Medium	High	High	Extreme
	Unlikely	Low	Low	Medium	Medium	High
	Rare	Low	Low	Low	Medium	Medium

For the assets in the asset register the risk rating has been determined in each planning timeframe for each of the SMU's. The summary is presented in Appendix D.1 for erosion and Appendix D.2 for inundation.

8.2 Risk Acceptance and Tolerance

The risk tolerance scale provides the basis for decision making to inform which risk, locations and assets require risk management measures as a priority. For the level of risk defined for the coastal assets, the corresponding tolerance scale is shown on Table 8.2. The tolerance scale has been developed from engagement with the community and based on the approach in WAPC (2019).

For a risk at the 'High' and 'Extreme' level, action to mitigate the risk is required. At lower level of risk, the risk is acceptable and no action is required.

Table 8.2: Risk Tolerance Scale

Risk Level	Action Required	Acceptance / Tolerance
Extreme	Immediate action required to eliminate or reduce the risk to acceptable levels	Unacceptable / Intolerable
High	Immediate to short term action required to eliminate or reduce the risk to acceptable levels	Tolerable
Medium	Short to medium term action to reduce the risk to acceptable levels, or accept risk	Tolerable / Acceptable
Low	Accept Risk	Acceptable

8.3 Adaptive Capacity

The concept of adaptive capacity recognises that some assets will cope with coastal hazard risk better than others. The coastal assets are rated with a consideration of how well they can recover from coastal inundation or erosion hazard, i.e. their potential to adjust to address risk arising from coastal hazards with minimal disruption and cost.

The adaptive capacity scale of the assets adopts a rating in one of three categories from worst performing ('Poor') to best performing ('Good') as shown in Table 8.3 developed from WAPC (2019).

Table 8.3: Adaptive Capacity Rating for Coastal Assets (based on WAPC 2019)

Rating	Adaptive Capacity
Poor	• Little or no adaptive capacity. Potential impact would destroy all functionality. Redesign required
Average	• Small amount of adaptive capacity. Difficult but possible to restore functionality through repair and redesign
Good	• Good adaptive capacity. Functionality restored easily. • Adaptive systems restored at a relatively low cost or naturally over time.

The potential for an asset to recover from the impact of either erosion or inundation is generally different and has been rated separately. A summary of the adaptive capacity ratings is provided in Table 8.4.

Table 8.4: Adaptive Capacity Ratings of Coastal Assets – Erosion and Inundation

	Adaptive Capacity Rating	
Asset Type	**Erosion**	**Inundation**
Houses	Poor	Average [1]
Vacant Land	Average	Good
Commercial / Community Structures[2]	Poor	Average[1]
Local Roads (eg Riverside Road)	Poor	Average
Carparks	Poor	Good
Beaches	Average	Good
Riverbanks	Average	Good
Foreshore Reserve	Average	Good
Riverwalls and Revetments	Not Assessed	Good
Jetties and Boat Ramps	Average	Good
Parks & Playgrounds (Benches, Gazebo, BBQ, Play equipment)	Average	Average
Minor Infrastructure (signage, shelters, fencing)	Good	Good
Coastal Pathway / cycle paths	Average	Good
Stormwater pipes / outlets, culverts	Poor	Average
Toilets	Poor	Average

Notes

1. For houses and commercial business with depth of flooding >1.0m over the Finished Floor level the adaptive capacity is rated as poor.

8.4 Vulnerability Scales

Using the risk level calculated in the potential impact stage the adaptive capacity of the respective assets was then considered to determine the final vulnerability rating for each of the assets.

Table 8.5: Asset Vulnerability Matrix

Potential Impact	Adaptive Capacity Rating		
	Poor	Average	Good
Extreme	Very High	Very High	High
High	Very High	High	Medium
Medium	High	Medium	Low
Low	Medium	Low	Low

A vulnerability tolerance scale determines the level at which vulnerability is deemed acceptable, tolerable or intolerable. The vulnerability tolerance scale is shown in Table 8.6 developed from WAPC (2019) and used to identify which risk, locations, assets and values require risk management measures as a priority.

Table 8.6: Vulnerability Tolerance Scale

Risk Level	Action Required	Acceptance / Tolerance
Very High	Asset has minimal ability to cope with the impacts of coastal hazards without additional support. Adaptation will need to be considered as a priority.	Unacceptable / Intolerable
High	Asset has limited ability to cope with the impacts of coastal hazards. Immediate to short-term adaptation is likely to be required to reduce risk to acceptable levels.	Tolerable
Medium	Asset has some ability to cope with the impacts of coastal hazards. However short to medium term actions are likely to be required to reduce risk to acceptable levels	Tolerable / Acceptable
Low	Asset has high resilience; it is able to cope with the impacts of coastal hazards without additional support. No immediate action required	Acceptable

9. Risk Assessment Outcomes

The outcomes of the risk assessment are discussed here for the three SMU's based on the full results of the risk assessment presented in **Appendix D.1** for erosion risk and **Appendix D.2** for inundation risk.

9.1 SMU1 – Walled Zone

The Walled Zone (SMU1) extends along approximately 1.4 km on the eastern side of the Swan River. There is a continuous line of river walls and revetments along the entire length of the shoreline, which prevents erosion. There is a coastal path along the edge of the shoreline which is highly utilised and valued by the community for recreation (eg walking, running, cycling) with foreshore reserve landward that varies in width with the proximity of Riverside Drive.

Along the foreshore there are parks, carparks, moorings and jetties as well as structures built over the water such as the Dome café and the Marine Education boatshed. Whilst the walled zone is afforded protection from erosion, the coastal pathway and carpark areas are susceptible to inundation from elevated ocean level during storm events. Additionally, boat wakes can cause overtopping of the shoreline in certain locations periodically.

Riverside drive is a key road connection which follows the shoreline. The elevation of Riverside drive is generally well above the 100-yr ARI water level (1.3m AHD, planning year 2025) with the exception of low points adjacent East Street (refer Figure 9.1) and north of the Marine boatshed. In the strip of land on the eastern side of Riverside Drive, there is road reserve, park areas, residential properties and The Left Bank hotel. The topography rises to a height of over 10mAHD very rapidly on the east side of the river approaching Canning Highway, offering natural protection from inundation.

There are two locations along the eastern edge of Riverside Road where residential property is situated. These are shown in Figure 9.1 for the section near East Street and in Figure 9.2 for the section south of Pier Street. For these locations the elevation data has been analysed to determine the critical point at which residential houses would be impacted by floodwaters which is at 2.0m and 2.5m AHD respectively. All other residential land in the Walled Zone SMU is located at a height above 5m AHD, well above any influence from extreme storm events.

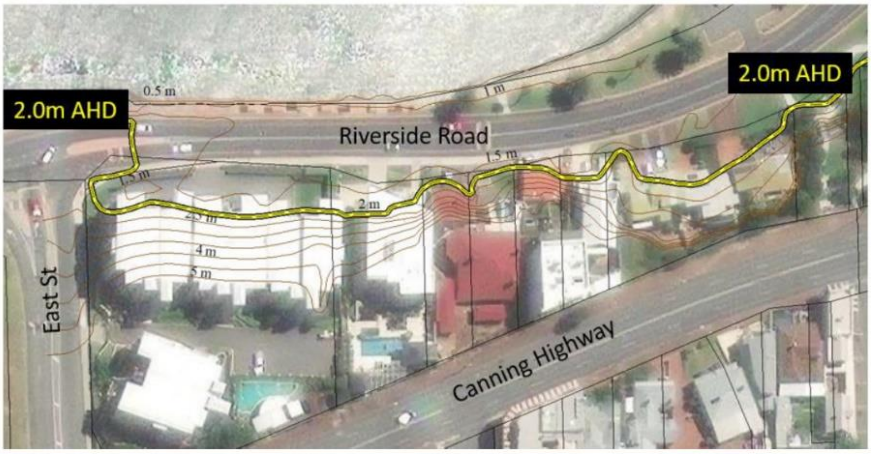

Figure 9.1: Residential properties on Riverside Road on the east side of East Street. The elevation contours are shown in the range of 0m to 5m AHD at 0.5m increments. The highlighted contour line at 2.0mAHD is adopted as the critical level for inundation of existing houses.

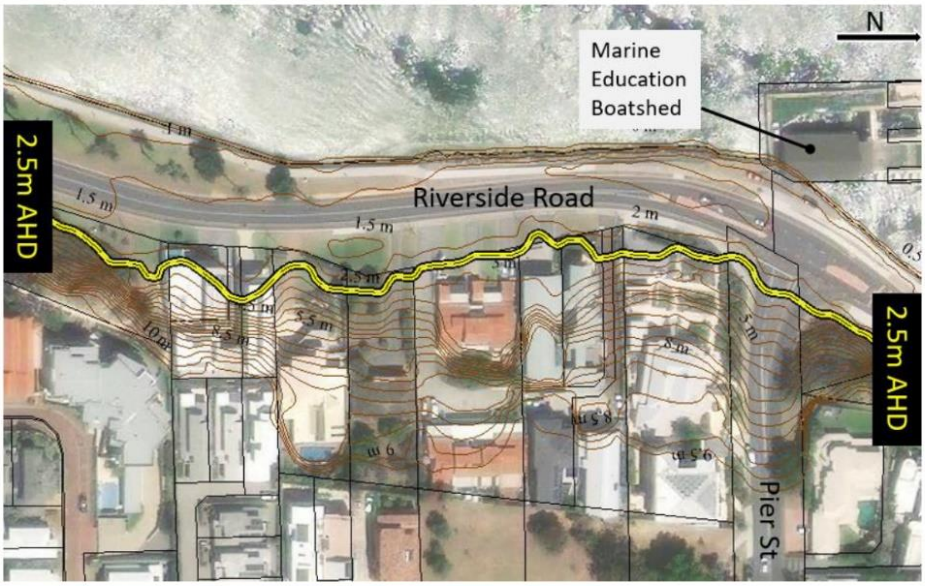

Figure 9.2: Residential properties on Riverside Road on the south side of Pier Street. The elevation contours are shown in the range of 0m to 10m AHD at 0.5m increments. The highlighted contour line at 2.5mAHD is adopted as the critical level for inundation of existing houses.

9.1.1 Vulnerability of Coastal Assets to Erosion in SMU1

The erosion risk for coastal assets in the Walled Zone is minimal, due to the continuous riverwall and protection structures along the shoreline (Table 9.1). The coastal assets rated as being 'Highly vulnerable' are the drainage outfall pipes, the jetties and moorings all of which are located directly at the water's edge.

The importance of Riverside Road and high value of the foreshore reserve for the community warrants that in future planning periods the protection of the shore will continue, to maintain the present-day level of protection for the road (refer guidance from the DBCA in Section 13.3).

The format of the protection may be riverwalls as exists presently or some other shoreline feature (eg engineered solution, nature based option or another yet to be determined approach) that can deliver the required outcome of protecting Riverside Road from erosion risk. This is discussed further in the Risk Treatment stage of CHRMAP (Chapter 13).

Table 9.1: Walled Zone (SMU1) Vulnerability analysis - Erosion

	Vulnerability - Incl. Adaptive Capacity			
	2035	2050	2075	2125
Road Reserve - Lower Merv Cowan (East Riv Drv)	L	L	L	L
Toilet Block - Lower Merv Cowan (East Riv Drv)	L	L	L	L
Riverside Road - Niergarup Reserve to Pier Street	L	L	L	L
Riverside Road - Pier Street to Dome Café	L	L	L	L
Riverside Road Dome Café to Stirling Bridge	L	L	L	L
Riverside Road - Stirling Bridge to J Dolan Park	L	L	L	L
J Dolan Park	L	L	L	L
Riverwalls protecting shoreline				
Coastal Pathways - Niergarup Reserve to Pier Street	L	L	L	L
Coastal Pathways - Pier Street to Dome Café	L	L	L	L
Coastal Pathways - Dome Café to Stirling Bridge	L	L	L	L
Coastal Pathways - Stirling Bridge to J Dolan Park	L	L	L	L
Boat ramps, moorings, jetties	H	H	E	E
Residential Properties - Riverside Rd / East St	L	L	L	L
Residential Properties - Riverside Rd / Pier St	L	L	L	L
Marine Education Boatshed	L	L	L	L
Dome Café	L	L	L	L
Minor Infrastructure (bins, signage, shelters, fencing)	L	L	L	L
Carpark - Public Carpark No 4 (Dome Cafe)	L	L	L	L
Carpark - J Dolan Park	L	L	L	L
Left Bank	L	L	L	L
Playground Equipment – north of Dome Cafe	L	L	L	L
Shelters, seating and picnic tables – J Dolan Park	L	L	L	L
Shelters, seating and picnic tables – North of Dome Cafe	L	L	L	L
Drainage features (pits, pipes, culverts, stormwater outlets)	H	H	E	E

9.1.2 Vulnerability of Coastal Assets to inundation in SMU1

The vulnerability of coastal assets to inundation for SMU1 is shown in Table 9.2:

- Carparks at the Dome café and J.Dolan park are rated Moderate at the 2035 planning period, and rated High in the 2050 and 2075 periods respectively.
- The Marine Education boatshed and Dome café are rated High at 2035, increasing to Extreme in the 2075 and 2125 periods respectively.
- Coastal pathways are rated at Low vulnerability presently and increase to Moderate rating in the 2050 to 2075 planning period.
- Riverside Road is rated Moderate at the section north of Pier St in the 2035 planning period. The whole of riverside Rd is rated Highly vulnerable at the 2125 period.
- Riverside Rd residential properties adjacent East St are rated at Low vulnerability presently and up until the 2125 planning period where they are rated as Highly vulnerable driven by projected sea level rise.
- The Left Bank hotel is rated at Low vulnerability presently and up until the 2125 planning period where its rating increases to Highly vulnerable driven by projected sea level rise.

It is noted that the elevation of the Marine Education boatshed, Dome Café and Riverside Road residential properties is based on nearby land levels captured by survey (LiDAR). The additional raised finished floor level is not considered in this initial analysis. The assumption of floor levels is considered in more detail in the Risk Evaluation phase (Section 13).

Table 9.2: Walled Zone (SMU1) Vulnerability analysis - Inundation

	Vulnerability - Incl. Adaptive Capacity			
Description	2035	2050	2075	2125
Road Reserve - Lower Merv Cowan (East Riv Drv)	L	L	L	M
Toilet Block - Lower Merv Cowan (East Riv Drv)	L	L	L	M
Riverside Road - Niergarup Reserve to Pier Street	M	M	M	H
Riverside Road - Pier Street to Dome Café	L	L	M	H
Riverside Road Dome Café to Stirling Bridge	L	L	M	H
Riverside Road - Stirling Bridge to J Dolan Park	M	M	M	H
J Dolan Park	L	L	M	M
Riverwalls protecting shoreline	L	L	M	M
Coastal Pathways - Niergarup Reserve to Pier Street	L	L	M	M
Coastal Pathways - Pier Street to Dome Café	L	L	M	M
Coastal Pathways - Dome Café to Stirling Bridge	L	M	M	M
Coastal Pathways - Stirling Bridge to J Dolan Park	L	L	M	M
Boat ramps, moorings, jetties	M	M	M	M
Residential Properties - Riverside Rd / East St	L	L	L	H
Residential Properties - Riverside Rd / Pier St	L	L	L	L
Marine Education Boatshed	H	H	E	E
Dome Café	H	H	H	E
Minor Infrastructure (bins, signage, shelters, fencing)	L	L	M	M
Carpark - Public Carpark No 4 (Dome Cafe)	M	H	H	H
Carpark - J Dolan Park	M	M	H	H
Left Bank	L	L	L	H
Playground Equipment – north of Dome Cafe	L	L	M	M
Shelters, seating and picnic tables – J Dolan Park	L	L	M	M
Shelters, seating and picnic tables – North of Dome Cafe	L	L	M	M
Drainage features (pits, pipes, culverts, stormwater outlets)	L	L	M	M

9.2 SMU2 – Reclaimed Zone

The Reclaimed Zone (SMU2) extends along approximately 1.2 km of the river and is comparatively lower elevation compared with the adjacent sections of the shoreline. The elevation on the section of Riverside Rd adjacent Aquarama is lowest at approximately 1m AHD, with the rest of Riverside Rd in the range of 1.1m to 1.3m AHD. The river bends around Preston Point in this section and the shoreline along the John Tonkin Park side faces west-southwest whilst the shoreline is generally north facing for the section on which the Swan Yacht Club, Aquarama and W Wayman Reserve are located.

The shoreline features change along the SMU from natural sandy shoreline fronting the Niergarup Reserve, to a sloped rock revetment and boat ramp adjacent Zephyr's café, to the sandy shoreline in the lee of the detached breakwaters at John Tonkin Park. Along the north facing shorelines around Preston Point, there are moorings and jetties for the Swan Yacht Club with seawalls protecting the shoreline as well as sections of natural shoreline in front of Norm McKenzie Park.

Commercial sites along the north facing section of river cater for the Swan Yacht Club, Aquarama, 8 Knots Tavern, Cool Beans café and several clubs and community groups. There are three parks in the SMU, several car parks and Riverside Road. The Leuuwin Barracks site occupies the majority of the area landward of Riverside Road.

9.2.1 Vulnerability of Coastal Assets to Erosion

For vulnerability rating of assets to erosion is shown in Table 9.3:

- For coastal assets landward of the shoreline where protection structures are located presently there is no risk (Rated 'Low'). Vulnerability rating in the assessment in Table 9.3 considers the structures remain in place. The future strategy to either continue to protect the shoreline or to pursue a different approach (such as accommodate or managed retreat) is examined in more detail in the Risk Treatment (Section 13).
- The natural shoreline areas at the beach of Niergarup Reserve, Norm McKenzie Park and W. Wayman Reserve are all rated as highly vulnerable from the 2035 period, with the rating of Extreme from 2075.
- The section of Riverside Road adjacent the Niergarup Reserve is rated as highly vulnerable in the planning year 2050 and extreme in the year 2075.
- The coastal pathway at W.Wayman Reserve is rated as Highly vulnerable by 2035.

Table 9.3: Reclaimed Zone (SMU2) Vulnerability analysis - Erosion

	Vulnerability - Incl. Adaptive Capacity			
	2035	2050	2075	2125
Niergarup Reserve	H	H	E	E
Coastal Pathway - John Tonkin Reserve	L	L	L	L
Coastal Pathway - Norm McKenzie Park	M	H	H	E
Norm McKenzie Park Foreshore Reserve Area	H	H	E	E
Norm McKenzie Park - Playground	L	L	M	H
Norm McKenzie Park - Roadside Shelter and BBQ	L	L	M	M
W Wayman Reserve - Foreshore Reserve Area	H	H	E	E
W Wayman Reserve - Pathway	H	H	E	E
W Wayman Reserve - Shelter	L	M	M	H
W Wayman Reserve - Exercise Equipment	L	L	L	L
Detached groyne field	L	L	L	L
John Tonkin Reserve - Playground	L	L	L	L
John Tonkin Reserve - Gazebos	L	L	L	L
Riverwalls protecting shoreline				
Navy Cadets	L	L	L	L
Beach access pathways	L	L	L	L
Leeuwin Barracks - Existing Carpark / Builings	L	L	L	L
Leeuwin Barracks -Park Area Adjacent Riv Drv	L	L	L	L
Aquarama Marina (CarPark East Side)	L	L	L	L
Aquamarina Bulding (adj Riv Drv)	L	L	L	L
8 Knots Tavern	L	L	L	L
Rowing Club	L	L	M	H
Minor Infrastructure (bins,signage, shelters, fencing)	L	L	L	L
Moorings	L	L	L	L
Cool Beans Café	L	L	L	L
Swan Yacht Club	L	L	L	L
Zephyr Cafe	L	L	L	L
Boat Ramp	L	L	L	L
Riverside Road	M	H	E	E
Car parks – Public Car Park No 1 (Boat Ramp)	L	L	L	L
Car parks – Public Car Park No 2 (John Tonkin North)	L	L	L	L
Car parks – Public Car Park No 5 (Cool Beans)	L	L	L	L
Car parks - Public Car Park No 3 – Zephyr Café	L	L	L	L
Car parks – Swan Yacht Club	L	L	L	L
Car parks – Fremantle Rowing Club	L	L	L	L
Drainage features (pits, pipes, culverts, outlets)	H	H	E	E

9.2.2 Vulnerability of Coastal Assets to Inundation

For inundation the results are shown in Table 9.4:

- The 8 Knots tavern, Cool Beans Café and Rowing Club are rated highly vulnerable by 2035. The Swan Yacht Club, Aquarama and Navy Cadets are similarly rated highly vulnerable at 2050 with 8 Knots Tavern rating moving to Extreme.
- Carparks are generally rated Moderate till the 2075 period, moving to be rated Highly vulnerable in the 2075 to 2125 planning period.
- Coastal pathways are rated as Low to Moderate throughout, recognising the high adaptive capacity to short term inundation.
- Playground areas in John Tonkin Park and Norm McKenzie Park are rated highly vulnerable by 2075.
- Riverside Road is rated highly vulnerable from the 2075 period onwards.

It is noted that the elevation of the commercial and club buildings (eg Swan yacht club, 8 Knots Tavern) assumed in the analysis is based on nearby land levels captured by survey (LiDAR). The additional raised finished floor level is not considered in this initial analysis. This will be captured in the Risk Evaluation phase (Section 11).

Table 9.4: Reclaimed Zone (SMU2) Vulnerability analysis - Inundation

	Vulnerability - Incl. Adaptive Capacity			
Description	2035	2050	2075	2125
Niergarup Reserve	L	M	M	M
Coastal Pathway - John Tonkin Reserve	L	L	M	M
Coastal Pathway - Norm McKenzie Park	L	L	M	M
Norm McKenzie Park Foreshore Reserve Area	L	L	M	M
Norm McKenzie Park - Playground	M	M	H	H
Norm McKenzie Park - Roadside Shelter and BBQ	L	M	M	H
W Wayman Reserve - Foreshore Reserve Area	M	M	M	M
W Wayman Reserve - Pathway	L	L	M	M
W Wayman Reserve - Shelter	L	L	M	M
W Wayman Reserve - Exercise Equipment	L	M	M	H
Detached groyne field	M	M	M	M
John Tonkin Reserve - Playground	M	M	H	H
John Tonkin Reserve - Gazebos	L	L	M	M
Riverwalls protecting shoreline	L	L	M	M
Navy Cadets	M	H	H	E
Beach access pathways	M	M	M	M
Leeuwin Barracks - Existing Carpark / Builings	L	L	H	E
Leeuwin Barracks -Park Area Adjacent Riv Drv	L	L	L	M
Aquarama Marina (CarPark East Side)	M	M	H	H
Aquamarina Bulding (adj Riv Drv)	M	H	H	E
8 Knots Tavern	H	E	E	E
Rowing Club	H	H	H	E
Minor Infrastructure (bins,signage, shelters, fencing)	L	L	M	M
Moorings	L	M	M	M
Cool Beans Café	H	H	H	E
Swan Yacht Club	M	H	H	E
Zephyr Cafe	L	M	H	E
Boat Ramp	M	M	M	M
Riverside Road	M	M	H	H
Car parks – Public Car Park No 1 (Boat Ramp)	M	M	H	H
Car parks – Public Car Park No 2 (John Tonkin North)	L	M	M	H
Car parks – Public Car Park No 5 (Cool Beans)	L	M	M	H
Car parks - Public Car Park No 3 – Zephyr Café	M	M	M	H
Car parks – Swan Yacht Club	L	M	M	H
Car parks – Fremantle Rowing Club	M	M	M	H
Drainage features (pits, pipes, culverts, outlets)	L	L	M	M

9.3 SMU3 – Natural Zone

The Natural Zone (SMU3) commences from the end of W Wayman Reserve heading east along the river approximately 1km to the end of the East Fremantle Yacht club site. The shoreline area encompasses developed sections of river that are occupied by the Department of Defence, the Sea Scouts and the East Fremantle Yacht Club, with vertical walls, quayside walls and rubble mound fronting the shoreline.

The remainder of the shoreline is natural principally along the section of the Jerrat Drive escarpment between the sea scouts building and the East Fremantle Yacht club. The shoreline is north facing and there are narrow beaches of sandy riverbed meeting the limestone-based escarpment which is covered

with native vegetation. The escarpment is a highly valued natural site by the community and used for recreation.

The East Fremantle Yacht Club occupies a section of the shoreline at the eastern end of SMU3. The shoreline here has continuous vertical quaywall of varying types, with several ramps as well as jetties and moorings extending out from the shore. There is a small beach in front of the vertical wall on the eastern side of the Yacht Club.

A summary of the key findings for the Natural Zone (SMU3) are:

For erosion the results are shown in Table 9.5:

- The section of beach at the base of the Jerrat Drive escarpment is rated as Highly vulnerable by 2035 and Extreme from 2050 onwards.
- The foreshore area and access stairs at the base of the Jerrat Drive escarpment is rated as Highly vulnerable by 2035 and Extreme from 2075 onwards.
- For sections where coastal protection is in place currently at the Sea Scouts site and the East Fremantle Yacht Club, the rating is low for all assets landward. It is assumed these structures are maintained in future planning periods, continuing the present-day level of protection along the shoreline.

For inundation the results are shown in Table 9.6:

- The buildings of the East Fremantle Yacht Club are rated highly vulnerable by 2035, with the rating increasing to Extreme in the 2075 to 2125 period.
- The Sea Scouts building is rated highly vulnerable by 2050, with the rating increasing to Extreme in the 2075 to 2125 period.
- The foreshore at the base of Jerrat Drive and the quayside and carpark adjacent the East Fremantle Yacht Club is rated as Moderate at 2035 moving up to High from 2075 onwards.

It is noted that the elevation of the East Fremantle Yacht Club and Sea Scout buildings assumed in the analysis is based on nearby land levels captured by survey (LiDAR). The additional raised finished floor level is not considered in this initial analysis. This will be captured in the Risk Evaluation phase (Section 11).

Table 9.5: Natural Zone (SMU3) Vulnerability analysis - Erosion

	Vulnerability - Incl. Adaptive Capacity			
Description	**2035**	**2050**	**2075**	**2125**
Riverwalls				
Foreshore along Jerrat Drive	H	H	E	E
Beaches within Jerrat Drive escarpment	H	E	E	E
Fremantle Sea Scouts building	L	L	L	L
Beach access stairs to Jerrat Drive escarpment Beach	H	H	E	E
Department of Defence wharves				
East Fremantle Yacht Club Building	L	L	L	L
East Fremantle Yacht Club Lower Car Park, Boat Access Pathway	L	L	L	L
Jerrat Drive and road network	L	L	M	H
Boat ramps, moorings and jetties	M	H	H	H
Minor Infrastructure (bins, signage, shelters, fencing	L	L	L	L
Carpark at Jerrat Drive	L	L	L	M
Drainage features (pits, pipes, culverts, stormwater outlets)	H	H	E	E

Table 9.6: Natural Zone (SMU3) Vulnerability analysis - Inundation

	Vulnerability - Incl. Adaptive Capacity			
Description	**2035**	**2050**	**2075**	**2125**
Riverwalls	L	L	M	M
Foreshore along Jerrat Drive	L	L	M	M
Beaches within Jerrat Drive escarpment	L	L	L	L
Fremantle Sea Scouts building	M	H	H	E
Beach access stairs to Jerrat Drive escarpment Beach	L	L	M	M
Department of Defence wharves	L	L	M	H
East Fremantle Yacht Club (BUILDING)	H	H	H	E
East Fremantle Yacht Club Lower Car Park, Boat Access Pathway	M	M	H	H
Jerrat Drive and road network	L	L	L	L
Boat ramps, moorings and jetties	L	M	M	M
Minor Infrastructure (bins, signage, shelters, fencing, beach access stairs)	L	L	L	M
Carpark at Jerrat Drive	L	L	L	L
Drainage features (pits, pipes, culverts, stormwater outlets)	L	L	M	M

10. Risk Evaluation – Existing Controls

Existing controls and risk management measures already in place in the study area have the potential to reduce the consequences and/or likelihood of coastal hazard. Controls can be in the form of

- Physical controls (e.g. shoreline protection structures or seawalls);
- Natural controls (e.g. shoreline topography features); or
- Planning Controls (e.g. controls on building development like finished floor levels).

10.1 Physical and Natural Controls

Within the shoreline areas there are a range of physical and Natural controls. For each of the SMU's these controls and their influence are summarised in Table 10.1.

Table 10.1: Summary of Existing Controls in the Shoreline Management Units

SMU	Control	Comment
Walled Zone	1. Continuous line of shoreline protection - River walls, Revetments	Provide protection to areas landward from erosion. Assumed these are maintained in future planning years.
	2. Development controls	Finished floor level of buildings raised above ground level as flood mitigation (this is a planning recommendation as part of development approval) Dome Café and Marine Education Boatshed assumed at +300mm above adjacent land level
	3. Development setacks	Residential development is setback from the coast to allow for coastal processes in the future. Some areas of land are at risk of erosion and/ or inundation hazard.
Reclaimed Zone	1. Natural shoreline areas	Beach at Niergarup Reserve, interface between John Tonkin and the beach area. Provide buffer against erosion for landward areas. No development in the shoreline.
	2. Development controls	Finished floor level of buildings raised above ground level as flood mitigation (this is a planning recommendation as part of development approval) Swan Yacht Club, 8 knots Tavern and Aquarama Marina Office are assumed at +300mm above adjacent surveyed land level.
	3. Boat Ramp – control structures either side on foreshore	Localised impacts - control of alongshore flow of sediment. The boat ramp is flanked by rock groynes either side of the structure.
	4. Preston Beach Groyne	Localised impacts - control of alongshore flow of sediment. Assumed this will be maintained in future.
	5. Offshore Groyne Structures at John Tonkin	Stabilises the beach in the lee of the structures by reducing wave impacts and creating a calm area where

SMU	Control	Comment
		sand accumulates and acts as a buffer in large storm events. Assumed these structures are maintained in their present form and the beach maintained by the Town following large storm events in the erosion assessment.
	6. Shoreline protection – Revetment in front of Boat Ramp carpark, river walls in front of the SPYC and rowing club, seawall fronting W. Wayman Reserve,	Provide protection to areas landward from erosion. Assumed these are maintained in future planning years.
Natural Zone	1. Natural control - Limestone in Jerrat Drive escarpment	Natural feature providing resilience to the shoreline from erosion.
	2. Development Controls	Finished floor level of buildings raised above ground level as flood mitigation (this is a planning recommendation as part of development approval). East Fremantle Yacht Club (EFYC) and Sea Scout Building are assumed at +300mm above adjacent surveyed land level.
	3. Shoreline Structures Quay Walls at EFYC, river wall at the Sea Scout site	Assumed these are maintained in future planning years. Provide protection to areas landward from erosion.

10.2 Planning Controls

The existing planning controls applicable to land use and development within the Town have been reviewed with a complete summary in Appendix E.1 (element 2022). The review has a particular focus on coastal planning and management aspects relating to the preparation of this CHRMAP.

10.2.1 Policy Framework Overview

Western Australia's State planning framework includes strategic and statutory planning functions set out in the Planning and Development Act 2005. The planning system is hierarchical, requiring increasing levels of detail as a proposal progresses through the state and local planning systems, including subdivision and development of individual sites. The relationships of the various policies are presented in Figure 10.1.

This CHRMAP provides the overarching blueprint for the Town's local planning framework to deliver the requirements of SPP2.6.

Figure 10.1: Western Australian planning hierarchy (State Coastal Planning Policy Guidelines, 2020)

SPP 2.6 considers the impacts of coastal related processes along the coastline and tidal reaches including river mouths and estuaries. SPP 2.6 provides the basis for coastal planning and seeks to ensure coastal hazard risk management and adaptation planning is established to guide the location and form of future development along the coast. SPP 2.6 is applicable to every stage of the planning process and provides a range of policy measures to consider in the decision-making process.

This section reviews the existing planning framework relevant to coastal processes along the Swan River foreshore within the Town. The primary aim of this review is to:

- Ensure the CHRMAP aligns with aims and objectives of the relevant state and local planning frameworks.
- Assess the adequacy of the existing planning framework and controls for addressing hazard issues.
- Identify any potential constraints and/or opportunities with the existing planning framework, including controls for addressing hazard issues.

10.2.2 Key Planning Controls Relevant to the CHRMAP

The following documents are included in the review:

1. Corporate Governance Framework:
   - Town of East Fremantle Strategic Community Plan 2020 – 2030
   - Town of East Fremantle Corporate Business Plan 2019 – 2023
   - Town of East Fremantle Strategic Resource Plan 2019 – 2034
2. Relevant Legislation:
   - Planning and Development (Local Planning Schemes) Regulations 2015
3. State Planning Framework:
   - Perth and Peel @3.5 million and Sub-Regional Planning Framework
   - Metropolitan Region Scheme
   - WA Coastal Zone Strategy
   - State Planning Policy 2.6 – State Coastal Planning and Guidelines
   - Coastal hazard risk management and adaptation planning guidelines
   - State Planning Policy 3.4 – Natural Hazards and Disasters
   - State Planning Policy 2.10 – Swan Canning River System
   - Draft State Planning Policy 2.9 – Planning for Water
   - Swan and Canning Rivers Management Act 2006

4. Local Planning Framework:
   - Town of East Fremantle Local Planning Strategy (2022)
   - Town of East Fremantle Local Planning Scheme No.3 (LPS 3)
   - Residential Design Guideline (Local Planning Policy 3.1.1).
   - Leeuwin Vision Plan (2016)
   - Preston Point Road North Recreation Precinct Master Plan (2020)
   - East Fremantle Foreshore Master Plan (2016)

10.2.3 Summary of Statutory Planning Mechanisms

There are various planning mechanisms that will be considered in the CHRMAP process and recommended for implementation, where appropriate. The statutory planning mechanisms that may be available to address coastal related hazards within the Town are considered in Table 10.2 which outlines the advantages and disadvantages of each option.

Based on the review the use of Local Structure Plans, a Special Control Area within LPS 3 and a CHRMAP Local Planning Policy are considered the most appropriate.

Table 10.2: Summary of Existing Planning Controls

Statutory Measure	Advantages	Disadvantages
Structure Plan / Activity Centre Plan	Can address location specific issues i.e. identification of foreshore physical setbacks and areas affected by erosion and inundation.	Does not have the force and effect of the local planning scheme. Decision makers to have due regard only. Structure Plan cannot specify / enforce built form requirements. Location specific only and therefore cannot address hazard issues on a broad scale. Generally, requires the land to be appropriately zoned to require the preparation of a structure plan.
Local Development Plan	Can specify built form requirements to address location specific hazard issues i.e. increased setbacks, minimum habitable floor levels, etc. Has due regard of the local planning scheme. Can vary 'deemed-to-comply' development requirements.	Location specific only and therefore cannot address hazard issues on a broad scale.
Local Planning Policies and Design Guidelines	Can address coastal hazard and risk issues at a district (broad) level and/or at a location specific level. Can include mapping of coastal hazard issues with flexibility to	Is only a 'due regard' document and does not have the full force and effect as provisions contained in a local planning scheme.

Statutory Measure	Advantages	Disadvantages
	update mapping as and when amendments are required to be undertaken. Can vary 'deemed-to-comply' development requirements. Can be amended relatively quickly (compared to local planning scheme amendment as new coastal studies are completed.	
Special Control Area (SCA)	SCAs may establish specific provisions to address a specific issue such as erosion and inundation. SCAs can broadly address unique issues that extend across multiple zones and/ or reserves. SCAs can be used to require development approval for otherwise normally 'exempted' development. In this regard, SCAs are the preferred mechanism to identify where and what type of development requires development approval to allow for appropriate consideration of the risk of erosion and inundation.	A scheme amendment would potentially need to be progressed every time mapping of the coastal issue is amended and/or updated. This may be avoided if the Special Control Area refers to a separate Local Planning Policy which may contain reference to mapping of coastal hazards.
General Development Provisions of LPS1	Can establish provisions which broadly address hazard issues. Can introduce provisions which relate to a local planning policy addressing hazard issues and which may contain hazard mapping.	Given the specific nature of erosion and inundation issues, including the varied locational extent to which it may affect land within a district, specific development requirements would more appropriately be established within a Special Control Area as opposed to general provisions within a local planning scheme.
Supplemental Provisions to Schedule 1 and 2 of the Regulations	May be used to supplement the standard scheme provisions set out in Schedule 1 and 2 of the Regulations to address specific hazard issues.	Given the specific nature of erosion and inundation issues, including the varied locational extent to which it may affect land within a district, specific development requirements would more appropriately be established within a Special Control Area as opposed to the supplemental provisions of a scheme.

11. Residual Risk and Priority for Treatment

11.1 Overview

The Risk Evaluation phase of the CHRMAP is used to prioritise risk management measures for the study area. The results from the risk assessment detailed in Section 9 are examined in greater detail for assets with vulnerability risk rated high and very high.

The risk evaluation considers if there are already risk management measures in place or existing controls that can be taken into consideration to reduce the risk rating determined through the vulnerability assessment. Upon completion of this stage, the residual risk rating for assets through the study area will be determined and the most vulnerable assets requiring risk management measures as a priority will be identified.

The vulnerability rating for assets is presented in this section, which incorporates consideration of existing controls through each SMU (Table 10.1).

The final asset vulnerability rating is presented in a traffic light system as shown in Table 11.1.

Table 11.1: Vulnerability Rating Summary

Rating	Description of Asset Vulnerability and Action Required
Low	Asset has high resilience; it is able to cope with the impacts of coastal hazards without additional support. No immediate action required
Medium	Asset has some ability to cope with the impacts of coastal hazards. However short to medium term actions are likely to be required to reduce risk to acceptable levels
High	Asset has limited ability to cope with the impacts of coastal hazards. Immediate to short-term adaptation is likely to be required to reduce risk to acceptable levels.
Very High	Asset has minimal ability to cope with the impacts of coastal hazards without additional support. Adaptation will need to be considered as a priority.

11.2 SMU1 -Walled Zone

The vulnerability rating for assets in SMU1 are presented in Table 11.2 for erosion and inundation. The priority assets that require risk management are driven by inundation impacts and include:

- The Carpark at Dome Café is rated as Highly vulnerable by 2050. The J Dolan Park carpark is rated Highly vulnerable by 2075.
- The Marine Education boatshed is rated Highly vulnerable by 2035 and Extreme in 2075.
- The Dome café is rated as Highly vulnerable in 2075 and Extreme in the 2125 period.
- Riverside Road is rated as Highly vulnerable in the timeframe 2075 to 2125.

It is noted that the continuous shoreline protection along the shoreline of the Walled Zone is assumed to be maintained in future years. In this assessment this is assumed to continue to provide erosion protection afforded to the coastal assets presently.

Table 11.2: Vulnerability Rating – SMU 1: Walled Zone

	Assets	2035	2050	2075	2125
	Erosion				
1	Road Reserve - Lower Merv Cowan (East	🟢	🟢	🟢	🟢
2	Toilet Block - Lower Merv Cowan (East Riv	🟢	🟢	🟢	🟢
3	Riverside Road - Niergarup Reserve to Pier	🟢	🟢	🟢	🟢
4	Riverside Road - Pier Street to Dome Café	🟢	🟢	🟢	🟢
5	Riverside Road Dome Café to Stirling Bridge	🟢	🟢	🟢	🟢
6	Riverside Road - Stirling Bridge to J Dolan	🟢	🟢	🟢	🟢
7	J Dolan Park	🟢	🟢	🟢	🟢
8	Riverwalls protecting shoreline	Not Rated			
9	Coastal Pathways - Niergarup Reserve to	🟢	🟢	🟢	🟢
10	Coastal Pathways - Pier St to Dome Café	🟢	🟢	🟢	🟢
11	Coastal Pathways - Dome Café to Stirling Br.	🟢	🟢	🟢	🟢
12	Coastal Pathways - Stirling Bridge to J Dolan	🟢	🟢	🟢	🟢
13	Boat ramps, moorings, jetties	🟡	🟡	🟡	🟡
14	Residential Properties - Riverside / East St	🟢	🟢	🟢	🟢
15	Residential Properties – Riverside / Pier St	🟢	🟢	🟢	🟢
16	Marine Education Boatshed	🟢	🟢	🟢	🟢
17	Dome Café	🟢	🟢	🟢	🟢
18	Minor Infrastructure (bins, signage, shelters, fencing)	🟢	🟢	🟢	🟢
19	Carpark - Public Carpark No 4 (Dome Cafe)	🟢	🟢	🟢	🟢
20	Carpark - J Dolan Park	🟢	🟢	🟢	🟢
21	The Left Bank	🟢	🟢	🟢	🟢
22	Playground Equipment – north of Dome Cafe	🟢	🟢	🟢	🟢
23	Shelters, seating and picnic tables – J Dolan Park	🟢	🟢	🟢	🟢
24	Shelters, seating and picnic tables – North of Dome Cafe	🟢	🟢	🟢	🟢
25	Drainage features (pits, pipes, culverts, stormwater outlets)	🟡	🟡	🟡	🟡

	Assets	2035	2050	2075	2125
	Inundation				
1	Road Res - Merv Cowan (East Riv Drv)	Low	Low	Low	Medium
2	Toilet Block -Merv Cowan (East Riv Drv)	Low	Low	Low	Medium
3	Riverside Road - Niergarup Res - Pier Street	Medium	Medium	Medium	High
4	Riverside Road - Pier Street to Dome Café	Low	Low	Medium	High
5	Riverside Road Dome Café to Stirling Bridge	Low	Low	Medium	High
6	Riverside Road - Stirling Br. to J Dolan Park	Medium	Medium	Medium	High
7	J Dolan Park	Medium	Medium	Medium	Medium
8	Riverwalls protecting shoreline	Low	Low	Medium	Medium
9	Coastal Pathways - Niergarup Res to Pier St	Low	Low	Medium	Medium
10	Coastal Pathways - Pier St to Dome Café	Low	Low	Medium	Medium
11	Coastal Pathways - Dome Café to Stirling Br.	Low	Medium	Medium	Medium
12	Coastal Pathways - Stirling Bridge to J Dolan	Low	Low	Medium	Medium
13	Boat ramps, moorings, jetties	Medium	Medium	Medium	Medium
14	Residential Properties - Riverside / East St	Low	Low	Low	Medium
15	Residential Properties – Riverside / Pier St	Low	Low	Low	Low
16	Marine Education Boatshed	High	High	Very High	Very High
17	Dome Café	Low	Medium	High	Very High
18	Minor Infrastructure (bins, signage, shelters, fencing)	Low	Low	Medium	Medium
19	Carpark - Public Carpark No 4 (Dome Cafe)	Medium	High	High	High
20	Carpark - J Dolan Park	Medium	Medium	High	High
21	The Left Bank	Low	Low	Low	High
22	Playground Equipment – north of Dome Cafe	Low	Low	Medium	Medium
23	Shelters, seating and picnic tables – J Dolan Park	Low	Low	Medium	Medium
24	Shelters, seating and picnic tables – North of Dome Café	Low	Low	Medium	Medium

Vulnerability Rating: Low Medium High Very High

11.3 SMU2 – Reclaimed Zone

The vulnerability rating for assets in SMU2 are presented in Table 11.3 for erosion and inundation.

The priority assets that require risk management are driven by inundation impacts and erosion impacts and include the following locations:

- The Niergarup Reserve is rated as Highly vulnerable to erosion by 2035 and Extreme in the year 2075.
- Norm Mckenzie foreshore reserve is rated as Highly vulnerable to erosion in 2035 and Extreme by 2075.
- W Wayman Reserve foreshore is rated as Highly vulnerable to erosion in 2035 and Extreme by 2075.
- Riverside Road behind the Nieragup Reserve is rated as Highly vulnerable to erosion in 2050 and Extreme by 2075.
- Coastal pathways in W Wayman Reserve and Norm McKenzie are rated Highly vulnerable to erosion by 2035 and 2050 respectively.
- The buildings of the Navy cadets, Cool Beans café, Rowing Club are all rated as Highly Vulnerable to inundation in 2075, rising to extreme towards 2125.
- The 8 Knots Tavern is rated at Highly vulnerable to inundation in 2035 and Extreme in 2075.
- Riverside Road is rated as Highly vulnerable to inundation in 2075.
- There are six carparks around the area which are rated as Moderate in the 2035 and 2050 periods and Highly vulnerable in the 2075 to 2125 period.

The beach at John Tonkin reserve in the lee of the detached breakwaters is assumed to be maintained following large erosion events.

It is noted that the current sections of shoreline protection along the Reclaimed Zone area are assumed to be maintained in the short to medium term (approximately 50 years). Under projected sea level rise a vertical sea level 0.5m to 1.05m higher than present day is forecast in the 2075 to 2125 planning period. With this magnitude of sea level rise in the future, to continue to provide protection to the assets in the shoreline of SMU2 may be too difficult and / or expensive, with the land level of the foreshore reserves susceptible to regular flooding. A decision on whether to continue protection of the shorelines or execute a planned and managed retreat of the shoreline areas triggered by sea level rise impacts will be required, discussed further in Section 13.

Table 11.3: Vulnerability Rating – SMU 2: Reclaimed Zone

	Erosion				
	Assets	**2035**	**2050**	**2075**	**2125**
1	Niergarup Reserve	Orange	Orange	Red	Red
2	Coastal Pathway – John Tonkin Reserve	Green	Green	Green	Green
3	Coastal Pathway – Norm McKenzie Park	Yellow	Orange	Orange	Red
4	Norm McKenzie Park Foreshore Reserve	Orange	Orange	Red	Red
5	Norm McKenzie Park – Playground	Green	Green	Yellow	Orange
6	Norm McKenzie Park Roadside shelter, BBQ	Green	Green	Yellow	Yellow
7	W Wayman Reserve– Foreshore reserve	Orange	Orange	Red	Red
8	W Wayman Reserve – Pathway	Orange	Orange	Red	Red

	Erosion				
9	W Wayman Reserve – Shelter				
10	W Wayman Reserve - Exercise Equipment				
11	Detached groyne field				
12	John Tonkin Reserve Playground				
13	John Tonkin Reserve – Gazebos				
14	Riverwalls protecting shoreline		Not Assessed		
15	Navy Cadets				
16	Beach access pathways				
17	Leeuwin Barracks Existing Carparks / Bldgs				
18	Leeuwin Barracks Park Area adjacent Riv				
19	Aquarama Marina (Car Park East side)				
20	Aquamarina Building adj Riv Rve				
21	8 Knots Tavern				
22	Rowing Club				
23	Minor Infra (bins, signage, shelters, fencing)				
24	Moorings				
25	Cool Beans Café				
26	Swan Yacht Club				
27	Zephyr Café				
28	Boat Ramp				
29	Riverside Road – Behind Nieragup Res.				
30	Car parks – TOEF Public Car Park Nos 1, 2 and 5, John Tonkin Reserve, Zephyr Café, and within Swan Yacht Club, Fremantle Rowing Club and Aquarama precincts.				
31	Drainage features (culverts, S/water				
	Inundation				
	Assets	**2035**	**2050**	**2075**	**2125**
1	Niergarup Reserve				
2	Coastal Pathway - John Tonkin Reserve				
3	Coastal Pathway - Norm McKenzie Park				

		Erosion			
4	Norm McKenzie Park Foreshore Reserve				
5	Norm McKenzie Park - Playground				
6	Norm McKenzie Park – Shelter / BBQ				
7	W Wayman Reserve - Foreshore Reserve				
8	W Wayman Reserve – Pathway				
9	W Wayman Reserve – Shelter				
10	W Wayman Reserve - Exercise Equipment				
11	Detached groyne field				
12	John Tonkin Reserve – Playground				
13	John Tonkin Reserve – Gazebos				
14	Riverwalls protecting shoreline				
15	Navy Cadets				
16	Beach access pathways				
17	Leeuwin Barracks - Ext Carpark / Buildings				
18	Leeuwin Barracks -Park Area Adj Riv Drv				
19	Aquarama Marina (Car Park East Side)				
20	Aquarama Building (adj Riv Drv)				
21	8 Knots Tavern				
22	Rowing Club				
23	Minor Infra (bins, signage, shelters, fencing)				
24	Moorings				
25	Cool Beans Café				
26	Swan Yacht Club				
27	Zephyr Café				
28	Boat Ramp				
29	Riverside Road				
30a	TOEF Public Car Park No 1 (Boat Ramp)				
30b	TOEF Public Car Park No 2 (John Tonkin Nth)				
30c	TOEF Public Car Park No 5 (Cool Beans)				
30d	TOEF Public Car Park No 3 – Zephyr Café				

		Erosion			
30e	Car Park Swan Yacht Club				
30f	Car park– Fremantle Rowing Club				
31	Drainage features (pits, pipes, culverts,				

Vulnerability Rating: Low Medium High Very High

11.4 SMU3 –Natural Zone

The vulnerability rating for assets in SMU3 are presented in Table 11.4 for erosion and inundation.

The priority assets that require risk management driven by erosion impacts are:

- The foreshore, beach and stairs at the base of Jerrat Drive which are rated as Highly vulnerable to erosion by 2035. The rating increases to Extreme for the beach in 2050 and for the other assets in 2075.
- For inundation the buildings at the Sea Scouts and East Fremantle Yacht Club and the lower carpark areas at the East Fremantle Yacht Club are rated Highly vulnerable in 2075.

It is noted that the sections of shoreline currently protected along the Natural Zone will be maintained in future years and will continue to provide erosion protection afforded to the coastal assets presently.

Table 11.4: Vulnerability Rating – SMU 3: Natural Zone

		Erosion			
	Assets	**2035**	**2050**	**2075**	**2125**
1	Riverwalls		Not Assessed		
2	Foreshore Area along Jerrat Drive				
3	Beaches below Jerrat Drive escarpment				
4	Sea Scouts building				
5	Beach access stairs to Jerrat Drive				
6	East Fremantle Yacht Club Building				
7	East Fremantle Yacht Club car park				
8	Jerrat Drive and road network				
9	Boat ramps, moorings and jetties				
10	Minor Infra (signage, seating, fencing)				
11	Carpark at Jerrat Drive				
12	Drainage Features				
		Inundation			
	Assets	**2035**	**2050**	**2075**	**2125**

Innovation Engineered.

	Erosion				
1	Riverwalls	Not Assessed			
2	Foreshore Area along Jerrat Drive	Low	Low	Medium	Medium
3	Beaches below Jerrat Drive escarpment	Low	Low	Low	Low
4	Sea Scouts building	Low	Low	High	Very H
5	Beach access stairs to Jerrat Drive	Low	Low	Medium	Medium
6	East Fremantle Yacht Club Building	Low	Medium	High	Very H
7	East Fremantle Yacht Club car park	Medium	Medium	High	High
8	Jerrat Drive and road network	Low	Low	Low	Low
9	Boat ramps, moorings and jetties	Low	Medium	Medium	Medium
10	Minor Infra (signage, seating, fencing)	Low	Low	Low	Medium
11	Carpark at Jerrat Drive	Low	Low	Low	Low
12	Drainage Features	Low	Low	Medium	Medium

Vulnerability Rating: Low Medium High Very H

12. Risk Treatment Framework

12.1 Adaptation Planning Overview

The risk treatment and adaptation stage of the CHRMAP considers the approaches that can be used to address the residual risk to coastal assets identified in the Risk Evaluation (Section 11). The goal of this stage is to determine appropriate risk treatment responses that can mitigate coastal hazard risk identified for the Town's shoreline areas and coastal assets over the immediate short term (next 10-15 years) and which can maintain a level of flexibility for future decision making. This will provide a basis for decision makers on what is important to focus on today, and what locations could be potentially affected in the future should projected sea level rise and climate change impacts be realised over the 100-year planning timeframe.

The level of coastal hazard risk for the coastal assets through the study area is generally low for the present day, however this risk is projected to increase associated with sea level rise in future years. Sea level rise scenarios consistent with SPP2.6 have been examined to understand how coastal assets could be affected by coastal hazard in future. This process has also considered a range of possible scenarios ranging from events that occur annually up to extreme events with a low likelihood of occurrence (1-in-100yr and 1-in-500yr ARI). It is recognised that there is uncertainty in making long term predictions on both the timing and nature of sea level rise and climate change, and in the risk treatment process this uncertainty is taken into consideration. The role of the CHRMAP is to focus attention today on the most critical areas of the shoreline requiring management for the short-term timeframe and to identify the trigger points at which a change in risk treatment may be required to meet the challenge of a higher level of risk to coastal assets in the future planning years.

Consultation with stakeholders and the community has provided a platform for discussions on how the shoreline areas could be affected in the future under projected sea level rise. The engineering structures that have been implemented at the river's edge such as river walls and groynes have created a highly modified shoreline area that safeguards the locations landward. In addition there has been extension of the natural foreshore areas in the Reclaimed Zone through reclamation actions. This allows for community access to roads (Riverside Drive), parks, walkways, cafes, marinas and many other facilities which are highly utilised and valued for social, commercial and recreational use. Maintaining this protection in the short to medium term is the intention, however, it is recognised that the protection that is offered today to the shoreline areas may at some point in the future become too expensive to maintain in its current form with projected sea level rise of 1.05m over the next 100-yrs. The intention of CHRMAP is to provide guidance on management of the shoreline areas so that they continue to provide the community with high value, whilst recognising that transitioning the shoreline areas to a long-term, sustainable future may require a change in strategy from 'Protect' and/or 'Accommodate' to 'Planned and Managed Retreat' when the cost of protection cannot be justified.

The ability of the shoreline areas to adapt and respond to the changing conditions in future planning periods will be the responsibility of the relevant authority in the shoreline areas. The roles of the various State Agencies in planning, management and development within these areas is discussed in this section.

12.2 Swan and Canning Rivers Management Act 2006

The Swan and Canning Rivers Management Act 2006 (SCRM Act) makes provision for the protection of the Swan and Canning Rivers to ensure ecological values and community benefits are maintained. Under the SCRM Act, the Swan Canning Development Control Area (DCA) has been established which comprises of all the land and waters shown in Figure 12.1 and generally includes:

- Waters of the Swan River reserved under Clause 12 of the Metropolitan Region Scheme (MRS) for 'waterways'; and

- Lands adjoining those waters that are reserved for 'parks and recreation' under Clause 12 of the MRS.

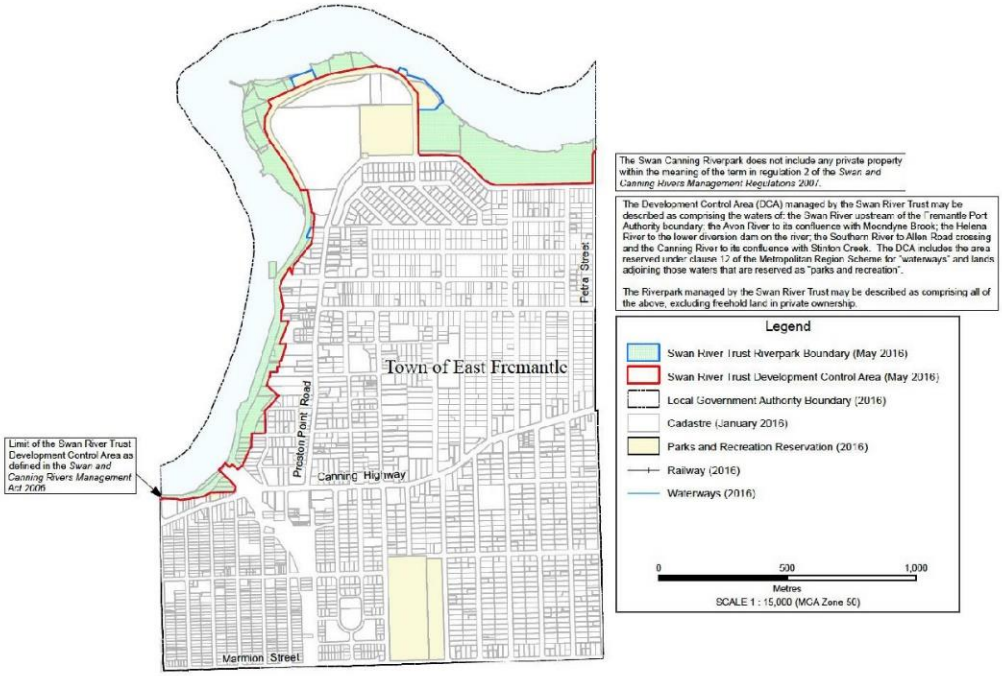

Figure 12.1: Swan Canning Development Control Area

The DCA boundary generally aligns with the boundary of land reserved for 'parks and recreation' under the MRS. Where the 'parks and recreation' reserve changes under the MRS, the DCA is often updated by the Department of Biodiversity, Conservation and Attractions (DBCA).

The DBCA, SRT, WAPC and State and local governments are responsible for the effective planning and management of land use and development within, abutting and affecting the waters and associated land within the DCA, at all stages of the planning process.

Section 70 of the SCRM Act sets out the statutory planning role of DBCA and the SRT in relation to development located in the DCA. The SCRM Act is guided by the Swan and Canning Rivers Management Regulations 2017 (SCRM Regulations) which defines development as:

- the erection, construction, demolition, alteration or carrying out of any building, excavation, or other works in, on, over or under land or waters;
- a material change in use of land or waters; and
- any other act or activity in relation to land or waters declared under the SCRM Regulations to constitute development.

12.3 DBCA Roles and Procedures

In considering development within the DCA, the DBCA is responsible for:

- Making recommendations to the Minister for Environment;
- Issuing permits and licences for works, acts and activities in accordance with the SCRM Regulations, including development that is considered exempt from development approval;

- Providing advice to the WAPC concerning amendments to the MRS and other strategic planning instruments;
- Providing advice to the WAPC in relation to subdivision proposals ;
- Providing advice to the Town on local planning scheme amendments, or other proposals that may affect the DCA, such as structure plans and local development plans;
- Provide advice to and obtain advice from public authorities concerning their responsibilities in terms of the SCRM Act;
- Provide clearance of conditions of approval and advice on implementation of DBCA approvals; and
- Update procedural matters associated with development assessments, review of development control policies, model conditions and DCA boundary as necessary.

Development proposed to be undertaken in the DCA shall be assessed by the DBCA in accordance with Part 5 of the SCRM Act with reference to the SCRM Regulations, policies and any other documents considered relevant. The development application will be referred to the Town for comment whereby certain implementation measures identified in this CHRMAP can be recommended to the DBCA for consideration prior to determination by the Minister for Environment.

It is important to note that as a result of the interactions between the Planning and Development Act and SCRM Act, the statutory decision maker may vary. However, considering that all the land within the DCA and the East Fremantle Local Government Area is Parks and Recreation reserved under the MRS, statutory decision-making authority rests with the Minister for Environment, DBCA or the WAPC. Further, the Local planning Scheme does not apply over land within the Parks and Recreation Reserve.

12.4 Swan River Trust Roles and Procedures

The SRT is responsible for providing advice to the DBCA, WAPC and local governments in accordance with the statutory processes outlined in the MRS, specifically:

- Clause 30A(2)(a):

(i) development of land, any part of which is in the DCA.

(ii) development of land that is not in the DCA but abuts waters in the DCA.

Development applications considered under Clause 30A(2)(a) of the MRS shall be determined by the WAPC in a manner consistent with the advice of the SRT. If the WAPC disagrees with the advice, the development application is to be determined with the involvement of the Minister for Planning and the Minister for Environment.

- Clause 30A(2)(b):

(i) development of land that abuts land in the DCA.

(ii) development likely to affect waters in the DCA, other than a development to which the above-mentioned processes apply.

For development applications considered under Clause 30A(2)(b) the Town shall provide advice to DBCA and WAPC to ensure their decisions align with the overarching objectives and recommendations of this CHRMAP. Consideration to be given to other planning mechanisms that would be more appropriate in assisting DBCA, the Minster for Environment or DPLH in implementing the recommendations of the CHRMAP.

A summary of the abovementioned approval processes is outlined in Table 12.1. While the Town cannot determine development applications under Clause 30A(2)(b) of the MRS, there is the opportunity to

provide advice to the DBCA and WAPC to ensure their decisions align with the overarching objectives and recommendations of this CHRMAP.

Table 12.1: Approval Process – Proposed Development in the DCA

Development Application Type	Part 5 of SCRM Act	Clause 30A(2)(a) of the MRS	Clause 30A(2)(b) of the MRS
Definition	Development proposed on land or in waters that are wholly in the DCA.	Development proposed on land that is partially in or abutting the DCA.	Development proposed on land that abuts other land in the DCA, or that are likely to affect waters in the DCA.
Assessing Body	The DBCA is the primary assessing authority under Part 5 of the SCRM Act. The DCBA makes a recommendation to the Minister for Environment, who makes the final determination on the application. In formulating advice, the DBCA must consult with the Swan River Trust and provide the Swan River Trust's views to the Minister.	Under Clause 30A(2)(a) of the MRS, the Swan River Trust provides advice to the WAPC. In routine cases, this function will be performed under delegated authority by DBCA officers. Complex issues may be considered by the Swan River Trust Board.	Under Clause 30A(2)(b) of the MRS, the Swan River Trust provides advice to the Town (who act under delegated authority from the WAPC). In routine cases, this Swan River Trust function will be performed under delegated authority by DBCA officers. Complex issues may be considered by the Swan River Trust Board.

12.5 Swan River Trust and DBCA Policy Framework

The SRT and DBCA have adopted policies and locality plans to guide development in and around the DCA and support the implementation of the SCRM Act. The policy framework includes provisions that can be used to respond to coastal hazards along the Swan River foreshore. In addition, any mitigation works to be undertaken by the Town in the DCA in response to the CHRMAP shall have regard to these policy requirements.

The relevant policy statements and locality plans applicable to the Town and the CHRMAP have been reviewed in Table 12.2, inclusive of draft policies currently being considered.

Table 12.2: Policy Statements

Policy Statement	CHRMAP Relevance
Corporate Policy Statement No. 42 – Planning for Land Use, Development and Permitting Affecting the Swan Canning Development Control Area.	Provisions relating to subdivision and development of properties within and around the Development Control Area, including: • General presumption against supporting development that could prejudice the future acquisition of the river foreshore for Parks and Recreation. • Requirement for landowners to prepare foreshore management plans. • Development within the flood fringe to be designed to minimise damage during a major flood event. A minimum finished floor level of 0.5m above the 100-year ARI flood level shall be provided. • Requiring any filling proposed as part of development in the DCA and within the floor fringe to be graded to existing nature contours,

Policy Statement	CHRMAP Relevance
	with side slopes to be no steeper than 1:4 and be suitably protected against erosion during storm events and major river flows. • Ensuring land parcels created through subdivision are located outside of the flood fringe area.
Corporate Policy Statement No. 48 – Planning for Development Setback Requirements Affecting the Swan Canning Development Control Area	Outlines provisions relating to subdivision and development of properties within and around the DCA, including: • Residential development on urban zoned land adjacent the DCA shall be setback a minimum 10m or 20 per cent of the average distance to the opposite boundary, whichever is the lesser, from the boundary of the DCA. DBCA reserve the right to define setbacks with respect to the DCA and the location of river systems. • Non-residential development on urban, industrial or public purposes zoned land shall be setback a minimum 10m or 20 per cent of the average depth of the lot, whichever is lesser, from the boundary of the DCA. • Where development is proposed on urban zoned land adjoining the rivers (including riparian areas) in the DCA, require a development setback of 50m from the high watermark to ensure that adequate separation between riparian area of the river and the proposed development is maintained. • Require any development that would likely be obstructive to major floods to be located outside of the floodway, as defined by the floodplain mapping available or as identified in this CHRMAP. • Support the implementation of SPP 2.6 which indicates that a vertical sea level rise of 0.9m over a 100-year planning timeframe to 2110 should be adopted when considering setback distance and elevation. • Requirements for the location and design of retaining walls where land is adjacent the DCA
Planning for Localities Along the Swan Canning Development Control Area (Draft)	Outlines provisions relating to subdivision, development and works within and around the DCA, including the requirement for development to be designed to accommodate inundation.
Blackwall Reach Jenalup Locality Plan (Draft)	Recommends key actions for the Town relevant to the CHRMAP, including: • Increasing the width of the foreshore Parks and Recreation Reserve. • Master plan the adjacent foreshore concurrently with any proposal for rezoning of the Leeuwin Barracks. • Undertake a foreshore risk assessment to understand potential climate change impacts.

12.6 Local Planning Framework

12.6.1 Local Planning Strategy

The Local Planning Strategy (the Strategy) establishes the vision and long-term planning directions for the Town over the next decade and beyond. The Town has recently adopted the Strategy which received final endorsement of the Western Australian Planning Commission (WAPC) in 2022.

A key planning direction of the Strategy is to "ensure protection of assets along or near the Swan River foreshore from hazards associated with climate change and rising sea levels through land use planning and management whilst engaging stakeholders and the community in the decision-making process."

The Strategy aims to achieve this through the preparation of this CHRMAP to assist the Town in identifying and managing risks to existing and future assets along the Swan River foreshore.

The Strategy also identifies the Leeuwin Barracks site as a potential site for future urban intensification which could ultimately accommodate up to 1,440 new dwellings. The outcomes and recommendations of this CHRMAP will be of particular importance to the planning and redevelopment of the Leeuwin Barracks site for residential purposes.

Some progress has been made to further the planning for the Leeuwin Barracks redevelopment site, led by the Department of Defence together with a working group comprising of consultants, State Government agencies and the Town. This is currently on hold however, pending the result of a Department for Defence study into the need to retain existing assets for defence purposes or not.

13. Risk Treatment

13.1 Risk Treatment and Adaptation Hierachy

The Risk Treatment options that are considered in this CHRMAP have been developed from a range of sources. The key guidance comes from the CHRMAP guidelines (WAPC 2019) which describes the general risk treatment categories in a risk treatment and adaptation hierarchy.

The hierarchy was developed on the principal of maintaining flexibility for decision makers in the future. The management approaches at the top of the list allow greater flexibility for decision makers in future (eg Avoid), whilst options further down the list in the hierarchy moving towards the final option of Protect limit the future decision making options available.

The categories in brief are described as follows from highest to lowest management categories:

1. **Avoid**: this approach is to simply avoid new development in areas at risk of coastal hazard. This approach is only applicable to locations where development has not commenced; The aim of this risk treatment option is to avoid the construction of new public and private assets within areas identified to be impacted by coastal hazards. Avoidance risk treatment options are the best form of risk management (mitigation) and where possible should be the risk treatment option of choice (WAPC 2019). Avoidance is particularly applicable to all land use and development in greenfield locations.

2. **Planned or Managed Retreat**: the concept of planned or managed retreat allows existing public assets and private property to remain in place until such time as coastal hazard from erosion or inundation is untenable. Planned or managed retreat for existing development involves relocating or sacrificing infrastructure, both public assets and private property, when erosion and recession impacts reach action trigger points. Under this option the use of temporary coastal protection structures and/or restoration of natural controls such as dunes and shoreline areas is supported to maintain or create a buffer against storm erosion. As existing assets reach the end of their functional life (or if they are substantially damaged by a storm event), they would be removed, including any associated coastal protection structures.

3. **Accommodate**: The accommodate risk treatment option aims to utilise design and management strategies which render the risks as tolerable/acceptable, allowing land to continue to be utilised until risks become intolerable. Design and management strategies may include a mix of structural or non-structural approaches. Structural approaches include minimum finished floor levels and elevated electrical circuitry, and relocatable structures which can be moved to a different location on- or off-site to manage risk arising from inundation coastal hazards. Non-structural approaches such as modifications to local planning frameworks (eg inclusion of a special control area) can also enable accommodate risk treatment options.

4. **Protect**: Protect risk treatment options aim to protect assets from damage resulting from erosion and recession and storm surge inundation. Protect risk treatment options should be primarily proposed in the public interest and enhance or preserve beach and foreshore reserve amenity. The Protect option

is only available when all other options are exhausted and should be justified in terms of the benefit it delivers to the community.

- Common hard protection structures include seawalls; groynes; offshore breakwaters and soft protection measures such as beach nourishment.
- Interim protection structures can be applied to delay shoreline recession over the short to medium term. This might be achieved through soft protection measures such as regular sand renourishment and revegetating shoreline areas.

In addition to the four main categories, additional management approaches considered in the CHRMAP are:

5. No Regrets

The no-regrets category is used for approaches that can improve resilience and preparedness against the impact of coastal hazards. These can be implemented where further understanding of the risk to assets is being collected or while the assessments to determine a preferred risk treatment option.

6. Do Nothing

The do-nothing risk treatment option assumes that all levels of risk is accepted and that no further action will be taken. This risk treatment option provides a basis for comparison of all other risk treatment options.

13.2 Adaptation Tools

A range of adaptation tools available to mitigate coastal risk applied in the CHRMAP under the key category definitions is summarised in Table 13.1. These have been developed from a range of sources including WAPC 2019 and the National Climate Change Adaptation Research Facility (NCCARF) Coast Adapt tools, as well as incorporating options provided through the community involvement in the CHRMAP engagement activities.

The coastal hazard and risk level identified for the assets within each of the coastal management units is considered with reference to the adaptation approaches in the adaptation hierarchy. Adaptation responses can vary within coastal compartments, and in many instances a range of complementary adaptation responses that mitigate the coastal risk are applied.

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Table 13.1: Adaptation Options Toolbox (Adapted from WAPC 2019)

	Code	Adaptation Type	Applicable	Measure
Avoid	Av.1	Locating Assets in areas that are not vulnerable to coastal hazards	Can be applied to all asset types. Applicable to undeveloped residential and commercial land.	1. Amend local planning scheme to include Special Control Area which encompasses all areas affected by either erosion of inundation hazard over the 100-year planning period. 2. Establish planning-based controls that only allow development in the SCA that can address coastal hazard.
Planned / Managed Retreat	MR.1	Leaving Assets Unprotected	Low cost, Temporary and easily relocatable recreation amenities. At end of lifecycle, allow impacts to occur, accept loss of asset once design event occurs.	1. Amend local planning scheme to include Special Control Area. 2. Determine assets that are deemed sacrificial. 3. Monitoring (NR1) to identify when trigger is reached.
	MR.2	Demolition, Removal or relocation of Assets from inside the hazard area	Assets of low value where it is impractical both technically and financially to design the asset to withstand the impact of the coastal hazards instead of relocating it.	1. Amend local planning scheme to include Special Control Area. 2. Determine assets that are deemed sacrificial or relocatable, and update Council's Asset register to reflect likely timeframe for impact to assist in prioritising asset relocation. 3. Monitoring (NR1) to identify when trigger is reached.
	MR.3	Event limited development approval / prohibit expansion of existing use rights.	Generally applicable where protection of assets is not viable. All assets where it is impractical to ultimately implement protection.	Amend local planning scheme to include Special Control Area.
	MR.4	Voluntary Acquisition	All private property where it is impractical to ultimately implement protection. This risk treatment option would require the acquisition of affected properties, on a voluntary basis. Ensures land in the coastal zone is continuously provided for coastal foreshore management, public access, recreation and conservation.	1. Investigate/put in place funding for acquisition of priority properties. 2. Offer voluntary acquisitions reflecting asset value in light of hazard.

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	Code	Adaptation Type	Applicable	Measure
	MR.5	Limit Further Subdivision	Limit further subdivision of existing lots identified in the hazard area.	Amend local planning scheme to include Special Control Area.
Accommodate	Ac.1	Building Design Relocatable Structures	Design assets to be relocatable. Structures can be moved in future as risk increases and becomes intolerable.	1. Amend local planning scheme to include Special Control Area. 2. Prepare local planning policy containing relevant inundation and wave overtopping development controls. 3. Approval of local planning policy by Council. 4. Implement local planning policy development controls to all properties within the special control area for coastal hazards within the local government area.
	Ac.2	Building Design Design assets to withstand impacts.	Where avoiding or relocating an asset is not an option, design of assets to withstand the impact of inundation. Roads, car parks, residential property, commercial property, hospitals, aged care facilities, schools, childcare facilities.	
	Ac.3	Building Design Appropriate Finished Floor Levels		
	AC.4	Filling Land		
Protect	Pr.1	Beach Management / sand management	Placement of sand to provide buffer against erosion or reinstate sediment that has been lost from the system.	Investigate and secure suitable sand sources for nourishment, planning approvals and to determine funding mechanisms.
	Pr.2	Nature Based Solutions	This approach refers to 'soft engineering' methods that are in keeping with nature. Includes revegetation, oyster beds, gabion baskets, natural materials such as brushing. Used to provide increased resilience to erosion process where wave conditions are mild.	There exists a guideline on river erosion edge treatments that provide a framework for approaches dependent on local conditions (SRT).
	Pr.3	Groynes. Can be land based or detached groynes (eg at John Tonkin Reserve)	Rock structures placed to reduce the wave conditions at the shore and promote sediment accumulation in the relatively calm conditions in the lee.	Requires detailed technical study to assess appropriateness of the option for the location. Considerations include modification of hydrodynamics and sediment transport processes. Undertake investigation of rock and sand sources for detailed costing's, design, planning approvals and funding mechanisms.

	Code	Adaptation Type	Applicable	Measure
	Pr.4	Seawalls	Involves construction of a seawall usually along a shoreline to maintain the shoreline position and protect important built assets from erosion. Seawalls are currently in place in many of the Town's shorelines.	1. Investigate viability of existing seawalls on beaches. 2. Consider in accordance with Council's Asset Management Plan. 3. Undertake investigation of rock and sand sources for detailed costing's, design of seawall and nourishment, planning approvals and funding mechanisms. 4. Continued monitoring for trigger.
	Pr.5	Flood Mitigation Structure	Involves construction of a flood control which is either permanent or temporary along an entire section of shoreline.	1. Undertake investigation of rock and sand sources for detailed costing's, design of flood structure and nourishment, planning approvals and developing business case for funding. 2. Continued monitoring for trigger.
No Regrets	**NR1**	Monitoring	Applicable all areas. Long term baseline monitoring and event-based monitoring following storm erosion events.	1. Set up a baseline monitoring program for long term trend and condition following major events. 2. Review results for particular asset triggers regularly. 3. Re-run risk assessment based on monitoring results and revise risk management measures if risk level changes (i.e. increase or decrease in level of risk).
	NR2	Protection Structure Audit	All existing coastal protection structures. This risk treatment option involves undertaking an audit of existing protection structures, to determine their current condition, effectiveness and future protection potential.	1. Conduct audit of existing protection structures. 2. Update hazard lines where relevant to account for existing protection structures. 3. Update CHRMAP proposed actions to account for condition (life) of existing protection structures. 4. Protection structures added to the Town's Asset Management Plan, and outcomes of audit used to determine asset replacement and maintenance schedules for the structures.
	NR3	Notification on title (also relevant to, planned/	All assets located within an area vulnerable to coastal hazards within the planning timeframe.	Implement in accordance with the planning framework, and as conditions of approval for subdivision and development.

	Code	Adaptation Type	Applicable	Measure
		managed retreat, accommodate and protect options).	Indicates to current and future landowners that an asset is likely to be affected by coastal erosion and/or inundation over the planning timeframe. Helps current and future owners make informed decision about level of risk they are/may be willing to accept, and that risk management is likely to be required at some stage within the planning timeframe.	
	NR4	Emergency evacuation plans (also relevant to accommodate options)	Roads (with regard to managing traffic flows during an event), car parks, residential property, commercial property, hospitals, aged care facilities, schools, childcare facilities.	1. Development evacuation plans for locations without existing inundation mapping as a priority. 2. Update evacuation plans with latest inundation mapping available or include coastal inundation area into existing evacuation plans.
	NR5	Reduce Vessel Speeds in the waterways	Review the speed limits for vessels travelling through the lower Swan River.	1. Require studies to examine erosion impacts to the riverbanks from vessel speed and provide basis for reduction in speed for vessels and or vessel activities. 2. Implement revised speed limits through the River (signage etc).
Do Nothing	**DN1**	Doing nothing and accepting the risk to the assets	Low value assets and assets that must be located in the shoreline areas for their function / purpose.	Take no action and accept risk.

13.3 Guidance from Management Authority (DBCA)

A discussion with representatives from the DBCA regarding adaptation approaches in the three SMU provided the following guidance:

For the Walled Zone

- Maintaining shoreline revetments and riverwalls to ensure the protection of Riverside Road and raising the height at shoreline in response to future sea level rise needs to be done in balance with the viability of the road over the long term. In this CHRMAP, maintaining the current extent of river walls to provide protection to the foreshore and Riverside Road has been adopted.
- Under projected sea level rise the inundation hazard for Riverside Road will increase in extreme events in the future. At present the risk is manageable. At the time when sea level rise of approximately 0.5m to 1m above the present-day level is realised (projected to be in the 2075 to 2125 period) the risk management will be more difficult (expensive). The coastal hazard risk to Riverside Drive and the foreshore area will be reviewed in future revisions of the CHRMAP.

Within the Reclaimed Zone

- there is presently 'hard engineering' river walls and revetments that offer protection; however, it is not a given that this type of foreshore edge treatment will continue to be used in the future. As the infrastructure ages in the shoreline areas there will need to be consideration and discussion on what is appropriate in terms of replacement. The intention will be to deliver an outcome that satisfies the community need whilst being environmentally sensitive. For the Reclaimed Zone, using fill in the foreshore areas to address inundation risk is not supported. Nature based solutions are supported , noting there may be engineering alternatives that are yet to emerge that could provide the right solution.
- In future there may be a point where it becomes too difficult and expensive to provide protection to the shoreline areas from erosion and inundation hazard (with rising sea level) and planning the process of Managed Retreat may be required. A future scenario could be to retreat the foreshore areas back to Riverside Road and use this as the interface to the shoreline, due to the land levels being generally higher from this section landward.
- Tenure within the Reclaimed Zone is generally managed by the SRT / DBCA apart from the Rowing Club which is freehold. Tenure is generally managed by the local government or DPLH. In contrast, planning and development (including statutory planning) is generally the responsibility of DBCA, SRT and the Minister for Environment.
- For the foreseeable future the Leeuwin Barracks site will remain under the ownership of the Department of Defence. Any changes to the use of the site with regard to residential development would need to consider the coastal hazard from the CHRMAP and ensure the risk is addressed as part of future planning and development.

Within the Natural Zone

- Nature based solutions are supported in the management of shoreline areas.
- For the Jerrat Drive escarpment section of foreshore, this is highly regarded as a key coastal asset for the Community as a site of recreation and environmental importance. Further understanding of the processes driving changes in this area is required – assessment of the present state of the foreshore (vegetation cover, habitat, drainage, underscoring at the shoreline and tree loss) and development and update to the existing foreshore management plan to guide future actions is considered a priority of the CHRMAP.

Other general comments from the discussion are as follows:

- Asset life and the timing of replacement should be factored into the CHRMAP decision making process.

- There was a request by DBCA that the drainage network be included as part of future CHRMAP assessment, to understand in more detail the interaction between catchment-based flooding through the stormwater network and riverine flooding.
- It was noted that the approaches developed for the Town's shorelines in this CHRMAP are location specific, and do not set a precedent for other sections of the Swan River (ie other Council areas). For other locations there would need to be site specific adaptation approaches developed.
- There has been a high-level study completed at the entrance to the Swan River by a University of Western Australia PHD student to examine the concept of installing a large-scale storm surge barrier. The details of this assessment have not been provided to the current study; however, the general outcome was conveyed that the investment cost would be too significant compared with the flood reduction benefits, whilst the local scale issues that drive erosion in the foreshore presently (eg boat wakes, local processes) would still persist.

13.4 General Approaches

In general, the Town's minor infrastructure in coastal areas (coastal pathways, benches, signage etc) will continue to be used under a 'Managed Retreat' scenario. This allows continued use of the infrastructure until such time as it is unsafe or un-useable at which time asset removal is required, or where maintenance costs consistent with the design life of the structure may be required.

For major infrastructure in the foreshore reserve (eg car parks, jetties, boat ramps) these are required to remain in hazard areas as part of their function and will continue to be used under a 'Managed Retreat' scenario. At the point in the future where these assets are too difficult or expensive to remain (as sea level rise increases the inundation and erosion hazard) these may be moved landward.

The preparation for managed retreat would be informed through the planned annual monitoring program (Section 17.3), asset management program and future revisions of the CHRMAP.

14. Economic Analysis

14.1 Multi Criteria Analysis (MCA)

A multi-criteria analysis (MCA) was completed to contrast and compare adaptation options in the three SMU's. An MCA is a tool to compare various alternatives or options. It provides a structured way to compare and contrast options and uses a number of criteria, and scoring of those criteria, to compare options.

The MCA incorporates community and stakeholder feedback gained through the coastal values survey, the information sessions and the George Street Festival workshop sessions. The outcomes are used to inform selection of adaptation pathways in future planning periods for each of the SMU.

The key focus areas for management in each SMU include:

- Walled Zone
  - Foreshore areas and coastal pathways
  - Riverside Road
  - Structures over the water (Dome Café and Marine Boatshed)
- Reclaimed Zone
  - Niergarup Reserve – Increasing resilience to erosion using nature based solutions
  - Commercial and Community Structures (Swan Yacht Club, 8 Knots etc)
  - Potential use of Leeuwin Barracks Site for residential development in Reclaimed Area
  - Riverside Road
  - Foreshore Reserve and Beach in John Tonkin Reserve
  - Foreshore Reserve at W Wayman Reserve
- Natural Zone
  - Beach and foreshore at base of Jerrat Drive
  - Commercial and Community Structures (EFYC, Sea Scouts)

For the MCA scoring there are five criteria that are assigned a "score" based on the expected performance:

- Technical
- Social
- Environmental
- Legal
- Cost

The assessment categories are outlined in Table 14.1

Table 14.1: MCA Categories and Key Criteria

Category	Criteria
Technical	Feasibility – the feasibility of designing and implementing the option (also incorporates legal considerations)
	Effectiveness – how effective the option is at achieving the outcome
	Climate Change Adaptation – how adaptable the option is to meet the likely changes due to climate change
	Construction and Maintenance – ease of construction and associated maintenance
Social	Community – impacts on the community
	Public Amenity – impacts on the recreational use of areas, access to areas etc
Environmental	Natural Environment – impacts on the natural environment
	Visual Amenity – visual impacts associated with the option
Legal	Legal implications associated with respective option
Cost	High level comparative estimate of the cost of the option (capital and ongoing cost)

The MCA scoring was developed to provide a basis for assessment across the categories with the approach summarised in Table 14.2 and Table 14.3.

Table 14.2: MCA Scoring – Performance and Impact

Score	Technical	Social and Environmental	Legal
-2	Very Poor Performance	High Negative Impact	Very Difficult
-1	Poor Performance	Medium Negative Impact	Difficult
0		Low to No Impact	
+1	Good Performance	Medium Positive Impact	Relatively Easy
+2	Very Good Performance	High Positive Impact	No Issues

Table 14.3: MCA Scoring - Cost

Score	Technical
1	Most Expensive
2	
3	
4	
5	Least Expensive

14.2 Key Outcomes from MCA

The scoring from the MCA is summarised in this section. The total score is based on an equal weighting of the scores from the respective categories of Technical, Social, Environmental, Legal and Cost. The final score is presented in a colour coded format to indicate best performing (green) and worst performing options (red).

14.2.1 Walled Zone

For the Walled Zone the MCA scoring is shown in Figure 14.1. The highest performing options by respective categories are:

- Avoid
  - Avoid development (Av.1) in areas determined as being at risk of coastal hazard in the 100-year planning period (applies to undeveloped areas only).
- Managed Retreat
  - For Minor Infrastructure
    - Leave assets unprotected under Managed Retreat (MR.1)
    - Removal of assets once trigger reached (MR.2)
  - Limit further Subdivision (MR.5)
- Accommodate
  - Building Design options to raise floor levels, build structures to withstand flooding impacts and use of relocatable structures (Ac.1s Ac.2 Ac.3)
  - For Major Infrastructure (Riverside Road and Carparks) raise surface level to mitigate flooding (Ac.3, Ac.4)). It is noted that the use of fill is not supported by DBCA policy in the Reclaimed Zone.
- Protect
  - Seawalls (Pr.4) and Nature Based solutions (Pr.2) scored highest.
- No Regrets
  - All options scored highly – Monitoring (NR.1), Protection Structure Audits (NR.2), Notification on Title (NR.3), Emergency Evacuation Plans (NR.4)

14.2.2 Reclaimed Zone

For the Reclaimed Zone the MCA scoring is shown in Figure 14.2. The highest performing options by respective categories are:

- Avoid
  - Avoid development (Av.1) in areas determined as being at risk of erosion or inundation hazard in the 100-year planning period (applies to undeveloped areas only).
- Managed Retreat
  - For Minor Infrastructure
    - Leave assets unprotected under Managed Retreat (MR.1)
    - Removal of assets once trigger reached (MR.2)
  - Limit further Subdivision (MR.5)
- Accommodate
  - Building Design options to raise floor levels, build structures to withstand flooding impacts and use of relocatable structures (Ac.1s Ac.2 Ac.3)
- Protect
  - Beach management / sand management (Pr.1) and Nature Based solutions (Pr.2) scored highest.

- The current practice of Groynes (Pr.3) and Seawalls (Pr.4) scored marginally lower
- No Regrets
  - All options scored highly – Monitoring (NR.1), Protection Structure Audits (NR.2), Notification on Title (NR.3), Emergency Evacuation Plans (NR.4)

14.2.3 Natural Zone

For the Natural Zone the MCA scoring is shown in Figure 14.3. The highest performing options by respective categories are:

- Avoid
  - Avoid development (Av.1) in areas determined as being at risk of coastal hazard in the 100-year planning period (applies to undeveloped areas only).
- Managed Retreat
  - For Minor Infrastructure
    - Leave assets unprotected under Managed Retreat (MR.1)
    - Removal of assets once trigger reached (MR.2)
- Accommodate
  - Building Design options to raise floor levels, build structures to withstand flooding impacts and use of relocatable structures (Ac.1s Ac.2 Ac.3)
- Protect
  - Beach management / sand management (Pr.1) and Nature Based solutions (Pr.2) scored highest.
  - Maintaining current Seawalls (eg at the East Fremantle Yacht club) location scored marginally lower (Pr.4).
- No Regrets
  - All options scored highly – Monitoring (NR.1), Protection Structure Audits (NR.2), Notification on Title (NR.3), Emergency Evacuation Plans (NR.4)

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			Technical				Social		Environment		Legal	Cost	
Code	Adaptation Option	Asset Types	Feasibility	Effectiveness	Climate Change Adaptation	Construction & Maintenance	Community	Public Amenity	Natural Environment	Visual Amenity	Legal Implications	Capital and Lifecycle	TOTAL
Av.1	Locating Assets in areas that are not vulnerable to coastal hazards	Land within the Hazard extent - applicable for undeveloped land or redevelopment	2	2	2	2	1	2	2	2	0	5	11
MR.1	Leaving Assets Unprotected	Minor Infrastructure	1	0	2	2	1	0	1	0	2	4	8
		Major Infrastructure	0	-2	2	2	-1	-1	0	-1	0	4	3
		Residential and Commercial Property	-2	-2	1	0	-2	-2	0	-1	-2	4	-1
MR.2	Demolition, Removal or relocation of Assets from inside the hazard area once trigger reached (flood or erosion trigger)	Minor Infrastructure	2	2	2	1	1	2	1	1	1	4	9
		Major Infrastructure	1	1	1	0	0	1	0	0	0	3	4
		Residential and Commercial Property	1	1	1	0	0	1	0	0	0	3	4
MR.3	Event limited development approval / prohibit expansion of existing use rights.	Residential and Commercial Property	0	1	1	1	0	0	1	2	-1	4	5
MR.4	Voluntary Acquisition	Residential and Commercial Property	1	1	1	1	1	1	1	2	-1	1	4
MR.5	Limit Further Subdivision	Residential and Commercial Property	2	2	2	2	1	1	1	1	0	5	9
Ac.1	Building Design - Relocatable Structures	Residential and Commercial Property	1	1	1	0	1	1	1	1	1	4	8
Ac.2	Building Design Design assets to withstand impacts.	Residential and Commercial Property	1	2	2	1	2	1	2	1	1	4	10
Ac.3	Building Design - Raise Finished Floor Levels	Residential and Commercial Property	2	2	2	0	2	1	2	1	1	4	10
		Major Infrastructure	2	2	2	0	2	1	2	1	1	4	10
AC.4	Filling Land	Residential and Commercial Property	0	1	1	-1	1	0	-1	0	0	3	3
		Major Infrastructure	1	1	1	1	1	2	0	0	1	3	7
Pr.1	Beach Management / sand management	Foreshore areas and Beaches	0	-1	1	-1	0	0	0	1	1	3	4
Pr.2	Nature Based Solutions	Foreshore areas and Beaches	0	0	1	0	2	1	2	2	1	3	8
Pr.3	Groynes. Can be land based (eg Preston Point) or detached groynes (eg at John Tonkin Reserve)	Foreshore areas and Beaches	-1	0	1	-1	-1	-1	0	0	-1	2	0
Pr.4	Seawalls	Foreshore areas and Beaches	2	2	1	1	1	1	0	2	2	2	8
Pr.5	Flood Mitigation Structure (Storm Surge Barrier)	Large Scale Flood Protection for Swan River	-1	2	0	-2	1	-1	0	-1	-1	1	-1
NR1	Monitoring	All Areas	2	0	0	0	2	2	2	1	2	4	10
NR2	Protection Structure Audit	Location of existing Structures	2	1	1	1	2	2	1	1	2	4	10
NR3	Notification on title	Residential and Commercial Property	2	1	2	2	1	1	1	1	-1	5	8
NR4	Emergency evacuation plans	Community, Residential and Commercial	2	0	2	2	1	1	1	1	1	5	10
DN1	Doing nothing - accept the risk to assets	All Areas	0	-2	2	2	-1	-2	-1	0	0	5	4

Figure 14.1: MCA scoring for adaptation approaches in the Walled Zone

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			Technical				Social		Environment		Legal	Cost	
Code	Adaptation Option	Asset Types	Feasibility	Effectiveness	Climate Change Adaptation	Construction & Maintenance	Community	Public Amenity	Natural Environment	Visual Amenity	Legal Implications	Capital and Lifecycle	TOTAL
Av.1	Locating Assets in areas that are not vulnerable to coastal hazards	Land within the Hazard extent - applicable for undeveloped land or redevelopment	2	2	2	2	1	2	2	2	0	5	11
MR.1	Leaving Assets Unprotected	Minor Infrastructure	1	0	2	2	1	0	1	0	2	4	8
		Major Infrastructure	0	-2	2	2	-1	-1	0	-1	0	4	3
		Residential and Commercial Property	-2	-2	1	0	-2	-2	0	-1	-2	4	-1
MR.2	Demolition, Removal or relocation of Assets from inside the hazard area once trigger reached (flood or erosion trigger)	Minor Infrastructure	2	2	2	1	1	2	1	1	1	4	9
		Major Infrastructure	1	1	1	0	0	1	0	0	0	3	4
		Residential and Commercial Property	1	1	1	0	0	1	0	0	0	3	4
MR.3	Event limited development approval / prohibit expansion of existing use rights.	Residential and Commercial Property	0	1	1	1	0	0	1	2	-1	4	5
MR.4	Voluntary Acquisition	Residential and Commercial Property	1	1	1	1	1	1	1	2	-1	1	4
MR.5	Limit Further Subdivision	Residential and Commercial Property	2	2	2	2	1	1	1	1	0	5	9
Ac.1	Building Design - Relocatable Structures	Residential and Commercial Property	1	1	1	0	1	1	1	1	1	4	8
Ac.2	Building Design Design assets to withstand impacts.	Residential and Commercial Property	1	2	2	1	2	1	2	1	1	4	10
Ac.3	Building Design - Raise Finished Floor Levels	Residential and Commercial Property	2	2	2	0	2	1	2	1	1	4	10
		Major Infrastructure	2	2	2	0	2	1	2	1	1	4	10
AC.4	Filling Land	Residential and Commercial Property	0	1	1	-1	1	0	-1	0	0	3	3
		Major Infrastructure	0	1	1	-1	1	0	-1	-1	0	3	3
Pr.1	Beach Management / sand management	Foreshore areas and Beaches	1	1	1	1	1	1	2	2	1	3	8
Pr.2	Nature Based Solutions	Foreshore areas and Beaches	1	1	1	1	2	2	2	2	1	3	9
Pr.3	Groynes. Can be land based (eg Preston Point) or detached groynes (eg at John Tonkin Reserve)	Foreshore areas and Beaches	2	2	1	1	1	1	0	0	1	2	6
Pr.4	Seawalls	Foreshore areas and Beaches	2	2	1	1	1	1	0	0	1	2	6
Pr.5	Flood Mitigation Structure (Storm Surge Barrier)	Large Scale Flood Protection for Swan River	-1	2	0	-2	1	-1	0	-1	-1	1	-1
NR1	Monitoring	All Areas	2	0	0	0	2	2	2	1	2	4	10
NR2	Protection Structure Audit	Location of existing Structures	2	1	1	1	2	2	1	1	2	4	10
NR3	Notification on title	Residential and Commercial Property	2	1	2	2	1	1	1	1	-1	5	8
NR4	Emergency evacuation plans	Community, Residential and Commercial	2	0	2	2	1	1	1	1	1	5	10
DN1	Doing nothing - accept the risk to assets	All Areas	0	-2	2	2	-1	-2	-1	0	0	5	4

Figure 14.2: MCA scoring for adaptation approaches in the Reclaimed Zone

			Technical				Social		Environment		Legal	Cost	
Code	Adaptation Option	Asset Types	Feasibility	Effectiveness	Climate Change Adaptation	Construction & Maintenance	Community	Public Amenity	Natural Environment	Visual Amenity	Legal Implications	Capital and Lifecycle	TOTAL
Av.1	Locating Assets in areas that are not vulnerable to coastal hazards	Land within the Hazard extent - applicable for undeveloped land or redevelopment	2	2	2	2	1	2	2	2	0	5	11
MR.1	Leaving Assets Unprotected	Minor Infrastructure	1	0	2	2	1	0	1	0	2	4	8
		Major Infrastructure	0	-2	2	2	-1	-1	0	-1	0	4	3
		Residential and Commercial Property	-2	-2	1	0	-2	-2	0	-1	-2	4	-1
MR.2	Demolition, Removal or relocation of Assets from inside the hazard area once trigger reached (flood or erosion trigger)	Minor Infrastructure	2	2	2	1	1	2	1	1	1	4	9
		Major Infrastructure	1	1	1	0	0	1	0	0	0	3	4
		Residential and Commercial Property	1	1	1	0	0	1	0	0	0	3	4
MR.3	Event limited development approval / prohibit expansion of existing use rights.	Residential and Commercial Property	0	1	1	1	0	0	1	2	-1	4	5
MR.4	Voluntary Acquisition	Residential and Commercial Property	1	1	1	1	1	1	1	2	-1	1	4
MR.5	Limit Further Subdivision	Residential and Commercial Property	2	2	2	2	1	1	1	1	0	5	9
Ac.1	Building Design - Relocatable Structures	Residential and Commercial Property	1	1	1	0	1	1	1	1	1	4	8
Ac.2	Building Design Design assets to withstand impacts.	Residential and Commercial Property	1	2	2	1	2	1	2	1	1	4	10
Ac.3	Building Design - Raise Finished Floor Levels	Residential and Commercial Property	2	2	2	0	2	1	2	1	1	4	10
		Major Infrastructure	2	2	2	0	2	1	2	1	1	4	10
AC.4	Filling Land	Residential and Commercial Property	0	1	1	-1	1	0	-1	0	0	3	3
		Major Infrastructure	0	1	1	-1	1	0	-1	-1	0	3	3
Pr.1	Beach Management / sand management	Foreshore areas and Beaches	1	1	1	1	1	1	2	2	1	3	8
Pr.2	Nature Based Solutions	Foreshore areas and Beaches	1	1	1	1	2	2	2	2	1	3	9
Pr.3	Groynes. Can be land based (eg Preston Point) or detached groynes (eg at John Tonkin Reserve)	Foreshore areas and Beaches	-2	1	1	1	-1	0	0	-1	-1	2	0
Pr.4	Seawalls (currently in place at East Fremantle YC)	Foreshore areas and Beaches	1	2	1	1	1	1	1	1	1	2	6
Pr.5	Flood Mitigation Structure (Storm Surge Barrier)	Large Scale Flood Protection for Swan River	-1	2	0	-2	1	-1	0	-1	-1	1	-1
NR1	Monitoring	All Areas	2	0	0	0	2	2	2	1	2	4	10
NR2	Protection Structure Audit	Location of existing Structures	2	1	1	1	2	2	1	1	2	4	10
NR3	Notification on title	Residential and Commercial Property	2	1	2	2	1	1	1	1	-1	5	8
NR4	Emergency evacuation plans	Community, Residential and Commercial	2	0	2	2	1	1	1	1	1	5	10
DN1	Doing nothing - accept the risk to assets	All Areas	0	-2	2	2	-1	-2	-1	0	0	5	4

Figure 14.3: MCA scoring for adaptation approaches in the Natural Zone

14.3 Economic Analysis – Reclaimed Zone

An economic analysis of impacts from projected inundation hazard in the Reclaimed Zone (SMU2) was undertaken (Rhelm 2023). The economic analysis evaluates impacts from inundation hazard associated with projected sea level rise using the value of assets to assist in understanding the economic costs of a Managed Retreat approach. The results provide a preliminary estimate of the magnitude of the economic cost of sea level rise and timing of asset loss within the Reclaimed Zone.

14.3.1 Assumptions in Economic Analysis

A number of assumptions were adopted within the economic analysis including:

- Sea level rise projections as noted in Section 5.
- The assets within the Reclaimed Zone were valued using a range of methods and parameter values in Rhelm (2023). Valuation methods are summarised in Table 14.4. The adoption of replacement costs for a number of the assets in the absence of more detailed information is considered a conservative approach.
- Economic assessment period: 100-years (to align with the planning horizon and the projected changes as a result of climate change). Discount rate: 7%.
- Floor height above ground level for buildings in the study area: 0.3 metres. Threshold at which commercial and recreation buildings retreat (or are lost): general tide level equal to floor level. Threshold at which reserves and car parks retreat: 50% coverage of site.
- For the marinas, it was assumed that the moorings would not be affected by sea level rise and would be adapted progressively. Therefore, the amenity value is retained and the key loss in this case is the buildings associated with these marinas.
- For the reserves, it was assumed that the land will eventually be lost and not relocated and so there will be a loss in amenity value to the community as well as the value of the land. This assumption was based on the limited availability of suitable relocation sites within the immediate area.

Table 14.4: Economic Assessment in Reclaimed Zone - Asset Valuation Methods

Site	Valuation method
Leeuwin carpark and boat ramp	Car park: replacement value (resealing cost x area m^2) Boat ramp: construction cost (original cost escalated to $2023)
Zephyr Café and carpark	Replacement cost (assumed replacement cost/m^2 x area m^2)
Swan Yacht Club and carpark	
Navy Cadets Building	
Fremantle Rowing Club	
Cool Beans and carpark	
Hurricane Dragon Boat	
Aquarama Marina (various sites) and car park	
Riverside Road	

Site	Valuation method
W Wayman Reserve	Replacement cost (assumed replacement cost/m^2 x area m^2)
Norm McKenzie Reserve	Amenity value – proxy value based Breunig et al. (2018) study of impact of property prices in Australia multiplied by the number of houses within a 600-metre radius.
John Tonkin reserve	

14.3.2 Assessment Method

The economic assessment examines the inundation of sites in Table 14.4 under a range of flooding events, with the incorporation of projected sea level rise across the 100-year planning horizon. Analysis of the depth of inundation against the ground level and floor level of the key assets is used to estimate the potential damage costs that would be incurred.

Currently, assets within the Reclaimed Zone are only susceptible to flooding in an extreme coastal storm event. This will be further exacerbated with the impacts of climate change. In future sea level rise scenarios for the 2125 timeframe, a projected +1.05m sea level rise would result in many of the assets being inundated in the general tides.

The assessment method assumes that no mitigation works will be completed within the one-hundred-year assessment period to offset the damages that will be incurred as a result of the sea level rise scenarios.

Tidal inundation will have two distinct impacts on assets within the reclaimed zone:

1. Loss of assets: with the onset of sea level rise some assets within the Reclaimed Zone will be impacted frequently by the general tide inundating the asset (car parks and reserves) and floor levels (commercial and recreation venues). The total loss value of the asset was incurred at the threshold point for retreating from the location and discounted to present value using the adopted discount rate.
2. Economic impact of coastal storm events: To incorporate the costs of overfloor flooding from coastal storm events, the annual average damages were calculated at the planning horizons and interpolated over the one-hundred-year assessment period. The annualised damage costs were set to zero from the year the asset was assumed to be abandoned (Item 1 above) as once the asset is lost there is no longer a damage cost incurred. The present value of the total annualised damage costs over the one-hundred-year assessment period was calculated using the adopted discount rate.

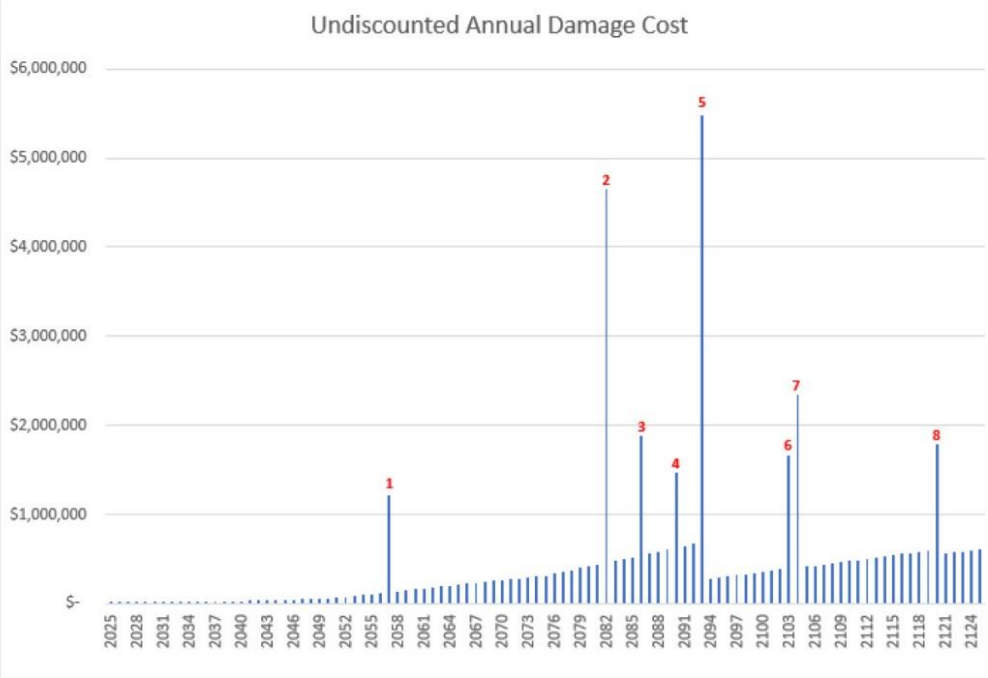
14.3.3 Total Present Value of Inundation

An estimate of the total present value of tidal inundation on the Reclaimed Zone is forecast to be $2.7 million. The present value result is reflective of the gradual impact of the onset of sea level rise on the Reclaimed Zone, and the likelihood that the majority of damages will be incurred towards the end of the one-hundred-year assessment period. This value will progressively increase in coming years as we reach a period where there is a greater influence of sea level rise. This will mean that mitigation options that are not feasible now (because the impacts primarily occur after 2050) may be viable in the future.

14.3.4 Undiscounted annual Damage Cost

The undiscounted gradual impact of damages is shown in Figure 14.4. The total undiscounted cost of sea level rise on the Reclaimed Zone is conservatively estimated at $46.2 million.

The spikes in the figure show the year at which retreat from the site occurs, and the total economic loss incurred, due to the general tide reaching the assumed abandonment threshold points. The spikes are generally followed by a drop or slowing rate of annual damages, this is due to the annualised damages of high tide events no longer being incurred by the abandoned assets. That is, there are less assets in the total Reclaimed Zone 'asset stock' that are vulnerable to tidal inundation.



Retreat Sites

1 Leeuwin boat ramp and car park	4 Norm McKenzie Reserve	7 Fremantle Rowing Club
2 John Tonkin Reserve	5 Aquarama (various assets)	8 Hurricane dragon Boat
3 W Wayman Reserve	6 Riverside Road overtops	

Figure 14.4: Undiscounted Annual damages cost summary (2025 to 2125)

14.3.5 Summary of Outcomes and Recommendations for Future Work

The results provide a preliminary estimate of the magnitude of the economic cost of sea level rise and timing of asset loss within the Reclaimed Zone. The analysis is not intended to provide a precise valuation of the economic values of assets or timing of asset loss. The results are provided to inform discussions on sea level rise mitigation options within the Reclaimed Zone.

There are a number of assumptions and uncertainties in the analysis which could be refined to provide greater certainty in a future more comprehensive analysis which could include:

- Refinement of short-term protection and long-term relocation options for assets within the Reclaimed Zone.
- Collation of data on the John Tonkin, W Wayman and Norm McKenzie reserve visitor numbers and distanced travelled by visitors.
- Collation of data on the Leeuwin Boat Ramp usage numbers and distance travelled by boat ramp users.
- Collation of data on the Riverside Road usage numbers.

15. Adaptation Pathways

15.1 Risk Management Pathway

In the CHRMAP guidelines the risk management pathway(s) approach enables the establishment of a decision-making strategy that is made up of a sequence of decision points over time, preventing a decision-maker from being locked into a risk treatment option (and associated risk management measures), which may not be appropriate for dealing with the long-term problem. The intent is for decision-making to be responsive to changing circumstances over time, while not all decisions can be made today, they can be planned, prioritised and prepared for (WAPC 2019).

The risk management pathways approach is used to inform decision-making at defined trigger points. The trigger points define the point at which a change in risk management approach / measure should be enacted as part of the ongoing strategic planning process.

15.2 Management Triggers

The concept of a trigger point is to have a pre-determined point that is set to 'trigger' the commencement of planning and/or implementation actions relating to a risk management option.

Triggers for the decision points are generally associated with the observation of key events on the ground rather than being time based. Estimated timeframes presented in the CHRMAP are driven by sea level rise impacts to inundation hazard that is projected to occur in future planning periods. The triggers would be assessed as part of future monitoring, to determine when they are reached or approaching.

The Trigger points, Decision Making and Measures that will be applied in the risk management pathways are summarised in Table 15.1.

The key activities that are used to monitor trigger points and inform where these are reached or close to being reached are:

- Annual Monitoring Program
  - The annual monitoring program (outlined in Section 17.3) would be used to examine changes in the shoreline areas and examine triggers for:
    - Erosion: identify the position of the shoreline (HSD) and whether this moves either landward (as a result of erosion) or seaward (as a result of accretion).
    - Inundation: track the rate of sea level rise (from Fremantle tide gauge and technical studies) and on the ground impacts from extreme flooding events that occur
- Asset Management and Structure condition reporting
  - Condition reports and asset management will provide the basis for understanding when structures need replacement or upgrade. The Town currently undertake inspections, upgrades and maintenance as part of the East Fremantle River walls 10 Year Priority Plan (2022).
- Review of CHRMAP (recommended every 5 to 10 years)
  - It is recommended that the CHRMAP be reviewed and updated every five to ten years. As part of this review the following would be included:
    - The improved knowledge of coastal hazards in the shoreline areas from the annual monitoring and additional studies should be incorporated into the review and where this may impact any of the recommendations in the CHRMAP
    - The guidance on sea level rise projections by the DoT (DoT 2010) should be reviewed for any updates. Any change to the projected sea level rise allowances would require assessment of updates to the CHRMAP.

- Review of changes in the SPP2.6 advice (WAPC 2013) or updates to the CHRMAP guidelines (WAPC 2019) would be assessed as part of the review process.
- Engagement with the community to provide an overview of learnings from the annual monitoring program and outline how these are captured in the CHRMAP review process. A review of the community values to determine if they are consistent with values collected in the previous version of the CHRMAP would be sought as part of the engagement activities.
- Assets that are predicted to become highly or very highly vulnerable within the next planning timeframe (or within 10 years) would be identified.

Table 15.1: Trigger Points Decision Making and Measures (Adapted from WAPC 2019)

Trigger Name	Trigger	Action	Measures	Identification Method
T1	The distance between an asset and the Horizontal Shoreline Datum (HSD) is less than the shoreline loss predicted from the erosion associated with a 1 in 100-yr storm event (S1).	Ongoing Monitoring to define changes to the HSD line Refinement to the S1 value based on field data collected following extreme events / updated modelling information	Provide interim protection for major infrastructure (roads, carparks), residential and commercial buildings Remove major infrastructure (roads, carparks), residential and commercial buildings, transfer land to public realm Prepare response plans for minor infrastructure that could be impacted	Assessment of the shoreline position will be a task included in the annual monitoring program.
T2	A public road is no longer available or able to provide legal access to a property	Liaison with/notification by relevant level of government	Remove residential and commercial buildings, and transfer land to public realm	Task included in the annual monitoring program.
T3	Water, sewer or electricity to a lot is no longer available as they have been removed/decommissioned by the relevant authority due to coastal hazards	Liaison with/notification by utility providers	Remove residential and commercial buildings, and transfer land to public realm	Task included in the annual monitoring program.
T4	Asset lies seaward of the most up to date 100-year coastal erosion hazard line or coastal inundation hazard extent	Definition of hazard extents through CHRMAP. CHRMAP and hazard extent updates due to availability of more relevant/recent information (such as updated sea level rise predictions) and changes in	Include all affected land in a Special Control Area (SCA) which is not in the DCA and ensure the hazard information is incorporated in structure planning.	This is defined in the SCA as an outcome of the CHRMAP.

Trigger Name	Trigger	Action	Measures	Identification Method
		environmental conditions (such as changes to tidal planes / Mean seal level).	Provide notification of potential hazards on certificates of title where reasonably practicable and by direct contact with affected landholders	
T5	An asset is damaged, destroyed or becomes unsafe	Inspection of coastal assets following storm events or during times of increased longshore erosion. Town asset management includes inspection and reporting on condition of the structures. Notification by the public	Remove assets and relocate to less hazardous area if possible/appropriate	Informed by the Asset management and Structure Condition Assessments undertaken by the Town. Also captured in Annual Monitoring program
T6	Assets are predicted to become highly or very highly vulnerable within the next planning timeframe or within 10 years	Definition of hazard extents through CHRMAP. CHRMAP and hazard extent updates due to availability of more relevant/recent information (such as updated sea level rise predictions) and changes in environmental conditions.	Undertake detailed cost-benefit analysis and assessment of community acceptance of interim protection vs. managed retreat of the affected asset; Identify sources and begin to allocate funding for risk management measures	As part of future CHRMAP review this can be reassessed periodically (every 5-10 years).
T7	The overall community and stakeholders are no longer supportive of a specific risk management technique or approach	Ongoing community engagement; Cost-benefit analysis	Investigate, identify and implement a change in the risk management pathway, if appropriate	As part of future CHRMAP review this can be reassessed periodically (every 5-10 years).

Trigger Name	Trigger	Action	Measures	Identification Method
T8	A specific risk management technique is forecast to no longer be economically or physically feasible within 10 years	Ongoing shoreline and coastal asset monitoring Budget expenditure and forecasts Cost-benefit analysis	Investigate, identify and implement a change in the risk management pathway, if appropriate	As part of future CHRMAP review this can be reassessed periodically (every 5-10 years).
T9	The beach and coastal foreshore reserve is significantly diminished with respect to its original state and function	Long-term coastal monitoring program Assessment of aerial imagery Feedback through ongoing community consultation	Investigate, identify and implement a change in the risk management pathway, if appropriate	Assessment of the shoreline position will be a task included in the annual monitoring program.
T10	Undeveloped land is identified as lying within the hazard extents	Definition of hazard extents through CHRMAP. CHRMAP and hazard extent updates due to availability of more relevant/recent information (such as updated sea level rise predictions) and changes in environmental conditions (such as changes to tidal planes / Mean seal level).	Implement planning controls to avoid inappropriate development of the land	This is defined in the SCA. As part of future CHRMAP review this can be reassessed periodically (every 5-10 years).

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15.3 Walled Zone (SMU1) – Adaptation Pathways

15.3.1 Risk Treatment

For the Walled Zone, Riverside Road is recognised as an important connection for the community and stakeholders and from discussions with the DBCA (refer Section 13.3) there is support to maintain the road in its current location in future. Additionally, the foreshore area is host to highly valued community assets such as the coastal pathways and parks.

The riverwalls that are in place along the Walled Zone will be maintained in future planning periods, as these provide erosion protection to the foreshore and all assets landward (foreshore reserve, Riverside Road, Carparks, minor infrastructure, private property). Whilst the objective is for erosion protection, there will still exist inundation hazard for the foreshore areas in extreme events that will require appropriate management responses with rising sea levels. The management of this risk will require a strategy that can adjust over time. For Riverside Road and Carparks along the section of the shore, there would be a need to lift the surface level incrementally to keep up with sea level rise. This could be done periodically (every 10 to 20 years) and factored into the general maintenance and upgrading of the road surface. Upgrades to drainage would also need to be considered as part of road upgrades.

There are approximately 15 properties that are located within the coastal inundation hazard extent for the 2125 planning period at Riverside Road in the sections adjacent Pier St and Near East St (Figure 15.1). These are protected from erosion under the assumption the riverwalls are maintained, however the inundation hazard associated with projected SLR in the 2075 – 2125 timeframe increases significantly. It is recommended that an accommodate approach is adopted to manage the risk from inundation, with planning-based measures used to mitigate the risk.

Figure 15.1: Inundation risk to existing properties on Riverside Road near Pier St and East St

The key CHRMAP recommendations for the management of the SMU are summarised as follows:

- The approach to manage erosion risk for the foreshore area is Protect, to be achieved through maintaining the continuous riverwall and revetment structures along the shoreline.
- To manage inundation risk to assets in the foreshore, the general approach is Accommodate until such time as this is too expensive and a Managed Retreat is enacted.
    - The Protect option at the shoreline will provide erosion protection for the Town and community assets located landward in the foreshore reserve area including pathways, carparks and minor infrastructure (shelters, seats, BBQ's etc). The adoption of a Protect strategy at the shoreline ensures Riverside Road is not subject to erosion impacts, recognising its importance. The Town should undertake audits of the existing riverwalls and protection structures to determine the current condition and schedule future maintenance and replacement costs into budget planning as part of management actions.
    - The inundation hazard in the shoreline areas will increase under projected sea level rise in future planning periods. To manage this risk an Accommodate approach is recommended that allows the use of respective coastal assets to continue until the asset is no longer safe or structurally sound. Minor repair would be permitted consistent with asset lifecycle and expected planning timeframe, including the raising of assets to keep up with sea level rise (eg raising the floor level of Dome Café and Marine Boatshed or increasing the Carpark surface as part of scheduled design life upgrades). At the point in time at which risk to assets become intolerable, or cost of the Accommodate option becomes too high, the strategy would change to Managed Retreat. This would relocate the respective assets further landward as required consistent with design life upgrades.
- The properties that are located within the coastal inundation hazard extent for the 2125 planning period are assumed to be protected from erosion under the assumption the riverwalls are maintained. It is recommended an SCA covering the region of the identified inundation is established with a Local Planning Policy (LPP) that implements the planning-based controls within the SCA. A map of the proposed area for the SCA is presented in Appendix E. Development controls for these areas is recommended in the LPP that would provide guidance for appropriate development controls within the SCA including:
    - Accommodating the inundation risk consistent with planning timeframes to 2125 through design and planning measures which include appropriate Building Design (Ac.2), Appropriate Finished floor levels (Ac.3), Filling Land (Ac.4).
    - Placement of a Notification on title (Ac.1) to indicate to current and future landowners that the property is within a coastal hazard area and likely to be affected by coastal erosion and/or inundation over the planning timeframe.
- It is noted there are a range of utilities infrastructure that are affected by inundation and erosion risk through the SMU. Utilities infrastructure is privately owned, and it is the responsibility of the respective utility owners to determine future adaptation approaches to manage their erosion risk (WaterCorp etc).
- Emergency planning to determine the accessibility to Riverside Road in extreme events should be undertaken. This will be further discussed in the Implementation Plan (Section 17).

Adaptation approaches are summarised in Table 15.2.

Table 15.2: Risk Treatment – Walled Zone (SMU1)

Asset / Location	Erosion	Inundation
Riverside Road	Protected through maintenance of the existing riverwall network (Pr.4).	Design to withstand the impacts from periodic inundation (AC.2) Incrementally raise surface level as sea level rise occurs (AC.4). Drainage upgrades would need to be considered. Emergency planning (Nr.4) for this key route
Foreshore Reserve areas	Protected through maintenance of the existing riverwall network (Pr.4).	Design to withstand the impacts from periodic inundation (AC.2) Short term inundation in large events is acceptable (MR.1).
Coastal Pathways	Protected through maintenance of the existing riverwall network (Pr.4). May be a need to relocate the pathways further landward in future associated with adjustments to the overall protection solution.	Design pathways to withstand the impacts from periodic inundation (AC.2) Incrementally raise surface level as sea level rise occurs (AC.4)
Minor Infrastructure (BBQ.s, benches, signs etc)	Protected through maintenance of the existing riverwall network (Pr.4).	Design to withstand the impacts from periodic inundation (AC.2) Longer Term – 0.5m to 1m Sea Level Rise Short term inundation in large events is acceptable (MR.1). Remove and relocate further landward if needed (MR2) Monitor for safety following impacts (NR1)
Existing Residential Properties	Erosion protection provided by the maintenance of the continuous riverwalls.	Planning controls implemented through SCA and LPP with Notification on title (Ac.1) Accommodate inundation consistent with planning timeframes to 2125 through design and planning measures specified in LPP which outlines requirements for: • Building Design / Design to withstand inundation impacts (Ac.2) • Appropriate Finished floor levels (Ac.3) • Filling Land (Ac.4)
Dome Café and Marine Education Boatshed	N/A	Planning controls implemented through SCA and LPP. Accommodate inundation consistent with planning timeframes to 2125 through design and planning measures which outlines requirement for: • Building Design (Ac.2) • Appropriate Finished floor levels (Ac.3) Monitor for safety following impacts (NR1)

Asset / Location	Erosion	Inundation
Carparks	Protected through maintenance of the existing riverwall network (Pr.4). May be a need to relocate further landward in future associated with adjustments to the riverwall protection solution.	Design to withstand the impacts from periodic inundation (AC.2) Incrementally raise surface level as sea level rise occurs (AC.4) Longer Term – 0.5m to 1m Sea Level Rise Short term inundation in large events is acceptable (MR.1). Relocate when too expensive or difficult to mitigate the flood risk (MR.2) Monitor for safety following impacts (NR1)

15.3.2 Risk Management Pathways – SMU1

Long term adaptation pathways for the key at risk assets identified in SMU1 are summarised in Table 15.3 based on the format recommended in WAPC 2019. The long-term pathways are based on trigger points that would signal a change in management response. Trigger points and their monitoring are detailed in the Implementation Plan (Section 17).

The colour legend in the table is based on the general adaptation categories in the table below.

Avoid
Planned or Managed Retreat
Accommodate
Protect
No Regrets
Do Nothing

Table 15.3: Risk management pathway and triggers for the Walled Zone (SMU1)

Planning Timeframe	Now – 2035	2035 - 2050	2050 - 2075	2075 - 2125
Sea Level Rise projection. End of period	0.1m	0.2m	0.5m	1.05m
Assets	**Foreshore Areas and All Assets Landward – Erosion Hazard**			
Pathway	Protect against Erosion Hazard using Riverwalls and Revetments (Pr.4)			
Pathway	Protection Structure Audits (NR.4)			
Assets	**Carparks and Coastal Pathway – Inundation Hazard**			
Pathway	Accommodate inundation hazard. • Design to withstand impacts (AC2) • Raise level in step with SLR (AC3)			Managed Retreat Remove and relocate the assets at a distance appropriate for the asset design life / lifecycle (MR1, MR2).
Trigger	T4 - Asset lies seaward of the most up to date 100-year coastal erosion hazard line or coastal inundation hazard extent			T5: Damaged/ unsafe T6: Highly Vulnerable T7: Lack public support T9: Economic feasibility
Assets	**Riverside Road – Inundation Hazard**			
Pathway	Accommodate inundation hazard. • Design to withstand impacts (AC2) • Raise surface level in step with Sea Level Rise (AC3)			
Trigger	T4 - Asset lies seaward of the most up to date 100-year coastal inundation hazard extent			
Pathway	Develop emergency planning for use of Riverside Road in extreme events (NR.4)			
Assets	**Residential Properties (Riverside Road near Pier St and East St). Inundation Hazard**			
Pathway	Accommodate Inundation (Ac.1, Ac.2, Ac.3, Ac.4) • Amend local planning scheme to include Special Control Area which encompasses all areas affected by either erosion or inundation hazard over the 100-year planning period. • Establish planning-based controls that only allow development in the SCA that can address coastal hazard.			
Trigger	Property lies seaward of 100-year planning period erosion and/or inundation extent (T4,T10)			

Planning Timeframe	Now – 2035	2035 - 2050	2050 - 2075	2075 - 2125
Assets	**Dome Café and Marine Education Boatshed. Inundation Hazard**			
Pathway	Accommodate inundation hazard. • Design to withstand impacts (AC2) • Raise floor level in step with SLR (AC3)		Managed Retreat Remove and relocate the assets (MR1, MR2).	
Trigger	Property lies seaward of 100-year planning period erosion and/or inundation extent (T4)		T5: Damaged/ unsafe T6: Highly Vulnerable T9: Economic feasibility	
Assets	**Minor Infrastructure – Inundation Hazard**			
Pathway	Accommodate inundation hazard. • Design to withstand impacts (AC2)		Managed Retreat Remove and relocate the assets at a distance appropriate for the asset design life / lifecycle (MR1, MR2).	
Trigger	T4 - Asset lies seaward of the most up to date 100-year coastal erosion hazard line or coastal inundation hazard extent		T5: Damaged/ unsafe T6: Highly Vulnerable Next 10-yrs T9: Economic feasibility	

15.4 Reclaimed Zone (SMU2) – Adaptation Pathways

15.4.1 Risk Treatment

The foreshore area around the Reclaimed Zone on the river side of Riverside Road is generally low lying, with mixed use including foreshore reserves and parks, Leeuwin boat ramp and carpark, commercial and community premises (Café's, Swan Yacht Club, Aquarama, 8 Knots Tavern etc). The area is highly valued by the community for recreational and social purposes.

The majority of the foreshore of the Reclaimed Zone is currently protected from erosion by several different hard engineering methods. This includes pitched rock revetment adjacent the Leeuwing boat ramp, detached groynes offshore of John Tonkin Reserve, groyne at Preston Point and almost continuous seawall along the north facing section of shoreline from Preston Point to the east side of W.Wayman Reserve. There are short sections of natural beach at the shoreline of Niergarup reserve, John Tonkin Reserve, Merv Cowan Park and W.Wayman Reserve.

The protection structures that are currently in the shorelines are recommended to be maintained in the short to medium term. With projected sea level rise it is anticipated that at a point in the future the impacts from inundation may become too difficult and expensive to mitigate for foreshore reserves, with a change in the adaptation pathway to planned and managed retreat. This would be triggered by a sea level rise at the end of the planning period considered in this study (2125 period +1.05m). Under this scenario, the low-lying foreshore areas of the reclaimed zone would be inundated regularly by the general tide range (mean high high water (MHHW)) in spring tides as shown in Figure 15.2. For a large storm event (eg 1 in 2yr ARI) the inundation hazard would impact areas landward of Riverside Road as shown in Figure 15.2.

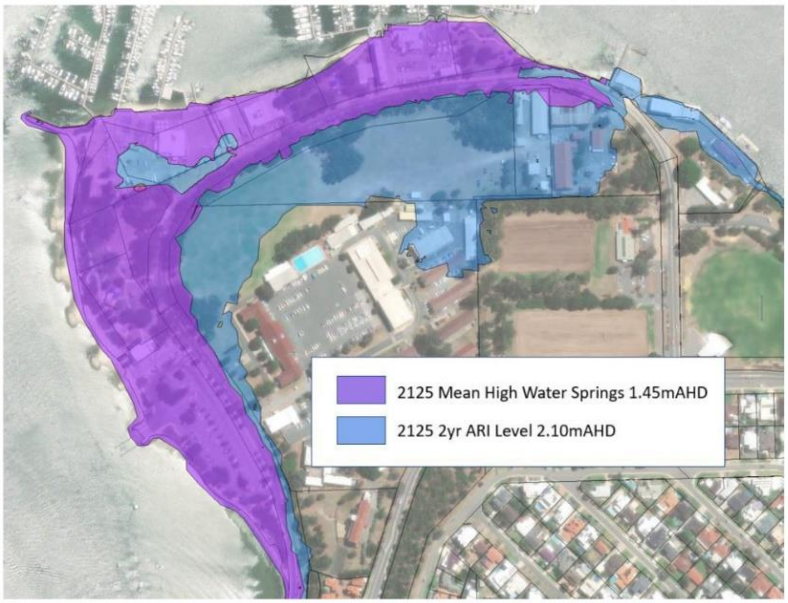

Figure 15.2: Reclaimed Zone Flooding Scenarios for 2125 with 1.05m Sea Level Rise. Inundation extent shown for spring tide mean high water level of 1.45m AHD (purple) and the 2yr ARI event peak water level (Blue).

Discussions with the DBCA have indicated that filling land in the foreshore to manage the inundation hazard would not be supported. The regular flooding of the foreshore under this scenario warrants a change in management strategy, recommended to be 'Managed Retreat'. The managed retreat of the foreshore area and associated infrastructure should consider retreat to the area bound by Riverside Road, as this represents a physical asset that provides connection to the location, whilst also being the point where the land level elevation is higher and less susceptible to inundation.

General recommendations for the Reclaimed Zone are:

- Accommodate flood risk to Riverside Road through periodic incremental raising of the road level in accordance with the rate of sea level rise and general road upgrade / maintenance schedule.
- Accommodate coastal hazard risk from inundation to commercial and community buildings (Swan Yacht Club, 8 Knots Tavern etc) through improved building design and the use of planning controls (minimum floor levels)
- Examine appropriate nature-based solutions to implement and provide resilience to shorelines including Niergarup Reserve, John Tonkin Reserve, Merv Cowan and W.Wayman Park, supported through grant funding and local volunteer groups. It is noted that application of Nature Based Solutions is an area that is still developing. While the intention is to maintain these shoreline areas with natural approaches (supported by the feedback received by the local community) their effectiveness in delivering the required outcomes would need to be examined in practice. In areas where these do not work well, the application of traditional 'hard engineering' methods or hybrid solution of hard engineering and Nature based options could be applied.
- For the Reclaimed Zone, the short to medium term adaptation pathway is to maintain existing erosion protection along the foreshore areas through traditional 'hard engineering' methods currently in place - river walls, revetments and detached groynes. Examine alternative methods of protection that can be achieved through other 'soft engineering' methods (eg Nature Based Solutions) and look for opportunities to implement as part of the asset replacement lifecycle.

- For the Reclaimed Zone the long-term adaptation pathway is expected to require a managed retreat approach, triggered by the difficulty and cost of mitigating inundation hazard with projected sea level rise of 1.05m in the 100-yr planning period. This scenario is driven by future sea level rise where the current foreshore areas are inundated regularly in the general tides and it is too difficult and/or expensive to maintain the current extent of the foreshore. There is a general presumption against using fill in the foreshore areas to address inundation risk.
- A future scenario of Managed Retreat of the foreshore area and associated infrastructure along the Reclaimed Zone should consider retreat to the area on the land side of Riverside Road.
- If there is a future change in the land use at the Leeuwin Barracks site to redevelop the location for residential and commercial property, then this would need to address the risk from erosion and inundation across the 100-years planning timeframe through planning-based approaches.
- It is noted there are a range of utilities infrastructure that are affected by inundation and erosion risk through the SMU. Utilities infrastructure is privately owned, and it is the responsibility of the respective utility owners to determine future adaptation approaches to manage their erosion risk (WaterCorp etc).
- Emergency planning to determine the accessibility to Riverside Road in extreme events should be undertaken. This will be further discussed in the Implementation Plan (Section 16.4.2).

Adaptation approaches are summarised in Table 15.4.

Table 15.4: Risk Treatment – Reclaimed Zone (SMU2)

Asset / Location	Erosion	Inundation
Riverside Road	Protected through maintenance of the existing riverwall network (Pr.4).	Design to withstand the impacts from periodic inundation (AC.2) Incrementally raise surface level as sea level rise occurs (AC.4) Emergency planning (Nr.4) for this key route
Foreshore Reserve areas	Protected through existing detached groyne field at John Tonkin (Pr.4), maintenance of the existing riverwall network (Pr.4).	Design to withstand the impacts from periodic inundation (AC.2) Short term inundation in large events is acceptable (MR.1).
Coastal Pathways	Protected through existing detached groyne field at John Tonkin (Pr.4), maintenance of the existing riverwall network (Pr.4). May be a need to relocate the pathways further landward in future associated with adjustments to the overall protection solution.	Design pathways to withstand the impacts from periodic inundation (AC.2) Incrementally raise surface level as sea level rise occurs (AC.4) Longer Term – 0.5m to 1m Sea Level Rise Short term inundation in large events is acceptable (MR.1). Remove and relocate further landward if needed (MR2) Monitor for safety following impacts (NR1)
Minor Infrastructure (BBQ.s, benches, signs etc)	Protected through existing detached groyne field at John Tonkin (Pr.4), maintenance of the existing riverwall network (Pr.4).	Design to withstand the impacts from periodic inundation (AC.2) Longer Term – 0.5m to 1m Sea Level Rise

Asset / Location	Erosion	Inundation
		Short term inundation in large events is acceptable (MR.1). Remove and relocate further landward if needed (MR2) Monitor for safety following impacts (NR1)
Commercial and Community premises	Protected through existing detached groyne field at John Tonkin (Pr.4), maintenance of the existing riverwall network (Pr.4).	Accommodate inundation consistent with planning timeframes to 2125 through design and planning measures which outlines requirement for: • Building Design / design to withstand impacts (Ac.2) • Appropriate Finished floor levels (Ac.3) Monitor for safety following impacts (NR1)
Carparks	Protected through existing detached groyne field at John Tonkin (Pr.4), maintenance of the existing riverwall network (Pr.4). May be a need to relocate further landward in future associated with Inundation risk triggering Managed Retreat..	Design to withstand the impacts from periodic inundation (AC.2) Incrementally raise surface level as sea level rise occurs (AC.4) Longer Term – 0.5m to 1m Sea Level Rise Short term inundation in large events is acceptable (MR.1). Relocate when too expensive or difficult to mitigate the flood risk (MR.2) Monitor for safety following impacts (NR1)

15.4.2 Risk Management Pathways – Reclaimed Zone SMU2

Long term adaptation pathways for the key at risk assets identified in SMU2 are summarised in Table 15.5 based on the format recommended in WAPC 2019. The long-term pathways are based on trigger points that would signal a change in management response. Trigger points and their monitoring are detailed in the Implementation Plan (Section 17).

The colour legend in the table is based on the general adaptation categories in the table below.

Avoid
Planned or Managed Retreat
Accommodate
Protect
No Regrets
Do Nothing

Table 15.5: Risk management pathway and triggers for the Reclaimed Zone (SMU2)

Planning Timeframe	Now – 2035	2035 - 2050	2050 - 2075	2075 - 2125
Sea Level Rise projection. End of period	0.1m	0.2m	0.5m	1.05m
Assets	**Foreshore Areas and All Assets Landward – Erosion Hazard**			
Pathway	Protect against Erosion Hazard using offshore detached groyne field, riverwalls and revetments (Pr.4) where currently in use. Apply Nature based solutions (Pr.2) to areas that are currently unprotected			Managed Retreat Remove and relocate the assets at a distance appropriate for the asset design life / lifecycle (MR1, MR2).
Pathway	Protection Structure Audits (NR.4)			T9: Economic feasibility
Assets	**Carparks and Coastal Pathway – Inundation Hazard**			
Pathway	Accommodate inundation hazard. • Design to withstand impacts (AC2) • Raise level in step with SLR (AC3)			Managed Retreat Remove and relocate the assets at a distance appropriate for the asset design life / lifecycle (MR1, MR2).
Trigger	T4 - Asset lies seaward of the most up to date 100-year coastal erosion hazard line or coastal inundation hazard extent			T5: Damaged/ unsafe T6: Highly Vulnerable

Planning Timeframe	Now – 2035	2035 - 2050	2050 - 2075	2075 - 2125
				T7: Lack public support T9: Economic feasibility
Assets	**Riverside Road – Inundation Hazard**			
Pathway	Accommodate inundation hazard. • Design to withstand impacts (AC2) • Raise surface level in step with SLR (AC3)			
Trigger	T4 - Asset lies seaward of the most up to date 100-year coastal inundation hazard extent			
Pathway	Develop emergency planning for use of Riverside Road in extreme events (NR.4)			
Assets	**Commercial Properties - Inundation Hazard**			
Pathway	Accommodate Inundation (Ac.1, Ac.2, Ac.3, Ac.4) • Amend local planning scheme to include Special Control Area which encompasses all areas affected by either erosion of inundation hazard over the 100-year planning period. • Establish planning-based controls that only allow development that can address coastal hazard.			
Trigger	Property lies seaward of 100-year planning period erosion and/or inundation extent (T4,T10)			
Assets	**Minor Infrastructure – Inundation Hazard**			
Pathway	Accommodate inundation hazard. • Design to withstand impacts (AC2)		Managed Retreat Remove and relocate the assets at a distance appropriate for the asset design life / lifecycle (MR1, MR2).	
Trigger	T4 - Asset lies seaward of the most up to date 100-year coastal erosion hazard line or coastal inundation hazard extent		T5: Damaged/ unsafe T6: Highly Vulnerable Next 10-yrs T9: Economic feasibility	

15.5 Natural Zone (SMU3)

15.5.1 Risk Treatment

For the Natural Zone, the key areas requiring management are the Jerrat Drive foreshore, the Sea Scouts location and the East Fremantle Yacht Club.

For the buildings at the site of the Sea Scouts and the East Fremantle Yacht Club, the key risk to manage is that from inundation hazard with projected sea level rise. The management of the risk is recommended to be addressed through planning responses (minimum finished floor levels) and building design (use of relocatable structures where appropriate, designing new structures to withstand inundation impacts). A foreshore management plan to guide management actions in the foreshore of the Jerrat Drive escarpment is recommended and further studies to better understand the site.

The key CHRMAP recommendations for the management of the SMU are summarised as follows:

- The approach to manage erosion risk is as follows:
  - For the East Fremantle Yacht Club foreshore area the adaptation approach is Protect. This is to be achieved through either maintaining the continuous riverwall and revetment structures along the shoreline or consideration of alternative options that are not traditional 'hard engineering' structures that would continue to provide the current level of protection. The practice of structure audits of the existing riverwalls to determine the current condition is recommended to inform future maintenance and replacement costs for budget planning.
  - For the Sea Scouts the adaptation approach is Protect. This is to be achieved through either maintaining the continuous riverwall and revetment structures along the shoreline or consideration of alternative options that are not traditional 'hard engineering' structures that would continue to provide the current level of protection.
  - The potential option to co-locate to a shared premises could be considered for East Fremantle Yacht Club and the Sea Scouts. This would allow the Town and Community groups to share the cost of construction and maintenance for protection structures.
- To manage inundation risk to assets in the foreshore, the general approach is Accommodate.
  - The inundation hazard in the shoreline areas will increase under projected sea level rise in future planning periods. To manage the risk to minor infrastructure an Accommodate approach is recommended that allows the use of respective coastal assets to continue until the asset is no longer safe or structurally sound. Minor repair would be permitted consistent with asset lifecycle and expected planning timeframe. At the point in the future where the Accommodate option becomes too difficult or expensive a Managed Retreat approach may be enacted to relocate further landward, at the time that sea level rise reaches 0.5m to 1m.
  - For the East Fremantle Yacht Club buildings the management of the risk is recommended to be addressed through planning responses (minimum finished floor levels) and building design (use of relocatable structures where appropriate, designing new structures to withstand inundation impacts).
  - For the Sea Scouts Building the inundation risk is recommended to be mitigated through planning-based recommendation on achieving a minimum finished floor level for the building consistent with the design life. This would be undertaken at the time of redevelopment of the site in the future.

Adaptation approaches are summarised in Table 15.6.

Table 15.6: Risk Treatment – Natural Zone (SMU3)

Asset / Location	Erosion	Inundation
Foreshore Reserve areas - section adjacent East Fremantle Yacht Club	Protected through maintenance of the existing riverwall network (Pr.4).	Design to withstand the impacts from periodic inundation (AC.2) Short term inundation in large events is acceptable (MR.1).
Coastal Pathway, access and parking - East Fremantle Yacht Club	Protected through maintenance of the existing riverwall network (Pr.4).	Design road and pathways to withstand the impacts from periodic inundation (AC.2) Incrementally raise surface level as sea level rise occurs (AC.4) Longer Term – 0.5m to 1m Sea Level Rise Short term inundation in large events is acceptable (MR.1). Remove and relocate further landward if needed (MR2) Monitor for safety following impacts (NR1)
Minor Infrastructure (BBQ.s, benches, signs etc)	Protected through maintenance of the existing riverwall network (Pr.4).	Design to withstand the impacts from periodic inundation (AC.2) Longer Term – 0.5m to 1m Sea Level Rise Short term inundation in large events is acceptable (MR.1). Remove and relocate further landward if needed (MR2) Monitor for safety following impacts (NR1)
Sea Scouts Building	Protected through maintenance of the existing riverwall (Pr.4).	Planning controls implemented through SCA and LPP. Accommodate inundation consistent with planning timeframes to 2125 through design and planning measures which outlines requirement for: • Building Design / Design to withstand impacts (Ac.2) • Appropriate Finished floor levels (Ac.3)
Jerrat Drive Foreshore Area	Examine use of Nature Based solutions to improve resilience in the shoreline areas (Pr.2). Monitor shorelines to track changes and develop further understanding of processes driving changes in the shoreline areas (NR.1).	N/A

15.5.2 Risk Management Pathways – Natural Zone SMU3

Long term adaptation pathways for the key at risk assets identified in SMU3 are summarised in Table 15.7 based on the format recommended in WAPC 2019. The long-term pathways are based on trigger points that would signal a change in management response. Trigger points and their monitoring are detailed in the Implementation Plan (Section 17.3).

The colour legend in the table is based on the general adaptation categories in the table below.

Avoid
Planned or Managed Retreat
Accommodate
Protect
No Regrets
Do Nothing

Table 15.7: Risk management pathway and triggers for the Natural Zone (SMU3)

Planning Timeframe	Now – 2035	2035 - 2050	2050 - 2075	2075 - 2125
Sea Level Rise projection. End of period	0.1m	0.2m	0.5m	1.05m
Assets	**Foreshore Areas - East Fremantle Yacht Club and Sea Scouts – Erosion Hazard**			
Pathway	Protect against Erosion Hazard using Riverwalls and Revetments (Pr.4)			
Pathway	Protection Structure Audits (NR.4)			
Assets	**Jerrat Drive Escarpment Foreshore Area – Erosion Hazard**			
Pathway	Protect against Erosion Hazard using Nature Based Solutions (Pr.2)			
Pathway	Shoreline Monitoring (NR.1)			
Assets	**Carparks and Coastal Pathway adjacent East Fremantle Yacht Club – Inundation Hazard**			
Pathway	Accommodate inundation hazard. • Design to withstand impacts (AC2)			Managed Retreat Remove and relocate the assets at a distance

Planning Timeframe	Now – 2035	2035 - 2050	2050 - 2075	2075 - 2125
	• Raise level in step with SLR (AC3)			appropriate for the asset design life / lifecycle (MR1, MR2).
Trigger	T4 - Asset lies seaward of the most up to date 100-year coastal erosion hazard line or coastal inundation hazard extent			T5: Damaged/ unsafe T6: Highly Vulnerable T7: Lack public support T9: Economic feasibility
Assets	**Sea Scouts Building and East Fremantle Yacht Club Building - Inundation**			
Pathway	Accommodate Inundation (Ac.1, Ac.2, Ac.3, Ac.4) • Amend local planning scheme to include Special Control Area which encompasses all areas affected by either erosion of inundation hazard over the 100-year planning period. • Establish planning-based controls that only allow development in the SCA that can address coastal hazard.			
Trigger	Property lies seaward of 100-year planning period erosion and/or inundation extent (T4,T10)			
Assets	**Minor Infrastructure – Inundation Hazard**			
Pathway	Accommodate inundation hazard. • Design to withstand impacts (AC2)		Managed Retreat Remove and relocate the assets at a distance appropriate for the asset design life / lifecycle (MR1, MR2).	
Trigger	T4 - Asset lies seaward of the most up to date 100-year coastal erosion hazard line or coastal inundation hazard extent		T5: Damaged/ unsafe T6: Highly Vulnerable Next 10-yrs T9: Economic feasibility	

16. Key Recommendations

16.1 Summary of Adaptation Approaches and Recommendations

The general approaches recommended to adapt to the risk of coastal hazard in this CHRMAP include:

- Avoid development on land within the erosion hazard area over the 100-year planning period.
- Accommodate coastal hazard risk from inundation to commercial and habitable buildings through improved building design and the use of planning controls (minimum floor levels).
- Accommodate coastal hazard risk to infrastructure in the foreshore areas until such time that a managed retreat pathway may be required, as a result of sea level rise.
- Protect foreshore area and assets landward in the Walled Zone from erosion through maintaining present riverwalls and revetments.
- Accommodate flood risk to Riverside Road through periodic incremental raising of the road level in accordance with the rate of sea level rise and general road upgrade / maintenance schedule.
- Implement nature-based solutions to provide resilience to shorelines including Niergarup Reserve, Jerrat Drive foreshore, John Tonkin Reserve, supported through grant funding and local volunteer groups.
- For the Reclaimed Zone, the short to medium term adaptation pathway is to maintain existing erosion protection along the foreshore areas through traditional 'hard engineering' methods currently in place - river walls, revetments and detached groynes. Examine alternative methods of protection that can be achieved through other 'soft engineering' methods (eg Nature Based Solutions) and look for opportunities to implement as part of the asset replacement lifecycle.
- For the Reclaimed Zone the long-term adaptation pathway is expected to require a managed retreat approach, triggered by the difficulty and cost of mitigating inundation hazard with projected sea level rise of 1.05m in the 100-yr planning period. This scenario is driven by future sea level rise where the current foreshore areas are inundated regularly in the general tides and it is too difficult and/or expensive to maintain the current extent of the foreshore. There is a general presumption against using fill in the foreshore areas to address inundation risk.
- A future scenario of Managed Retreat of the foreshore area and associated infrastructure along the Reclaimed Zone should consider retreat to the area landward of Riverside Road. This decision is contingent on the future of the Leeuwin Barracks site and potential for land being made available.
- If there is a future change in the land use at the Leeuwin Barracks site to redevelop the location for residential and commercial property, then this would need to address the risk from erosion and inundation across the 100-years planning timeframe through planning-based approaches.
- For the shoreline area at the base of the Jerrat Drive escarpment use of nature-based solutions to increase resilience of the shoreline area.

16.2 Additional Studies Recommended

The following reports are recommended to support the understanding of shoreline areas for the CHRMAP:

1. A geophysical study and / or geotechnical study of the Jerrat Drive foreshore area is recommended to further understand the stability in this section of the shore. The high value of this section of coast to the community and stakeholders warrants that a detailed foreshore management plan be prepared to guide management of this location.
2. Foreshore management plans can provide a strategy to deliver the recommendations of this CHRMAP for particular foreshore reserves throughout the Town. Foreshore management plans can be a key tool for communication and engagement with the community as they include detailed planning for community places and facilities. The Town should update the current foreshore management plan for

each of the SMU's to provide guidance for the ongoing management of foreshore reserves, monitoring of assets and the triggers for the managed retreat of assets and infrastructure at risk of erosion and inundation.

3. The City of Fremantle and the Town have established a Local Emergency Management Committee (LEMC) to oversee, plan and test the local emergency management arrangements in accordance with section 38(1) of the Emergency Management Act 2005. The LEMC has developed a Local Emergency Management Arrangement (LEMA) which includes useful information in relation to emergency preparation and response, including flooding. The LEMC shall be provided with a copy of the final CHRMAP and consider the identified risks in any subsequent reviews of the LEMA.
4. Publicly Available Information: It is recommended that the Town introduces the inundation hazard data into a publicly available mapping system, if available. This will ensure staff and the community have access to information on any affected land and can be made aware of the presence of the coastal hazards. Information on relevant coastal hazards and the implications for property, now and into the future, should also be made available to potential buyers upon making a land purchase enquiry.

16.3 Recommended Planning Controls

Planning based recommendations have been developed to address coastal hazard for existing residential and commercial property for areas outside the DCA that are controlled by the Town. These would also apply to the Leeuwin Barracks site in the Reclaimed Zone should this be released by the Department of Defence for redevelopment.

16.3.1 Local Planning Strategy

This CHRMAP will inform the next iteration of the Town's Local Planning Strategy to guide land use planning and development in areas prone to coastal hazards. There should be a general presumption against further land use intensification through rezoning or subdivision, unless specifically identified in the Local Planning Strategy. The identification of land for further intensification shall consider the risks identified in this CHRMAP alongside the precautionary principle contained in SPP 2.6.

The Local Planning Strategy has recently been adopted and endorsed by the Western Australian Planning Commission (WAPC). This references the application of SPP 2.6 and the need to consider coastal hazards identified through the preparation of the CHRMAP. Future revisions of the Local Planning Strategy must consider the coastal hazard risks identified in this CHRMAP together with other relevant planning matters including environmental, economic and social considerations to holistically inform and shape future amendments to the Town's LPS 3.

16.3.2 Structure Planning

Structure planning is considered the most effective mechanism where some degree of comprehensive redevelopment of land remains an option. Structure plans for land identified as being at risk of coastal processes over the next 100 years must include provision for a foreshore reserve to avoid unnecessary risks on future development. The foreshore reserve shall be ceded free of cost to the Crown to provide for continued coastal foreshore management, public access, recreation, conservation and landscape amenity. Structure plans shall also include provisions for all SPP 2.6 requirements to be met through subsequent approval process, including subdivision and development applications.

The Leeuwin Barracks site has been identified in the Local Planning Strategy as a potential site for future urban intensification. Amendments to the Metropolitan Region Scheme (MRS) and LPS 3 will be required to rezone the Leeuwin Barracks site to support future urban development. It is anticipated that a structure plan will be required to guide development and use of the Leeuwin Barracks site. Should a structure plan be prepared for the Leeuwin Barracks site, it will need to:

- Demonstrate how inundation risks can be appropriately managed, as outlined in the CHRMAP Local Planning Policy;
- Demonstrate how erosion risks can be appropriately managed should the existing physical barriers along Riverside Road be removed. This shall include provisions for planned or managed retreat along with the identification of alternative access and servicing arrangements; and
- Identify land for a foreshore reserve which is to be ceded free of cost to the Crown without payment of compensation. The foreshore reserve width is to include a suitable allowance for coastal processes while allowing for the continued foreshore management, public access, recreation, conservation and landscape amenity.

16.3.3 Local Planning Scheme Amendment

It is recommended that the Town initiate an amendment to LPS 3 to include the following provisions, in accordance with the CHRMAP Guidelines:

- Insert Land prone to inundation under Part 6: Special Control Areas and include the provisions outlined in Table 16.1.
- Update the Scheme Map to include the SCA which shall reflect the 100-year inundation hazard extents which affect zoned land, as identified in the CHRMAP.

The recommendations of this CHRMAP could be included as part of the next scheduled review of the Local Planning Scheme.

16.3.4 Special Control Area

The introduction of a SCA over zoned land affected by inundation over the 100-year planning period will provide the most effective response to the identified risks. The SCA will stipulate provisions to respond to the inundation hazards, including the trigger for normally exempt development to require development approval.

The proposed area of the SCA is shown in Appendix E.1, with the DCA extent also shown in the mapping. The SCA covers small areas on the landward side of the DCA in the Walled Zone. For the Reclaimed zone the SCA would extend across the Leeuwin Barracks site if this were to be released by the Department of Defence for redevelopment in the future.

It is noted that some forms of development cannot be controlled by the SCA, such as works carried out by the State Government under the Public Works Act 1902 or development within the DCA. The Town will need to liaise with the relevant State agencies regarding such development to ensure it is not incompatible with the outcomes of this CHRMAP.

The planning controls for SCA1 are outlined in Table 16.1.

Table 16.1: Special Control Area (SCA1) – Area Prone to Inundation

Name of Area	Purpose	Additional Provisions
Special Control Area 1 (SCA 1) – Area Prone to Inundation	(1) To provide guidance for land use and development within areas subject to inundation. (2) To identify land within Town of East Fremantle at risk of inundation by 2125. (3) To ensure land along the Swan River foreshore is continuously available for foreshore management, public access, recreation and conservation purposes. (4) To ensure public health and safety and reduce risk associated with inundation. (5) To avoid inappropriate land use and development of land at risk of inundation. (6) To ensure land use and development does not accelerate coastal processes; or have a detrimental impact on the functions of public reserves. (7) To protect new development from the impacts of inundation. (8) To ensure coastal process considerations are taken into account in preparing strategic planning proposals and in assessing subdivision and development applications.	(1) Notwithstanding any other provision of the Scheme, all proposed development within SCA 1 requires the approval of the local government. (2) In considering any application for development approval, or its advice in relation to proposed structure plans or subdivision applications for subdivision for land within SCA 1, the local government is to have particular regard to: (a) The Town Coastal Hazard and Risk Management Adaptation Plan. (b) State Planning Policy 2.6 – State Coastal Planning Policy and Guidelines and any other relevant State planning policies. (c) The CHRMAP Local Planning Policy and any other relevant local planning policies adopted by the Town. (3) An application for development approval for development proposed within SCA 1 may be referred to any statutory, public or planning authority for advice and recommendations before being considered by the local government. (4) Where the local government decides to approve an application for development approval it may impose conditions so as to: (a) Constrain the location of the development; (b) Control the form of construction including foundations and associated works; (c) Determine the form, location and construction of access; (d) Require a minimum floor level for development; (e) Require the registration of a notification under section 70A of the Transfer of Land Act 1893 on the Certificate of Title of the subject land at the cost of the landowner advising that the lot is located in an area

		likely to be subject to coastal inundation over the next 100 years. (5) Where subdivision applications are received within SCA 1, the local government may recommend that the Commission requires a notification under section 165 of the Act to be placed on the Certificate(s) of Title of the subject land, at the cost of the landowner advising that the lot(s) is located in an area likely to be subject to coastal inundation over the next 100 years.

16.3.5 CHRMAP Local Planning Policy (LPP)

Following the introduction of SCA 1 into LPS 3, the Town shall prepare and adopt a CHRMAP Local Planning Policy in accordance with Schedule 2 of the Planning and Development (Local Planning Schemes) Regulations 2015. It is recommended that the CHRMAP Local Planning Policy includes provisions included in Table 16.2 which may be subject to further refinement by the Town following the completion of this CHRMAP.

Table 16.2: CHRMAP Local Planning Policy

CHRMAP Local Planning Policy
Policy Application
This policy applies to all land within the CHRMAP Special Control Area (SCA 1), which is that land identified as being subject to inundation over the 100-year planning timeframe. The Town shall also have due regard to this policy in providing advice to the DBCA or WAPC for development on land within the Swan Canning DCA or the Parks and Recreation Reserve.
Policy Objectives
1. To identify land within the Town at risk of inundation by 2125. 2. To ensure land along the Swan River foreshore is continuously available for foreshore management, public access, recreation and conservation purposes. 3. To ensure public health and safety and reduce risk associated with inundation. 4. To avoid inappropriate land use and development of land at risk of inundation. 5. To protect new development from the impacts of inundation. 6. To ensure coastal process considerations are taken into account in preparing strategic planning proposals and in assessing subdivision and development applications.
Definitions
Annual Recurrence Interval (ARI) means how likely an event is to occur. For example, a 100-year ARI event is an event that occurs or is exceeded on average once every 100 years. CHRMAP means the Town of East Fremantle Coastal Hazard Risk Management and Adaptation Plan. Coastal means the area of water and land that may be influenced by coastal processes, including the tidal reaches of inland waters. Coastal process means any action of natural forces on the coastal environment. Habitable Room has the same meaning given in State Planning Policy 7.3 Residential Design Codes. Horizontal Shoreline Datum (HSD) means the active limit of the shoreline under storm activity, as defined in State Planning Policy 2.6 – State Coastal Planning Policy. MRS means the Metropolitan Region Scheme. Net Lettable Area has the same meaning given in the Planning and Development (Local Planning Schemes) Regulations 2015. SCA 1 means the Special Control Area 1 – Area Prone to Inundation as defined on the Scheme Maps. Scheme means the Town of East Fremantle Local Planning Scheme No. 3 or any subsequent local planning scheme endorsed by the Minister for Planning. SPP 2.6 means State Planning Policy 2.6 Coastal Planning Policy Strategic Planning Proposals means a Local Planning Strategy, Local Planning Scheme, amendment to a Local Planning Scheme, Local Structure Plan or Local Development Plan. WAPC means the Western Australian Planning Commission.

CHRMAP Local Planning Policy

Requirement for Development Approval

Notwithstanding any other provision in the Scheme, development approval is required prior to commencing or carrying out any works or use of land within SCA 1, unless specified as exempt development in this Policy.

Where development approval is required, applications will need to clearly demonstrate that the proposed development meets the objectives and requirements of this Policy and any other relevant requirements of the Town's planning framework.

Exempted Development

Notwithstanding the land being located within SCA 1, unless otherwise required by the Scheme, the provisions of this Policy do not apply to:

1. Alterations and additions to a habitable room of an existing residential building or net lettable area of commercial, retail or community building which does not exceed 50m^2 cumulatively from the date of adoption of this Policy; or
2. A change of use that does not intensify development or use of the land.

General

The inundation hazards identified in the CHRMAP must be considered during the preparation and assessment of strategic proposals, subdivision and development applications to avoid increasing the impacts of coastal processes on inappropriately located land use and development.

Notwithstanding the requirements of this Policy, the Town may exercise discretion in its consideration of proposals where a site-specific coastal hazard assessment is prepared in accordance with SPP 2.6 to demonstrate the suitability of the proposal.

Strategic Planning Proposals

1. Strategic planning proposals for land identified as being prone to inundation must demonstrate how it is proposed to plan for and appropriately manage coastal hazards, including risk to public utility infrastructure servicing the land and roads which provide public access to the land.
2. Strategic planning proposals for land adjacent to the river must include provision for a foreshore reserve which is to be ceded free of cost to the Crown without payment of compensation. The foreshore reserve width is to include a suitable allowance for coastal processes, in addition to sufficient land which is not vulnerable to coastal processes to provide for continued foreshore management, public access, recreation, conservation and landscape amenity.

Subdivision

The Town is responsible for providing advice to the WAPC in respect to the subdivision of land. For the subdivision of land identified as being prone to inundation, the Town will need to be satisfied that the subdivision responds to the inundation risk by ensuring:

1. The finished surface level of all new roads and lots within the subdivision area designed at or above 2.5m AHD to respond to the 500-year ARI event in the 100-year planning timeframe;
2. Public road access to the new lots is not subject to inundation to the extent that would result in difficulty providing evacuation during inundation events; and
3. Future lots can be developed for the intended purpose without the need for fill.

CHRMAP Local Planning Policy

4. The Town will recommend to the WAPC that a condition be imposed on all subdivision approvals requiring a notification under section 165 of the Planning and Development Act 2005 to be placed on the Certificate(s) of Title of the subject land, at the cost of the landowner. The notification will alert prospective purchasers that the land is located within an area likely to be subject to coastal hazards within the period to 2125, except where the coastal hazard will be adequately addressed through the development works or is otherwise suitably addressed. The notification shall state the following: 'Vulnerable area – this lot is located in an area likely to be subject to inundation over the next 100 years.'

Development

The Town will be the responsible authority for development applications for land zoned under the Scheme outside of the DCA, as identified as SCA 1. For the development of land identified as being prone to inundation, the Town will need to be satisfied that the development responds to the inundation risk by ensuring:

1. Habitable rooms for residential buildings and net lettable areas for commercial, retail or community buildings provide a minimum finished floor level of at least 2.5m AHD to respond to the 500-year ARI event in the 100-year planning timeframe. The following exception may be considered below this level:

   (a) Minor additions and alterations to buildings which exist at the date of adoption of this Policy, where the minimum finished floor level is not reasonably practicable or desirable in a particular instance; or

   (b) Non-habitable buildings or floorspace such as outbuildings, carports, or the lower floor level of buildings between the natural ground level and the habitable floor level where the non-habitable purpose is noted on the application for development approval and/or building permit as such and therefore solely used for the labelled purpose.
2. The design and extent of fill and any retaining walls to achieve minimum floor levels does not create an adverse impact of inundation levels on adjacent properties or the amenity of the locality.
3. All utility service connections including power points, light switches, communications connections, sewer vents and the like are elevated and/or designed to be protected from the impacts of inundation. The Town may require information to demonstrate how this will be achieved or apply conditions to this effect.
4. The building is designed to withstand structural loads associated with inundation, including water resistant building materials and construction methods. The Town may require information from a structural engineer to demonstrate how this will be achieved or apply conditions to this effect.
5. All development approvals include a condition requiring a notification to be placed on the certificate of title of the subject land pursuant to section 70A of the Transfer of Land Act 1893, as the cost of the landowner. The notification will alert prospective purchasers that the land is located within an area likely to be subject to coastal hazards within the period to 2125, except where the coastal hazard will be adequately addressed through the development works or is otherwise suitably addressed. The notification shall state the following: 'Vulnerable area – this lot is located in an area likely to be subject to inundation over the next 100 years.'

The Town may also be required to provide comment and advice in respect to development within the DCA and/or Parks and Recreation reserve. As part of this statutory role, the Town will recommend the above requirements to be considered in the decision-making process by the relevant authority.

16.4 Management Requirements

16.4.1 Publicly Available Information

It is recommended that the Town introduces the inundation hazard data into a publicly available mapping system, if available. This will ensure staff and the community have access to information on any affected land and can be made aware of the presence of the coastal hazards.

Information on relevant coastal hazards and the implications for property, now and into the future, should also be made available to potential buyers upon making a land purchase enquiry.

16.4.2 Emergency Response and Evacuation

The City of Fremantle and the Town have established a Local Emergency Management Committee (LEMC) to oversee, plan and test the local emergency management arrangements in accordance with section 38(1) of the Emergency Management Act 2005. The LEMC has developed a Local Emergency Management Arrangement (LEMA) which includes useful information in relation to emergency preparation and response, including flooding.

The LEMC shall be provided with a copy of the final CHRMAP and consider the identified risks in any subsequent reviews of the LEMA.

17. Short Term Implementation Plan

17.1 Implementation Actions

The short-term implementation actions over the period now to 2035 are summarised in this section. They include recommendations for:

1. Planning Actions;
2. Annual Monitoring Program;
3. Additional Technical Studies; and
4. Adaptation Actions in Shoreline Areas.

An overview of the actions is presented, with a summary of the projected timing and estimated cost. It is noted that the actions recommended in this section are the responsibility of the Town. Consultation and support from the relevant management authority (DBCA) will be required for activities in the DCA.

17.2 Planning Implementation – Short Term

The following planning and management controls should be implemented by the Town as soon as practicable given the inundation impacts identified in the CHRMAP.

Table 17.1: Short-term Implementation – Planning Actions

Planning Controls	Description	Implementation Triggers
Structure Plans	Require proponents to include coastal adaptation and management provisions into structure plans. The Leeuwin Barracks site is the only area that is likely to be subject to a future structure plan.	The submission of a structure plan containing lots being affected by coastal hazards, as identified in the CHRMAP.
Scheme Amendment	Introduce SCA into the Town's local planning scheme.	Next scheduled scheme review.
CHRMAP Local Planning Policy	Adoption of local planning policy to guide future development within the SCA.	Following the introduction of the SCA into the Town's local planning scheme.
Emergency Response and Evacuation	Review LEMA alongside the inundation mapping identified in the CHRMAP.	Next scheduled LEMA review.

17.3 Annual Monitoring Program

It is recommended that an annual monitoring program commence following the adoption of the CHRMAP. This will be used to support the CHRMAP and to further develop the understanding of the shoreline dynamics in the key locations where the risk from erosion and / or inundation has been identified.

The monitoring program would be used to target key locations in the Town's shoreline areas to improve understanding of coastal erosion and inundation impacts in the coming years. It will also provide the mechanism to assess where established triggers are being approached, to provide early indication of a change in management.

The annual monitoring program would involve collection of new information in the river shoreline areas (eg photo, survey) with discussion, analysis and comparison against previously captured data.

Desktop analysis including a review of relevant wind and water level records and summary of extreme events would be delivered. This would include analysis of the annual measured data with comparison relative to long term averages in each respective year of the program.

Current management of the coastal infrastructure assets by the Town such as structural inspections of the river walls would be summarised. The report would also note any significant extreme events that occur over the year and how these impacted the shoreline areas.

Further detail on the monitoring program is presented in the sections following.

17.3.1 Photo Monitoring and Survey Data Collection

Collection of photos and survey in the key areas to develop the understanding of the river shorelines would be undertaken at key locations of interest.

The following methods of capture are recommended:

- Photo Monitoring. Fixed monitoring locations would be established at key locations around the study area and photos would be captured at various times during the year. This method develops the understanding of how the shoreline changes seasonally.
- Capture of data using unmanned aerial vehicles (UAV). UAV data capture (drone) provides survey levels of shoreline areas as well as oblique aerial imagery. This method of capture has been used successfully in other locations around Western Australia and offers a cost-effective means of capturing this data across small areas. The data can be used to analyse the way in which shorelines evolve across different seasons and changes following large storm events.

Photo monitoring is recommended from a fixed position on the shoreline to be determined as part of the first-year annual monitoring tasks at:

1. Nieragarup Reserve foreshore
2. John Tonkin Reserve foreshore
3. Unprotected foreshore areas at Norm McKenzie Park and W. Wayman Reserve
4. Jerrat Drive escarpment foreshore

At several locations around the State this approach has been used with the installation of fixed infrastructure and signage promoting photo capture by community through the CoastSnapWA coastal monitoring program. There are several methods in practice that allow the public to take a photo of the shoreline that can be uploaded to a database that is then catalogued for analysis as part of the shoreline monitoring. This promotes citizen science and highlights the work the Town is doing in its foreshore areas. The CoastSnapWA site (https://wacoastline.org/coastsnapwa) provides a summary of the coastal

monitoring that has been undertaken at locations in Rockingham, Mandurah, Waroona, Harvey, Bunbury, Dardanup, Capel, and Busselton.

17.3.2 Asset Management and Structural Inspections

The annual monitoring program would summarise key information from the Town's management of the shoreline protection structures in its foreshore areas (eg river walls, revetments, groynes etc).

The information of interest would be structural inspections, scheduling or implementation of replacement or upgrade works undertaken as part of the East Fremantle River walls 10 Year Priority Plan (2022).

The structures of interest would include the following:

- Leeuwin Boat Ramp
- Car Parks (specifically those sited directly adjacent the river eg Public Carpark No 4 at Dome Cafe)
- River Walls and revetments through the Walled Zone
- River Walls and revetments through the Reclaimed Zone
- Offshore groyne structures at John Tonkin Reserve
- Groyne at Preston Point
- Beach access paths and stairs (John Tonkin, Nieragarup Reserve, Jerrat Drive locations)
- Beach area at John Tonkin Reserve
- River walls at East Fremantle Yacht Club

17.3.3 Projected Cost of Annual Monitoring Program

An indicative five-year program for the annual monitoring is presented in Table 17.2 with the following noted:

- In the first year the photo monitoring sites would be established with approximately six sites determined for repeat capture in the years to follow. These would be in the Reclaimed Zone and the Natural Zone. In subsequent years the collection of photos from these sites could be managed through a community led platform where members of the public could upload photos to a database (eg CoastSnapWA). An estimate of $3,000 annually to manage this process has been included in Table 17.2. Alternatively, the Town could elect to undertake the photo-monitoring through the year using its own personnel to reduce cost.
- In the first year of the program an independent verification of the accuracy of the UAV survey collection would be undertaken using a local surveyor. This activity would provide an independent comparison of the UAV survey accuracy and would not be repeated in subsequent years. This has been applied in similar monitoring programs in WA.

The cost for the monitoring activities in Table 17.2 is estimated at approximately $15,500 (ex GST) annually, with a five-year total of $77,500 ex GST. Co-funding of up to 50% of the cost of the program could be made available if the Town is successful in application for the DoT's annual Coastal Adaptation and Protection (CAP) grants.

- The annual cost could be reduced if the Town was to undertake the photo-monitoring through the year using its own personnel.

Table 17.2: Indicative five-year program for Annual Monitoring activities

Task	Description	Budget
Year 1	2024 Activities	$ 15.5k
1.1	UAV survey and oblique imagery capture – Reclaimed Zone	$ 4,000
1.2	Inspection / Asset management of shoreline structures	Town Internal
1.3	Transect Surveys (UAV Independent Accuracy Verification)	$ 1,500
1.4	Photo Monitoring. Establish Site Locations in Year 1 (estimate 6)	$ 1,500
1.5	Desktop Analysis, Annual Monitoring Report	$ 8,500
Year 2	2025 Activities	$ 15.5k
2.1	UAV survey and oblique imagery capture – Natural Zone	$ 4,000
2.2	Inspection / Asset management of shoreline structures	Town Internal
2.3	Photo Monitoring – Community Capture / On-line Platform	$ 3,000
2.4	Desktop Analysis, Annual Monitoring Report	$ 8,500
Year 3	2026 Activities	$ 15.5k
3.1	UAV survey and oblique imagery capture – Reclaimed Zone	$ 4,000
3.2	Inspection / Asset management of shoreline structures	Town Internal
3.3	Photo Monitoring – Community Capture / On-line Platform	$ 3,000
3.4	Desktop Analysis, Annual Monitoring Report	$ 8,500
Year 4	2027 Activities	$ 15.5k
4.1	UAV survey and oblique imagery capture – Natural Zone	$ 4,000
4.2	Inspection / Asset management of shoreline structures	Town Internal
4.3	Photo Monitoring – Community Capture / On-line Platform	$ 3,000
4.4	Desktop Analysis, Annual Monitoring Report	$ 8,500
Year 5	2028 Activities	$ 15.5k
5.1	UAV survey and oblique imagery capture – Reclaimed Zone	$ 4,000
5.2	Inspection / Asset management of shoreline structures	Town Internal
5.3	Photo Monitoring – Community Capture / On-line Platform	$ 3,000
5.4	Desktop Analysis, Annual Monitoring Report	$ 8,500
	TOTAL Cost for Five-Year Program	**$77,500**

17.4 Additional Technical Studies

The following technical studies are recommended over the next 5-years:

1. Analysis of flood risk for local catchment flooding in extreme events using the existing drainage network.

The CHRMAP does not assess catchment-based flooding in extreme events. A dedicated hydrological and hydraulic model to assess the flood risk for the study area under severe rainfall events with consideration of local catchment flooding, the existing stormwater drainage network and the connection to the Swan River would be required. Joint occurrence of the river level and catchment-based events would be considered. This would provide a greater understanding of the flood risk and recommendations for potential upgrades to manage the risk. It is expected that this study would be led by the Town, though potential for joint ownership with the DBCA could be examined.

An estimate of the cost of the study is $60,000 (ex GST).

2. Jerrat Drive escarpment foreshore stability study

The Jerrat Drive foreshore area is a location which is highly valued by the community in the Natural Zone. The study will summarise the current condition of the foreshore and assess the risks to the location in future with consideration of the local site survey, vegetation, geotechnical information, drainage and local access pathways. Recommendations for the management of the location to inform future foreshore management approaches which include consideration of revegetation of the foreshore and use of nature-based solutions in the shoreline to improve resilience.

An estimate of the cost of the study is $35,000 (ex GST)

3. Study to determine appropriate Nature Based Solutions for target shoreline areas.

A study of the methods to be used for shoreline stabilisation in the target shoreline areas which can reference the general guidance from SRT (2009) and deliver site specific recommendations. This will guide the nature-based approaches in the subsequent years.

An estimate of the cost of the study is $30,000 (ex GST)

17.5 Additional Planning Based Studies

In addition, the following planning-based studies are recommended in the next 7 years (by 2030):

- Update to current Foreshore Management Plan.
- Publicly Available Information
- Emergency Response and Evacuation.
- CHRMAP Review.

17.5.1 Foreshore Management Plans

Foreshore management plans can provide a strategy to deliver the recommendations of this CHRMAP for foreshore reserves throughout the Town. Foreshore management plans can be a key tool for communication and engagement with the community as they include detailed planning for community places and facilities.

The Town should update its foreshore management plan, in conjunction with relevant stakeholders, to provide guidance for the ongoing management of foreshore reserves, monitoring of assets and the triggers

for the managed retreat of public assets and infrastructure at risk of coastal processes. The priority actions under the East Fremantle River walls 10 Year Priority Plan (2022) would be included as part of this process.

An estimate of the cost of the study is less than $40,000 (ex GST).

17.5.2 Publicly Available Information

It is recommended that the Town introduces the inundation hazard data into a publicly available mapping system, if available. This will ensure staff and the community have access to information on any affected land and can be made aware of the presence of the coastal hazards.

Information on relevant coastal hazards and the implications for property, now and into the future, should also be made available to potential buyers upon making a land purchase enquiry.

17.5.3 Emergency Response and Evacuation

The City of Fremantle and the Town have established a Local Emergency Management Committee (LEMC) to oversee, plan and test the local emergency management arrangements in accordance with section 38(1) of the Emergency Management Act 2005. The LEMC has developed a Local Emergency Management Arrangement (LEMA) which includes useful information in relation to emergency preparation and response, including flooding.

The LEMC shall be provided with a copy of the final CHRMAP and consider the identified risks in any subsequent reviews of the LEMA.

An update to the LEMA in the next 5 years based on the revised hazard mapping from the CHRMAP is anticipated with an estimated cost of $15,000 (ex GST).

17.5.4 CHRMAP Review

Approximately every five-years a general review of the CHRMAP should be undertaken by the Town. As part of the review the following should be covered (as a minimum):

- The improved knowledge of coastal hazards in the shoreline areas from the annual monitoring and additional studies should be incorporated into the review and where this may impact any of the recommendations in the CHRMAP.
- The guidance on sea level rise projections by the DoT (DoT 2010) should be reviewed for any updates. Any change to the projected sea level rise allowances would require assessment of updates to the CHRMAP.
- Review of changes in the SPP2.6 advice (WAPC 2013) or updates to the CHRMAP guidelines (WAPC 2019) would be assessed as part of the review process.
- Engagement with the community to provide an overview of learnings from the annual monitoring program and outline how these are captured in the CHRMAP review process. A review of the community values to determine if they are consistent with values collected in the previous version of the CHRMAP would be sought as part of the engagement activities.

The monitoring and review process will ensure that the management and adaptation actions remain relevant. In conjunction with annual monitoring activities, a general review of the CHRMAP approximately every 5-years would be used to implement the findings from the monitoring program and address updates to the CHRMAP recommendations where required.

An estimate of the cost of the study is less than $35,000 (ex GST).

17.6 Adaptation Actions - Shoreline Areas

To improve the resilience of the natural shoreline areas through the Reclaimed Zone and the Natural Zone, the implementation of nature-based solutions is recommended. An example of the revegetation of shoreline at John Tonkin Reserve foreshore is shown in Figure 17.1.

For indicative budget planning purposes, the key shoreline areas where adaptation approaches are recommended along with the approximate cost and timing are summarised in Table 17.3.

Table 17.3: Indicative Timing and Cost of Adaptation Actions in the Short term (present day to 2035)

SMU	Location and Approach	Approximate Cost [1, 2]	Indicative Timing
Reclaimed Zone	Niergarup Reserve application of nature-based revegetation and foreshore stabilisation techniques	$25k	2024
Reclaimed Zone	John Tonkin Reserve application of nature-based revegetation and foreshore stabilisation techniques	$50k	2025 -2026
Natural Zone	Jerrat Drive escarpment - application of nature-based revegetation and foreshore stabilisation techniques	$60k	2027 - 2028
Reclaimed Zone	Norm McKenzie Park and W. Wayman Reserve application of nature-based revegetation and foreshore stabilisation techniques	$25k	2029

Notes:
[1] Nature based solutions for revegetation and foreshore stabilisation estimated at $200/m.
[2]. Costs are rounded to nearest $5,000.

Figure 17.1: Example of nature-based stabilisation technique - revegetation of foreshore at John Tonkin Reserve shoreline

17.7 Short Term Implementation Plan and Estimated Cost

A proposed short-term implementation plan with indicative costs for the period over the first 5-years 2024 to 2028 inclusive is presented in Table 17.4.

The budget is estimated at $427,500 for studies and monitoring ($77,500 annual monitoring, $215,000 for technical studies and planning studies). Additionally, a budget estimate of $135,000 is forecast to fund nature-based adaptation approaches.

Table 17.4: Short-term implementation plan and estimated budget. First five years 2024 – 2028.

Task	Description	Budget
Year 1	2024 Activities	
Annual Monitoring	Year 1 Monitoring Activities	$ 15,500
Technical Studies	Jerrat Drive escarpment foreshore stability study	$ 35,000
Technical Studies	Nature Based Solutions in Target Shoreline Areas	$ 30,000
Planning	Introduce SCA into the Town's LPS 3. Prepare local planning policy to guide future development within the SCA.	Town Internal
Adaptation	Niergarup Reserve – Nature Based Solutions in Shorelines	$ 25,000
Year 2	2025 Activities	
Annual Monitoring	Year 2 Monitoring Activities	$ 15,500
Planning	Prepare Foreshore Management Plans	$ 40,000
Adaptation	John Tonkin Res (Yr1) Nature Based Solutions in Shorelines	$ 25,000
Year 3	2026 Activities	
Annual Monitoring	Year 3 Monitoring Activities	$ 15,500
Planning	Update Emergency Response Plan (LEMA)	$ 15,000
Adaptation	John Tonkin Res (Yr2) Nature Based Solutions in Shorelines	$ 25,000
Year 4	2027 Activities	
Annual Monitoring	Year 4 Monitoring Activities	$ 15,500
Technical Studies	Catchment Based Flooding Study	$ 60,000
Adaptation	Jerrat Drive (Yr1) Nature Based Solutions in Shorelines	$ 30,000
Year 5	2028 Activities	
Annual Monitoring	Year 5 Monitoring Activities	$ 15,500
Adaptation	Jerrat Drive (Yr2) Nature Based Solutions in Shorelines	$ 30,000
Planning	CHRMAP Review	$ 35,000
	TOTAL Cost for Five-Year Program	**$427,500**

17.8 Funding Opportunities

It is noted that the Town would be eligible for up to 50% of the cost of the planning and technical studies presented in Table 17.4. Additionally for the adaptation approaches (nature-based solutions), there are opportunities to also co-fund these activities through grant schemes outlined in more detail in Section 19.

The implementation budget over the 12-year short-term period from 2024 to 2035 is estimated at approximately $596,000 (ex GST) as shown in Table 17.5. This will cover the cost of annual monitoring, completion of the additional technical / planning studies recommended including two reviews of the CHRMAP (2028, 2033) and undertake nature-based work in the shoreline areas summarised in Table 17.3.

As previously noted, there are grant schemes that would allow the Town to co-fund this commitment by up to 50% over the period (covered in more detail in Section 19). The costs in Table 17.5 show the estimated costs without any co-funding and with co-funding of 50%.

Table 17.5: Estimated Implementation Budget over short term (12-year period 2024 – 2035)

Item	Cost	Cost if co-funded 50%
Annual Monitoring Cost (2024 to 2035)	$ 186,000	$ 93,000
Technical and Planning Studies	$ 180,000	$ 90,000
Nature Based Work in Shorelines	$ 160,000	$ 80,000
Review of CHRMAP x 2	$ 70,000	$ 35,000
TOTAL	**$ 596,000**	**$ 298,000**

18. Medium and Long-Term Implementation Plan

The medium-term implementation actions cover the period of 2035 to 2075. The long-term plan covers the period 2075 to 2125. Summary advice to the Town for its management strategy and adaptation response is provided in this Section.

18.1 Medium-Term Actions (2035 to 2075)

18.1.1 Planning Implementation

A Planned or Managed Retreat Policy would be developed and implemented over this timeframe. The findings from the annual monitoring program and the Town's asset management would be considered in future CHRMAP review to inform this process. The future of the Leeuwin Barracks site will also be a key driver of the future decision on adaptation pathways for the Reclaimed Zone. The recommendations and actions would be subject to engineering advice and local planning recommendations in accordance with the applicable policy.

The planning and management controls Table 18.1 should be implemented in the medium-term, as deemed appropriate by the Town.

Table 18.1: Medium term Implementation. Planning Actions

Planning Controls	Description	Implementation Triggers
Planned or Managed Retreat Policy	Adoption of a policy of planned or managed retreat in response to the impacts of erosion.	Once it has been determined that the physical barriers along Riverside Road are to be removed. This will be confirmed through future iterations of this CHRMAP.
MRS Amendment	Request rezoning of retreated land to 'Parks and Recreation' reserve under the MRS.	Once land has been retreated in accordance with the adopted Planned or Managed Retreat Policy.

18.1.2 Adaptation Actions

A summary of the medium-term adaptation actions is presented in Table 18.2.

Table 18.2: Medium Term Adaptation Actions

Item	Description	Trigger	Projected Timing
Minor infrastructure in the foreshore (SMU1, SMU2, SMU3)	Replacement of Town assets in the foreshore as part of asset lifecycle. Replacement to consider the projected planning timeframes and associated coastal hazard from erosion and inundation.	Annual monitoring and CHRMAP review process to be used as basis for confirming future allowances for erosion and inundation in development requirements.	2035 – 2075

Item	Description	Trigger	Projected Timing
Riverwalls in the Walled Zone (SMU1)	Maintain shoreline revetments and river walls to ensure erosion protection of Riverside Road. As part of asset lifecycle, raise the height of river walls at the shoreline in response to future sea level rise.	Regular structural condition assessments in the Walled Zone to determine the maintenance requirements / replacement schedule as part of asset management ().	2035 – 2075
Riverside Road in SMU1	As part of asset lifecycle, incrementally raise the height of Riverside Road to accommodate future sea level rise.	Sea level rise[1] of +0.5m	2050-2075
Walled Zone - Dome Café and Marine Education Boatshed (SMU1)	Under guidance in adopted local Planned or Managed Retreat policy either: • Accommodate the risk through building design (raise floor levels, use of suitable building materials) or • remove the assets under a managed retreat approach (remove to higher ground or completely)	Sea level rise[1] of +0.5m	2050-2075

Note 1. Calculation of sea level rise increase is to be determined based on the analysis of the nearest available tide gauge data (Fremantle Harbour) accounting for annual, inter-annual and longer-term water level influences.

18.2 Long Term Implementation (2075 – 2125)

A summary of the Long-Term adaptation actions is presented in Table 18.3.

It is noted that cost estimates are not provided at this stage, as this requires further assessment, evaluation and agreement on the long-term future strategy of managed retreat / protect approaches in SMU1 and SMU2 between the DBCA and the Town. This task should be included in future CHRMAP revision.

Table 18.3: Long Term Adaptation Actions (2075 – 2125)

Item	Description	Trigger	Projected Timing
Minor infrastructure in the foreshore (SMU1, SMU2, SMU3)	Prepare for Managed retreat from shoreline areas once inundation risk is too high (frequent)	Sea level rise[1] of +0.5m to 0.75m	2075 - 2125

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Item	Description	Trigger	Projected Timing
Riverwalls in the Walled Zone (SMU1)	Maintain shoreline revetments and river walls to ensure erosion protection of Riverside Road. As part of asset lifecycle, raise the height at the shoreline in response to future sea level rise.	Regular structural condition assessments in the Walled Zone to determine the maintenance requirements / replacement schedule as part of asset management.	2075 – 2125
Riverside Road in SMU1	As part of asset lifecycle, incrementally raise the height of Riverside Road to accommodate future sea level rise.	Sea level rise[1] of +0.5m to 1.05m	2075-2125
Carparks (SMU1 and SMU2)	When inundation risk is too high because of sea level rise either: • Accommodate the risk through raising level; or • remove the assets under a managed retreat approach	Sea level rise[1] of +0.5m to 0.75m	2075 – 2125
Foreshore Area Assets in SMU1 between Riverside Rd and River edge	Prepare for Managed Retreat from shoreline areas once inundation risk is too high	Sea level rise[1] of +0.5m to 1.05m	2075 – 2125
Foreshore and assets SMU2 between Riverside Rd and River edge	Prepare for Managed Retreat from shoreline areas once inundation risk is too high	Sea level rise[1] of +0.5m to 1.05m	2075 – 2125

Note 1. Calculation of sea level rise increase is to be determined based on the analysis of the nearest available tide gauge data (Fremantle Harbour) accounting for annual, inter-annual and longer-term water level influences.

19. Funding

19.1 Grant Funding

The grant funding options that could apply for to support the funding of coastal management activities is summarised in Table 19.1. These funding mechanisms generally require a co-funded approach whereby 50% of the funding is matched. The grant programs are designed to support outcomes that support public benefit.

Table 19.1: Summary of Funding Mechanisms

Grant	Brief Description	Potential Application
Coastal Management Plan Assistance Program (CMPAP) Coastal Management Plan Assistance Program (CMPAP grants) (www.wa.gov.au)	CMPAP grants support eligible coastal land managers to develop and implement adaptation and management plans and strategies for coastal areas that are, or are predicted to become, under pressure from a variety of challenges. CMPAP grants are administered by the Department of Planning, Lands and Heritage. CMPAP grants provide up to 50% of the budget for planned projects (co-funded with 50% contribution by the Town). Applications are invited for grants of up to $200,000 Note - the Town is eligible for CMPAP grants for coastal land vested to them for care, control or management. DBCA would not be eligible as they are State Government, however they can be a project partner.	• Funding of future CHRMAP review (every 5-years). • Funding of additional studies to develop management strategy for shoreline areas eg Foreshore Management Plans • Review/update of a planning scheme and local planning strategy, and inclusion of a Special Control Area covering the vulnerable coastal land • Develop/review a local planning policy to help guide development in a vulnerable coastal area • Detailed assessment of economic or adaptation options.
Coastal Adaptation and Protection (CAP) grants Coastal Adaptation and Protection (CAP) Grants and H-CAP Major Project Fund (transport.wa.gov.au)	CAP grants provide financial assistance for local projects that identify and manage coastal hazards. The program seeks to preserve and enhance coastal assets for the community. It aims to build partnerships with local coastal managers and help them understand and adapt to coastal hazards. CAP grants are available for the coastline immediately adjacent to the oceans of WA. Estuarine shorelines are also included as an area of secondary focus.	• Annual Monitoring Program. • Funding for shoreline restoration / revegetation programs. • Funding of additional studies to develop management strategy for shoreline areas • Jerrat Drive escarpment foreshore stability study).

Grant	Brief Description	Potential Application
	CAP grants provide up to 50% of the budget for planned projects (co-funded with 50% contribution by the Town). The minimum CAP grant limit is $15,000 (excluding GST) and the maximum CAP grant limit is $400,000 (excluding GST)	
Coastwest Grants Coastwest grants (www.wa.gov.au)	Coastwest grants support eligible coastal land managers and community organisations to undertake projects that manage and enhance WA's coastal environments through rehabilitation, restoration and preventative actions. Coastwest grants are administered by the Department of Planning, Lands and Heritage. Grants provide up to 50% of the budget for planned projects (co-funded with 50% contribution by the Town). Applications are invited for grants of $5,000 - $60,000. Note - the Town is eligible for Coastwest grants for coastal land vested to them for care, control or management. DBCA would not be eligible as they are State Government, however they can be a project partner.	• Funding for shoreline restoration / revegetation programs with input from community organisations. • Projects which aim to protect and rehabilitate sensitive coastal areas, enhance coastal landscapes and biodiversity including near shore marine habitats.
National Disaster risk Reduction (NDRR) Grant Program Apply for a National Disaster Risk Reduction grant (www.wa.gov.au)	The Western Australian Government has a National Partnership Agreement (NPA) for Disaster Risk Reduction with the Commonwealth to fund disaster reduction activities that are specifically intended to deliver the outcomes of the National Disaster Risk Reduction Framework (NDRRF). The NPA is the primary funding mechanism for the National Disaster Risk Reduction (NDRR) Grants Program. The NDRR supports projects that: 1. Reduce existing disaster risk. 2. Minimise creation of future disaster risk.	• Funding for shoreline restoration / revegetation programs which provide public benefit. • Funding for coastal Protection Structures which offer a public benefit. •

Grant	Brief Description	Potential Application
	3. Equip decision-makers with the capabilities and information they need to reduce disaster risk and manage residual risk. In the 2023 NDRR grant round $2.5 million was made available. Projects with local outcomes could apply for between $10,000 and $250,000 grant funding. Applicants must contribute at least 50 per cent of the total project cost in cash or in-kind.	
Disaster Ready Fund https://nema.gov.au/disaster-ready-fund	The Australian Government has established the Disaster Ready Fund (DRF) to provide up to $200 million per financial year, over five years from 1 July 2023 ($1 billion in total). Proponents will need to provide a 50 per cent co-contribution (cash or in-kind). The minimum and maximum funding amounts are not currently available at time of writing.	• projects that build resilience to, prepare for, or reduce the risk of, future natural hazard impacts, and help to build the long-term sustainability of communities at risk of being affected by future disasters. • Projects may include direct investment in grey and green-blue infrastructure, for example levees, floodways, seawalls, firebreaks, constructed wetlands and reefs.

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Appendix A

Community and Stakeholder Engagement

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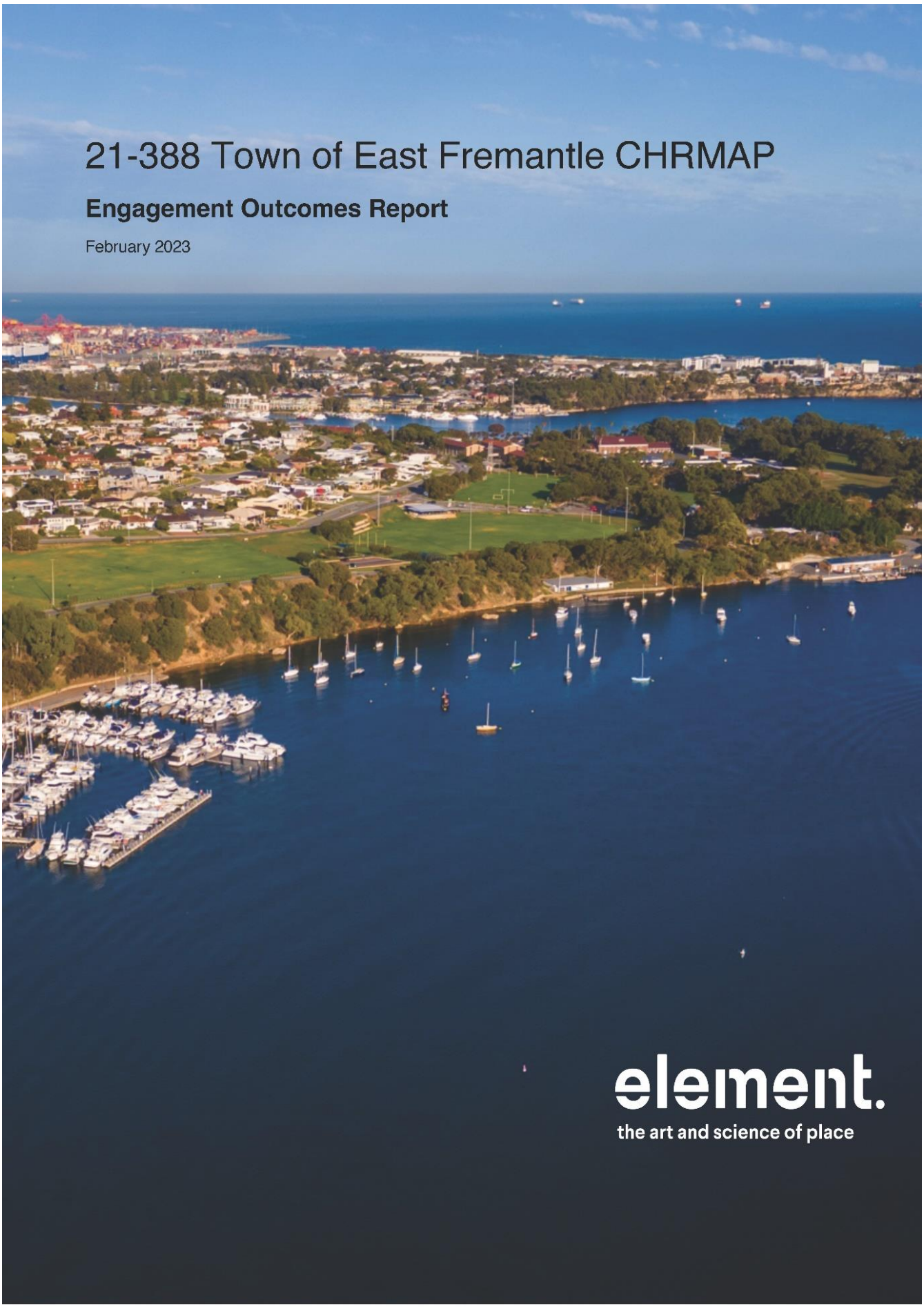
A.1 Engagement Outcomes Report


21-388 Town of East Fremantle CHRMAP
Engagement Outcomes Report
February 2023
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the art and science of place

Document ID: 21-601 Documents /04 Reports						
Issue	Date	Status	Prepared by		Approved by	
			Name	Initials	Name	Initials
1	29.09.2022	Draft	Misha White	MW	Cath Blake-Powell	CBP
2	10.02.2023	Draft	Misha White	MW	Cath Blake-Powell	CBP

Contents

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Executive Summary

In 2021, the Town of East Fremantle engaged the project team of Baird Australia, **element**, and Rheum to provide specialist land use planning, community engagement and coastal engineering consultants to produce a Coastal Hazard Risk Management and Adaptation Plan (CHRMAP). The CHRMAP will be prepared in accordance with the CHRMAP Guidelines and State Planning Policy 2.6, adopted by the Town of East Fremantle and used to guide future decision making for vulnerable assets in its riverine foreshore zone.

An important part of this study is speaking with the community and key stakeholders to identify their values and aspirations for the foreshore. The engagement for this project will be primarily spread across two key stages in the project lifecycle: Stage 1: Establish the Context and Stage 5: Risk Treatment.

In Stage 1 of the project, we engaged with over 150 people across 3 activities and promoted the project through an awareness campaign. The purpose of engagement in Stage 1 was to understand coastal values, aspirations, visitation and usage of the coastline. Below is a summary of the key findings.

- The community valued the 'natural environment' most about their foreshore, with 'opportunities for health and well-being' and 'access to land-based activities' also highly valued.
- The East Fremantle foreshore is well utilised with a range of land and water-based activities occurring frequently in the area.
- Whilst only a small proportion of respondents noted that they were undertaking activities in the area because 'I can't do this activity elsewhere, it is unique to this area', many felt that their lives would be impacted adversely if they were unable to undertake these along the East Fremantle foreshore.
- The community were concerned about erosion and inundation along the foreshore, including flooding of carparks and pathways during storms and high tides as well as erosion of the existing river walls.

This report will be updated after the Community Workshops in Stage 5, which will be held in late 2022.

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1. Introduction

1.1 Project Overview

In 2021, the Town of East Fremantle appointed the project team of Baird Australia, **element and** Rhelm to produce a Coastal Hazard Risk Management Adaptation Plan (CHRMAP) consistent with Western Australian Planning Commission (WAPC) 2019 guidelines. The East Fremantle CHRMAP is the first riverine CHRMAP conducted in the Perth metropolitan area.

A Stakeholder and Community Engagement Strategy (SCEP) was prepared to guide the engagement process and ensure that the community and stakeholders were effectively and actively involved in the CHRMAP preparation process.

The SCEP outlines how the community and stakeholder participation, and engagement process aligns within the inform, consult and involve levels of IAP2 Public Participation Spectrum. The goals of each level of engagement are described in the table below.

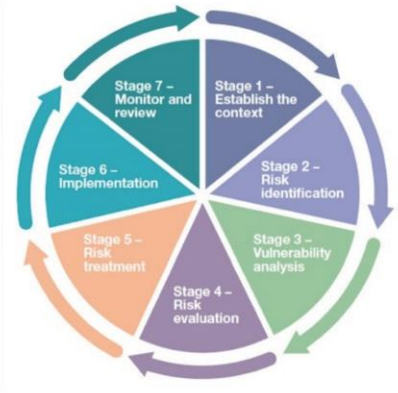
Table 3.1: Levels of Engagement for the Project (based on IAP2 Public Participation Spectrum)

Level	Inform	Consult	Involve
Goal	To provide balanced and objective information in a timely manner.	To obtain feedback on analysis, issues, alternatives and decisions.	To work with the public to make sure that concerns and aspirations are considered and understood.
Promise	"We will keep you informed."	"We will listen to and acknowledge your concerns."	"We will work with you to ensure your concerns and aspirations are directly reflected in the decisions made."

The engagement objectives and the engagement tools are summarised in the sections that follow based on the information in the SCEP.

The CHRMAP process is being completed in 7 stages, where the community will review the draft prepared at the end of each stage. In this way, community and stakeholder involvement will guide the preparation process. See the diagram overleaf for a breakdown of the 7 stages.

Figure 1 Diagram of the CHRMAP stages



This report is a summary of the community engagement undertaken during Stage 1 of the CHRMAP process. This report will be updated as the engagement progresses throughout the CHRMAP project.

1.2 Project Scope

The subject area for the East Fremantle CHRMAP is located on Whadjuk Noongar land within of the Town of East Fremantle. The Swan River riverine foreshore features some 3km in length lies between Petra Street to the north-east and East Street to the south. Bordered by the residential suburb of East Fremantle the area has interactions with many landmarks and recreational features including the John Tonkin Reserve, Swan Yacht Club, East Fremantle Yacht Club, several outdoor sporting grounds, hospitality venues and several boating moorings and jetties. The significant Leeuwin Barracks site (closed to the general public) is a nearby land area currently undergoing a divestment process by Department of Defence.

The study area was split into 3 zones shown in the Figure 2 overleaf;

- The Natural Zone;
- The Reclaimed Zone and;
- The Walled Zone

Figure 2 CHRMAP study area

1.3 Project Objectives

The objectives of the CHRMAP are to:

- improve understanding of coastal and riverine features, processes and hazards in the study area;
- identify significant vulnerability trigger points and respective timeframes to mark the need for immediate or medium-term risk management measures;
- identify assets (natural and man-made) and the services and functions they provide situated in the coastal zone;
- gain an understanding of asset vulnerability;
- identify the value of the assets that are vulnerable to adverse impacts from coastal hazards;
- determine the consequence and likelihood of coastal hazards on the assets, and assign a level of risk;
- identify possible (effective) risk management measures (or 'actions') and how these can be incorporated into short and longer-term decision-making; and
- engage stakeholders and the community in the planning and decision-making process.

2. Engagement Methodology

2.1 Purpose and Objectives of Engagement

The purpose of the engagement during Stage 1 of the CHRMAP process was to raise project awareness, engage a community and business reference group and collect community coastal values including social, economic and environmental values, including which foreshore assets the community hold important.

As such, the objectives of the engagement were to:

- Utilise reliable communication channels to ensure information is shared with interested stakeholders.
- Identify stakeholders and understand the nature of their interest and potential to contribute towards success of the project or otherwise.
- Establish early in the project opportunities to have authentic conversations with people. Particularly those most affected by potential change from future coastal adaptation measures.
- Inform key community member and stakeholders to develop understanding and alignment with the goals of coastal hazard risk assessment within the East Fremantle community.
- Ensure adjacent neighbours (residents and businesses) to the project site are kept informed and are invited to undertake targeted engagement as required, giving sufficient notice to do so.
- Inform, consult and involve the community in identifying suitable adaptation options
- Collect and collate the community and stakeholders' coastal values and aspirations for the long term.
- Understand the level of tolerance of specific risks within the community for specific assets, or groups of assets.
- Develop a shared vision between the Town, landowners and surrounding community for the future CHRMAP recommendations.

A number of communication channels and engagement tools have been used throughout Stage 1 of the CHRMAP project process, these are identified below.

2.2 Engagement Tools

2.2.1 Community and Business Reference Group

A Community and Business Reference Group was established (CBRG) to occur for the duration of the engagement activities and delivery of the draft CHRMAP. By engaging the local knowledge and insights of the CBRG, the project demonstrates a greater level of transparency, collaboration and willingness to take on board concerns, values and ideas of local businesses and the community, via selected representatives. The CBRG members were selected via an Expression of Interest process which aimed to ensure a diverse mix of local business and community members.

The CBRG will meet at key milestones in the project to provide feedback of the engagement approach prior to implementation as well as an additional point of review of each chapter report. The CBRG will help to

generate community buy-in and good will and help in the dissemination of key information through their networks.

The CBRG will be ongoing for the remainder of the CHRMAP project.

2.2.2 Pop-up Information Sessions

Two pop-up information sessions were held to introduce the CHRMAP process and provide information about the project including;

- Why does a CHRMAP need to be prepared
- Outline of foreshore zones to be included in the study
- Identification of coastal assets
- Explanation of coastal hazards
- Overview of management options

These were attended by the project team and Town staff who were available to explain the process and answer any questions

2.2.3 . Foreshore Values Survey

The Foreshore Values survey ran was composed of 21 questions and considered the East Fremantle foreshore as 3 separate zones; the Walled Zone, the Reclaimed Zone and the Natural Zone (see Figure 2) and was hosted online via the Town's webpage.

An outline of the questions in the Coastal Values survey is shown in Table 1 below.

Table 1 Coastal Values Survey Questions Overview

No.	Question
About you – Respondent Demographic Information	
1	Please tell us your current residential suburb
2	What is your connection to the East Fremantle foreshore project area (between Petra Street and East Street)?
3	Are you of Aboriginal and/or Torres Strait Islander descent?
CHRMAP Awareness and Interactions with the Foreshore	
4	Before taking this survey, how familiar are you with the CHRMAP project currently being undertaken by the Town of East Fremantle?
5	Thinking about your interactions and experiences with the East Fremantle Foreshore (between Petra Street and East Street) what are three words that come to mind?
Values and Activities	
6	Below is a list of values that can apply to a variety of coastline and foreshore environments. Please tell us how important each value is to you in the context of the East Fremantle foreshore.
7	Roughly how close do you live to the East Fremantle Foreshore project area?
8	Please indicate below whether you personally undertake any of these activities and where you undertake them.
Activities in the Walled Zone	

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9	How often do you participate in these activities in the Walled Zone?
10	Why do you choose to undertake these activities in the Walled Zone as opposed to other areas? (You may select more than one option)
Activities in the reclaimed Zone	
11	How often do you participate in these activities in the Reclaimed Zone?
12	Why do you choose to undertake these activities in the Reclaimed Zone as opposed to other areas? (You may select more than one option)
Activities in the Natural Zone	
13	How often do you participate in these activities in the Natural Zone?
14	Why do you choose to undertake these activities in the Natural Zone as opposed to other areas? (You may select more than one option)
Impact of Hazards	
15	If you were unable to do these activities along the East Fremantle foreshore, how much would this impact your life?
16	From your experience, within the project area have you noticed any areas along the foreshore that may be affected by, or increasingly impacted by, inundation and/or erosion hazards over the past 5 years. Please tell us more below, including the location/s of concern
Other demographics and comments	
17	Please tell us how you heard about this survey
18	How young are you?
19	What is your gender?
20	Would you like to receive project updates via email?
21	Please let us know if you had any further questions or comments about the project for the CHRMAP Team here:'

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2.3 Communication Channels

Project information, updates and invitations to participate in engagement opportunities were distributed to the community in the following ways.

Table 2 Communications Methods

Communication Method	Description
Project website	A project webpage was created website was hosted on the ToEF consultation webpage, https://www.eastfremantle.wa.gov.au/consultations/ To contain all project information including; FAQ's, project background, engagement event information and project contact.
Project flyer / postcard	A project postcard was distributed to nearby residents and businesses.
Project emails/ e-newsletters	Emails were sent out via the TOEF to registered community members as a call to action for engagement opportunities.
Posters and signage	Posters were erected at local businesses and signage at key locations along the foreshore directing people back to webpage.
Social media	Established social media channels for the TOEF were used to provide information and direct people to the webpage

3. Key Findings

3.1 Community and Business Reference Group

The initial CBRG meeting occurred on 24 August 2022, with 13 of the 15 attending.

Some of the questions and comments raised during this meeting were;

- Is the health of the river and water quality considered within the CHRMAP project.
- Pollution of the river and foreshore is a hazard and affects the use of the river.
- Water based fish, marine life and plants should be considered as an asset.
- Need to consider the effect of human activity and particularly boat wake on the foreshore.
- The effect of inundation due to rainfall also needs to be considered.
- Who was the East Fremantle CHRMAP steering committee comprised of.
- Is there connectivity across LGA's.
- What are the implications of a riverine rather than coastal CHRMAP.

A second CBRG meeting occurred on the 23rd November, 2022. The meeting delivered the results of the studies and survey to date to attendees. The new format for community engagement for Asset Priorisation and Adaptation Options being via the George Street Festival was discussed. Potential activities were tested with the CBRG and the feedback from the group was provided.

3.2 Pop-up Information Sessions

Two pop-up information sessions were held on Wednesday 31 August 2022 from 5pm to 7pm and 2 October 2022 from 10am to 12pm at the East Fremantle town Hall, 135 Canning Highway. The 2 sessions were visited by 14 people who came to view the information and chat to the project team to gather more information about the project.

The information session included a static information display, coastal flooding maps and a rotating presentation and was attended by the following project team members:

- Baird coastal engineering specialists
- element, planning and engagement specialists
- Town of East Fremantle officers

A summary of the feedback and questions asked are below.

- Stormwater discharge along the river needed to be considered
- Some of the breather pipes in the area caused water to overflow and flood the surrounding land-based area

- Several people were concerned about the impact of inundation on their properties close to the foreshore area.

3.3 Foreshore Values Survey

The main tool for collecting community feedback was through a Foreshore Values survey which ran from 1 August to 6 September 2022. A total of 152 respondents undertook the Foreshore Values survey.

3.3.1 Who did we reach

The majority of respondents were residents from within the Town of East Fremantle (n=101) whilst most of the remaining respondents were from nearby suburbs, particularly Bicton. A smaller number of respondents were from a variety of other metropolitan suburbs.

Approximately 7% owned property in East Fremantle but did not live in the area, whilst 14.5% worked in East Fremantle. A significant amount attended a sporting or community group (35%) while 65% used the area for recreational purposes.

Well over half (58%) lived within 1km of the site, while a further (31.5%) lived up to 5km away. The remainder lived more than 5km away.

The majority of respondents (60%) were over 55 years of age, with 27% aged 35-54 and 10% 34 years or below. Most respondents were male (56%).

3.3.2 Awareness of East Fremantle CHRMAP project and survey

Well over a quarter (28%) were not aware of what a CHRMAP was before answering the survey. A further 62% were somewhat aware and had heard of it or knew the basics, whilst only 10% felt that they were highly aware of the project.

For those that indicated how they had heard of the survey well over half (53%) received a direct email or e-newsletter from the Town of East Fremantle or an organised club in the area. Nearly a quarter became aware via the Town's website with a further 10% and 12% from posters/flyers and word of mouth.

3.3.3 Perceptions of the foreshore area

Respondents were asked about what three words they associated with the East Fremantle foreshore based on their experiences and interactions. Almost a quarter of respondents (22%) described the foreshore using beautiful (or beauty). Peaceful/tranquil/serene (15%) and nature/natural (13%) were almost mentioned often, along with recreation (9%), walking (9%) and relaxing (8%).

The image overleaf shows a graphical representation of the word descriptions that were used

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Figure 3: Q5. Thinking about your interactions and experiences with the East Fremantle Foreshore (between Petra Street and East Street) what are three words that come to mind?

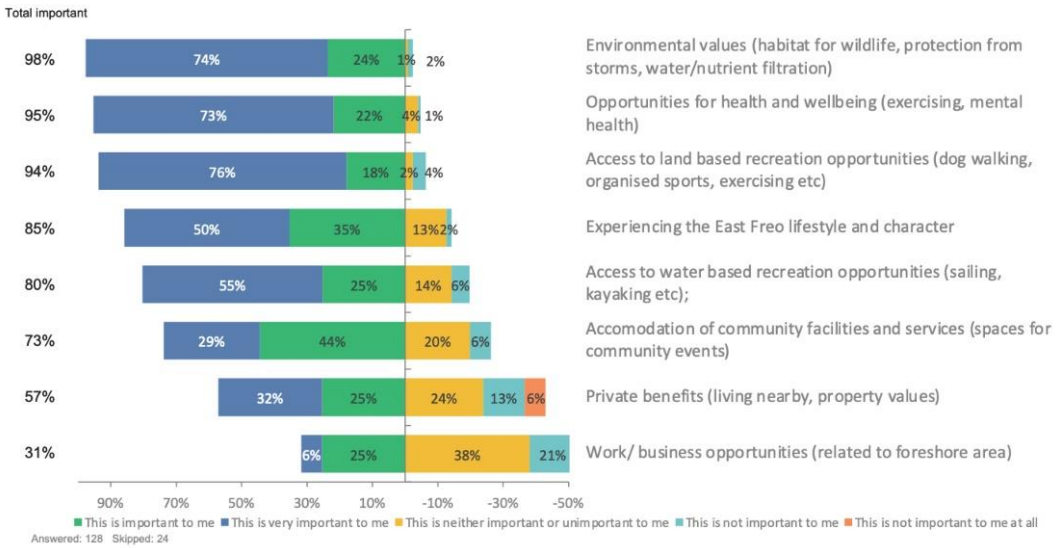
3.3.4 Values

There are a range of values that can apply to the riverine foreshore within East Fremantle. Respondents were asked to rate the following values to determine which were most important to them. A full list of the values is shown in Figure 4 below.

Whilst almost all were viewed as important, the most highly rated values were 'Environmental' (98% combined importance), 'Opportunities for health & well-being' (95% combined importance) and 'Access to Land-based recreation opportunities' (94% combined importance).

'Work/ business opportunities were seen as the least important value (31% overall importance).

Figure 4: Q5. Please tell us how important each value is to you in the context of the East Fremantle foreshore



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3.3.5 Activities

As illustrated in the Figures below and overleaf; walking, visiting a restaurant or café, being in nature and visiting a restaurant were the top 4 activities respondents engage in along the East Fremantle foreshore.

There were some differences noted between the zones

- Outdoor socialising/picnics were more likely to occur in the Reclaimed Zone than other zones (67% vs 48% and 47% for the Reclaimed and Walled Zones)
- Sporting or community group activities were more likely to occur in the Natural Zone than other zones (40% vs 26% and 16% for the Natural and Walled Zones)
- Visiting a restaurant or café were least likely occur in the Natural zone (37% vs 72% and 73% for the Reclaimed and Walled Zones)

Figure 5: Q8. Please indicate below whether you personally undertake any of these activities and where you undertake them – all zones

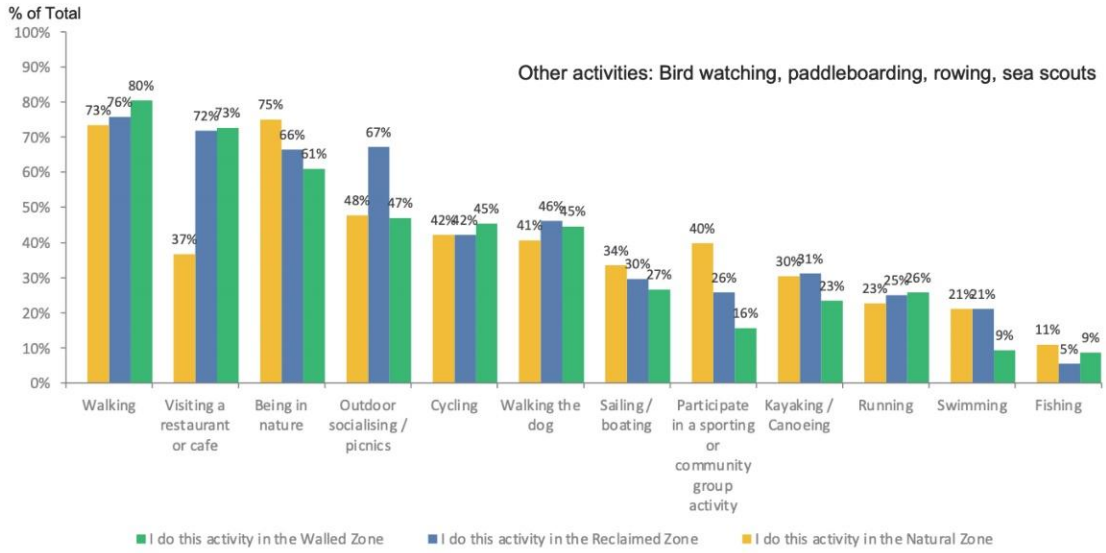

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Figure 6: Q8. WALLED ZONE - Please tell us how important each value is to you in the context of East Fremantle foreshore

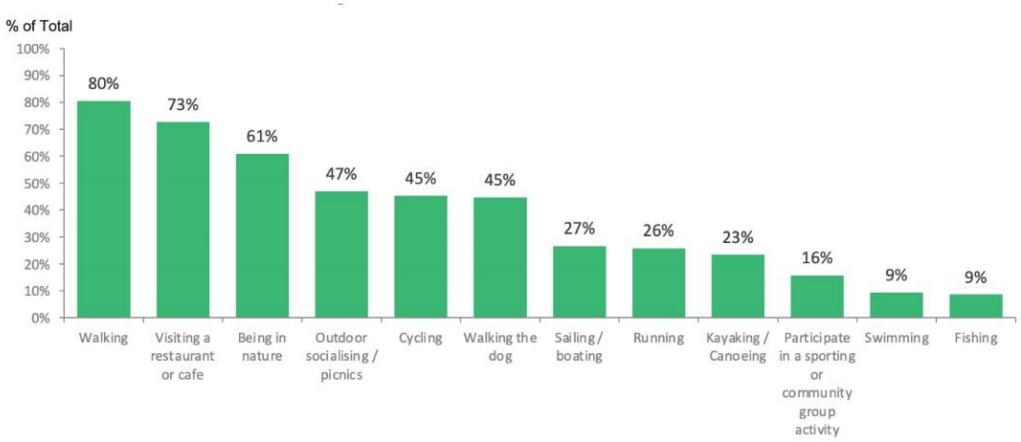


Figure 7: Q8. RECLAIMED ZONE - Please tell us how important each value is to you in the context of Fremantle foreshore

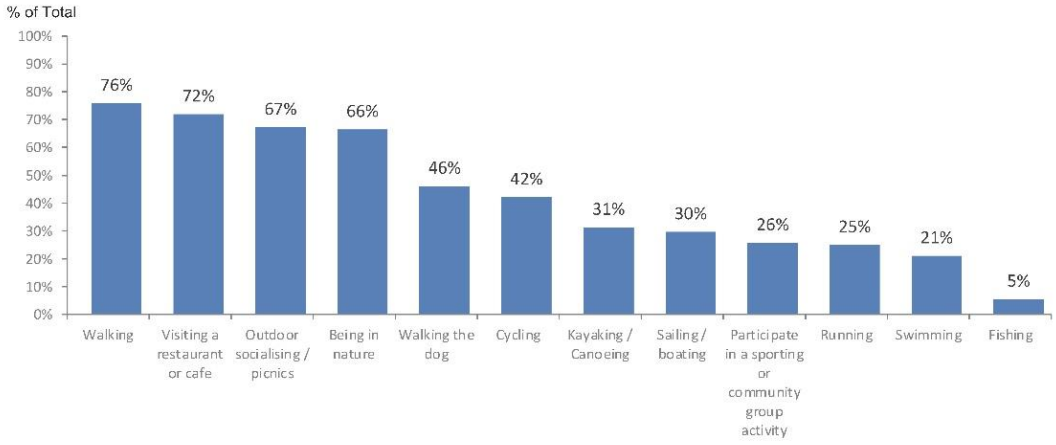
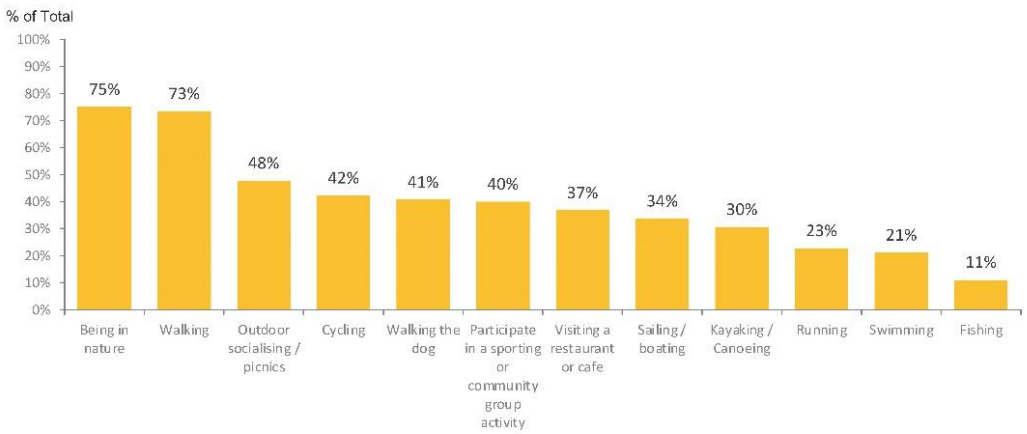


Figure 8: Q8. NATURAL ZONE - Please tell us how important each value is to you in the context of East Fremantle foreshore



For each zone, respondents that participated in an activity were asked how frequently they did that. In terms of the frequency of activities, those that occurred at least once a week for each of the zones are shown in the table below.

The proportion of those who participated in the activity for the zone is expressed as a %, with the number of people shown in brackets.

Table 3: Proportion of respondents participating in Activities at least weekly

Activities	Walled Zone	Reclaimed Zone	Natural Zone
Walking	75%	66% (58)	68% (54)
Running	71% (20)	60% (15)	52% (13)
Walking the dog	71% (39)	70% (35)	71% (32)
Being in nature	64% (49)	53% (41)	57% (48)
Participate in a sporting or community group activity	56% (9)	43% (12)	67% (28)
Cycling	42% (24)	42% (21)	39% (19)
Sailing / boating	42% (13)	24% (7)	39% (12)
Visiting a restaurant or cafe	38% (34)	34% (29)	42% (16)
Swimming	33% (4)	21% (5)	27% (6)
Kayaking / Canoeing	29% (8)	27% (9)	29% (10)
Outdoor socialising / picnics	24% (14)	15% (12)	18% (9)
Fishing	22% (2)	17% (1)	18% (2)

Walking and walking the dog were some of the most frequently occurring activities across the zones.

Those activities that occurred less often were outdoor fishing and outdoor socialising/picnics.

Some the differences across the zones were;

- Walking, running and being in nature occurred more frequently in the walled zoned.
- Most activities occurred less frequently in the reclaimed zone in comparison to other zones.
- Sporting and community group activities occurred more often in the natural zone.

Detailed graphs outlining the frequency of activity for each of the zones are contained in Appendix A.

3.3.6 Reasons for undertaking activities

People were asked to choose why they undertook an activity in an area, rather than elsewhere based on a following choices;

- I can't do this activity anywhere else, it is unique to this area
- I've always done the activity here, it's what I know and like
- I live nearby so it is more convenient for me
- I like the quality of the public facilities
- I feel a social connection with others who do this same activity
- Proximity to an attractive, natural setting

More than one reason could be provided for each activity in each zone.

For most activities across the zones the most common reasons were 'I live nearby so it is more convenient for me' and 'Proximity to an attractive, natural setting'.

There were relatively few respondents that indicated 'I can't do this activity anywhere else, it is unique to this area' for activities. This is shown in the table below for each activity across the zones, in terms of proportion of those participating in the activity and the actual numbers of people (n).

Table 4: Proportion (and number) of respondents participating in Activities by Zone who indicated that 'I can't do this activity anywhere else, it is unique to this area'.

Activities	Zones		
	Walled Zone	Reclaimed Zone	Natural Zone
Walking	10% (n=10)	12% (10)	11% (9)
Running	7% (2)	15% (4)	17% (4)
Walking the dog	2% (1)	8% (4)	16% (7)
Visiting a restaurant or cafe	8% (7)	10% (8)	11% (4)
Sailing / boating	7% (2)	11% (3)	18% (6)
Swimming	9% (1)	0	19% (4)
Outdoor socialising / picnics	5% (3)	5% (4)	8% (4)
Participate in a sporting or community group activity	12% (2)	15% (4)	30% (12)
Kayaking / Canoeing	11% (3)	15% (5)	9% (3)
Being in nature	11% (8)	9% (7)	14% (11)
Fishing	10% (8)	0	9% (1)
Cycling	9% (1)	2% (1)	4% (2)

More respondents were likely to feel that they were unable to do the same activities elsewhere in the natural zone. This was particularly true for participating in sporting or community activities and being in nature.

Detailed graphs and tables outlining the reasons for participating in an activity for each of the zones are contained in the Appendix B.

3.3.7 Impact if unable to participate in activities

Each of the respondents that indicated they participated in a particular activity in a specific zone, were subsequently asked 'If you were unable to do these activities along the East Fremantle foreshore, how much would this impact your life?'. Respondents then rated the impact on their lives from no impact, some impact, significant impact and extreme impact.

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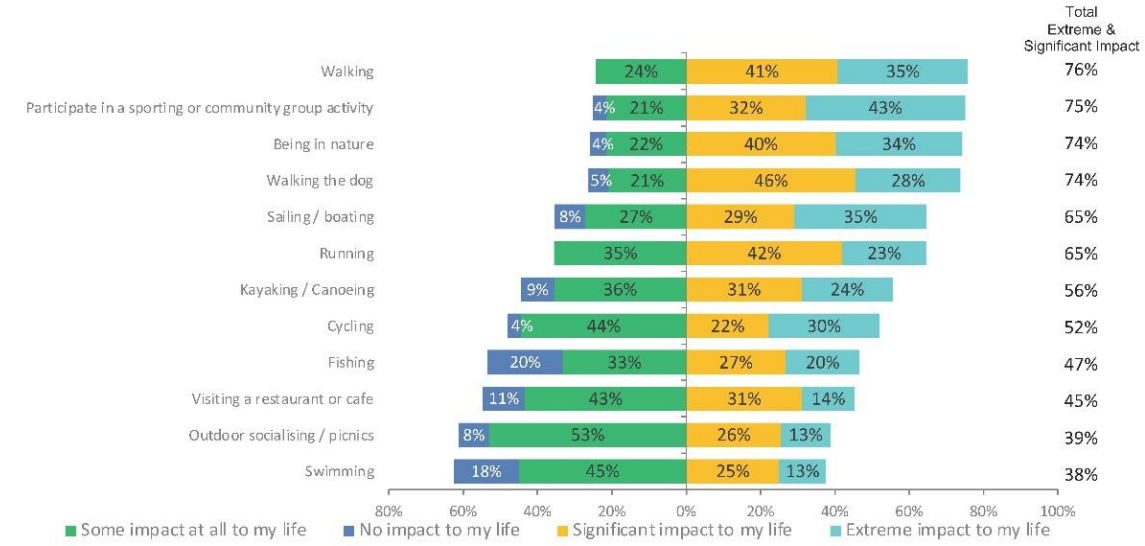
Those who engaged in walking, participating in sporting or community group activities, being in nature and walking the dog indicated that being unable to do this would have the highest impact with approximately three quarters of participants indicating that this would have an extreme or significant impact as shown in Figure 8 overleaf.

Figure 9: Q15. If you were unable to do these activities along the East Fremantle foreshore, how much would this impact your life?



Answered: 114 Skipped: 38

3.3.8 Erosion and Inundation Noticed

Respondents were asked 'Have you noticed any areas along the foreshore that may be affected by, or increasingly impacted by, inundation and/or erosion hazards over the past 5 years?'

A total of 46 respondents provided comments about the type and location of erosion and inundation.

The comments and number of mentions are shown in the table below

Table 5: Comments on locations /types of erosion and inundation noticed in the vicinity of the East Fremantle foreshore.

Comments	Number of mentions
Cycle and walking paths can be affected	9
Concerns about boat wash	6
East Fremantle Yacht Club	6
River walls	6
Foreshore area near rowing club	4
Area near Dome (carpark)	6
Walled Zone	4
Beach area near Zephyrs	3
Cliff areas near Jerat Drive	4
The Groynes at Zephyrs are working	2
Natural area	2
Stirling bridge area	2
Beach areas (general)/ unwalled sections	2

Fremantle bridge	2
Reclaimed zone	2
Jetty infrastructure /Navy cadet boat ramp	2
EG Chapman Reserve	1
Scouts area	1

3.3.9 Other Questions and Comments

Respondents were asked if there was any further questions or comments. Eleven people responded with the following comments:

- Would like to be involved (n=2)
- Consider the interests of cyclists (n=2)
- Don't over-vegetate the river and cut of views (n=1)
- Include higher walls to limit inundation in urban areas (n=1)
- Thanks for seeking input from the community (1)
- You cannot forecast for 100 years (n=1)
- Include additional images of foreshore erosion (n=1)

3.4 Asset Prioritisation and Adaptation Pathways

3.4.1 Festival Methodology

The initial methodology for this was to have two community workshops. However, it was decided that the annual George Street Festival offered a good opportunity to canvas a broader and greater amount of community members due to good attendance numbers. The George Street Festival is an outdoor event that incorporates the length of George Street. It is a free event that features a range of stalls, music and activities. The event occurred on the 4 December, 2022 from 11am – 6pm. An East Fremantle CHRMAP stall was set up for the day and a total of 92 people attended the CHRMAP stall.

The purpose of the stall was to share information about the CHRMAP and to encourage attendees to participate in activities to identify important community assets, prioritise these assets and understand the preferred adaptation options for them. This also allowed information sharing to occur with community members who were not already aware of the East Fremantle CHRMAP.

The utilisation of the George Street Festival to obtain feedback meant that the number of community members exposed to the information and involved in the process was maximized. However, the stall format also meant that the time available to explain the CHRMAP concept and obtain feedback was reduced in comparison to a workshop. To accommodate this, the tasks that participants undertook were split into two sessions for the day.

The new format for activities was tested with the CBRG and the feedback from the group helped to refine the final activities that were undertaken with the community at the 2022 George Street Festival.

Display Boards were utilised during the day to provide information about the CHRMAP, outline the instructions for the activities and gather feedback from the community.

3.4.2 Session One: Coastal Assets Identification and Prioritisation

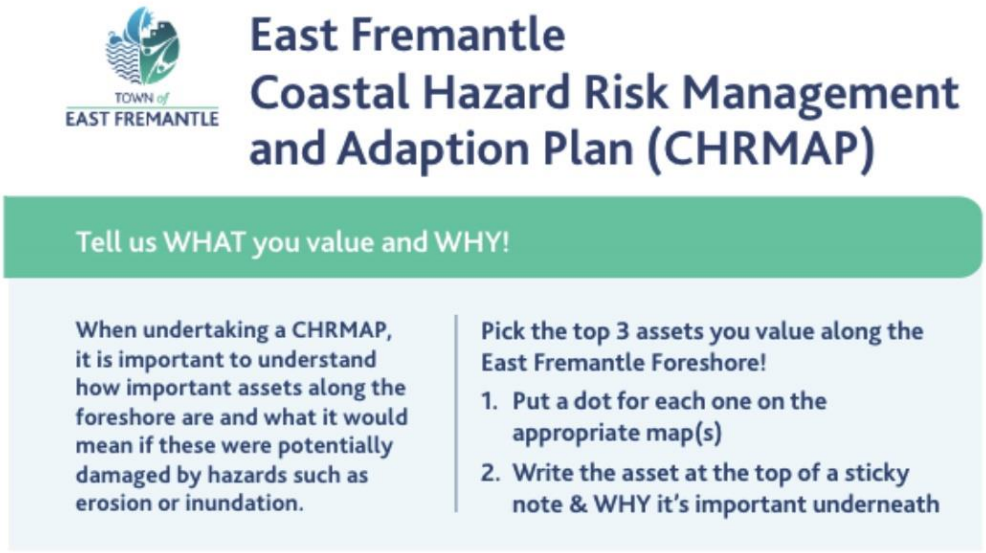
The tasks that occurred during session one were undertaken between 11am – 2.30pm. These tasks required participants to identify the assets along the foreshore that were of importance to them by placing 3 dots on the

maps displayed to indicate their top 3 assets. (Participants from session 2 of the day were also asked to provide input for this)

Participants from session one were also required to state why these assets were important to them.

The instructions for the session one participants are shown in Figure 10 below.

Figure 10: Foreshore Asset Display Board instructions



3.4.3 Session Two: Coastal Asset Adaptation Options

Session two was undertaken between 2.30pm – 6.00pm. Similarly to session one, participants were required participants to identify the assets along the coast that were of importance to them by placing 3 dots on the maps.

Participants were then also asked to decide on the preferred adaptation option for each of their priority assets. Relevant adaptation approaches and examples were shown on Display Boards and each participant had the adaptation options explained to them individually. They then wrote their top three assets on a piece of paper and allocated them to an adaptation option by placing them in the appropriately labelled container. Additional descriptions of the adaptation options were next to the containers for each of the options.

Participants were also able to suggest other adaptation strategies if desired, however no one did this.

The instructions for the session one participants and the adaptation containers are shown in Figure 11 and 12 overleaf.

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Figure 11: Adaptation Options Display Board instructions

East Fremantle
Coastal Hazard Risk Management and Adaption Plan (CHRMAP)

Tell us WHAT you value and HOW to deal with future erosion and flooding.

When undertaking a CHRMAP, it is important to understand how important assets are along the foreshore and what to do when they are at risk of erosion or flooding.

Pick the top 3 assets you value along the East Fremantle Foreshore!

1. Put a dot for each one on the appropriate map(s)
2. Write the asset on a card
3. Decide what you think should be done if it were at risk and place the card in the appropriate container

Figure 12: Adaptation Options Display Board and Containers

3.4.1 Results

The following table shows the assets that were identified as important to participants. The higher the number of dots allocated to the assets the greater the priority. This number is a record of all participants who attended the East Fremantle stall and took part. It should be noted that while participants could record a maximum of 3 assets, a few recorded less than this.

The table is divided up into each of the zones; Walled, Reclaimed and Natural. The assets are then ranked according to the number of dots allocated as important. If an asset did not receive a dot (recorded as important) it was not included in the table.

In terms of articulating why this asset was important to them, only those who participated during the first session provided reasons and these are recorded in the table below. Those who participated in the second session did not record this information, therefore not all assets will have reasons for importance included in the table.

Based on the information shown below, the most important asset for the community within the area was the multi use/walking path (13) which stretched along the entire foreshore (including the walled area). The main reasons that this feature was seen as important related to its use for exercise, the enjoyment that people had from using it and the accessibility or the potential lack thereof to the river foreshore.

The detached groyne field and the beaches adjacent to it stretching from Preston Point to the Boat Ramp in the reclaimed zone (7) were also deemed a priority. Again, access to the water and the enjoyment its use gave people were the main reasons it was seen as important.

Other key assets the community indicated were particularly important to them were; 8 Knots Tavern (6), Cool Beans (5), John Tonkin Reserve (5), Preston Point (5), Zephyrs Café (5) and the East Fremantle Yacht Club (EFYC) (5).

In addition to this, the natural foreshore area between the Defence Building and the EFYC (in front of the Jerrat Drive escarpment) in the Natural Zone was also noted as an important asset to the community. (5)

Table 6: Asset Priority and Importance

Map No.	Asset	No. of dots (priority)	Why is it important
	Low lying areas	2	• Public use areas
	Multi-use Path/ Walking path (all zones)	13	• It often gets flooded and I run there every day. • Exercise and vista • Accessing the whole river foreshore which belong to the people and connects all of Freo • Cannot use them when the tides are high • I walk dog often • Daily exercise for all along foreshore through to Fremantle • Because I walk every day and it is a pleasant thing to do • Parks for dogs • Can't use the space to enjoy the area
	Parks	3	• Public space • For children to play in • Outdoor activities and outings with children & family
		Walled Zone	
10	Riverside Road	4	

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5	Left Bank	3	• Social setting, employment area, family gathering area
4	J Dolan Park	2	• It's at risk
6	Marine Education Boatshed	2	
7	Merv Cowan Park	1	
9	Niergarup Trail	1	
11	Steve Swan Walk	1	
n/a	Beach area in front of wall	1	• Becoming flooded - not able to walk along
n/a	Bon Scott head mural	1	
	Reclaimed Zone		
5	Detached Groyne Field and adjacent foreshore beach areas	7	• Dolphins, pelicans • Beach areas between groynes are easy to access • Dogs allowed to go off the lead and swim in the river - go for nice walks – wildlife
1	8 knots tavern	6	• River proximity landscape • 8 Knots is a lovely place to go
4	Cool Beans	5	• Herons roost there • Relaxed communication - Trees • Healthy community based activities
6	John Tonkin Reserve	5	• Love the work at the John Tonkin. More projects like this would be great! • Fauna that lives in the area
	Preston Point and adjacent beach	5	• Affects the rest of the river and the flow that goes through • Birds nest on it
17	Zephyrs Cafe	5	• The view and visit • Community meeting place
7	Leeuwin Barracks	3	• Will use for something else • No more development near or at Leeuwin Barracks
14	Swan Yacht Club	4	• Very close to the water's edge
3	Boat Launching area	2	• Where people keep their dinghy and access their boats • Being accessible and natural
8	Leeuwin Boat Ramp	1	
10	Niergarup reserve	1	
15	W Wayman Reserve	1	
13	Rowing /Boat Club	1	• Healthy community based activities and dwellings need to be preserved including rowing, strength conditioning - imperative for the culture
	Natural Zone		
n/a	Natural foreshore area	5	• It will be the first to go • Keep it accessible • So you can walk along the sand area

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			• Leave as natural as possible
9	East Fremantle Yacht Club	5	• Access to wider part of the river
2	Camp Waller Scout hall	3	• Family gathering area, walking my dog along the river and in the river
4	Defence Jetty	3	
14	Wauhop Park	2	
11	Jerrat Drive Escarpment	2	
3	Defence Building	1	• Will use for something else
6	East Fremantle Junior Cricket Club	1	
7	East Fremantle Junior Football Club	1	
10	EJ Chapman reserve	1	

During the second session people identified the assets that were important to them and then decided their preferred adaptation option. The adaptation options were identified by Baird as those most suitable to the unique East Fremantle riverine environment.

Overall, a total of 49 assets were prescribed adaption options to mitigate risk. Based on this, building design was the preferred adaptation option for a third (33%) of assets. Further to this, nature-based designs were preferred for 31% of assets.

Table 7: Adaptation Option Types

Adaptation Option	Total Number of Assets	Walled Zone	Reclaimed Zone	Natural Zone	General
Building Design	16	3	4	4	5
Nature Based	15	3	8	3	1
Groynes	8	2	5	-	1
Sea Walls	6	4	1	1	
Sand Nourishment	3	-	3	-	
Retreat	1	1	-	-	

The table overleaf outlines the priority assets and corresponding adaptation options in more detail.

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Table 8: Adaptation Options by Asset

Asset	Preferred Adaptation option					
	Building Design	Nature Based	Groynes	Sea Walls	Sand nourishment	Retreat
Pathways / Multiuse Pathway	3		1			
Jetties should be floating	1					
Buildings on Piles	1					
Erosion protection from storm surge		1				
Walled Zone						
Dome Café	1					
J Dolan Park		1				
Left Bank	2					
Marine Education Boatshed	1	1				
Riverside Road/ Inundation of foreshore road & underground infrastructure			1	2		1
Niergarup Trail		1				
Steve Swan Walk			1			
Bon Scott Head Mural	1					
Reclaimed Zone						
8 Knots	1	1	1			
Cool Beans		1		1		
4 Groynes			1			
Beaches near groynes/ Preston Point Beach/ Preston Pt Dog Beach		2			2	
Foreshore Leeuwin Area		1				
John Tonkin Reserve		1			1	
Leeuwin Boat Ramp			1			
Plausible SLR Projections built into Leeuwin Barracks redevelopment	1					
Niergarup Reserve		1				
Swan Yacht Club	2					
Zephyr Café		1	2			
Natural Zone						
Jerrat Drive Foreshore/ Escarpment		2				
East Fremantle Yacht Club	4					
EJ Chapman Reserve		1				
Wauhop Park				1		

4. Success Criteria

As a result of the engagement findings, we can deduce a preliminary set of criteria which will be used to guide the success of the CHRMAP report. The 'success' of the CHRMAP will be determined by the assets identified through the CHRMAP process continuing to provide their present function, services and values (or an accepted version of it as determined by community and stakeholders).

Therefore, the success criteria will be determined by the values collected in this part of the engagement process. The preliminary success criteria are outlined below and will be updated as the engagement progresses.

- Ensure the natural environment is protected and sustained in its current condition or an improved condition. In line with this the use of nature-based adaptation solutions were viewed as being preferable by the community, especially in the reclaimed zone.
- Preserve the function and opportunity for land-based health & well-being and recreation activities along the foreshore and access to water-based activities such as walking (the dog), sailing and kayaking. This multi-use pathways throughout the zones were seen as crucial to enabling these activities.
- Preserve the existing hospitality and recreation venues along the coastline and access to them. In general, the preferred adaptation option for these assets was for via building design either retrospectively or in the future to withstand and manage flooding and raised water levels.
- Maintain services that maximise community benefit for all.
- Consider foreshore areas that have current inundation and erosion issues and are at particular risk of water level rise.
- Develop solutions to riverine processes that are sustainable (financially, socially and built form) and locally responsive.
- Revisit regularly with community and key stakeholders their values in relation to development adjacent the foreshore.

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5. Next Steps

With most of the engagement complete, Baird will incorporate the findings from the engagement into the draft CHRMAP. The draft CHMRAP report will then be presented to the CBRG for consideration.

Following this there will be a public comment period for a minimum of 4 weeks will be hosted via the Town of East Fremantle's website. At this time communications will be sent to community members that participated in the CHRMAP process and key stakeholders.

The draft CHRMAP report will then be finalised based on feedback in mid-2023.

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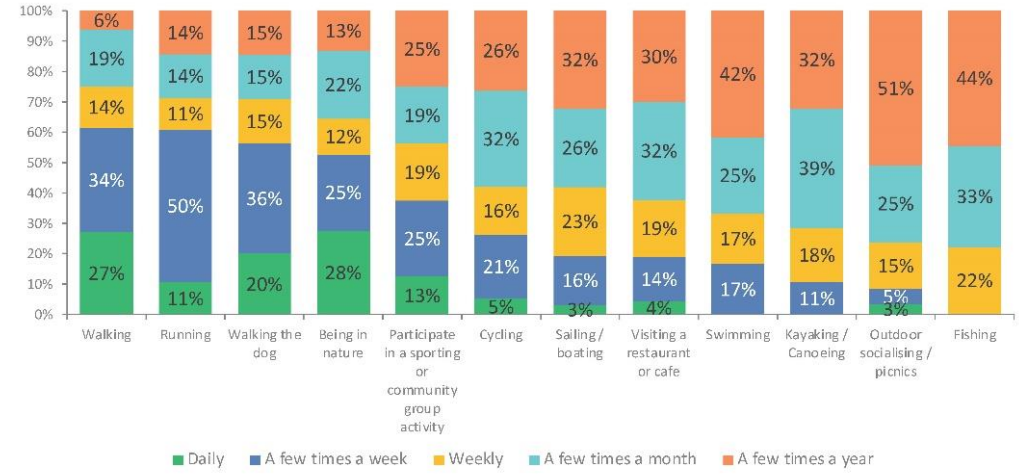
Appendix A. Frequency of Activities

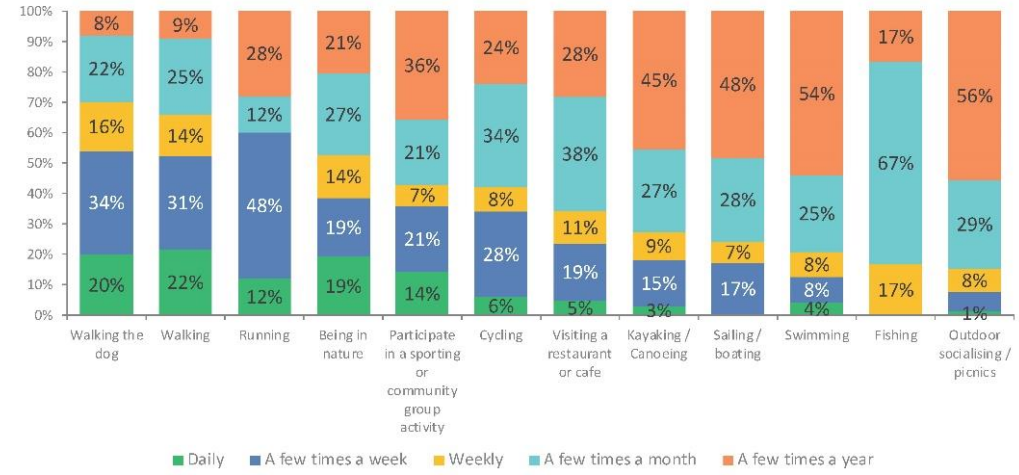
Q9: How often do you participate in these activities in the Walled Zone?

Answered: 114 Skipped: 38



Q9: How often do you participate in these activities in the Reclaimed Zone?

Answered: 105 Skipped: 47



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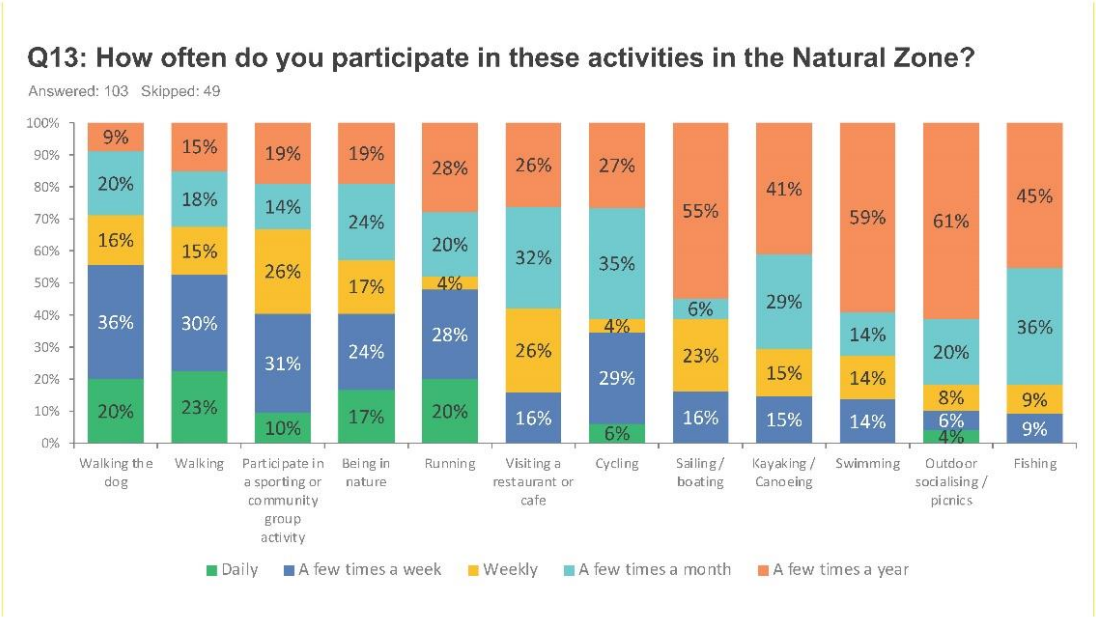
Q13: How often do you participate in these activities in the Natural Zone?
Answered: 103 Skipped: 49
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
9%
20%
16%
36%
20%
15%
18%
15%
30%
23%
19%
14%
26%
31%
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16%
27%
35%
4%
29%
6%
55%
6%
23%
16%
41%
29%
15%
15%
59%
14%
14%
14%
61%
20%
8%
6%
4%
45%
36%
9%
9%
Walking the dog
Walking
Participate in a sporting or community group activity
Being in nature
Running
Visiting a restaurant or cafe
Cycling
Sailing / boating
Kayaking / Canoeing
Swimming
Outdoor socialising / picnics
Fishing
Daily
A few times a week
Weekly
A few times a month
A few times a year

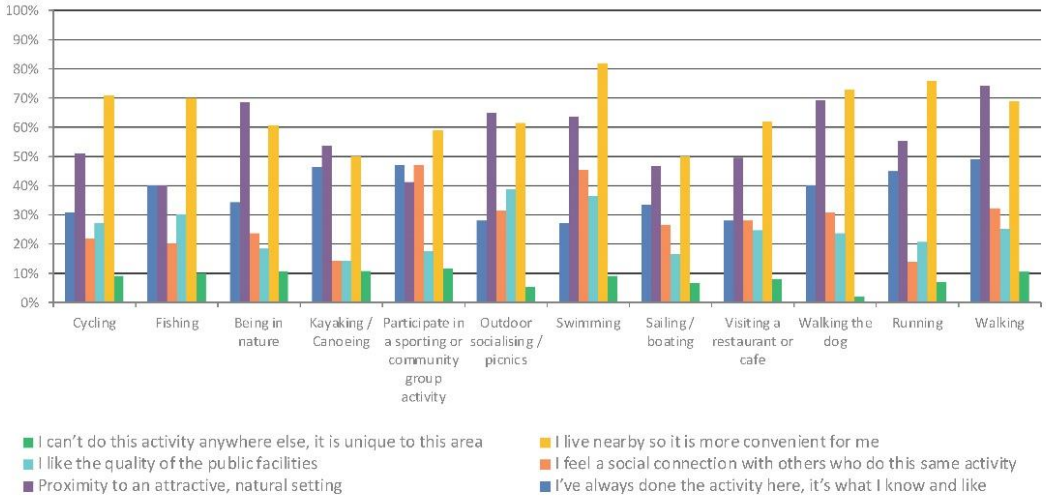
27

element.

Appendix B. Reason for Activities

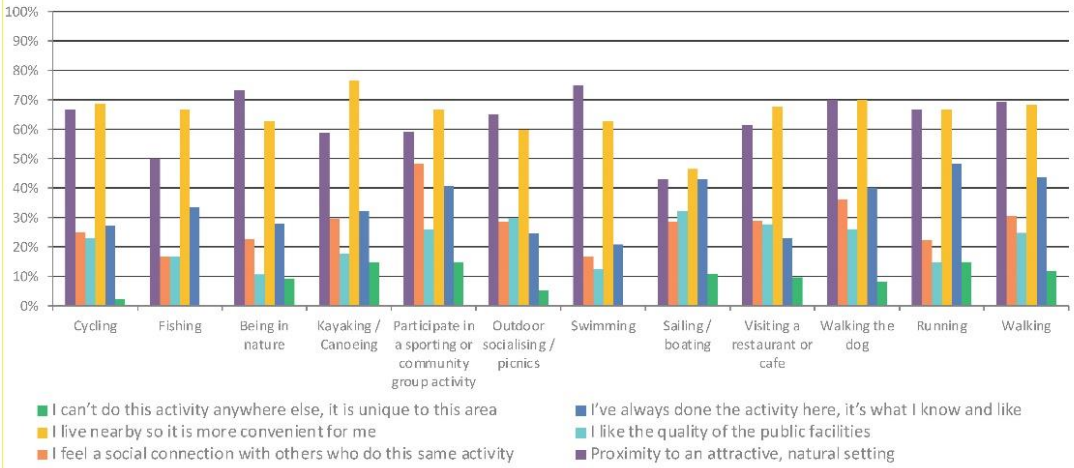
Q10: Why do you choose to undertake these activities in the Walled Zone as opposed to other areas? (You may select more than one option)

Answered: 112 Skipped: 40



Q12: Why do you choose to undertake these activities in the Reclaimed Zone as opposed to other areas? (You may select more than one option)

Answered: 103 Skipped: 49



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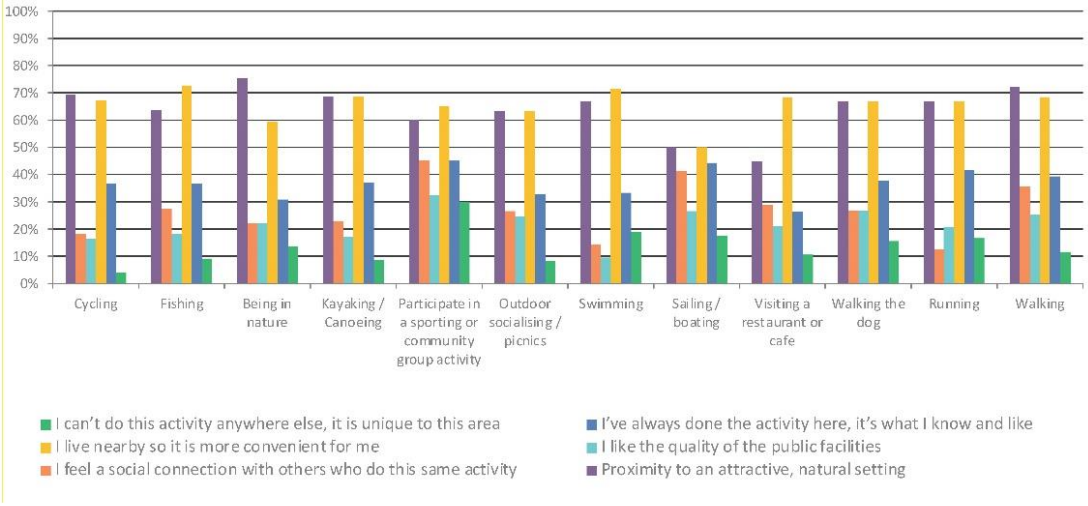
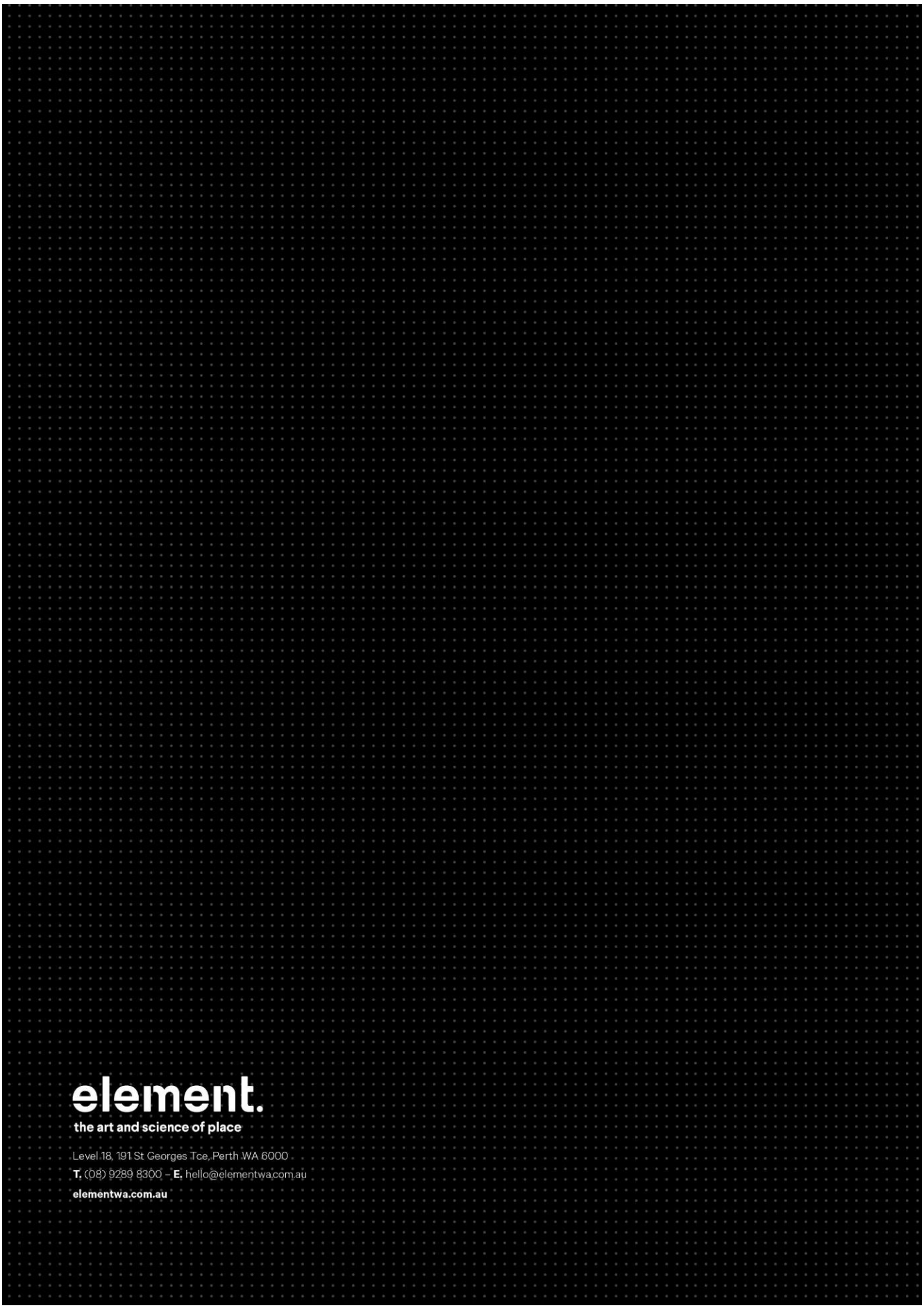
Q14: Why do you choose to undertake these activities in the Natural Zone as opposed to other areas? (You may select more than one option)

Answered: 102 Skipped: 50

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the art and science of place
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T. (08) 9289 8300 – E. hello@elementwa.com.au
elementwa.com.au

Appendix B

Coastal Processes Allowances

Baird.

B.1 Structures in the Shoreline

B.1.1 Walled Zone

N:\Projects\13668.101_TOEF_CHRMAP\09_GIS\10 QGIS\Figures\TOEF_StudyArea_WalledZone.png

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B.1.2 Reclaimed Zone

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Innovation Engineered.

B.1.3 Natural Zone

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Innovation Engineered.

B.2 Coastal Processes Allowances – Assumption that Protection Structures in the Shoreline are Maintained

Baird.

B.2.1 Walled Zone

N:\Projects\13668.101_TOEF_CHRMAP\09_GIS\10 QGIS\Figures\TOEF_StudyArea_WalledZoneSetbackLines_Structures.png

Note HSD: Horizontal Shoreline Datum (used as benchmark)

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B.2.2 Reclaimed Zone

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Note HSD: Horizontal Shoreline Datum (used as benchmark)

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B.2.3 Natural Zone

Note HSD: Horizontal Shoreline Datum (used as benchmark)

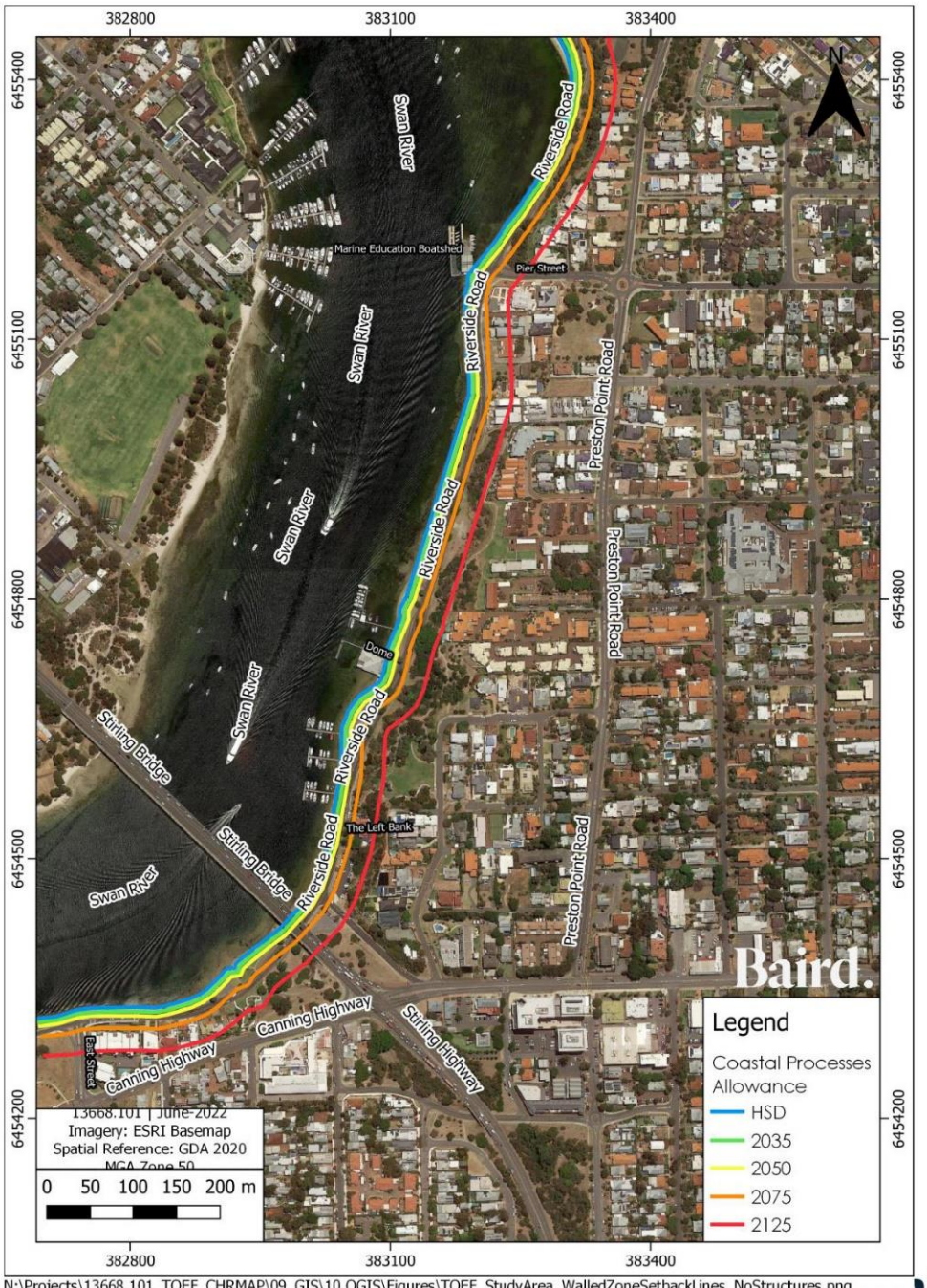
Baird.

Innovation Engineered.

B.3 Coastal Processes Allowances – Assumption of No Protection Structures in the Shoreline.

Baird.

B.3.1 Walled Zone

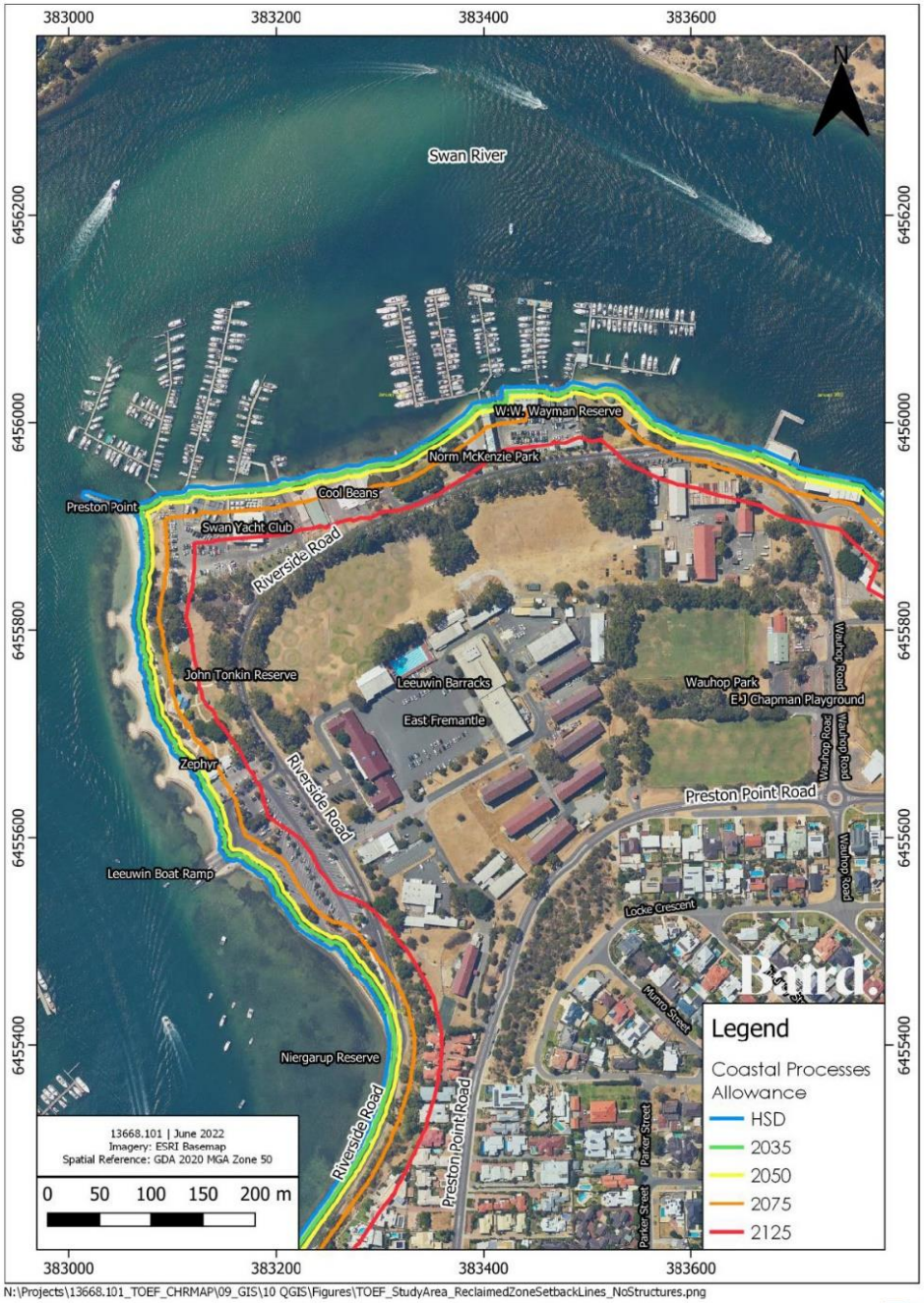


N:\Projects\13668.101_TOEF_CHRMAP\09_GIS\10 QGIS\Figures\TOEF_StudyArea_WalledZoneSetbackLines_NoStructures.png

Baird.

Note HSD: Horizontal Shoreline Datum (used as benchmark)

B.3.2 Reclaimed Zone



N:\Projects\13668.101_TOEF_CHRMAP\09_GIS\10 QGIS\Figures\TOEF_StudyArea_ReclaimedZoneSetbackLines_NoStructures.png

Note HSD: Horizontal Shoreline Datum (used as benchmark)

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B.3.3 Natural Zone

Note HSD: Horizontal Shoreline Datum (used as benchmark)

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Appendix C

Inundation Mapping

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C.1 Inundation Hazard (S4)

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C.1.1 500yr ARI Scenario. Peak Depth. Present Day

N:\Projects\13668.101_TOEF_CHRMAP\09_GIS\10 QGIS\Figures\TOEF_500yrARIInundation.png

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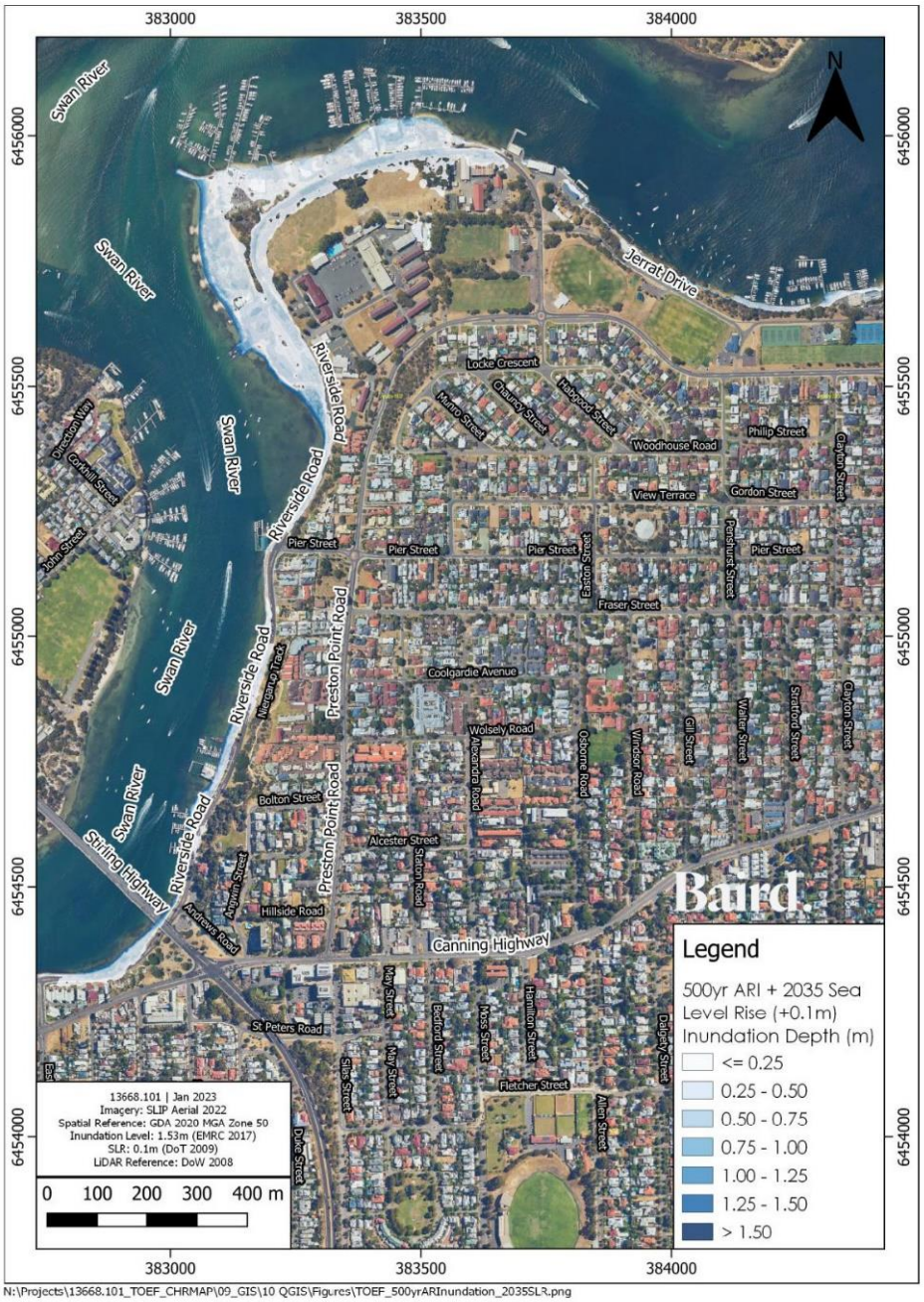
C.1.2 500yr ARI Scenario. Peak Depth. Planning Year 2035



N:\Projects\13668.101_TOEF_CHRMAP\09_GIS\10 QGIS\Figures\TOEF_500yrARInundation_2035SLR.png

Baird.

C.1.3 500yr ARI Scenario. Peak Depth. Planning Year 2050

N:\Projects\13668.101_TOEF_CHRMAP\09_GIS\10 QGIS\Figures\TOEF_500yrARInundation_2050SLR.png

Baird.

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C.1.4 500yr ARI Scenario. Peak Depth. Planning Year 2075

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Baird.

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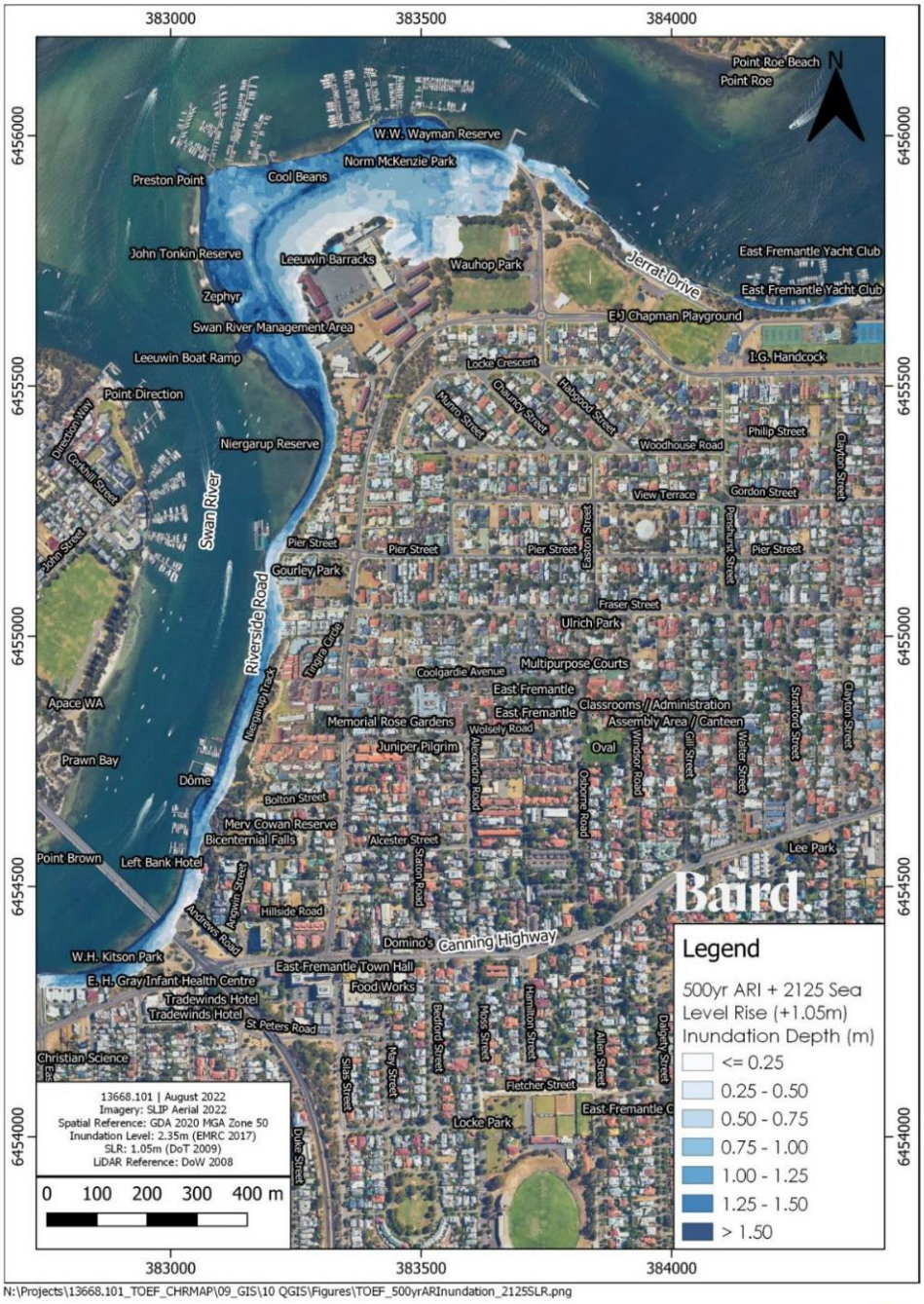
C.1.5 500yr ARI Scenario. Peak Depth. Planning Year 2125



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Baird.

Appendix D

Vulnerability Assessment by Shoreline Management Unit

D.1 Vulnerability – Erosion

					Likelihood Category				Erosion Risk Rating				Vulnerability - Incl. Adaptive Capacity			
SMU			Consequence	Adaptive Cap.	2035	2050	2075	2125	2035	2050	2075	2125	2035	2050	2075	2125
1	Road Reserve - Lower Merv Cowan (East Riv Drv)	Environmental	Moderate	Average	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
1	Toilet Block - Lower Merv Cowan (East Riv Drv)	Environmental	Minor	Poor	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
1	Riverside Road - Nierganup Reserve to Pier Street	Environmental	Major	Poor	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
1	Riverside Road - Pier Street to Dome Café	Environmental	Major	Poor	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
1	Riverside Road Dome Café to Stirling Bridge	Environmental	Major	Poor	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
1	Riverside Road - Stirling Bridge to J Dolan Park	Environmental	Major	Poor	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
1	J Dolan Park	Environmental	Moderate	Average	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
1	Riverwalls protecting shoreline	Environmental														
1	Coastal Pathways - Nierganup Reserve to Pier Street	Social	Moderate	Average	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
1	Coastal Pathways - Pier Street to Dome Café	Social	Moderate	Average	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
1	Coastal Pathways - Dome Café to Stirling Bridge	Social	Moderate	Average	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
1	Coastal Pathways - Stirling Bridge to J Dolan Park	Social	Moderate	Average	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
1	Boat ramps, moorings, jetties	Economic	Moderate	Average	Possible	Likely	Almost Certain	Almost Certain	H	H	E	E	H	H	E	E
1	Residential Properties - Riverside Rd / East St	Economic	Major	Poor	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
1	Residential Properties - Riverside Rd / Pier St	Economic	Major	Poor	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
1	Marine Education Boatshed	Economic	Major	Poor	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
1	Dome Café	Economic	Major	Poor	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
1	Minor Infrastructure (bins, signage, shelters, fencing)	Economic	Insignificant	Average	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
1	Carpark - Public Carpark No 4 (Dome Cafe)	Economic	Moderate	Poor	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
1	Carpark - J Dolan Park	Economic	Moderate	Poor	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
1	Left Bank	Economic	Moderate	Poor	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
1	Playground Equipment – north of Dome Cafe	Economic	Minor	Good	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
1	Shelters, seating and picnic tables – J Dolan Park	Economic	Insignificant	Good	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
1	Shelters, seating and picnic tables – North of Dome Cafe	Economic	Insignificant	Good	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
1	Drainage features (pits, pipes, culverts, stormwater outlets)	Economic	Moderate	Average	Possible	Likely	Almost Certain	Almost Certain	H	H	E	E	H	H	E	E

					Likelihood Category				Erosion Risk Rating				Vulnerability - Incl. Adaptive Capacity			
SMU		General Cat.	Consequence	Adaptive Cap.	2035	2050	2075	2125	2035	2050	2075	2125	2035	2050	2075	2125
1	Riegarup Reserve	Environmental	Moderate	Average	Possible	Likely	Almost Certain	Almost Certain	H	H	E	E	H	H	E	E
2	Coastal Pathway - John Tonkin Reserve	Environmental	Moderate	Average	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
3	Coastal Pathway - Norm McKenzie Park	Environmental	Moderate	Average	Unlikely	Possible	Likely	Almost Certain	M	H	H	E	M	H	H	E
4	Norm McKenzie Park Foreshore Reserve Area	Environmental	Moderate	Average	Possible	Likely	Almost Certain	Almost Certain	H	H	E	E	H	H	E	E
5	Norm McKenzie Park - Playground	Environmental	Minor	Average	Rare	Unlikely	Likely	Almost Certain	L	L	M	H	L	L	M	H
6	Norm McKenzie Park - Roadside Shelter and BBQ	Environmental	Minor	Average	Rare	Rare	Possible	Likely	L	L	M	M	L	L	M	M
7	W Wayman Reserve - Foreshore Reserve Area	Environmental	Moderate	Average	Possible	Likely	Almost Certain	Almost Certain	H	H	E	E	H	H	E	E
8	W Wayman Reserve - Pathway	Social	Moderate	Average	Possible	Likely	Almost Certain	Almost Certain	H	H	E	E	H	H	E	E
9	W Wayman Reserve - Shelter	Social	Minor	Average	Unlikely	Possible	Likely	Almost Certain	L	M	M	H	L	M	M	H
10	W Wayman Reserve - Exercise Equipment	Social	Minor	Average	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
11	Detached groyne field	Environmental	Moderate	Average	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
12	John Tonkin Reserve - Playground	Environmental	Moderate	Poor	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
13	John Tonkin Reserve - Gazebos	Environmental	Moderate	Poor	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
14	Riverwalls protecting shoreline	Environmental														
15	Navy Cadets	Social	Moderate	Poor	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
16	Beach access pathways	Social	Moderate	Average	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
17	Leeuwin Barracks - Existing Carpark / Buiings	Economic	Moderate	Good	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
18	Leeuwin Barracks -Park Area Adjacent RN Dry	Economic	Moderate	Good	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
19	Aquarama Marina (CarPark East Side)	Economic	Moderate	Poor	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
20	Aquamarina Building (adj RN Dry)	Economic	Moderate	Poor	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
21	8 Knots Tavern	Economic	Moderate	Poor	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
22	Rowing Club	Economic	Moderate	Poor	Rare	Rare	Unlikely	Possible	L	L	M	H	L	L	M	H
23	Minor Infrastructure (bins,signage, shelters, fencing)	Economic	Moderate	Poor	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
24	Moorings	Economic	Moderate	Poor	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
25	Cool Beans Café	Economic	Moderate	Poor	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
26	Swan Yacht Club	Economic	Moderate	Poor	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
27	Zephyr Cafe	Economic	Moderate	Poor	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
28	Boat Ramp	Economic	Moderate	Poor	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
29	Dinghy Storage	Economic	Minor	Average	Possible	Likely	Almost Certain	Almost Certain	M	M	H	H	M	M	H	H
30	Riverside Road	Economic	Major	Poor	Rare	Unlikely	Possible	Likely	L	M	H	E	M	H	E	E
31	Car parks – Public Car Park No 1 (Boat Ramp)	Economic	Moderate	Poor	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
32	Car parks – Public Car Park No 2 (John Tonkin North)	Economic	Moderate	Poor	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
33	Car parks – Public Car Park No 3 (Cool Beans)	Economic	Moderate	Poor	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
34	Car parks - Public Car Park No 3 – Zephyr Café	Economic	Moderate	Poor	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
35	Car parks – Swan Yacht Club	Economic	Moderate	Poor	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
36	Car parks – Fremantle Rowing Club	Economic	Moderate	Poor	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
37	Drainage features (pits, pipes, culverts, outlets)	Economic	Moderate	Average	Possible	Likely	Almost Certain	Almost Certain	H	H	E	E	H	H	E	E

					Likelihood Category				Erosion Risk Rating				Vulnerability - Ind. Adaptive Capacity			
SMU	Description	General Cat.	Consequence	Adaptive Cap.	2035	2050	2075	2125	2035	2050	2075	2125	2035	2050	2075	2125
3	Riverwalls	Environmental														
3	Foreshore along Jerrat Drive	Environmental	Moderate	Average	Possible	Likely	Almost Certain	Almost Certain	H	H	E	E	H	H	E	E
3	Beaches within Jerrat Drive escarpment	Environmental	Major	Average	Possible	Likely	Almost Certain	Almost Certain	H	E	E	E	H	E	E	E
3	Fremantle Sea Scouts building	Social	Major	Poor	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
3	Beach access stairs to Jerrat Drive escarpment Beach	Social	Moderate	Average	Possible	Likely	Almost Certain	Almost Certain	H	H	E	E	H	H	E	E
3	Department of Defence wharves	Economic														
3	East Fremantle Yacht Club Building	Economic	Major	Poor	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
3	East Fremantle Yacht Club Lower Car Park, boat Access Pathway	Economic	Major	Poor	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
3	Jerrat Drive and road network	Economic	Moderate	Average	Rare	Rare	Unlikely	Possible	L	L	M	H	L	L	M	H
3	boat ramps, moorings and jetties	Economic	Moderate	Good	Likely	Almost Certain	Almost Certain	Almost Certain	H	L	E	E	M	H	H	H
3	Minor Infrastructure (bins, signage, shelters, fencing	Economic	Insignificant	Good	Possible	Likely	Almost Certain	Almost Certain	L	L	M	M	L	L	L	L
3	Carpark at Jerrat Drive	Economic	Moderate	Average	Rare	Rare	Rare	Unlikely	L	L	L	M	L	L	L	M
3	Drainage features (pits, pipes, culverts, stormwater outlets)	Economic	Moderate	Average	Possible	Likely	Almost Certain	Almost Certain	H	H	E	E	H	H	E	E

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D.2 Vulnerability – Inundation

		m AHD				Likelihood Category				Inundation Risk Rating				Vulnerability - Incl. Adaptive Capacity			
SMU	Description	Elevation	General Cat.	Consequence.	Adaptive Cap.	2035	2050	2075	2125	2035	2050	2075	2125	2035	2050	2075	2125
1	Road Reserve - Lower Mery Cowan (East Riv Dry)	1.5	Environmental	Minor	High	Rare	Unlikely	Likely	Almost Certain	L	L	M	H	L	L	L	M
1	Toilet Block - Lower Mery Cowan (East Riv Dry)	1.9	Environmental	Minor	Moderate	Rare	Rare	Rare	Likely	L	L	L	M	L	L	L	M
1	Riverside Road - Niergarup Reserve to Pier Street	1.2	Environmental	Moderate	High	Possible	Likely	Likely	Almost Certain	H	H	H	E	M	M	M	H
1	Riverside Road - Pier Street to Dome Café	1.4	Environmental	Moderate	High	Unlikely	Unlikely	Likely	Almost Certain	M	M	H	E	L	L	M	H
1	Riverside Road Dome Café to Stirling Bridge	1.4	Environmental	Moderate	High	Unlikely	Unlikely	Likely	Almost Certain	M	M	H	E	L	L	M	H
1	Riverside Road - Stirling Bridge to J Dolan Park	1.2	Environmental	Moderate	High	Possible	Likely	Likely	Almost Certain	H	H	H	E	M	M	M	H
1	J Dolan Park	1.0	Environmental	Insignificant	Moderate	Likely	Likely	Almost Certain	Almost Certain	L	L	M	M	L	L	M	M
1	Riverwalls protecting shoreline	1.0	Environmental	Minor	High												
1	Coastal Pathways - Niergarup Reserve to Pier Street	1.0	Social	Minor	High	Likely	Likely	Almost Certain	Almost Certain	M	M	H	H	L	L	M	M
1	Coastal Pathways - Pier Street to Dome Café	0.9	Social	Minor	High	Likely	Likely	Almost Certain	Almost Certain	M	M	H	H	L	L	M	M
1	Coastal Pathways - Dome Café to Stirling Bridge	0.8	Social	Minor	High	Likely	Almost Certain	Almost Certain	Almost Certain	M	H	H	H	L	M	M	M
1	Coastal Pathways - Stirling Bridge to J Dolan Park	0.9	Social	Minor	High	Likely	Likely	Almost Certain	Almost Certain	M	M	H	H	L	L	M	M
1	Boat ramps, moorings, jetties	0.7	Social	Minor	High	Almost Certain	Almost Certain	Almost Certain	Almost Certain	H	H	H	H	M	M	M	M
1	Residential Properties - Riverside Rd / East St	2.3	Economic	Moderate	Moderate	Rare	Rare	Rare	Unlikely	L	L	L	M	L	L	L	M
1	Residential Properties - Riverside Rd / Pier St	2.8	Economic	Moderate	Moderate	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
1	Marine Education Boatshed	1.1	Economic	Moderate	Moderate	Likely	Likely	Almost Certain	Almost Certain	H	H	E	E	H	H	E	E
1	Dome Café	1.5	Economic	Moderate	Moderate	Rare	Unlikely	Likely	Almost Certain	L	M	H	E	L	M	H	E
1	Minor Infrastructure (bins, signage, shelters, fencing)	1.0	Economic	Minor	High	Likely	Likely	Almost Certain	Almost Certain	M	M	H	H	L	L	M	M
1	Carpark - Public Carpark No 4 (Dome Café)	0.8	Economic	Moderate	High	Likely	Almost Certain	Almost Certain	Almost Certain	H	E	E	E	M	H	H	H
1	Carpark - J Dolan Park	0.9	Economic	Moderate	High	Likely	Likely	Almost Certain	Almost Certain	H	H	E	E	M	M	H	H
1	Left Bank	2.1	Economic	Moderate	Moderate	Rare	Rare	Rare	Likely	L	L	L	H	L	L	L	H
1	Playground Equipment – north of Dome Café	1.0	Economic	Minor	High	Likely	Likely	Almost Certain	Almost Certain	M	M	H	H	L	L	M	M
1	Shelters, seating and picnic tables – J Dolan Park	1.1	Economic	Minor	High	Likely	Likely	Almost Certain	Almost Certain	M	M	H	H	L	L	M	M
1	Shelters, seating and picnic tables – North of Dome Café	1.0	Economic	Minor	High	Likely	Likely	Almost Certain	Almost Certain	M	M	H	H	L	L	M	M
1	Drainage features (pits, pipes, culverts, stormwater outlets)	1.0	Economic	Minor	High	Likely	Likely	Almost Certain	Almost Certain	M	M	H	H	L	L	M	M

		m AHD					Likelihood Category				Inundation Risk Rating				Vulnerability - Incl. Adaptive Capacity			
SMU	Description	Elevation	General Cat.	Consequence	Adaptive Cap.	Adaptive Cap.	2035	2050	2075	2125	2035	2050	2075	2125	2035	2050	2075	2125
2	Riverarup Reserve	0.8	Environmental	Minor	Good	High	Likely	Almost Certain	Almost Certain	Almost Certain	M	H	H	H	L	M	M	M
2	Coastal Pathway - John Tonkin Reserve	1.0	Environmental	Minor	Good	High	Likely	Likely	Almost Certain	Almost Certain	M	M	H	H	L	L	M	M
2	Coastal Pathway - Norm McKenzie Park	1.1	Environmental	Minor	Good	High	Likely	Likely	Almost Certain	Almost Certain	M	M	H	H	L	L	M	M
2	Norm McKenzie Park Foreshore Reserve Area	1.0	Environmental	Minor	Good	High	Likely	Likely	Almost Certain	Almost Certain	M	M	H	H	L	L	M	M
2	Norm McKenzie Park - Playground	1.1	Environmental	Minor	Average	Moderate	Likely	Likely	Almost Certain	Almost Certain	M	M	H	H	M	M	H	H
2	Norm McKenzie Park - Roadside Shelter and BBQ	1.3	Environmental	Minor	Average	Moderate	Unlikely	Possible	Likely	Almost Certain	L	M	M	H	L	M	M	H
2	W Wayman Reserve - Foreshore Reserve Area	0.7	Environmental	Minor	Good	High	Almost Certain	Almost Certain	Almost Certain	Almost Certain	H	H	H	H	M	M	M	M
2	W Wayman Reserve - Pathway	1.1	Social	Minor	Good	High	Likely	Likely	Almost Certain	Almost Certain	M	M	H	H	L	L	M	M
2	W Wayman Reserve - Shelter	1.1	Social	Minor	Good	High	Likely	Likely	Almost Certain	Almost Certain	M	M	H	H	L	L	M	M
2	W Wayman Reserve - Exercise Equipment	1.3	Social	Minor	Average	Moderate	Unlikely	Possible	Likely	Almost Certain	L	M	M	H	L	M	M	H
2	Detached groyne field	0.2	Environmental	Minor	Good	High	Almost Certain	Almost Certain	Almost Certain	Almost Certain	H	H	H	H	M	M	M	M
2	John Tonkin Reserve - Playground	1.1	Environmental	Minor	Average	Moderate	Likely	Likely	Almost Certain	Almost Certain	M	M	H	H	M	M	H	H
2	John Tonkin Reserve - Beaches	1.1	Environmental	Minor	Good	High	Likely	Likely	Almost Certain	Almost Certain	M	M	H	H	L	L	M	M
2	Riverwalls protecting shoreline	1.0	Environmental	Minor	Good	High												
2	Navy Cadets	1.6	Social	Moderate	Average	Moderate	Rare	Rare	Possible	Almost Certain	L	L	H	E	L	L	H	E
2	Beach access pathways	0.7	Social	Minor	Good	High	Almost Certain	Almost Certain	Almost Certain	Almost Certain	H	H	H	H	M	M	M	M
2	Leeuwin Barracks - Existing Carpark / Buildings	1.6	Economic	Moderate	Average	Moderate	Rare	Rare	Possible	Almost Certain	L	L	H	E	L	L	H	E
2	Leeuwin Barracks - Park Area Adjacent Riv Dry	1.4	Economic	Minor	Good	High	Unlikely	Unlikely	Likely	Almost Certain	L	L	M	H	L	L	L	M
2	Aquarama Marina (CarPark East Side)	1.1	Economic	Moderate	Good	High	Likely	Likely	Almost Certain	Almost Certain	H	H	E	E	M	M	H	H
2	Aquamarina Building (adj Riv Dry)	1.6	Economic	Moderate	Average	Moderate	Rare	Rare	Possible	Almost Certain	L	L	H	E	L	L	H	E
2	8 Knots Tavern	1.4	Economic	Moderate	Average	Moderate	Likely	Likely	Almost Certain	Almost Certain	H	H	E	E	H	H	E	E
2	Rowing Club	1.5	Economic	Moderate	Average	Moderate	Rare	Unlikely	Likely	Almost Certain	L	M	H	E	L	M	H	E
2	Minor Infrastructure (bins,signage, shelters, fencing)	1.0	Economic	Minor	Good	High	Likely	Likely	Almost Certain	Almost Certain	M	M	H	H	L	L	M	M
2	Moorings	0.8	Economic	Minor	Good	High	Likely	Almost Certain	Almost Certain	Almost Certain	M	H	H	H	L	M	M	M
2	Cool Beans Café	1.5	Economic	Moderate	Average	Moderate	Rare	Unlikely	Likely	Almost Certain	L	M	H	E	L	M	H	E
2	Swan Yacht Club	1.6	Economic	Moderate	Average	Moderate	Rare	Rare	Possible	Almost Certain	L	L	H	E	L	L	H	E
2	Zephyr Cafe	1.8	Economic	Moderate	Average	Moderate	Rare	Rare	Unlikely	Likely	L	L	M	H	L	L	M	H
2	Boat Ramp	0.7	Economic	Minor	Good	High	Almost Certain	Almost Certain	Almost Certain	Almost Certain	H	H	H	H	M	M	M	M
2	Dinghy Storage	0.4	Economic	Minor	Good	High	Almost Certain	Almost Certain	Almost Certain	Almost Certain	H	H	H	H	M	M	M	M
2	Riverside Road	1.0	Economic	Moderate	Good	High	Likely	Likely	Almost Certain	Almost Certain	H	H	E	E	M	M	H	H
2	Car parks – Public Car Park No 1 (Boat Ramp)	1.1	Economic	Moderate	Good	High	Likely	Likely	Almost Certain	Almost Certain	H	H	E	E	M	M	H	H
2	Car parks – Public Car Park No 2 (John Tonkin North)	1.3	Economic	Moderate	Good	High	Unlikely	Possible	Likely	Almost Certain	M	H	H	E	L	M	M	H
2	Car parks – Public Car Park No 5 (Cool Beans)	1.3	Economic	Moderate	Good	High	Unlikely	Possible	Likely	Almost Certain	M	H	H	E	L	M	M	H
2	Car parks – Public Car Park No 3 – Zephyr Café	1.2	Economic	Moderate	Good	High	Possible	Likely	Likely	Almost Certain	H	H	H	E	M	M	M	H
2	Car parks – Swan Yacht Club	1.3	Economic	Moderate	Good	High	Unlikely	Possible	Likely	Almost Certain	M	H	H	E	L	M	M	H
2	Car parks – Fremantle Rowing Club	1.2	Economic	Moderate	Good	High	Possible	Likely	Likely	Almost Certain	H	H	H	E	M	M	M	H
2	Drainage features (pits, pipes, culverts, outlets)	1.0	Economic	Minor	Good	High	Likely	Likely	Almost Certain	Almost Certain	M	M	H	H	L	L	M	M

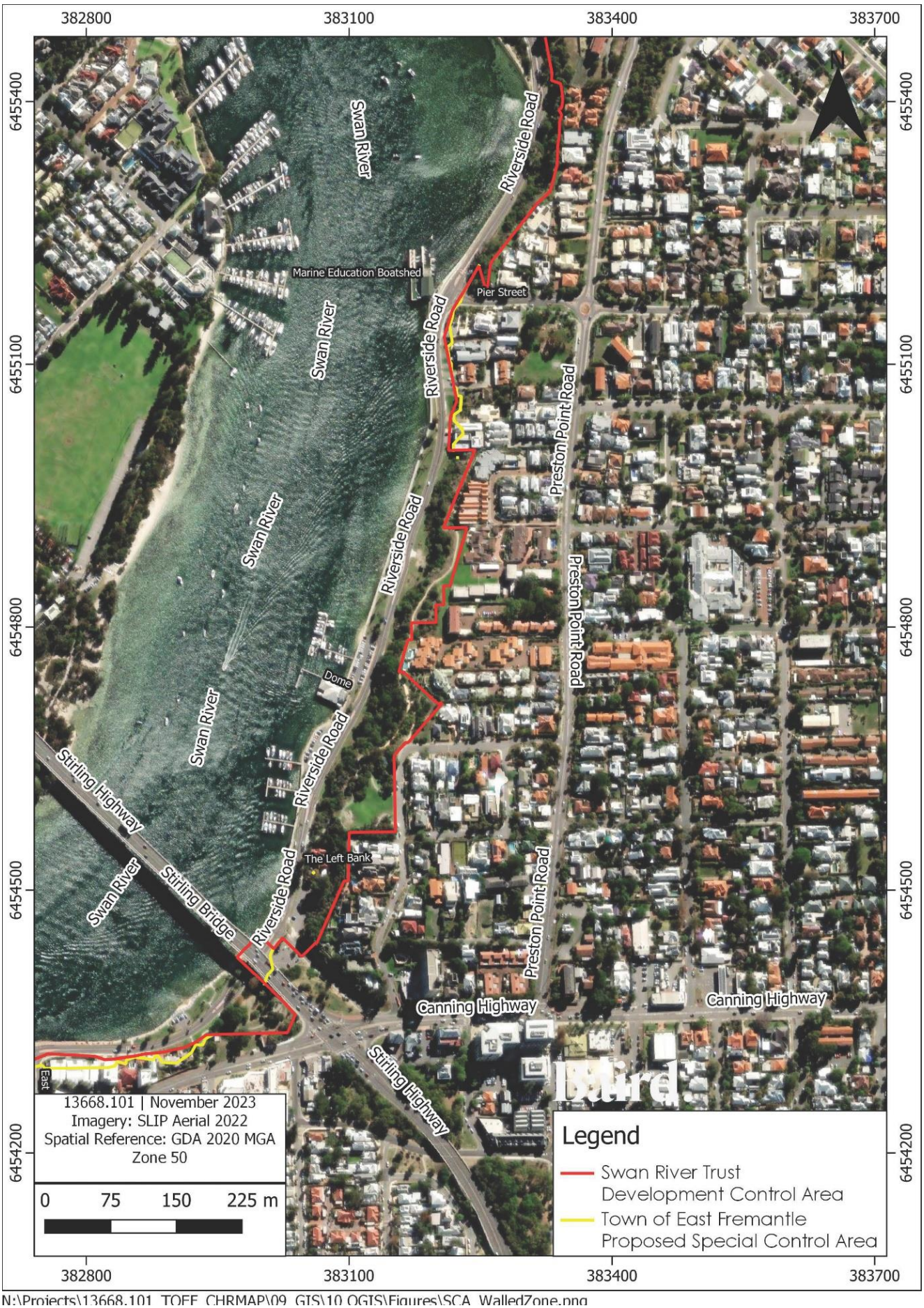
		m AHD					Likelihood Category				Inundation Risk Rating				Vulnerability - Incl. Adaptive Capacity			
SMU	Description	Elevation	General Cat.	Consequence	Adaptive Cap.	Adaptive Cap.	2035	2050	2075	2125	2035	2050	2075	2125	2035	2050	2075	2125
3	Riverwalls (Sea Scouts, East Fremantle Yacht Club)	1.0	Environmental	Minor	Good	High	Likely	Likely	Almost Certain	Almost Certain	M	M	H	H	L	L	M	M
3	Foreshore along Jerrat Drive	1.0	Environmental	Minor	Good	High	Likely	Likely	Almost Certain	Almost Certain	M	M	H	H	L	L	M	M
3	Beaches within Jerrat Drive escarpment	0.5	Environmental	Insignificant	Good	High	Almost Certain	Almost Certain	Almost Certain	Almost Certain	M	M	M	M	L	L	L	L
3	Fremantle Sea Scouts building	1.6	Social	Moderate	Average	Moderate	Rare	Rare	Possible	Almost Certain	L	L	H	E	L	L	H	E
3	Beach access stairs to Jerrat Drive escarpment Beach	1.0	Social	Minor	Good	High	Likely	Likely	Almost Certain	Almost Certain	M	M	H	H	L	L	M	M
3	East Fremantle Yacht Club Building	1.5	Economic	Moderate	Average	Moderate	Rare	Unlikely	Likely	Almost Certain	L	M	H	E	L	M	H	E
3	East Fremantle Yacht Club Lower Car Park, Boat Access Pathway	1.0	Economic	Moderate	Good	High	Likely	Likely	Almost Certain	Almost Certain	H	H	E	E	M	M	H	H
3	Jerrat Drive and road network	16.0	Economic	Minor	Good	High	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
3	Boat ramps, moorings and jetties	0.8	Economic	Minor	Good	High	Likely	Almost Certain	Almost Certain	Almost Certain	M	H	H	H	L	M	M	M
3	Minor infrastructure (bins, signage, shelters, fencing, beach access stairs)	1.5	Economic	Minor	Good	High	Rare	Unlikely	Likely	Almost Certain	L	L	M	H	L	L	L	M
3	Carpark at Jerrat Drive	18.7	Economic	Moderate	Average	Moderate	Rare	Rare	Rare	Rare	L	L	L	L	L	L	L	L
3	Drainage features (pits, pipes, culverts, stormwater outlets)	1.0	Economic	Minor	Good	High	Likely	Likely	Almost Certain	Almost Certain	M	M	H	H	L	L	M	M

Appendix E

Proposed Special Control Area

Innovation Engineered.

E.1 Proposed Special Control Area



N:\Projects\13668.101_TOEF_CHRMAP\09_GIS\10.QGIS\Figures\SCA_WalledZone.png

N:\Projects\13668.101_TOEF_CHRMAP\09_GIS\10 QGIS\Figures\SCA_ReclaimedZone.png

N:\Projects\13668.101_TOEF_CHRMAP\09_GIS\10 QGIS\Figures\SCA_NaturalZone.png

13.5 NAVY LEAGUE - DONATION OF WORKS

Report Reference Number	OCR-2706
Prepared by	Nick King, Executive Manager Technical Services
Supervised by	Jonathan Throssell, Chief Executive Officer
Meeting date	Tuesday, 16 April 2024
Voting requirements	Absolute majority
Documents tabled	Nil
Attachments	Nil

PURPOSE

For Council to consider approving works to the Navy League car park area.

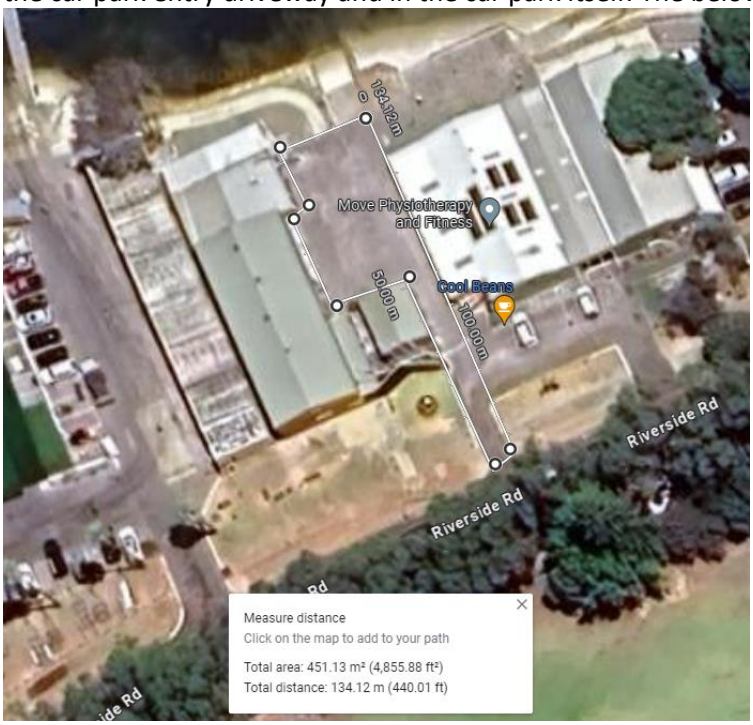
EXECUTIVE SUMMARY

A request has been received from the Navy League of Australia for the Town to upgrade its car park area, adjacent to the new HMAS Memorial. The car park is approximately 450m2, which they have requested a new asphalt surface. It is recommended the works be approved.

BACKGROUND

The Navy League of Australia have been in regular communication with Officers regarding the HMAS Perth memorial and compass rose, which it is near completion. Grants have been received from Lotteries west of $350,000, and to date all costs associated with works at the site have been covered by the Navy League or grants received, with no Council funds contributed.

The Navy League through discussions have requested that the Town resurface their car park area, adjacent to the building, which is approximately 450m2. The condition of the car park is poor, with patches and pot holes through the car park entry driveway and in the car park itself. The below map shows the approximate area.



CONSULTATION

N/A

STATUTORY ENVIRONMENT

The proposed works are not included in the Town's 23-24 Budget and therefore a budget variation is requested pursuant to section 6.8 of the *Local Government Act 1995*.

POLICY IMPLICATIONS

N/A

FINANCIAL IMPLICATIONS

Works have been quoted by the Town's term contracted asphalt company at $10,660 (Ex GST), which includes resurfacing the existing car park with 25mm-30mm thick asphalt.

The works are proposed to be taken from the two accounts as below:

Account	Description	Budget	Expenditure to date	Proposed funds used for these works
E08203	Donations account	$10,455	$3,500.00	$6,955.00
E12827	Car park capex	$15,000	$11,500.73	$3,499.27
	Totals	**$25,455**	**$15,000.73**	**$10,454.27**

STRATEGIC IMPLICATIONS

1.2 Inviting open spaces, meeting places and recreational facilities

RISK IMPLICATIONS

RISKS

Risk	Risk Likelihood (based on history & with existing controls)	Risk Impact / Consequence	Risk Rating (Prior to Treatment or Control)	Principal Risk Theme	Risk Action Plan (Controls or Treatment proposed)
Reputational risk of the relationship with the Navy League of Australia	Possible (3)	Minor (2)	Low (1-4)	REPUTATIONAL Substantiated, low impact, low news item	Accept Officer Recommendation

RISK MATRIX

Consequence / Likelihood		Insignificant	Minor	Moderate	Major	Extreme
		1	2	3	4	5
Almost Certain	5	**Moderate (5)**	**High (10)**	**High (15)**	**Extreme (20)**	**Extreme (25)**
Likely	4	**Low (4)**	**Moderate (8)**	**High (12)**	**High (16)**	**Extreme (20)**
Possible	3	**Low (3)**	**Moderate (6)**	**Moderate (9)**	**High (12)**	**High (15)**
Unlikely	2	**Low (2)**	**Low (4)**	**Moderate (6)**	**Moderate (8)**	**High (10)**
Rare	1	**Low (1)**	**Low (2)**	**Low (3)**	**Low (4)**	**Moderate (5)**

A risk is often specified in terms of an event or circumstance and the consequences that may flow from it. An effect may be positive, negative or a deviation from the expected and may be related to the following objectives: occupational health and safety, financial, service interruption, compliance, reputation and environment. A risk matrix has been prepared and a risk rating is provided below. Any items with a risk rating over 16 will be added to the Risk Register, and any item with a risk rating over 16 will require a specific risk treatment plan to be developed.

RISK RATING

Risk Rating	6
Does this item need to be added to the Town's Risk Register	No
Is a Risk Treatment Plan Required	No

SITE INSPECTION

N/A

COMMENT

Considering the poor condition of the existing car park and that to date the Town have not contributed any funds to the memorial installation, it is recommended that works are approved to progress.

CONCLUSION

The relationship the Town have with Navy League of Australia is currently very good, with communication through all stages of the memorial installation works. It is recommended that the works progress, which will finish off the area nicely.

13.5 OFFICER RECOMMENDATION / COUNCIL RESOLUTION

Council Resolution 051604

OFFICER RECOMMENDATION:

Moved Cr Harrington, seconded Cr White

That Council, pursuant to section 6.8 of the Local Government Act 1995, by absolute majority approves the schedule of budget variations below to enable the resurfacing of the Navy League of Australia car park, resulting in a nil change in net current assets:

Account Number	Description	Current Budget	Amended Budget	Variance
New account	Capex – Navy League Carpark	$0	($10,500)	($10,500)
E08203	Donations	($10,455)	($3,455)	$7,000
E12827	Capex – Carpark (General)	($15,000)	($11,500)	$3,500

(CARRIED UNANIMOUSLY BY AN ABSOLUTE MAJORITY 9:0)

For: **Mayor O'Neill, Crs Wilson, Collinson, Donovan, Harrington, Natale, Maywood, White & McPhail.**

Against: **Nil**

Mayor O'Neill declared a proximity interest in the following item and left the meeting at 7.06pm.
In the absence of the Presiding Member, the Deputy Mayor, Cr Natale, assumed the Chair.

13.6 HEAD CONTRACT VARIATION – EAST FREMANTLE OVAL REDEVELOPMENT PROJECT

Applicant	N/A
Report Reference Number	OCR-2717
Prepared by	Andrew Malone, Executive Manager Regulatory Services
Supervised by	Jonathan Throssell, Chief Executive Officer
Meeting date	Tuesday 16 April 2024
Voting requirements	Absolute Majority
Documents tabled	Nil

Attachments

1. **Contingency Tracker dated 11 April 2024**
2. **Cooper & Oxley Head Contract Variation dated 11 April 2024**
3. **Delegation DA85 East Fremantle Oval Precinct Redevelopment Project (CEO)**

PURPOSE

The purpose of this report is to seek approval for all Head Contract variations to the East Fremantle Community Park as per Council Delegation DA85 East Fremantle Oval Redevelopment Project (CEO).

EXECUTIVE SUMMARY

The total sum of all agreed variations to date is approximately $1.56 million, with further proposed variations to date costing $2,142,948 (a total of $2,313,000). Of these, five variations have yet to be costed but are included in the contingency allowance, therefore an indicative sum has been put against these variations.

The total sum of the variations already agreed to and implemented, but not formally approved, is approximately $753,000. Available forecasted contingency to date is approximately $571,000. The proposed variations to the Head Contract will exceed the available contingency by approximately $181,334. It is noted that all forecasts included in the contingency may not eventuate, which would result in additional funds being made available in contingency. Further, some unapproved variations remain subject to review; and may not be approved or will be modified subject to that review.

Similarly, the Town continues to receive variations to the Head Contract which will further exceed the current contingency.

This report seeks Council consideration to retrospectively approve all variations to the Head Contract agreed and implemented since the start of the project, to approve 56 current variation requests and to note Delegation DA85 East Fremantle Oval Redevelopment Project (CEO) has not been fully complied with as documented in the Town's Delegations Register.

BACKGROUND

Delegations Register

In June 2021 Council endorsed a new delegation, **Delegation DA85 East Fremantle Oval Precinct Redevelopment Project (CEO)** ("the Delegation").

East Fremantle Oval Precinct Redevelopment Project (EFOPRP) Purchasing Policy ("the Policy") was similarly endorsed and stipulated how purchases must be made, the purchasing framework, and the delegated authority for purchases within the EFOPRP. This policy is to be read in conjunction with the current overall Town of East Fremantle Purchasing Policy & Delegations.

The Delegation was approved by Council on 15 June 2021 as a special project delegation granted to the CEO for the life of the project. The delegation provides authority to the CEO for individual variations up to a maximum of $50,000, subject to an aggregate project limit of $500,000.

As per the Policy, any variations not included in the Project Budget can only be incurred with written approval from the CEO with the recommendation of the Project Steering Committee. If the additional unbudgeted item of expenditure for contract variations is more than $50,000, Council approval is required. If the variation is below $50,000 it can be approved by the CEO following the approval of the Steering Committee and the recommendation of the Project Working Group.

The Delegation and Policy were based on a project that assumed a Lump Sum contract, whereby all aspects of the project would have been finalised prior to awarding of tender: however, given the extreme market conditions at the time, the Town opted to undertake a different contract model.

The Town adopted a procurement process that attempted to respond to the challenges in the WA construction market through a Modified Traditional Tender (MTT). This MTT is similar to an Early Contractor Involvement (ECI) but also included a modified version of the traditional local government tender process. The combination of the two resulted in a fixed lump sum price by the conclusion of the process, however the process has also resulted in many amendments to the tender price from the contract price.

A summary of the MTT process is provided below:

- Tenderers are shortlisted through an EOI process
- Tender documentation based on a modified traditional contract is issued to the Tenderers which details the extent of the works seeking pricing for Preliminaries and Margin, with all works packages being included as defined Tender Package Allowances (TPAs) having been developed by the Town's quantity surveyor. Documentation includes further qualitative criteria.
- Tenderers provide pricing for Preliminaries as a lump sum and a margin as a percentage that is then applied to the TPAs. The intent is for the Tendered Sum to be the target overall final contract sum for delivery. The total of the Preliminaries, Margin, TPAs and escalation/contingency TPA will then form the Tendered Price.
- Tenders are assessed based on the criteria set and a single Contract Award is made based on the Tender submissions and the total Tendered Price, which reflects the Tenderer estimate of the whole cost of the works.
- Once appointed, the successful Contractor works with the Design Team to convert the TPAs to fixed prices through an open book tender process managed by the Contractor. The Margin is applied to the finalised TPA. The TPA conversion process is intended to remain within the total Tendered Sum or such other amount as may be advised by the Principal and it is expected that the successful Contractor will assist in driving an outcome that achieves the target
- The conversion of the TPAs to fixed prices continues until an appropriate level of price certainty (within funding parameters) is achieved at which point the Contractor can be provided Site Possession (subject to formal decision of Council) and the actual construction works commence. Site Possession is not granted prior to the Principal being satisfied that all Conditions Precedent to access (including satisfactory conversion of the TPAs to fixed prices) has occurred.
- The Contract continues as a standard traditional contract from Site Possession with any remaining provisional sums converted to fixed prices as works progress.

The MTT approach was developed to create the following outcomes:

- Avoid the risks that attach to a traditional ECI process, whereby the initial award is for the provision of services only, comprising the design and price development process, with a second separate contract then entered into for the delivery of the construction works, which, due to the nature of the GA procurement rules, would have necessitated the requirement to work with at least 2 participants during the ECI phase, so that the Town could demonstrate the application of a competitive tender process for the receipt of prices for the undertaking of the construction works.
- Availability of Contractor expertise in the design stage for buildability / material supply advice
- Improved level of interest in the project from Principal Contractors due to the reduced level of effort required in Tendering
- Improved level of competition in the sub-contractor market through the Contract already having been awarded prior to seeking pricing
- Improved oversight of sub-contract packages to identify any cost/design issues that can be resolved to address any pricing issues
- Reduced risk to the Contractor through the open pricing mechanism

The legal advice sought from McLeods Lawyers at the time confirmed that the MTT process as outlined and intended to be implemented did not breach the *Local Government Act 1995* or associated Regulations, notwithstanding the inherent additional flexibility that it brought to the refinement of the design and the process, over the more traditional lump sum model of procurement.

Project Cost Plan

The cost plan as of July 2022 (one year after the Delegation and the Policy were endorsed by Council) when the building contractor contract was considered by Council under the MTT process, was the following cost estimate:

Item	Budget*	*Gateway 2*[1]	DD Cost Plan[2]	Variance to Budget
Construction	$ 24,987,000	$ *24,750,464*	$ 25,205,110	$ (218,110)
Headworks	$ 0	$ *293,000*	$ 296,500	$ (296,500)
Design Contingency	$ 2,498,700	$ *1,237,523*	$ 756,153	$ 1,742,547
Construction Contingency	$ 1,374,300	$ *1,299,399*	$ 1,298,063	$ 76,237
Professional fees	$ 2,900,000	$ *2,900,000*	$ 2,900,000	$ 0
FF&E	$ 500,000	$ *1,000,000*	$ 1,000,000	$ (500,000)
Public Art	$ 240,000	$ *240,000*	$ 240,000	$ 0
Escalation	$ 0	$ *1,250,832*	$ 1,273,217	$ (1,273,217)
TOTAL	**$ 32,500,000**	$ *32,971,218*	**$ 32,969,043**	**$ (469,043)**

**Estimated breakdown based on $32.5m*

**1 DCWC Cost Plan dated 10 May 2022 (Gateway 2) - Superseded*

**2 DCWC Cost Plan dated 27 June 2022 (Appendix 3)*

The cost plan highlighted a potential project budget deficit of $469,043, resulting in the requirement for at least a minimum $469,043 worth of value engineering or variations to be agreed. With such a high budget deficit from day one of the project and by using the MTT process it is clear (albeit on review) that the Delegation and Policy were not fit for purpose, because by approving a contract for a project that was not fully funded and required deletions to the overall project scope through reviewing and modifying the design, whenever a modification was made a variation to the project was required. This was not anticipated when the Delegation and Policy were first developed.

However, the cost plan still had design contingencies of $1,237,523, and further cost escalation provision of $1,250,832 and construction contingencies of $1,237,523: totaling $3,725,878 in project contingencies in a $32.9 million project. The progress report dated 22 March 2024 details a forecast project cost of $34,550,753 ex GST, an additional $1.6million above contingency costs over the July 2022 budget.

Additional Value Engineering (VE) also took place to further reduce the cost after July 2022. During the value engineering process which involved Council, it appears decisions were made without a clear understanding of the ramifications of design changes. In some instances, VE modifications resulted in higher costs or delays, which required repricing from contractors, resulting in higher costs again because of prevailing market conditions. In a few instances VE recommendations had to be reversed because of unforeseen consequences, again resulting in higher costs. All of the variations are provided in this report for Council's review (attached).

On review of the Delegation and the Policy, it is clear that these should have been amended in July 2022 to account for the processes outlined above. The Delegation as endorsed by Council could not practically be complied with by administration during the MTT procurement process, notwithstanding the fact as of July 2022 (when Council considered the contract report) the project was over budget and required immediate variations. As the contract premise was built on provisional sums being converted to fixed prices as works progressed, it was inevitable that variations would be received from day one of the contract. Due to the Delegation and the Policy not being amended at that time, administration was ultimately unsuccessful in its efforts to comply with the delegation.

In addition, in instances of provisional sums being converted to fixed prices as works progressed (especially in a high inflationary market), many contractors were only providing terms based on 7-14 days, creating an environment where decisions had to be made quickly – precluding Council approval.

Project Steering Committee meeting minutes indicate that while approval has not been sought for any variation within the project, it is acknowledged that detailed briefings were outlined at the Steering Committee, including a review of the contingency tracker and variations. Whilst the Council report of June 2021 stipulates the variation process it does not outline that process as a condition of the Delegation. The MTT process substantially changed how the project was procured and therefore at that time the Delegation should have been amended to reflect the MTT procurement process as detailed above.

Head Contract Variations

To date a total of $2,142,948 in variations has been requested by C&O ($2,313,000 total variations including consultants' variations). A total of approximately $1.56 million has been approved (including $408,668 variation of the kitchen approved by Council). As per the Delegation, any variation with a cumulative sum over $500,000 required Council approval.

The total sum of the 56 unapproved variations which have been identified and require approval is for an amount of approximately $753,000.

The Town has exceeded Council's variation in cumulative spending per the Delegation. Individual variations have also, in 13 instances, exceeded the $50,000 threshold prescribed in the Delegation. All 13 of these variations were approved by or direction provided by the previous CEO prior to May 2023. Two unapproved variations that exceed the individual $50,000 variation are included in this report (AV variations and Western Power variation) for which Council approval is sought.

It is noted that by May 2023 (including the Council approved $408,000 variation for the kitchen) all variations had exceeded the $500,000 cumulative variation as required by the Delegation ($1,066,000 in variations - $400,000 Council approved variation and $600,000 in cumulative variations). All subsequent variations should have been approved by Council.

It is noted that in many instances Council members were informed of the larger variations and informally agreed to such variations without a formal Council decision, eg southern bank earthworks, removal of eastern bank earthworks, removal of the dog park from scope, removal of the art from scope.
In addition to the above, it is noted that the contract between the Town and C&O includes a provision with respect to approving variations. The contract provides that the Superintendent has full authority to approve variations. The contract between the Town and DCWC notes that DCWC was to act as Project Manager and Superintendent, two positions that are normally distinct from each other to ensure independence.

Additional workflows should have provided for specific workflow/authorisation processes for contract variations under the Construction Contract. Below is an indication of the current process:

- Builder submits a Request for Information (RFI) after identifying an error/ omission/ problem with the development.
- The RFI is investigated by the Architect or appropriate sub-discipline.
- Where an issue has been discovered the builder is then to price the variation through a Head Contract Variation
- The HCV is then reviewed by the project Superintendent and Quantity Surveyor and amended as required.
- Change Control Request (CCR) Form is received by the Town to consider approval of the variation.

However, in many instances, through the advice of the Town the Project Manager has approved for the works to be undertaken to ensure materials can be ordered and the project continue to avoid any delays being caused by the Town. This was because where it could be demonstrated that delays were caused by the Town the contractor would be able to claim an amount of approximately $4000 per day in delay costs: this was recently demonstrated by the delay caused from connecting the site to power, where the Town is contractually required to pay $58,000 in delay costs (noting this is a contract variation requiring approval and is listed on the attachment).

Due to the process of variation approval, in many instances the CCR Form was received after the date a direction to undertake the work was issued. As noted above, the process required a RFI from the builder, and the builder then pricing the variation through a HCV. The HCV was then reviewed by the project Superintendent and Quantity Surveyor and amended as required. On final review of the HCV, in many instances the works which were the subject of the variations were already undertaken and, therefore, instead of a provisional sum a fixed price/ final price could be provided in the CCR. The CCR was then provided to the client (Town) for final approval. In many instances this process resulted in significant time elapsing between the HCV and the CCR being approved by the Town. However, to ensure the project remained on time and within budget the works were undertaken while the HCV was being assessed.

By way of two examples of this process the following is provided:

- Head Contract Variation (HCV030) – IFT to IFC structural Steel Changes was requested by Cooper & Oxley on 27 March 2023 because of a RFI being submitted; however, the actual CCR was approved by the then A/CEO in August 2023, some five months later. The direction to proceed was provided by the previous CEO, and the works undertaken by the builder for structural steel in order for the roof to be installed; but the actual CCR was not approved until after the works were undertaken and prices fixed in August 2023. The steel variation was identified while the roof was being constructed and immediate approval was required to ensure materials, fabrication and construction could be undertaken to ensure no client delays. The steel was required to ensure the structural integrity of the roof and therefore a critical component of the structure and development. Due to material constraints at the time and the requirement to continue works on the roof, approval to order the steel was granted, incurring the $68,000 variation. This variation was therefore approved in excess of the Delegation.

- Head Contract Variation (HCV 042) - Request by Town of East Fremantle for landscape redesign to include further grading requirements and grassed areas to the west and south of the precinct and around the depot.

Direction was provided by the previous CEO, the HCV dated 18 March 2023 but the CCR was not received until October 2023, whereupon it was signed off by the current CEO. As such the works had already been undertaken by the time the CCR was received. The delay between the HCV and the CCR was required because the QS could not assess the HCV (based on tonnages and day rates) until the works were complete and thus the overall amount of material moved on site, inclusive of the additional material in HCV 042, rationalised. The QS determined the value to be a fair amount through the CCR. To delay approval would have resulted in a potential two-week client delay, which would likely have resulted in the contractor demobilising from site and additional costs being incurred.

CONSULTATION

Project Working Group (PWG)

The EFOPRP Project Working Group (PWG) is responsible for managing and monitoring the day-to-day definition, planning and delivery of the Project ensuring that agreed program, cost, and quality targets are achieved. The PWG manage the delivery of the EFOPRP through planning, design, commission, transition to operations and defects resolution. The PWG comprises the following:

- Town of East Fremantle CEO (Chair)
- Client Project Lead
- Town of East Fremantle Executive Staff Members x 3
- Funding Partners – 1 representative each
- Project Manager (ex officio)
- Design Team Lead (ex officio)
- Quantity Surveyor (ex officio)

Other Project Consultants as required (ex-officio)

EFOPRP Steering Committee

The Steering Committee comprises of the following:

- Council Representative – Elected Members (X2)
- Town of East Fremantle CEO
- Client Project Lead
- Town of East Fremantle Executive Manager Regulatory Services
- Independent Member
- Project Manager (ex officio)
- Quantity Surveyor (ex officio)

Elected Members were provided with a Contingency Tracker and Monthly Progress Report up until December 2023. Elected Members were also provided with the February contingency report. Unfortunately, the January report was not provided at that time. These reports outlined in detail the contingency remaining for the project, approved variations, pending variations and forecast variations. The Monthly Progress Report also outlined the variations approved and raised outstanding matters that were likely to cause further variations. Elected Members also undertook several site visits on site, where matters of budget and required modifications were discussed. Further matters relating to costs were also raised with Elected Members in briefings regarding the project. It is noted that until the issues with the Delegation and variation approval process were recently identified by the CEO no queries had been received or raised in regards to non-compliance with the Delegation.

STATUTORY ENVIRONMENT

DA85 EAST FREMANTLE OVAL PRECINCT REDEVELOPMENT PROJECT (CEO)

Further to the issues raised in regard to the Delegation as detailed above, it is noted that the Executive Manager Regulatory Services had been approving variations to the Head Contract from September 2023 until March 2024. While somewhat unclear in its wording, it appears that Council's intention was for the Delegation to be restricted to the CEO alone and was not to be sub delegated.

Noting the CEO was not aware of this specific Delegation, given the Executive Manager's background in the project since its commencement, the CEO determined it was appropriate that the Executive Manager continue in the role and authorised him to continue undertaking operational responsibilities such as approving variations. This was not in accordance with the Delegation.

To date a total of $2,142,948 in variations have been requested by C&O, with other variations addressed in the contingency report (eg consultancy fees, Legal Fees and services costs), resulting in total variations of approximately $2,313,000. A total of approximately $1.56 million has been approved (including $408,668 variation of the kitchen approved by Council). The total sum of the unapproved variations identified in this report and thus requiring approval is approximately $753,000. As per the Delegation, any variation with a cumulative sum over $500,000 requires Council approval. As this cumulative sum exceeded the Delegation in May 2023 each decision after that date required a Council decision, but this was not done until the date of this report.

Individual variations have, in 13 instances, also exceeded the $50,000 threshold within the Delegation. All 13 of these variations were approved by or direction provided by the previous CEO. Two unapproved variations that exceed the individual $50,000 variation are included in this report (AV variations and Western Power variation) for which Council approval is sought.

Pursuant to section 6.8 of the *Local Government Act 1995*, expenditure not included in the annual budget is to be authorised in advance by an absolute majority decision of Council.

POLICY IMPLICATIONS

Council has adopted Policy 2.1.19 Contract Variations. This Policy enables the Chief Executive Officer to approve contract variations to a maximum price of $50,000 provided that the variation is contained within the available budget.

FINANCIAL IMPLICATIONS

This report requests Council approves 56 variations to the project. The Contingency Tracker (as attached) outlines three sections:

- Total approved variations - $1,559,695
- Total pending variations - $545,191
- Total forecast variations (pending) - $206,447

All proposed and forecast variations (should they materialise) to the Head Contract will exceed contingency, resulting in a negative contingency sum of $181,334, requiring additional project funding to be approved by Council. Further, this sum is based on no further RFIs or issues being identified to the project. However, there is an additional $30,000 built into the contingency tracker for further unidentified variations, allowing for some ability to address RFIs without further impacting on the Town's total project sum.

Below are some of the costs which have resulted in a deficit to the contingency.

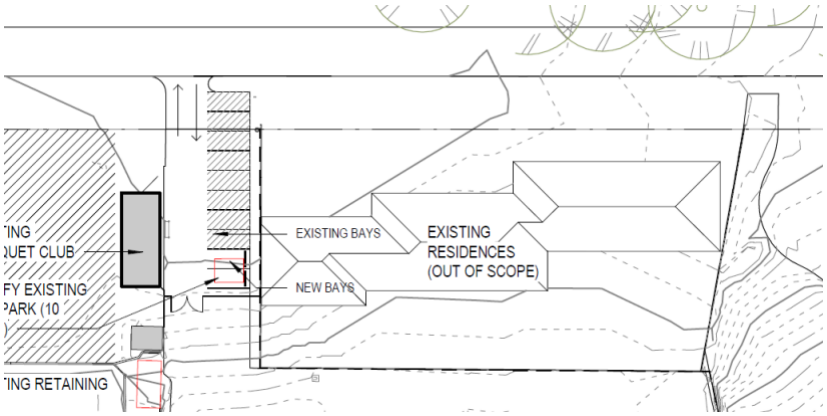
<u>Western Power Lot Consolidation – Variation $113,137:</u>

Design Development– Further works are required to be undertaken in relation to the Western Power design requirements in consolidation of power supplies on LOT 2 (Residential Units). This is not within the project scope. All power was provided from one supply to the site previously. Because of the works proposed by the project, the power to the site had to be split into two lots, the main lot for the project and a second lot for the Depot and the residential units. This variation relates to all costs associated with connection of the second lot.

- Connection & reconfiguration of existing residential houses - $71,878.20
- Associated switchboard upgrades - $27,319.34
- Builders Works

The Western Power Lot Consolidation variation substantially required the project contingency to enter into a negative sum. This variation is required to be undertaken at the direction of Western Power because of current non-compliance of the depot and the residential properties owned by the Town. Instead of taking the funds required for the works from Municipal funds, a determination was made to require the project to fund the works. Therefore, this item became an unbudgeted project cost and reduced the contingency. This work is required to be carried out however. Should this work be removed from the project, the required additional funds will have to be found through other municipal funds. To not proceed with the works is a significant risk to the Town.

Tender and Value Engineering (June – November 2022)



- Works to the existing residences were out of scope as noted in A01.10 Proposed Site Plan Rev.0 at Tender and;
- Works to the existing residences were out of scope as noted in A01.10 Proposed Site Plan Rev.2 at VE stage after Contract award.

Initial Western Power Design Requests (May 2023)

- The existing incoming supplies to residences were required by Western Power (WP) to be redirected into the new site main switchboard 2. (noted in MP203208-WP-001 refer drawing).
- C&O advised this would result in additional new cabling (condition unknown) due to Metrowest not being able to warrant existing cables. (noted in item 8.1 in Site Meeting 12 Minutes).

C&O Initial Variations pricing (May 2023 – June 2023)

- The estimate for the works was initially noted as a line item in HCV058 R0 dated 25/05/23 as a $50,000 Provisional Allowance in C&O's indicative cost (due to scope of works not being resolved at that time).
- The works were then separated into it's own HCV065 (Prov Sum) R0 for an increased amount of $93,374 with items still noted as provisional sums with works to be confirmed.

Western Power Quotation & Design (November 2023)

- Western Power Quotation Letter MP203211 and For Construction Design were received November 2023.

C&O Detailed Variation Costing (March 2024)

- HCV065 R1 for $117,213 update based on scope of works resolved (with some minor provisional sums in variation for items not fully resolved)
- HCV065 R2 for $113,157 incorporating reduction in trenching following rationalisation (still with some minor provisional sums in variation for items not fully resolved)

It is noted that NDY have not charged a fee variation design, documentation and CA services for these works. The end sum may vary further pending additional fees. Other than fabrication of the switchboard C&O/ Metrowest are not progressing works without acceptance of HCV065 – R2. Should these works/ variation not be approved the

Towns assets (Depot and residential units) can be considered to be noncompliant and will be a risk to the Council. It is recommended this variation be approved.

Audio and Visual Variation – Variation $230,472

An amount of $85,000 was allocated for Audio and Visual. Unbeknown to the Town's current administration, because of previous value engineering and scope reduction decisions, the scope for audio visual was reduced. This included removal of the main PA system and Hearing Augmentation System; resulting in the proposed audio-visual sum of $85,000 being considered appropriate.

A review of all audio visual equipment was undertaken by Belgravia and the project team, including engaging the services of a different consultant to ensure the audio visual proposed was fit for purpose. This review determined that the audio-visual sum of $85,000 was significantly inadequate, as a PA system and Hearing Augmentation System are required in the facility. This variation includes the supply and installation of the main building's audio visual system including main AV equipment, main PA system and Hearing Augmentation System. The proposed reassessment of the audio visual requires a further variation of $230,472.

C&O delay costs

Western Power Headworks delays has resulted in the Town being contractually obliged to pay C&O $58,980 in costs.

Supply and installation of whitegoods and Gym Fixtures – Variation $45,564

This is a client change and confirms the instruction by the Town for the supply and installation of whitegoods and gym fixtures as per the scope identified in the CCR. This variation is considered a minor variation to the budget, as items budgeted (whitegoods) for furniture equipment (fitout for Bowls, Croquet and staff kitchen) were included within the budget but were out of scope for the builder. By including these items into C&O scope a variation to their scope of works was required. The gym fixtures (mirror, drinks fountains and fans) are additional to the budget scope. These items were considered essential to be provided within the gym. The fixtures to the gym were considered important for the operation of the gym and therefore approved by administration. As evident on the site visit with Elected Members, the gym works have been finished to a high standard, with Belgravia expected to move gym equipment into the facility shortly. It is recommended that this variation is approved.

Project Management (DCWC) – Variation $35,000

The Project Manager (DCWC) has requested a variation to their fee. This is outlined below:

ToEF Request For Tender (RFT) to Market

- ToEF RFT provided a program for the tenderer's to complete their submission.
- The RFT outlined a PC date of around October 2023.

DCWC RFT Proposal

- DCWC Proposal outlined potential for a fee variation linked to Project Value.
- DCWC Proposal outlined potential for a fee variation linked to project timeline.

DCWC Fee Variation Request

- DCWC are claiming an additional $38,000 based on projected effort across the whole of Stage 6
- DCWC have made a commercial offer of $35,000.
- DCWC cite the following causes as impacting their fee and this claimable
    - Prolongation due to Value Engineering / Site Possession
    - Prolongation due to Extension of Time
    - Contract Sum Increase
- Notwithstanding any of the above causes DCWCs contract has been prolonged from the RFT anticipated PC date to that projected due to circumstances outside of their control.

- That prolongation could be up to 6 months.
- DCWC fee of Stage 6 (Construction) was $221,184 based on an 18 month duration, which equates to $12,288 per month, therefore the request for a commercial offer of $35,000 equates to three months' additional work, less than the current 5 months.

Whilst prolongation should be based on actual costs and not that presented at the contract stage, administration would suggest that $35,000 is reasonable from both a cost and time basis. It is recommended that this variation is approved.

The progress report dated 22 March 2024 details a forecast project cost of $34,550,753 ex GST:

Budget Element	Previous Costs	Current Costs	Variance
Construction	**$30,393,981**	**$30,417,413**	**$23,432**
Original Contract Sum	$ 26,046,000	$ 26,046,000	$ 0
Trade Package Adjustments (prior to Site Possession)	$ 2,088,273	$ 2,088,273	$ 0
Approved Variations	$ 1,265,816	$ 1,559,696	$ 293,880
Pending Variations	$ 665,596	$ 525,873	$ (139,723)
Forecast Costs	$ 328,296	$ 197,571	$ (130,725)
Other Project Costs	**$ 4,133,340**	**$ 4,133,340**	**$ 0**
Professional Fees	$ 3,446,515	$ 3,446,515	$ 0
Public Art	$ 96,000	$ 96,000	$ 0
FF&E	$ 390,825	$ 390,825	$ 0
EFFC Compensation	$ 200,000	$ 200,000	$ 0
Contingency	**$ 0**	**$ 0**	**$ (0**
Total	**$ 34,490,411**	**$34,550,753**	**$ 60,342**

The above compares to an approved budget of $34,397,614 as follows:

Funding Breakdown

Funder	Previous Funding	Current Funding
WA State Government (DLGSC)	$ 25,000,000	$ 25,000,000
Town of East Fremantle (Cash)	$ 2,200,000	$ 2,200,000
Town of East Fremantle (Loan)	$ 4,800,000	$ 4,800,000
AFL/WAFC (executed)	$ 250,000	$ 250,000
LotteryWest	**$ 1,345,060**	**$ 1,345,060**
EFBC	$ 17,727	$ 17,727
Town of East Fremantle (Cash)	$ 337,829	$ 337,829
Town of East Fremantle (Cash)	$ 370,000	$ 370,000
EFFC Scoreboard	$ 0	$ 0
EFFC (confirmed) Joinery and Cabinetry	$ 59,795	$ 59,795
EFFC AV Equipment	$ 0	$ 17,203
TOTAL	**$ 34,380,411**	**$ 34,397,614**

Further funding of $181,334 is therefore required, which should be sufficient to cover the pending/forecast variations to the construction contract. The amounts as outlined above in the tables (eg $153,139 deficit) varies slightly to the contingency tracker amount of $181,334, as some of the forecast costs have been updated since the March Progress Report (March Progress Report/ April Contingency Report).

The mid-year budget review resulted in a forecast closing balance of $428,663 in the East Fremantle Oval Redevelopment Reserve. $181,334 is proposed to be drawn from the reserve for final payment of contracted variations as discussed below. The remaining amount in reserve will be $247,329. Please also refer to the Council report for the Gap Analysis listed in this meeting's agenda, as this report also requests further additional funds from the reserve to complete and manage the project. This will have a further impact on the funds remaining in the reserve (ie a final reserve amount of $140,529 would result).

STRATEGIC IMPLICATIONS

The Town of East Fremantle Strategic Community Plan applies.
Strategic Priority 1: Social
1.2.1 Provision of adequate facilities to support healthy and active lifestyles.

RISK IMPLICATIONS

Potential moderate to high risk as detailed in above and below in this report.

Further risks identified are:

- Delay to the practical completion of the project and delay in the Town's ability to hand over management and maintenance of the project to Belgravia.
- Reputational risk, including but not limited to delays in the delivery of the project, final payment of contractors and consultants, delay to the opening of the building impacting on future revenue, and perceptions the community may consider delays to the building unacceptable.
- Cost risks to the project.
- Continued non-compliance of the Delegation by administration.
- Inability to approve any further works or variations to the project resulting in delays and additional builder's penalties.

SITE INSPECTION

Elected Members were presented with an opportunity to inspect the site prior to practical completion. The date of the inspection was 23 March 2023. Other site visits were organised with Elected Members throughout the construction period.

Site inspections were also conducted at least fortnightly by the CEO and EMRS.

COMMENT

See attached Cooper and Oxley variations to date (draft, pending in review and approved) from HCV 001 through to the most recent HCV169 (previously provided to Council in the Monthly Progress Reports).

The Town is non-compliant with delegation DA85 as discussed in detail above. The MTT procurement process was not fit for purpose with this project. The contract with the building contractor was approved with a budget deficit of $469,000 resulting in the requirement for variations based on the contracted sum. This resulted in the administration attempting to bring the project into budget through scope modifications, with a Delegation and Policy that was not appropriate for these actions. Additionally, t appears that the Delegation approved in 2021 for a project specific for a fix sum contract, was not actioned by the previous CEO, and therefore was not known to the previous A/CEO (who had to manage the project under very challenging circumstances) and subsequently the

current CEO. Once this Delegation and Policy became known to the administration all subsequent variation sums (as included in this report) are presented to Council for its consideration and approval.

Retrospective approval subsequent to administration authorising the expenditure is therefore sought from Council. As detailed in the financial implications section above the largest variations relate to:

- Western Power Lot Consolidation - $113,137
- Audio and Visual variation – $230,472
- C&O delay costs - $58,980
- Supply and installation of whitegoods to staff kitchen, bowls office and croquet tea prep as well as fans, mirrors and water fountains to health club - $45,564
- Project Managers Fee Variation (DCWC) - $35,000

Total: $483,153

In total 56 variations are requested for Council approval, ranging from $163 to $230,000. Each variation requires a Council decision because of the Delegation.

The Contingency Tracker (as attached) outlines three sections:

- Total approved variations - $1,559,695
- Total pending variations - $545,191
- Total forecast variations - $206,447

All proposed and forecast variations to the Head Contract (should they materialise) will exceed contingency, resulting in a negative sum of $181,334, requiring additional project funding to be approved by Council. Further that sum is based on no further RFIs or issues being identified to the project.

CONCLUSION

It is recommended that Council revokes Delegation 85 and Council's Purchasing and Procurement Policy relating to the East Fremantle Oval Redevelopment as it is not fit for purpose. It is further recommended that Council approve all variations as outlined within this report and as attached to the C&O Head Contract variation form. It is further recommended that Council approves $753,000 in unapproved and pending variations, resulting in the requirement for $181,334 to be drawn from the East Fremantle Oval Reserve.

13.6 OFFICER RECOMMENDATION / COUNCIL RESOLUTION

Council Resolution 061604

OFFICER RECOMMENDATION

Moved Cr White, seconded Cr Donovan

That Council:

1. **revokes Delegation DA85 East Fremantle Oval Precinct Redevelopment Project (CEO) and the East Fremantle Oval Precinct Redevelopment Project (EFOPRP) Purchasing Policy;**
2. **retrospectively approves all fee variations to the Head Contract as outlined in the attached Cooper & Oxley Head Contract Variation;**
3. **approves 56 unapproved variations as highlighted in the attached Cooper & Oxley Head Contract Variation and the variations as outlined in the contingency tracker;**

4. **grants authority to the Chief Executive Officer to approve all pending forecasts as variations as outlined in the contingency tracker within the overall budget, as approved in this report;**

5. **grants authority to the Chief Executive Officer to expend all miscellaneous funds within the contingency tracker for the purposes of future variations; and**

6. **pursuant to section 6.8 of the *Local Government Act 1995*, by absolute majority approves a budget variation of $181,334 against the East Fremantle Community Park project to facilitate the payment of all pending and forecasted variations as outlined in the contingency tracker dated 11 April 2024, captured in the schedule of variations below:**

Account Number	Account Description	Current Budget	Amended Budget	Variance
E11738	East Fremantle Oval Redevelopment	($21,366,808)	($21,548,142)	($181,334)
2428	Transfer from East Fremantle Oval Redevelopment Reserve	$848,879	$1,030,213	$181,334

(CARRIED UNANIMOUSLY BY AN ABSOLUTE MAJORITY 8:0)

For: **Crs Wilson, Collinson, Donovan, Harrington, Natale, Maywood, White & McPhail.**

Against: **Nil**

REPORT ATTACHMENTS

Attachments start on the next page

Attachment -1

CONTINGENCY REPORT

Town of East Fremantle
East Fremantle Oval Redevelopment

DONALD CANT WATTS CORKE

Report: Fortnightly
Date: 08 April 2024
Company: Cooper and Oxley
Contract: ABS124
Contract Date: 01 July 2022
Original Contract Sum: $26,046,000.00

BUDGET

BUDGET ELEMENT	Approved Budget	Revised as at 8/4/2024	Movement	Comments	Status
Funding Total	$ 34,122,183.60	$ 34,397,814.09	$ 275,630.49		
WA State Government (DLGSC)	$ 25,000,000.00	$ 25,000,000.00	$ -		
Town of East Fremantle (Cash)	$ 2,200,000.00	$ 2,200,000.00	$ -		
Town of East Fremantle (Loan)	$ 4,800,000.00	$ 4,800,000.00	$ -		
XFL/WA FC (executed)	$ 250,000.00	$ 250,000.00	$ -		
Lotterywest	$ 1,345,060.00	$ 1,345,060.00	$ -	Lotterywest funding amount confirmed $1,345,060.00	
City of Cockburn (confirmed)	$ -	$ -	$ -		
EFBC (Cash) Temp Facilities	$ 19,500.00	$ 17,727.00	-$ 1,773.00	Reduced to reflect GST exclusive amount	
Town of East Fremantle (Cash) $448k	$ 447,829.00	$ 447,829.00	$ -	Approved: +$408k kitchen fit out & +$110k solar (less $70,839 remove scope for dog park from C&D Contract, ringfenced for ToEF)	
EFFC (Cash) Scoreboard	$ -	$ -	$ -	Directed for removal of $30k as EFFC supplying and installing scoreboard steelwork	
EFFC (Cash) Joinery & Cabinetwork	$ 59,794.60	$ 59,794.60	$ -	EFFC Joinery & Cabinetwork Contribution - Agreed; +6 % margin agreed by EFFC/ToEF	
EFFC (Cash) AV Equipment		$ 17,203.49			
Town of East Fremantle (Cash) $465k	$ -	$ 370,000.00	$ 370,000.00	$96k transferred out from $466k for ToEF Direct Works - Eastern Bank - Concrete Path	
Removal of Solar from Project Scope		-$ 110,000.00	-$ 110,000.00		
City of Fremantle Fill (unconfirmed)	$ -	$ -	$ -	ToEF confirmed City of Fremantle payment received and allocated to general revenue	

FORECAST COSTS	Approved Budget	Revised as at 8/4/2024	Movement	Comments	Status
Construction Budget	$ 29,305,816.00	$ 28,134,273.00	-$ 1,171,343.00	- Original Contract Value $26,046,000 + $2,088,273 approved as TPA adjustment	
Contingency	$ 1,395,000.00	-$ 181,333.44	-$ 1,576,333.44	- Refer Best Case Comparison	
Fees	$ 3,000,000.00	$ 3,446,515.00	$ 446,515.00	- Addit professional Fees; Legal Fees incurred in the period	
ART	$ 100,000.00	$ 96,000.00	-$ 4,000.00	- To accommodate $4k artist Concept Design honorarium proposals	
FF&E	$ 430,000.00	$ 340,825.00	-$ 89,175.00	- Under review with Council - $5,945 included as part of HCV127 (reduced in this line)	
Scoreboard (Ex FF&E)	$ -	$ 50,000.00	$ 50,000.00	- Reallocated from FF&E (Town/Project)	
AV (Ex FF&E)	$ -		$ -	- Reallocated from FF&E (Town/Project)	
Other	$ 200,000.00	$ 200,000.00	$ -	- EFFC Compensation;	
EFFC (Cash) Joinery & Cabinetwork	$ 59,794.60	$ -	-$ 59,794.60	- EFFC Joinery & Cabinetwork Contribution (Costs included in Variations)	
EFFC (Cash) AV Equipment	$ 17,203.49		-$ 17,203.49		
Variations - Approved, Pending & Forecast	$ -	$ 2,311,334.53	$ 2,311,334.53	- Refer to Variations listed below	
Removal of Solar from Project Scope	-$ 110,000.00	$ -	$ 110,000.00		
TOTAL BUDGET	$ 34,397,814.09	$ 34,397,814.09			

VARIATIONS

Ref	Description	Previous Report 26/03/2024	Revised as at 8/04/2024	Movement	Best Case		Change Category	Comments	Status
Approved Variations									
HCV001	Preconstruction Works	$ 14,806.00	$ 14,806.00	$ -	$ 14,806.00	$ -	Investigations	- Investigatory works undertaken during IFTT process	Closed
HCV002	In Ground Foundation Changes	$ 64,367.22	$ 64,367.22	$ -	$ 64,367.22	$ -	Latent Condition	- IFT to IFC revision to foundling types to deisk piling	Closed
HCV003	Precast Panel Formliner	$ 16,744.21	$ 16,744.21	$ -	$ 16,744.21	$ -	Town Instruction	- VE reversal	Closed
HCV004	Temp Irrigation	$ 8,619.60	$ 8,619.60	$ -	$ 8,619.60	$ -	Latent Condition	- Works undertaken to accommodate existing relic	Closed
HCV005	Oval Roofing Material	$ 27,752.73	$ 27,752.73	$ -	$ 27,752.73	$ -	Latent Condition	- Latent condition of existing oval material	Closed
HCV006	Carpark Deletion	-$ 3,242.34	-$ 3,242.34	$ -	-$ 3,242.34	$ -	Client Change	- Carpark rationalisation	Closed
HCV007	Ceramic Tiling IFC Changes	$ 132.66	$ 132.66	$ -	$ 132.66	$ -	VE	- IFT to IFC revision	Closed
HCV008	Tilemaster discount	-$ 2,506.00	-$ 2,506.00	$ -	-$ 2,506.00	$ -	Commercial	- Discount as per subcontractor tender	Closed
HCV009	Precast Panel Changes	$ 12,784.13	$ 12,784.13	$ -	$ 12,784.13	$ -	Client Change	- IFT to IFC revision	Closed
HCV010	Trafficable Footpath	$ 1,726.98	$ 1,726.98	$ -	$ 1,726.98	$ -	Client Change	- IFT to IFC revision	Closed
HCV011	Delete Mowing Curb	-$ 36,825.70	-$ 36,825.70	$ -	-$ 36,825.70	$ -	Client Change	- Further VE	Closed
HCV012	PSA - Bowls Club Throw Accom	28,304.25	28,304.25	-	28,304.25	-	Client Change	- Provisional sum adjustment	Closed
HCV015	Additional Concrete Thickening	2,784.23	2,784.23	-	2,784.23	-	Design development	- IFT to IFC revision to slab adjustments	Closed
HCV016	Civil & Hydraulic Changes	15,353.80	15,353.80	-	15,353.80	-	Design development	- IFT to IFC revision	Closed
HCV017	Northern Embankment Material Disposal	61,081.36	61,081.36	-	61,081.36	-	Latent Condition	- Latent condition of limestone	Closed
HCV018	Hydraulic Water Main Crash	3,045.59	3,045.59	-	3,045.59	-	Latent Condition	- Existing water and fire service feeding Richmond House required lowering for new footpath.	Closed
HCV019	PSA - Kitchen Equipment	408,998.16	408,998.16	-	408,998.16	-	PSA	- VE reversal	Closed
HCV020	Oval Irrigation Credit	-$ 41,795.51	-$ 41,795.51	$ -	-$ 41,795.51	$ -	VE	- IFT to IFC revision	Closed
HCV021	PSA - Deleted Pest Screening	9,579.51	9,579.51	-	9,579.51	-	PSA	- IFT to IFC revision, full VE not realised	Closed
HCV022	EOT 2	27,524.00	27,524.00	-	27,524.00	-	EOT	- Extension of time associated costs	Closed
HCV023	Beer Line to Cool	887.00	887.00	-	887.00	-	Client Change	- 15m Sleeve from keg store to cool	Closed
HCV024	Ground Floor Slab Edge Detail	3,600.00	3,600.00	-	3,600.00	-	Design development	- IFT to IFC revision	Closed
HCV025	PSA Investigate retaining wall	-$ 128,963.24	-$ 128,963.24	$ -	-$ 128,963.24	$ -	PSA	- Provisional sum adjustment	Closed
HCV026	Bowls Temp Walkway Lights	2,127.88	2,127.88	-	2,127.88	-	Client Change	- Additional lighting for bowls club required	Closed
HCV027	PSA - Trafwerx & Fixtures	-$ 9,955.91	-$ 9,955.91	$ -	-$ 9,955.91	$ -	PSA	- IFT to IFC revision	Closed
HCV028	PSA - Ceilings to Function Club	121,173.64	121,173.64	-	121,173.64	-	PSA	- VE not realised. VE resulted in additional more costly thermal applications	Closed
HCV029	PSA - Concrete Post Tensioning	38,639.10	38,639.10	-	38,639.10	-	PSA	- Contract provisional sum adjustment following works tender	Closed
HCV030	IFC Structural Steel Changes	68,239.00	68,239.00	-	68,239.00	-	VE	- IFT to IFC revision, mainly associated to awnings roofing change following VE;	Closed
HCV031	PSA - Awnings Canopy Reflexion	-$ 89,632.33	-$ 89,632.33	$ -	-$ 89,632.33	$ -	PSA	- IFT to IFC revision to accommodate VE	Closed
HCV032	Masonry Changes	20,788.50	20,788.50	-	20,788.50	-	Design development	- IFT to IFC revision design development;	Closed
									Closed
HCV034	Partition Wall, Ceiling & Cladding Changes	31,829.66	31,829.66	-	31,829.66	-	Design development	- IFT to IFC revision - Full VE not realised, high impact included in areas :	Closed
HCV035	IFC Door Hareware Changes	303.91	303.91	-	303.91	-	VE	- IFT to IFC revision	Closed
HCV036	Grand Stand Seating Spares	4,338.40	4,338.40	-	4,338.40	-	Client Change	- Included spare requirements	Closed
HCV037	IFC Window Changes	30,596.50	30,596.50	-	30,596.50	-	Design development	- IFT to IFC revision design development	Closed
HCV038	PSA Joinery, Cabinetry and Feature timber	22,943.70	22,943.70	-	22,943.70	-	VE	- Contract provisional sum adjustment following works tender and VE; - HCV038 received from C&O and under assessment by QS; - Includes EFFC's Joinery & cabinetworks	Closed
HCV039	Structural Steel Drawing Updates	1,452.00	1,452.00	-	1,452.00	-	Design development	- Additional precast panel cost implates	Closed
HCV040	PSA - Supplier Hardware Supply	19,156.38	19,156.38	-	19,156.38	-	PSA	- Provisional sum adjustment	Closed
HCV041	PSA - Water authorities	-$ 51,256.11	-$ 51,256.11	$ -	-$ 51,256.11	$ -	PSA	- Provisional sum adjustment	Closed
HCV042	IFC Civil & Earthwork Changes	153,803.96	153,803.96	-	153,803.96	-	VE	- Revised HCV042 R1 as per latest VO from C&O following further design rationalisation; - QS assessment issued (TBA) 8/4/24 with instruction for prelims omitted	Closed
HCV043	PSA - Marmion Hill landscaping	-$ 74,200.00	-$ 74,200.00	$ -	-$ 74,200.00	$ -	PSA	- Contract provisional sum adjustment (reviewed under IFT to IFC updates Inlandscaping and curbs)	Closed
HCV044	Limestone Retaining Wall Rate	5,280.00	5,280.00	-	5,280.00	-	Client Change	- IFT to IFC revision	Closed
HCV045	A1 - D1	-$ 8,782.38	-$ 8,782.38	$ -	-$ 8,782.38	$ -	Design development	- IFT to IFC revision	Closed
HCV046	Synchrolec	68,900.00	68,900.00	-	68,900.00	-	Client Change	- VE reversal	Closed
HCV047	PSA Eastern Embankment	-$ 26,280.88	-$ 26,280.88	$ -	-$ 26,280.88	$ -	PSA	- Contract provisional sum adjustment (reviewed under IFT to IFC updates Inlandscaping and curbs)	Closed
HCV048	PSA Arthur Croque Building	10,600.00	10,600.00	-	10,600.00	-	Design development	- Contract provisional sum adjustment (reviewed under TPA's)	Closed
HCV049	Administrative store building	79,500.00	79,500.00	-	79,500.00	-	Design development	- Contract provisional sum adjustment (reviewed under TPA's)	Closed
HCV050	Bowling Green Excavations	56,159.07	56,159.07	-	56,159.07	-	Latent Condition	- Latent condition of limestone	Closed
HCV051	Kitchen Make Up Air	2,835.00	2,835.00	-	2,835.00	-	Design development	- IFT to IFC revision	Closed
									Closed
HCV053	Delete Dog Park from C&O Contract Sum	-$ 45,171.50	-$ 45,171.50	$ -	-$ 45,171.50	$ -	Client Change	- Town request; - DCWC QS review to be conducted	Closed
HCV054	Lift Shaft Ventilation	605.00	605.00	-	605.00	-	Design development	- Installation of core hole to lift shaft	Closed
HCV055	Asbestos Pipe	3,960.00	3,960.00	-	3,960.00	-	Latent Condition	- Latent Condition - Revised as per latest VO from C&O	Closed
HCVDS8.1	Electrical IFT to IFC Changes; - Additional Comms	12,176.15	12,176.15	-	12,176.15	-	Design development	- Current based on VO from C&O ; - M BY: No charge to variation cost. Cost appears fair and reasonable based on the works and quantities involved.	Closed
HCVDS8.2	Electrical IFT to IFC Changes; - Additional Sports Lighting & Ext Lighting	55,293.01	55,293.01	-	55,293.01	-	Design development	- Current based on VO from C&O ; C&O claiming + 10% - DCWC QS Assessment + 6% Margin;	Closed
HCVDS8.3	Electrical IFT to IFC Changes; - Additional Security & CCTV	18,947.50	18,947.50	-	18,947.50	-	Design development	- Current based on VO from C&O ; - M W to revisit the drawings to reconfirm the additions/deletions and resubmit updated cost for review.	Closed
HCVDS8.4	Electrical IFT to IFC Changes; - Switchboard Upgrades	104,138.96	104,138.96	-	104,138.96	-	Design development	- Current Best Case based on VO from C&O ;	Closed
HCVDS8.5	Electrical IFT to IFC Changes; - Electrical Documentation Updates	6,920.74	6,920.74	-	6,920.74	-	Design development	- Current based on VO from C&O ; - M BY: The credit applied appears fair and reasonable.	Closed
HCVDS8.6	Electrical IFT to IFC Changes; - PSA (Electrical Service Rationalisation)	45,880.00	45,880.00	-	45,880.00	-	Design development	- Current based on VO from C&O ;	Closed
HCVDS9	Bowling Green Pavement Surrounds	58,080.32	58,080.32	-	58,080.32	-	PSA	- Cost offset against $75,000 Landscape Overage Allowance; - Balance of $16,451.16 retained against further landscape HCV's	Closed
HCVDS0	Croquet / Bowls Fence	27,965.09	27,965.09	-	27,965.09	-		- Scope reduced previously: Added back in for VE reversal	Closed
HCVDS4	Soffit Linings	75,735.00	75,735.00	-	75,735.00	-	Design development	- For soffit linings to the viewing deck and balcony - VE reversal - Environmental suitability risk	Closed
HCVDS6	Southern Embankment Earthworks -	58,322.84	58,322.84	-	58,322.84	-	Latent Condition	- HCVDS6 raking and disposal of unsuitable silt in the southern embankment over May, June and July	Closed
HCVDS6a	Southern Embankment Earthworks - Aug-23	16,451.16	16,451.16	-	16,451.16	-	Latent Condition	- HCVDS6a raking and disposal of unsuitable silt in the southern embankment over Aug 2023.	Closed
HCVDS6b	Southern Embankment Earthworks - demolition rubbish	-$ 3,622.08	-$ 3,622.08	$ -	-$ 3,622.08	$ -	Latent Condition	- HCVDS6b accounts for the demolition rubbish that makes up part of HCVDS6 and HCVDS6a	Closed
									Closed
HCVDS8	Cassette Unit Fans	11,442.40	11,442.40	-	11,442.40	-	Design development	- As per latest VO from C&O due to IFT to IFC revisions following ceiling VE	Closed
HCVDS9	Fire Pump Mechanical Grilles	660.00	660.00	-	660.00	-	Design development		Closed
HCVD70	Threshold Drain Connections to Outbuildings	1,529.00	1,529.00	-	1,529.00	-	Design development	- Additional 100mm PV drainage pipework to the threshold drains of the Outbuildings.	Closed
									Closed
HCVD72	Dishwasher RO System	4,043.60	4,043.60	-	4,043.60	-	Design development	- As per latest VO from C&O based on revised kitchen equipment requirements	Closed
HCVD73	PSA Irrigation	19,704.49	19,704.49	-	19,704.49	-	Client Change	- Revised as per latest VO from C&O for retained relic	Closed
HCVD77	Redirect Existing Sewer	9,199.30	9,199.30	-	9,199.30	-	Latent Condition		Closed
HCVD78	Revised Civil Drawing	2,563.00	2,563.00	-	2,563.00	-	Design development	- Introduction of signage and markings to north carpark "drop off only" section	Closed
HCVD79	Grandstand Door Obstruction	367.30	367.30	-	367.30	-	Design development	-Coordination issue required change in door frame to allow full operational use	Closed
HCVD80	Updated Oval Fencing (Gate Qty changes)	525.00	525.00	-	525.00	-	Design development	- Original Scope : 5 x single gates + 1 x double gates - Revised Scope : 6 x single gates + 4 x double gates	Closed
HCVD82	A1.21 & SD 10 (Bar Bulkhead)	117.70	117.70	-	117.70	-	Design Development	- Bar bulkhead change	Closed
HCVD84	Acoustic Ceiling System	-$ 17,217.69	-$ 17,217.69	$ -	-$ 17,217.69	$ -	Design development	- Change inspec for acoustic plasterboard lids; - Saving will be reduced due to HCVD5 additional cost for bulkheads at windows to Gym	Closed
HCVD88	Delete Comms Racks	-$ 4,866.68	-$ 4,866.68	$ -	-$ 4,866.68	$ -	Design Development		Closed
HCVD89	FM Admin Workstation GPO's (Operator Area)	2,369.37	2,369.37	-	2,369.37	-	Design development	- supply and install of GPO outlets to Operator FM Admin area	Closed
HCVD91	Kitchen Make-Up Air (RFI-171)	8,112.50	8,112.50	-	8,112.50	-	Requested from M DY	- Clarify required why VO from M DY	Closed
HCVD96	Light Pole Footing Excavations	17,566.68	17,566.68	-	17,566.68	-	Latent Condition	- Limestone present when excavating for sports lighting poles -minimal cost as much as possible	Closed
HCVD97	Fire Pump Remote Start	2,470.88	2,470.88	-	2,470.88	-	Design development		Closed
HCVD98	Wall Mounted Fan Coil Units	1,364.00	1,364.00	-	1,364.00	-	Client Change	- Operator Request	Closed
HCV100	Kitchen Servitor Modifications	19,214.80	19,214.80	-	19,214.80	-	Client Change	- servitors connection works with kitchen back in scope	Closed
HCV102	Kitchen Exhaust Ductwork Modifications	1,463.00	1,463.00	-	1,463.00	-	Design development	- revision to kitchen exhaust riser ductwork	Closed
HCV103	Stair 3 Handrail Modifications	6,270.00	6,270.00	-	6,270.00	-	Design development	-new forecast cost relating to works for stair light to be included in handrail	Closed
HCV105	Mirror Wall Supports	11,043.40	11,043.40	-	11,043.40	-	Client Change	- Mirror supports added as per RG/Belgravia Request	Closed
HCV106	Gym Ceiling	7,096.32	7,096.32	-	7,096.32	-	Design development	- Approved by council at $10k	Closed
HCV107	Perimeter Oval Earthwork Strip	7,774.80	7,774.80	-	7,774.80	-	Client Change	- Eastern Bank - Initial Clubs & Temp Fence Removal - council approved at $20k	Closed
HCV115	Threshold Door Drain Credit	-$ 5,000.00	-$ 5,000.00	$ -	-$ 5,000.00	$ -	Credit	- Credit to keep door drains as installed, deviation from documentation. Credit is $5,000 and bar 2 wall height is the cost	Closed
HCV118	Sport Shade structures	8,966.54	8,966.54	-	8,966.54	-	PSA	- Revised as per latest correspondence from C&O; - Reduced based on standardised design for EFFC Player Shelters (SD)	Closed
HCV119	Access Control Outbuilding 2	7,519.31	7,519.31	-	7,519.31	-	Client Change	-access control for outbuilding 2 - to be partially funded by council approved $5k fund	Closed
HCV120	Hydraulic Sub Metering	5,319.05	5,319.05	-	5,319.05	-	Client Change	- Sub metering requested by ToEF	Closed
HCV121	Lift SIM Card	719.40	719.40	-	719.40	-	Client Change	-Lift SIM card activation and management	Closed
HCV122	Gym Mech Ductwork Alterations	4,191.00	4,191.00	-	4,191.00	-	Design Development	- Modifications to mech ductwork and additional bulk heads due to changes in ceiling height	Closed
				-					Closed
HCV124	Spare Bowling Green Light Pole - CREDIT	-$ 1,406.62	-$ 1,406.62	$ -	-$ 1,406.62	$ -	Credit	- Sale of unused light pole	Closed
HCV125	Soil Remediate Tie-Ins	2,695.00	2,695.00	-	2,695.00	-	Latent Condition	-further testing undertaken to ensure ground is okay	Closed
HCV126	Gym floor sled track	3,368.38	3,368.38	-	3,368.38	-	Client Change	- Operator input to add artificial turf strip to gym floor for sled track	Closed
HCV128	Lift Access Control	9,652.61	9,652.61	-	9,652.61	-	Client Change	-access control required on lift	Closed
Total Approved Variations		1,668,896.38	1,668,896.38	-	1,668,896.38				
Pending Variations									
HCV033	IFC Landscape Submission	-	-	-	-	-			Closed
HCVD56	PSA Western Power Headworks	-$ 170,480.97	-$ 170,480.97	$ -	-$ 170,480.97	$ -			
HCVD61	Limestone Pathway (PT) & Rock Pitching (PS)	5,280.66	5,280.66	-	16,768.80	10,288.05		- Works previously deleted as per Lot HCV033	
HCVD62	Revised Roof & Wall Flashings	4,481.40	4,481.40	-	4,481.40	-	Design development	-Additional flashings to grandstand roof	Pending
HCVD65	Western Power Lot Consolidation	113,157.14	113,157.14	-	113,157.14	-	Design development	- Adjacent lot works associated to Western Power upgrades - Non project cost; - Allowances and exclusions apply to HCV	Pending
HCVD67	Revised details to SLD04	1,140.70	1,140.70	-	1,140.70	-	Design development		
HCVD81	A1.20	-$ 1,118.60	-$ 1,118.60	$ -	-$ 1,118.60	$ -	Design Development		
HCVD60	Revised Joinery Details	-	4,400.00	4,400.00	-			- FM admin window change	
HCVD69	Existing Richmond House DB (RFI-275)	5,439.56	5,439.56	-	5,439.56	-	Client Change	- No allowance for repairs to existing services; - The existing cabling is assumed to be good condition but this won't be known until the works are undertaken.	Pending
HCV101	Audio Visual System - Provisional Cabling	30,375.74	30,375.74	-	30,375.74	-	Design Development		Pending
HCV104 (Rev 1)	Water Station Services	5,709.00	5,709.00	-	5,241.50		Client Change	- Services provision for water stations in health club	
HCV109	Southern Retaining Wall Heights (RFI-205)	5,335.00	5,335.00	-	3,000.00	-	Design development	- Compliance/Plan E to review reason for design change	Pending

Attachment -1

HCV110 (Rev 1)	Additional Access Panels	$ 25,300.00	$ 25,300.00	$ -	$ 25,300.00	$ -	Design Development	- Access panels in the function room are required for electrical maintenance access requirements	Pending
HCV111	Mechanical Split System Pipe Lengths (RFI#315)	$ 19,208.75	$ 19,208.75	$ -	$ -	$ 19,208.75	Design development	- Air conditioning unit has lower refrigerant pipe run capacity than current pipe run lengths - Council approved $40k - Responsibility for error likely to be disputed by C&G - Added all heli variation cost for reallocation of budget (standalone)	Pending
HCV112	Skatepark Structural Design - Geotech	$ 4,070.00	$ 4,070.00	$ -	$ 4,070.00	$ -	Latent Condition	- Investigatory geotech survey completed.	
HCV114	Revised Security Design	$ 15,298.96	$ 15,298.96	$ -	$ 15,298.96	$ -	Client Change	- Access Control Changes - Items ranked number 1 importance - Council approved $20k	Pending
HCV116	Additional CFC PAA Lunidad Panels	$ 1,336.67	$ 1,336.67	$ -	$ 1,336.67	$ -	Design development	-	
HCV117	Lighting Control (DALI Cable)	$ 1,847.34	$ 1,847.34	$ -	$ 1,847.34	$ -	Client Change	- Provision for DALI lighting with cable in ceiling.	
HCV127	Whitegoods and Gym Fixtures	$ 5,564.20	$ 5,564.20	$ -	$ 5,564.20	$ -			
HCV129	Handrail Design Compliance	$ 2,250.00	$ 2,250.00	$ -	$ 2,250.00	$ -	Design Development	- Handrail required to be modified to reach to ambient requirements.	
HCV130	Connection Plate Flashing & Status Inside Cover Plate	$ 2,618.00	$ 2,618.00	$ -	$ 2,618.00	$ -			
HCV133	Flashing Cover Details	$ -	$ 605.00	$ 605.00	$ -	$ 605.00			
HCV135	Hinges to Anodised Frames	$ 2,437.60	$ 2,437.60	$ -	$ 8,500.00	$ 6,062.40		- Hinges on servery windows only, are not anodised bronze, cost to allow for powdercoat	
HCV136	FF Amenities Locker Changes	$ 10,516.00	$ 10,516.00	$ -	$ 10,516.00	$ -		client changes to health club lockers	
HCV137	AV Package (Main Building)	$ 227,842.00	$ 227,842.00	$ -	$ 227,842.00	$ -			
HCV143	AV Package (EF/C)	$ 17,203.49	$ 17,203.49	$ -	$ 17,203.49	$ -			
HCV138	Gym Electrical Light Fittings	$ 1,615.96	$ 1,615.96	$ -	$ 1,615.96	$ -		- compliance changes - helight changes to exit signs and wider motion sensors range	
HCV139	Locke Park Tree Removal	$ 3,166.03	$ 3,166.03	$ -	$ 1,000.00	$ 2,166.03			
HCV140	Landscape Reductions	$ 14,243.73	$ 14,243.73	$ -	$ 10,000.00	$ 4,243.73			
HCV141	PSA - Statutory Signage and Wayfinding	$ -	$ 31,666.20	$ 31,666.20	$ 31,666.20	$ -	Client Change	- Descoping of wayfinding package	
HCV142	F12 Balustrading	$ 3,916.00	$ 3,916.00	$ -	$ 3,916.00	$ -	Design development	- pending to croquet if retain wall	
HCV145	Backflow Preventilon Devices	$ 20,469.50	$ 20,469.50	$ -	$ 20,469.50	$ -	Design Development	- Requested by Water Corp	
HCV146 (Rev 1)	Tree Clash with Pathway	$ 6,210.07	$ 6,210.07	$ -	$ 8,541.50	$ 2,331.43	Design Development	- Ramp to bus stop inline with tree, cost is to extend pathway around tree and add grate	
HCV147	Function Area Bar Top	$ 13,673.00	$ 13,673.00	$ -	$ 13,673.00	$ -	Client Change	-Tied oak bar top cannot be reused - change to corian bar top for main function bar	
HCV148	Function Room Feature Ceilings	$ 14,652.00	$ 14,652.00	$ -	$ 17,820.00	$ 3,168.00			
HCV149	Landscape Glass Racking	$ 1,760.00	$ 1,760.00	$ -	$ 1,760.00	$ -		- racking to lamicasing for glass bottles	
HCV151	Umpire Cubicle Clearance	$ 4,276.30	$ 4,276.30	$ -	$ 4,276.30	$ -		- Changes in the umpire change room, to allow greater width between wall and cubicles	
HCV152	Ambulant Toilet Non-Compliance	$ -	$ 11,560.00	$ 11,560.00	$ -	$ 11,560.00			
HCV153	Power Supply for CO2 Monitor	$ 403.70	$ 403.70	$ -	$ 403.70	$ -			
HCV154	Timber Battens for Sunshades	$ 12,662.80	$ 12,662.80	$ -	$ 12,662.80	$ -		- Cost is for extra timber battens for craft strata shuckres	
HCV155	Mini Sock & Flagpoles	$ 7,117.00	$ 7,117.00	$ -	$ 7,117.00	$ -		- New wind sock and flag pole to the Bowls Greens	
HCV156	Bar 2 Servery Door	$ 4,620.00	$ 4,620.00	$ -	$ 4,620.00	$ -	Design Development	- Change to specified door due to availability	
HCV157	Gym Ductwork Clearance	$ 2,464.00	$ 2,464.00	$ -	$ 2,464.00	$ -		- No allowance for A/C split supply & installation required	
HCV158	Viewing Deck & Balcony Finish	$ 13,117.50	$ 13,117.50	$ -	$ 13,117.50	$ -	Design Development		
HCV159	Tree Deletion	$ 5,560.12	$ 5,560.12	$ -	$ 5,560.12	$ -		- credit for tree deletions	
HCV160	Southern Balcony Glass	$ 550.00	$ 550.00	$ -	$ 550.00	$ -	Design Development	- Change due to compliance all balustrade adjacent	
HCV161	Toilet Make Up Air	$ 5,000.00	$ 6,281.00	$ 1,281.00	$ 6,281.00	$ -	Design development		
HCV162	Tapware Extensions	$ -	$ 2,788.50	$ 2,788.50	$ -	$ 2,788.50			
HCV163	Western Power Headworks Delays (EoT 4)	$ 58,560.00	$ 58,560.00	$ -	$ -	$ 58,560.00			
HCV164	Vertical Door Seals	$ -	$ 2,679.28	$ 2,679.28	$ 2,679.28	$ -	Design Development		
HCV167	Handrail Design Compliance	$ 20,000.00	$ 22,671.00	$ 2,671.00	$ 22,671.00	$ -		- compliance issue with requirement to modify.	
						$ -			
Total Pending Variation c		$ 660,372.93	$ 646,181.61	$ 6,851.42	$ 623,394.24	$ 8,044.87			
Forecast C&G inc									Open
C&G forecast VO's		$ 15,000.00	$ 15,000.00	$ -	$ 15,000.00	$ -	Design development	- New forecast cost Anticipated VO's to be submitted by C&G - Best case based on possible lesser value	Open
Misc -		$ 15,000.00	$ 15,000.00	$ -	$ 15,000.00	$ -			
Electrical Headworks PSA		$ -	$ -	$ -		$ -	PSA	- Best case based on remaining sum to Electrical Headworks PSA no being utilised as allocated; - WIP Headworks PSA $221,000	Open
Replace Richmond House existing cabling		$ 5,000.00	$ -	$ 5,000.00	$ -	$ -	Latent Condition		
GPO s for wall mounted fans		$ 2,818.06	$ 2,818.06	$ -	$ 2,828.06	10.00	Client Change	- Operator Request	
Legal Fees over spend		$ -	$ -	$ -	$ -	$ -	Professional Fees	- Legal Fees overspend up to 19/10/23	
Limestone to oval		$ -	$ -	$ -	$ -	$ -		- Council approved - risk item for oval limestone to be removed for soil planting	
Waste management for FF&E		$ 4,000.00	$ -	$ 4,000.00	$ 4,000.00	$ 4,000.00		- Council approved - contingency for packaging to be removed once FF&E onsite	
Water fountains in Gym		$ -	$ -	$ -	$ -	$ -		- Council approved - supply and install of water fountain units - Unit spec to be confirmed - $10,000 for water fountain	
Gym Fans		$ -	$ -	$ -	$ -	$ -		- Council approved - supply and install fans - fan spec to be confirmed - included in HCV127	
Mirrors in Gym		$ -	$ -	$ -	$ -	$ -		- Council approved - mirror spec? - by C&G? - included in HCV127	
Outdoor Furniture (Croquet)		$ 2,000.00	$ 2,000.00	$ -	$ 2,000.00	$ -		- Council approved	
Western Power Additional Conduits		$ -	$ -	$ -	$ 3,000.00	$ 3,000.00		- Additional conduits required as per WIP design	
Statutory and Wayfinding Signage Provisional Sum		$ 50,000.00	$ -	$ 50,000.00	$ 50,000.00	$ 50,000.00		- accounted about in HCV141	
Statutory Signage Reconciliation		$ 5,000.00	$ -	$ 5,000.00					
Wayfinding Signage Reconciliation		$ 45,000.00	$ -	$ 45,000.00	$ 63,462.00	$ 63,462.00		- Tradepackage received and under review	
Main Entrance Signage		$ -	$ 15,000.00	$ 15,000.00	$ 10,000.00	$ 5,000.00		- Main entrance sign	
Western Power Headworks Provisional Sum		$ -	$ -	$ -		$ -			
WIP Early Undertaking Equipment Cost		$ 58,735.19	$ 58,735.19	$ -	$ -	$ 58,735.19			
WIP Depot Headworks Payment		$ -	$ -	$ -	$ -	$ -		- Confirm if $24.7k is already included in HCV 065	
Builders work		$ -	$ -	$ -	$ -	$ -			
Legal Overspend		$ 10,053.00	$ 32,832.91	$ 17,779.91	$ 50,000.00	$ 22,832.91			
Consultant fees		$ 50,000.00	$ 50,000.00	$ -	$ 50,000.00	$ -		- DCWC ; NDY Catering & PA; Plan E Landscape	
Skatepark Curbing and Steps		$ 5,000.00	$ 5,000.00	$ -	$ 2,000.00	$ 3,000.00		- Design coordination between Cull and Landscaping	
NBN Reduction against Forum		$ 5,000.00	$ -	$ 5,000.00	$ 5,000.00	$ 5,000.00		- NBN Provisional Sum reduction	
Additional Sport Eng Walls		$ 8,000.00	$ 8,000.00	$ -	$ -	$ 8,000.00			
Keg Room Ventilation		$ 2,000.00	$ 1,353.00	$ 647.00	$ 500.00	$ 853.00			
Skate Zone Lighting Timer		$ 2,000.00	$ 825.00	$ 1,175.00	$ 500.00	$ 325.00		- Separate timer for the skatezone lights	
ESD Sustainability Report		$ -	$ -	$ -	$ 8,500.00	$ 8,500.00		- Post PC expenditure	
Wheel Stop Location		$ -	$ 6,600.00	$ 6,600.00		$ 6,600.00		- To align with standards when backing into spots	
Integrill System (Security & Access)		$ -		$ -		$ -		- Protect cost for Belgravia cost	
Scalewell Grates		$ -		$ -		$ -			
Additional Bowls Temp Accomodation Costs		$ -	$ -	$ -	$ -	$ -		- Additional temp accomodation cost is all $615 a week - OPERATIONAL COST	
Site Fencing Additional Hire		$ -	$ -	$ -	$ -	$ -		- Additional site fencing hire post PC - OPERATIONAL COST ($4,200)	
Rotunda Power Supply		$ -	$ 5,500.00						
Emergency Egress Signage - Function Area		$ -	$ 2,750.00						
Emergency Exit FF Group Room		$ -	$ 2,200.00						
Function Bar Towel & Soap Dispenser		$ -	$ 330.00						
Gym TV Alterations		$ -	$ 8,250.00						
PSA Landscape Items		$ -	$ 31,200.00						
Soutter Carpark Light Pole		$ -	$ 5,500.00						
Roll on Grass Eastern Embankment Extension		$ -	$ 5,000.00						
Tree relocation x 2		$ -	$ -						
		$ -		$ -		$ -			
Total Pending Variation c		$ 170,808.26	$ 208,447.18	$ 37,667.91	$ 122,790.06	$ 36,377.10			
		Previous Report 24/05/2024	Revised as at 30/04/2024	Movement	Exit Case				
Contingency		$ 131,174.86	$ 131,333.44	$ 158.58	$ 94,471.27				

COOPER & OXLEY
Cooper & Oxley
Unit 26, Level 6, 34 Charles Street
South Perth , Western Australia 6151
Australia

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Job #: 2028 East Fremantle Oval Redevelopment
Moss Street
East Fremantle Western Australia. 6157

Variations: Head Contract (178)

Contract	#	Revision	Title	Date Initiated	Contract Company	Designated Reviewer	Due Date	Review Date	Status	Amount
Head Contract #1	001	0	Preconstruction Services	9/12/22	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)	13/1/23	27/12/22	Approved	$14,806.00
Head Contract #1	002	1	In-Ground Foundation Changes (Main Building)	30/1/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		31/3/23	Approved	$64,367.22
Head Contract #1	003	0	Precast Panel Formliner	30/1/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		23/3/23	Approved	$16,744.21
Head Contract #1	004	1	Temporary Irrigation Works	30/1/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		4/12/23	Approved	$8,619.60
Head Contract #1	005	1	Oval Rooting Material (RFI-050)	6/2/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		21/3/23	Approved	$27,752.73
Head Contract #1	006	0	Carpark 4 Deletion (RFI-064)	6/2/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		4/12/23	Approved	($3,294.66)
Head Contract #1	007	1	Ceramic Tiling IFC Changes	7/2/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		23/3/23	Approved	$132.55
Head Contract #1	008	0	Turfmaster Discount	14/2/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		4/12/23	Approved	($2,506.00)
Head Contract #1	009	0	IFC Precast Panel Changes	21/2/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		1/8/23	Approved	$12,784.13
Head Contract #1	010	0	Richmond House Trafficable Footpath Section	22/2/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		21/3/23	Approved	$1,726.98
Head Contract #1	011	0	Delete Mowing Curb	24/2/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		21/3/23	Approved	($34,989.70)
Head Contract #1	012	0	Provisional Sum Adjustment (Bowls Club TA)	27/2/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		21/3/23	Approved	$28,304.25
Head Contract #1	013	0	Richmond House Ramp (RFI-083)	28/2/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			Void	$0.00
Head Contract #1	014	0	Insitu & Precast Wall Connection Detail Change	7/3/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			Void	$0.00
Head Contract #1	015	0	Additional Concrete Thickening (RFI-088)	8/3/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		22/5/23	Approved	$2,784.23
Head Contract #1	016	0	Civil Drainage & Hydraulic Design Changes (RFI-071)	9/3/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		15/6/23	Approved	$15,353.80
Head Contract #1	017	1	Northern Embankment Material Disposal (RFI-086)	9/3/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		28/4/23	Approved	$61,081.86
Head Contract #1	018	0	Hydraulic Water Main Clash (RFI-091)	9/3/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		5/10/23	Approved	$3,046.59
Head Contract #1	019	0	Provisional Sum Adjustment (Kitchen Equipment & Cool Rooms)	13/3/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		15/3/23	Approved	$408,668.16
Head Contract #1	020	0	Oval Irrigation Credit	13/3/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		15/6/23	Approved	($41,765.91)
Head Contract #1	021	0	Provisional Sum Adjustment (Delete Perforated Screens to Building Façade)	13/3/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		22/5/23	Approved	$9,579.51
Head Contract #1	022	0	IFC Documentation Delays (EOT 02)	15/3/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		12/7/23	Approved	$27,524.00
Head Contract #1	023	0	Beer Line to Café (RFI-103)	16/3/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		5/10/23	Approved	$887.70
Head Contract #1	024	0	Ground Floor Slab Edge Detail	17/3/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		22/5/23	Approved	$3,630.00
Head Contract #1	025	0	Provisional Sum Adjustment (Limestone Retaining Wall)	22/3/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		25/1/24	Approved	($128,953.24)
Head Contract #1	026	0	Temporary Walkway Lighting to Bowls Club	22/3/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		22/5/23	Approved	$2,127.88
Head Contract #1	027	0	Provisional Sum Adjustment (Tapware & Fixture Supply)	23/3/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		22/5/23	Approved	($9,599.87)
Head Contract #1	028	1	Provisional Sum Adjustment (Delete Ceilings to Football Club)	27/3/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		22/5/23	Approved	$121,173.54
Head Contract #1	029	0	Provisional Sum Adjustment (Concrete Post Tensioning)	27/3/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		22/5/23	Approved	$38,689.10
Head Contract #1	030	0	IFC Structural Steel Changes	27/3/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		1/8/23	Approved	$68,239.00
Head Contract #1	031	1	Provisional Sum Adjustment (Aramax Canopy Redesign)	27/3/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		22/5/23	Approved	($89,632.33)
Head Contract #1	032	0	IFC Masonry Changes	28/3/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		31/8/23	Approved	$20,788.90

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Contract	#	Revision	Title	Date Initiated	Contract Company	Designated Reviewer	Due Date	Review Date	Status	Amount
Head Contract #1	033	1	IFC Landscape Changes	28/3/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		2/4/24	Approved	$0.00
Head Contract #1	034	0	IFC Partition Walls, Ceilings & Claddings Changes	29/3/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		31/8/23	Approved	$31,829.55
Head Contract #1	035	0	IFC Door Hardware Changes	31/3/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		28/7/23	Approved	($303.91)
Head Contract #1	036	0	Grandstand Seating Spares (RFI-117)	4/4/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		12/7/23	Approved	$4,338.40
Head Contract #1	037	0	IFC Window Changes	4/4/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		31/8/23	Approved	$30,596.50
Head Contract #1	038	3	Provisional Sum Adjustment (Joinery, Cabinetwork & Feature Linings)	6/4/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		25/1/24	Approved	$22,943.70
Head Contract #1	039	0	Structural Steel Drawing Updates (RFI-113)	11/4/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		23/10/23	Approved	$1,452.00
Head Contract #1	040	2	Provisional Sum Adjustment (Sanitary Hardware Supply)	12/4/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		12/7/23	Approved	$19,156.38
Head Contract #1	041	0	Provisional Sum Adjustment (Water Authority Charges)	18/4/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		22/5/23	Approved	($51,298.11)
Head Contract #1	042	2	IFC Civil Earthwork Changes	18/4/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		31/8/23	Approved	$153,903.95
Head Contract #1	043	0	Provisional Sum Adjustment (Marmion Hill Landscape)	19/4/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		25/1/24	Approved	($74,200.00)
Head Contract #1	044	0	Limestone Retaining Wall Rake (RFI-126)	20/4/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		28/7/23	Approved	$5,280.00
Head Contract #1	045	0	Revised Architectural Drawings (AI-01)	26/4/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		12/7/23	Approved	($8,782.38)
Head Contract #1	046	0	Provisional Sum Adjustment (Delete Sunshades ESS-01)	27/4/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		15/6/23	Approved	$68,900.00
Head Contract #1	047	0	Provisional Sum Adjustment (Eastern Embankment)	3/5/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		23/10/23	Approved	($26,880.88)
Head Contract #1	048	0	Provisional Sum Adjustment (Adjust Croquet Building)	3/5/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		28/7/23	Approved	$10,600.00
Head Contract #1	049	0	Provisional Sum Adjustment (Adjust Activity Zone Building)	3/5/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		28/7/23	Approved	$79,500.00
Head Contract #1	050	0	Bowling Green Excavations (RFI-138)	10/5/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		28/6/23	Approved	$56,159.07
Head Contract #1	051	0	Kitchen Make Up Air (RFI-139)	17/5/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		23/10/23	Approved	$2,585.00
Head Contract #1	052	0	GF Function Area Wall & Ceiling Changes (RFI-137, AI-08 & AI-10)	17/5/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			No Charge	$0.00
Head Contract #1	053	0	Delete Dog Park (SD008)	17/5/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		11/3/24	Approved	($45,171.50)
Head Contract #1	054	0	Lift Shaft Ventilation (AI-09)	19/5/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		23/10/23	Approved	$605.00
Head Contract #1	055	0	Asbestos Pipe Removal (SD007)	24/5/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		23/10/23	Approved	$3,960.00
Head Contract #1	056	1	Provisional Sum Adjustment (Western Power Headworks)	24/5/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		2/4/24	Approved	($170,460.97)
Head Contract #1	057	0	Bowls Club Retaining Wall Demolition (RFI-111)	24/5/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			Pending - Not Proceeding	$0.00
Head Contract #1	058a	0	Electrical Tender to IFC Changes (Adjustment)	11/3/24	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		11/3/24	Approved	($9,194.56)
Head Contract #1	058	4	Electrical Tender to IFC Changes	25/5/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		31/1/24	Approved	$252,850.51
Head Contract #1	059	0	Bowling Green Pavement Surrounds (RFI-158)	25/5/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		23/10/23	Approved	$58,080.32
Head Contract #1	060	0	Bowls Club Fencing Scope	25/5/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		11/3/24	Approved	$27,965.09
Head Contract #1	061	1	Limestone Pathway & Rock Pitching	25/5/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		2/4/24	Approved	$5,890.55
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Contract	#	Revision	Title	Date Initiated	Contract Company	Designated Reviewer	Due Date	Review Date	Status	Amount
Head Contract #1	062	0	Revised Roof & Wall Flashings (RFI-161 & AI-11)	9/6/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		2/4/24	Approved	$4,481.40
Head Contract #1	063	0	Richmond House Fencing (RFI-162 & AI-12)	19/6/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			Void	$8,811.94
Head Contract #1	064	0	Soffit Lining to Balconies (AI-13)	23/6/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		7/12/23	Approved	$75,735.00
Head Contract #1	065	2	Western Power Lot Consolidation	23/6/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			Pending - In Review	$113,157.14
Head Contract #1	066b	0	Southern Embankment Earthworks (RFI-131)	18/9/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		18/12/23	Approved	($3,292.80)
Head Contract #1	066a	0	Southern Embankment Earthworks - August-23 (RFI-131)	29/7/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		31/8/23	Approved	$16,451.16
Head Contract #1	066	0	Southern Embankment Earthworks - May/June/July-23 (RFI-131)	28/6/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		1/8/23	Approved	$98,322.84
Head Contract #1	067	0	Revised Details to SLD04 (RFI-164 & AI-14)	28/6/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		2/4/24	Approved	$1,140.70
Head Contract #1	068	0	Cassette Unit Fans (RFI-081)	28/6/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		25/1/24	Approved	$11,422.40
Head Contract #1	069	0	Fire Pump Room Mechanical Grilles (RFI-168 & AI-15)	28/6/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		25/1/24	Approved	$550.00
Head Contract #1	070	0	Threshold Drain Connections to Outbuildings (RFI-179)	4/7/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		23/10/23	Approved	$1,529.00
Head Contract #1	071	0	North West Mowing Kerb Level Changes (RFI-174)	5/7/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			No Charge	$0.00
Head Contract #1	072	0	Dishwasher RO System	6/7/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		23/10/23	Approved	$4,043.60
Head Contract #1	073	0	Provisional Sum Adjustment (Irrigation)	17/7/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		23/10/23	Approved	($19,704.49)
Head Contract #1	074	0	Door Hardware & Frame Changes (RFI-224)	18/7/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			No Charge	$0.00
Head Contract #1	075	0	Additional Electrical GPO's (RFI-199)	24/7/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			No Charge	$0.00
Head Contract #1	076	0	Fire Tank Plinth Size (RFI-210)	24/7/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			No Charge	$0.00
Head Contract #1	077	0	Redirect Existing Sewer (RFI-134)	29/7/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		18/12/23	Approved	$9,199.30
Head Contract #1	078	0	Revised Civil Drawing (C-003 R2)	29/7/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		18/12/23	Approved	$2,563.00
Head Contract #1	079	0	Grandstand Door Obstruction (RFI-214)	1/8/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		18/12/23	Approved	$357.50
Head Contract #1	080	0	Updated Oval Fencing	2/8/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		8/11/23	Approved	$907.50
Head Contract #1	081	0	Updated Architectural Drawings (AI-20)	4/8/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			Pending - In Review	($1,118.60)
Head Contract #1	082	0	Updated Architectural Drawings (AI-21 & SD-10)	4/8/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		11/3/24	Approved	$117.70
Head Contract #1	083	0	Changeroom Bulkheads (RFI-232)	8/8/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		2/4/24	Approved	$9,509.50
Head Contract #1	084	0	Acoustic Ceiling System (AI-22)	9/8/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		23/10/23	Approved	($17,217.69)
Head Contract #1	085	0	Syphonic Downpipe to Quad Gutter (RFI-213)	9/8/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			No Charge	$0.00
Head Contract #1	086	0	Revised Roller Shutter Details (RFI-227)	9/8/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			No Charge	$0.00
Head Contract #1	087	0	Stair 3 Finish (RFI-229)	9/8/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			No Charge	$0.00

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Contract	#	Revision	Title	Date Initiated	Contract Company	Designated Reviewer	Due Date	Review Date	Status	Amount
Head Contract #1	088	0	Delete Comms Racks (RFI-197)	14/8/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		18/12/23	Approved	($4,656.58)
Head Contract #1	089	0	FM Admin Workstation GPO's (RFI-243)	15/8/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		11/3/24	Approved	$2,359.37
Head Contract #1	090	0	Revised Joinery Details (RFI-224 & AI-23)	16/8/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			Draft	$4,400.00
Head Contract #1	091	0	Kitchen Make-Up Air (RFI-171)	17/8/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		18/12/23	Approved	$8,112.50
Head Contract #1	092	0	Tree Relocation (SD-11)	21/8/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			No Charge	$0.00
Head Contract #1	093	0	Grandstand Waterproofing (RFI-241)	23/8/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			No Charge	$0.00
Head Contract #1	094	0	Revised Flooring Layout & Tactile Specification (AI-24)	23/8/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			Void	$6,341.50
Head Contract #1	095	0	Light Tower Locations (RFI-242)	24/8/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			No Charge	$0.00
Head Contract #1	096	1	Light Pole Footing Excavations (RFI-200)	24/8/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		11/3/24	Approved	$17,565.68
Head Contract #1	097	0	Fire Pump Remote Start (RFI-256)	30/8/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		25/1/24	Approved	$2,470.88
Head Contract #1	098	1	Wall Mounted Fan Noggings	1/9/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		2/4/24	Approved	$4,182.06
Head Contract #1	099	0	Existing Richmond House DB (RFI-279)	4/9/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		2/4/24	Approved	$5,439.56
Head Contract #1	100	0	Kitchen Service Modifications (RFI-347)	8/9/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		11/3/24	Approved	$19,214.80
Head Contract #1	101	0	Audio Visual System (RFI-136)	8/9/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		2/4/24	Approved	$30,375.74
Head Contract #1	102	0	Kitchen Exhaust Ductwork Modifications	11/9/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		25/1/24	Approved	$1,463.00
Head Contract #1	103	0	Stair 3 Handrail Modifications (RFI-217)	13/9/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		18/12/23	Approved	$6,270.00
Head Contract #1	104	1	Water Station Services	19/9/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		2/4/24	Approved	$5,709.00
Head Contract #1	105	0	Mirror Wall Supports	27/9/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		25/1/24	Approved	$11,048.40
Head Contract #1	106	1	Gym Ceiling (RFI-311)	29/9/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		18/12/23	Approved	$7,096.32
Head Contract #1	107	0	Perimeter Oval Earthwork Strip	29/9/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		2/4/24	Approved	$7,774.80
Head Contract #1	108	0	Hydraulic Plant Power Provisions (RFI-289)	2/10/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			No Charge	$0.00
Head Contract #1	109	0	Southern Retaining Wall Heights (RFI-205)	2/10/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		2/4/24	Approved	$5,885.00
Head Contract #1	110	2	Additional Access Panels (RFI-266)	3/10/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			Pending - In Review	$25,300.00
Head Contract #1	111	0	Mechanical Unit Design Changes (RFI-315)	4/10/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			Pending - In Review	$38,417.50
Head Contract #1	112	0	Skatepark Structural Design (SD012 & RFI-322)	10/10/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		2/4/24	Approved	$4,070.00
Head Contract #1	113	0	Bar Design Details (RFI-348 & AI-25)	17/10/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			Pending - In Review	$162.25
Head Contract #1	114	0	Revised Security Design	17/10/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		2/4/24	Approved	$15,298.95
Head Contract #1	115	0	Threshold Door Drains	17/10/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		25/1/24	Approved	($5,000.00)
Head Contract #1	116	0	Additional CFC PAA Lumiclad Panel (RFI-354)	17/10/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		2/4/24	Approved	$1,336.67
Head Contract #1	117	0	Lighting Control (RFI-288)	19/10/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		2/4/24	Approved	$1,847.34

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Head Contract #1	118	0	Provisional Sum Adjustment (Shade Structures)	24/10/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		25/1/24	Approved	$8,966.54
Head Contract #1	119	0	Outbuilding 2 Access Control	24/10/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		11/3/24	Approved	$7,519.31
Head Contract #1	120	0	Hydraulic Sub-Metering	26/10/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		11/3/24	Approved	$5,319.05
Head Contract #1	121	0	Lift SIM Card (RFI-351)	26/10/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		18/12/23	Approved	$719.40
Head Contract #1	122	0	Gym Mechanical Ductwork Alterations (RFI-361)	26/10/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		11/3/24	Approved	$4,191.00
Head Contract #1	123	0	Circulation Room Joinery (RFI-337)	27/10/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			Void	$0.00
Head Contract #1	124	0	Light Pole Credit	27/10/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		18/12/23	Approved	($1,406.62)
Head Contract #1	125	0	Soil Nematode Test (RFI-272)	31/10/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		18/12/23	Approved	$2,695.00
Head Contract #1	126	0	Gym Floor Sled Track	1/11/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		11/3/24	Approved	$3,368.38
Head Contract #1	127	0	Whitegoods and Gym Fixtures (SD014)	10/11/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		30/1/24	Approved	$45,564.20
Head Contract #1	128	0	Lift Access Control (RFI-304)	20/11/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		18/12/23	Approved	$9,388.61
Head Contract #1	129	2	Handrail Design Compliance	30/11/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		2/4/24	Approved	$2,250.00
Head Contract #1	130	0	Connection Plate Flashing & Balustrade Cover Plate (AI-26)	4/12/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		2/4/24	Approved	$2,618.00
Head Contract #1	131	0	WP Easement Scope of Works	7/12/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			Void	$0.00
Head Contract #1	132	0	Gym Plant Deck Internal Wall Finish (RFI-389)	19/12/23	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			No Charge	$0.00
Head Contract #1	133	0	Flashing Over Cleats	8/1/24	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			Draft	$605.00
Head Contract #1	134	0	Skirting Duct Replacement (RFI-409)	11/1/24	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		2/4/24	Approved	$8,332.50
Head Contract #1	135	0	Hinges to Anodised Frames	11/1/24	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		2/4/24	Approved	$2,437.60
Head Contract #1	136	0	FF Amenities Locker Changes (SD019)	17/1/24	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		2/4/24	Approved	$10,516.00
Head Contract #1	137	1	Audio Visual Package (Main Building)	17/1/24	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		2/4/24	Approved	$230,472.35
Head Contract #1	138	0	Gym Electrical Fitting Changes	17/1/24	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			Pending - In Review	$1,615.96
Head Contract #1	139	0	Locke Park Tree Removal (SD021)	22/1/24	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		2/4/24	Approved	$3,166.03
Head Contract #1	140	1	Landscape Scope Reduction	22/1/24	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		2/4/24	Approved	($19,847.67)
Head Contract #1	141	1	Provisional Sum Adjustment (Statutory & Wayfinding Signage)	23/1/24	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			Pending - In Review	($31,556.20)
Head Contract #1	142	0	F12 Balustrading (RFI-408)	24/1/24	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			Pending - In Review	$3,916.00
Head Contract #1	143	1	Audio Visual Package (Football Club)	24/1/24	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		2/4/24	Approved	$17,203.49
Head Contract #1	144	0	Café Painting Protection Screening	25/1/24	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			Void	$3,784.00
Head Contract #1	145	0	Backflow Prevention Devices (RFI-413)	29/1/24	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		2/4/24	Approved	$20,469.90
Head Contract #1	146	1	Tree Clash with Pathway (RFI-420)	29/1/24	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			Pending - In Review	$6,210.07
Head Contract #1	147	0	Function Area Bar Top (SD020)	30/1/24	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		2/4/24	Approved	$13,673.00

Total: $2,142,948.82

COOPER & OXLEY

Cooper & Oxley
Unit 26, Level 6, 34 Charles Street
South Perth , Western Australia 6151
Australia

Printed on Thu 11 Apr 2024 at 02:20 pm AWST

Job #: 2028 East Fremantle Oval Redevelopment
Moss Street
East Fremantle Western Australia. 6157

Contract	#	Revision	Title	Date Initiated	Contract Company	Designated Reviewer	Due Date	Review Date	Status	Amount
Head Contract #1	148	1	Function Room Feature Ceilings (RFI-303)	5/2/24	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			Pending - In Review	$14,652.00
Head Contract #1	149	0	Landscape Glass Racking (SD022)	7/2/24	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		2/4/24	Approved	$1,760.00
Head Contract #1	150	0	Delete Landscape Scope	12/2/24	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		2/4/24	Approved	($20,567.82)
Head Contract #1	151	0	Umpires Cubicle Clearance	15/2/24	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			Pending - In Review	$4,876.30
Head Contract #1	152	0	Ambulant Toilet Non-Compliance	15/2/24	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			Draft	$11,550.00
Head Contract #1	153	0	Power Supply for CO2 Monitor (SD026)	20/2/24	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			Pending - In Review	$403.70
Head Contract #1	154	0	Timber Battens for Sunshades (SD027)	20/2/24	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			Pending - In Review	$12,592.80
Head Contract #1	155	0	Wind Sock and Flagpoles (SD028)	20/2/24	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		2/4/24	Approved	$7,117.00
Head Contract #1	156	0	Bar 2 Servery Door (RFI-440)	21/2/24	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			Pending - In Review	$4,620.00
Head Contract #1	157	0	Gym Ductwork Clearance (SD031)	27/2/24	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		2/4/24	Approved	$2,464.00
Head Contract #1	158	0	Viewing Deck & Balcony Finish (RFI-203)	29/2/24	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		11/3/24	Approved	$13,117.50
Head Contract #1	159	0	Tree Deletions (SD032)	1/3/24	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		2/4/24	Approved	($5,560.12)
Head Contract #1	160	0	Southern Balcony Glass (SD034)	6/3/24	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			Pending - In Review	$550.00
Head Contract #1	161	0	Toilet Make Up Air (RFI-431 & SD035)	6/3/24	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			Draft	$6,281.00
Head Contract #1	162	0	Tapware Extensions (RFI-405)	7/3/24	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			Draft	$2,788.50
Head Contract #1	163	0	Western Power Headworks Delays (EOT 04)	11/3/24	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)		2/4/24	Approved	$58,980.00
Head Contract #1	164	0	Vertical Door Seals (RFI-449)	2/4/24	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			Pending - In Review	$2,579.28
Head Contract #1	165	0	Wheel Stop Set Out (SD038)	2/4/24	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			Draft	$6,600.00
Head Contract #1	166	0	Skatepark Lighting Time Clock	2/4/24	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			Draft	$825.00
Head Contract #1	167	0	Handrail Design Compliance (RFI-453 & SD041)	4/4/24	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			Pending - In Review	$22,671.00
Head Contract #1	168	0	Post Mix Room Vent Hole	4/4/24	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			Draft	$1,353.00
Head Contract #1	169	0	Rotunda Power Supply (RFI-447)	4/4/24	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			Draft	$5,500.00
Head Contract #1	170	0	Emergency Egress Signage - Function Area 1 (SD043)	11/4/24	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			Draft	$2,750.00
Head Contract #1	171	0	Emergency Exit FF Group Room (SD044)	11/4/24	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			Draft	$2,200.00
Head Contract #1	172	0	Function Bar Towel & Soap Dispenser (RFI-460)	11/4/24	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			Draft	$880.00
Head Contract #1	173	0	Gym TV Alterations	11/4/24	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			Draft	$8,250.00
Head Contract #1	174	0	Provisional Sum Adjustment (Landscape Items)	11/4/24	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			Draft	($31,800.00)
Head Contract #1	175	0	Southern Carpark Light Pole (RFI-457)	11/4/24	Town of East Fremantle	Smith, Ryan (Cooper & Oxley)			Draft	$5,500.00

Total: $2,142,948.82

DA85 EAST FREMANTLE OVAL PRECINCT REDEVELOPMENT PROJECT (CEO)

Objective of Delegation: To ensure the timely process for approval of project variations for the East Fremantle Oval Precinct Redevelopment Project (Only).

Extent of Delegation: The authority to the CEO only for individual variations up to a maximum of $50,000, subject to an aggregate project limit of $500,000

Conditions imposed:

1. Project Variations up to $50,000 must be reported to the Project Steering Committee.
2. Contract variations more than $50,000 require Council's approval.
3. This authority is only valid for the delivery of the East Fremantle Oval Precinct Redevelopment Project.
4. Compliance with "General Standards of Delegation"

Delegation by Council to:	Chief Executive Officer
Delegation by Chief Executive Officer to:	Nil
Formal Record:	Recorded in central records system
Heads of Power:	***Local Government Act 1995 s5.42***
Last Reviewed:	
Date adopted:	15 June 2021

Mayor O'Neill returned to the meeting at 7.23pm and resumed the Chair. It was noted that he did not speak or vote on the previous Item.

13.7 EAST FREMANTLE COMMUNITY PARK GAP ANALYSIS

Report Reference Number	OCR-2715
Prepared by	Andrew Malone, Executive Manager Regulatory Services
Supervised by	Jonathan Throssell, Chief Executive Officer
Meeting date	Tuesday, 16 April 2024
Voting requirements	Absolute Majority
Documents tabled	Nil
Attachments	

1. **Gap Analysis (Full Fat Consulting)**

PURPOSE

The purpose of this report is provide Council with a gap analysis review of the East Fremantle Community Park project and to request additional funds to engage suitable resources to address the matters identified.

EXECUTIVE SUMMARY

This report should be read in conjunction with the report to Council regarding the Head Contact variations.

Practical completion of the project was achieved on 28 March 2024. There are a significant number of variations, defects and tasks to address on site currently. The Town with Belgravia Leisure, the appointed operators of the facility, is transitioning from construction to operations at the facility. Belgravia Leisure are aiming at opening the facility from 30 April 2024. Noting this transition, the Town, with the assistance of Nicola Parker of Full Fat Consulting, has undertaken a Gap Analysis for the project.

A typical gap analysis process reviews the current status of an entity (in this case a project), reconfirms the desired state, which then in turn, identifies any gaps. An action plan for the closure of the gaps is drafted along with time frames for delivery, to guide the project to the desired state. Within the action plan, recommendations on resource allocation, roles and responsibilities are also provided. This helps to ensure that there is adequate capacity / resourcing to close the gaps as well as forecast realistic timeframes for delivery, to keep the plan to an agreed program and ensure accountability.

After further discussion with the Town's Executive this Gap Analysis focused on four key areas. These are:

- Construction completion and compliance certification
- Transition to operations
- EFCP Business as usual operations
- Management of Belgravia Leisure's contract

In addition to identifying gaps, the assessment makes recommendation to 'fill the gaps' and complete outstanding items. The recommendations are made with consideration to the following points:

- Project knowledge base in existing contractors and consultants and the impacts / risk of losing this knowledge
- Risk to timely close out of items with Head Contractor with PC issued, under guidance, on 28th March 2024
- Reputational risk in regard to the Oval (eg from EFFC and WAFC)

- Potential risk of additional fees from Belgravia Leisure now that the Operators' Agreement is active
- Relationship infancy of the Town with Belgravia Leisure
- Planned extended leave for key Town staff involved in the project

It is recommended that Council notes the GAP analysis review of the East Fremantle Community Park project and endorses the expenditure of additional funds to engage suitable resources to address the current matters identified.

BACKGROUND

Practical completion of the project was achieved on 28 March 2024. There are a significant number of variations, defects and tasks remaining to be addressed on site. The Town, with Belgravia, is also transitioning from construction to operations at the facility. Noting the transition, the Town's consultant undertook a Gap Analysis for the project to review the current status of the project, reconfirm the desired outcomes, which in turn identified any gaps within the project and for the successful transition to operations.

CONSULTATION

Consultation and information was sought by Full Fat Consulting for the purposes of the Gap Analysis from the following:

- Town of East Fremantle Officers
- Client Project Lead (Paatsch Group)
- Project Manager and various other project consultants (SportEng, Turf Masters, Carabiner etc)
- Belgravia Leisure

STATUTORY ENVIRONMENT

Pursuant to section 6.8 of the *Local Government Act 1995*, expenditure not included in the annual budget is to be authorised in advance by an absolute majority decision of Council.

POLICY IMPLICATIONS

Council has adopted Policy 2.1.19 Contract Variations. This Policy enables the Chief Executive Officer to approve contract variations to a maximum price of $50,000 provided that the variation is contained within the available budget.

FINANCIAL IMPLICATIONS

This report should be read in conjunction with report "Head Contract Variation - East Fremantle Community Park" presented to Council at this meeting. The report contains the following financial implications relating to this project/ the total sum of the current variations.

The Contingency Tracker (as attached) outlines three sections:

- Total approved variations - $1,559,695
- Total pending variations - $545,191
- Total forecast variations pending - $206,447

All proposed and forecast variations (should they materialise) to the Head Contract will exceed contingency resulting in a negative $181,334 sum, requiring additional project funding to be approved by Council. This $181,334 sum does not include any expenditure outlined in this report.

Full Fat Consulting has provided a project cost to assist with the implementation and management of the Gap Analysis. The proposal would require an estimate of 2 to 3 days a week (15 to 22.5hrs based on 7.5hr allocation per day). Based on the works outlined in the Gap analysis the Town is requesting a budget allocation (additional to the $181,334 above) for approximately 20 hrs a week, for 12 weeks, equating to $46,800.00. This allocation will be required to be taken from the East Fremantle Oval Redevelopment Reserve.

Further funding of $138,148 is required (refer Head Contract Variation - East Fremantle Community Park report), which should be sufficient to cover the pending/forecast variations to the construction contract to date 08 April 2024.

The mid-year budget review resulted in a forecast closing balance of $428,663 in the East Fremantle Oval Redevelopment Reserve. $181,334 is proposed for final payment of contracted variations and is proposed to be taken from the reserve. The remaining amount in reserve will be $247,329.

This report proposes to expend consultancy funds of $46,800 from the Reserve to provide external assistance to the Town for implementation of the recommendations of the Gap Analysis.

To further pay for any unforeseen costs after 11 April 2024 a separate amount for a contingency is requested. This contingency will be set aside for any unforeseen variations received and required after 11 April 2024. This amount will not be included in the project contingency tracker, but will remain as a final provisional amount for any outstanding works eg project works, or works the Town is completing eg eastern bank. Expenditure of $60,000 is requested to be taken from the reserve.

The proposed $46,800 and $60,000 results in an additional total amount of $106,800 to be drawn from reserve. All attempts will be made not to expend the $60,000 contingency. Authority will be provided to the CEO to expend the funds as per the Town's standard procurement practices and policies.

This leaves a final reserve amount of $140,529.

STRATEGIC IMPLICATIONS

The Town of East Fremantle Strategic Community Plan applies.
Strategic Priority 1: Social
1.2.1 Provision of adequate facilities to support healthy and active lifestyles.

RISK IMPLICATIONS

Potential moderate to high risk as detailed above and below in this report. Should a funding allocation not be provided there is an extreme risk the move to the operational management of the East Fremantle Community Park could have significant reputational and commercial impacts, resulting in potential substantial losses for the project.

Further risks identified are:

- Delay to the operational hand over and management and maintenance of the project by Belgravia Leisure.
- Reputational risk, including but not limited to delays in the delivery of the project, and perceptions the community may consider delays to the building unacceptable.
- Delay to the opening of the building impacting on future revenue and the operation success of the facility.
- Cost risks to the project.
- Potential and potential non-compliance of the facility
- Delay to the successful integration of the Bowls, Croquet and Football Clubs into the facility.
- Poor and / or compromised relationships with the facility operator and relevant stakeholders.

The above list is not an exhaustive list. Additional minor risks are identified but have not been detailed in full in this report.

SITE INSPECTION

Not Applicable.

COMMENT

As per the Gap Analysis, it is evident that there is a significant risk to the project, as it moves from construction through to operations of the facility. It is clear a resource is currently missing that is critical to the completion and successful transition of this project to a Business-as-Usual operation. This resource required by the Town is a client-side Project Manager (PM).

The role of this transition PM would be to:

- Act as a single point of contact to both track and drive the completion of items that are either active or pending;
- Work with Paatsch Group, DCWC and Belgravia Leisure to support Cooper & Oxley in the completion of construction items and transition to operation;
- With the aforementioned stakeholders, compile a program of outstanding activities, with timeframes to which teams are held accountable;
- Implement a simple governance structure to hold stakeholders to task and program;
- Report on risks to the CEO, with recommendations for further actions; and
- Work through the Gap Analysis report, with priorities aligned with items critical for initial operations and previously agreed deadlines such as predetermined opening phases or events.

In addition, the PM would provide assistance for and make recommendations regarding the responsibilities that the Town needs a resource to carry out as part of day-to-day management of its contract with Belgravia Leisure; KPI monitoring, review of the Operators Agreement, SLA levels, reviews of operating processes and the process / governance structure for this to occur.

Through the process of conducting the Gap Analysis, the report finds that:

> *'Neither the building as a facility or the operational framework (processes and plans) are at an acceptable level for Belgravia to conduct their commercial operations as termed in their Operator Agreement'.*

In the attachment to this report is a list of items under each of the four focus areas listed at the beginning of this report which provided the detail informing this statement. Furthermore, the building has only been issued with a temporary occupancy licence which expires in two months from the date of issue (28 March 2024). The Public Building approval has yet to be issued because the building is currently not compliant.

It is important to note that the report finding extends further than the physical construction of the building, (including the readiness of the oval / bowls or croquet green surfaces) to include the operational readiness of Belgravia Leisure and the Town. For context this includes but is not limited to:

- Processes for the close out of the construction project and works / operations during the Defects Liability Period are yet to be drafted and approved
- Operational processes that are outstanding in definition and approval e.g. communication channels, escalation points, responsible persons and level of delegations
- Incomplete Management Plans that are at varying stages of revision or approval and then subject to further confirmation of their alignment with the Tender specifications and the Town's Policies
- A financial year schedule / calendar for the management of Belgravia's contract
- Ongoing use and management of the facility, implementation of the Operators Agreement and decision around the Community Garden.
- Management Committee: scope, members, level of delegation, frequency of meeting and sphere of influence

In the Gap Analysis Report Full Fat Consulting has provided the following three recommendations:

1. Provision of additional / extension of existing project team members:
    - Engage an additional resource to guide the close out of the gaps as a representative of the Town (Full Fat Consulting). This role would deliver a variety of tasks including but not limited to:
        1. Define governance process for the close out of the Project
        2. Determine and seek approval for areas of responsibility within the close out program
        3. Define processes for additional works, changes, or deletions, with timeframes for turn around
        4. Work with Paatsch Group, monitoring the progression of items with them for completion and accountability
        5. Act as a single point of contact for Belgravia Leisure, working with them to review operational processes, reviewing their alignment with Town Policies (as outlined in the Tender documentation) and stakeholder expectations
        6. Provide support to the Town as cover for key staff absent on leave
        7. Report to CEO as needed on the progress of the defects / close out list, seek guidance on strategic matters and decisions as needed.

    - Paatsch Group has submitted a fee variation to complete the project. It is proposed to accept Paatsch Group's proposal for the extension of their services. This would be a time-based extension until 30 June 2024. The risk to the completion of the project in not retaining the Paatsch Group is high. The extensive background knowledge of situations, variations and relationships with contractors and stakeholders is critical at this point in the project. To wrap up their engagement, would mean that resources to close out gaps would spend considerable time getting up to speed on situations (resulting in additional costs), 'relationships' won't be there to lean on (cost and loss of integrity behind claims or information provided by contractors / other project stakeholders) and Paatsch Group are still working to finalise project variations with the Town and Belgravia.

      In addition, it is a recommendation that Paatsch Group's relationship with and understanding of the East Fremantle Football Club (EFFC) is likely of benefit to the Town, in assisting the negotiations with EFFC to sign their sub-lease and licences.

      There could also be a reputational and operational risk to the Town, in that if the Paatsch Group's extension is not approved and they are not onboard to oversee / assist with the management of the completion of the football oval (turf) delivery and subsequent communications with WAFL and the Football Association etc.

    - The Town to review the Town's budget forecast against the Operator's Agreement, a revised Belgravia Leisure budget (current operational budget variations), whilst considering opening delays to the facility and proposed charges and change requests from Belgravia Leisure

2. Facilitating both the compilation and the ongoing tracking of a single list of outstanding items which includes operational processes and plans.

At the time of writing this report, action lists are currently held by four of the major stakeholders; DCWC, Cooper & Oxley, Carabiner and Belgravia Leisure. The lists detail defects, outstanding works and variations.

One single list is needed to remove any ambiguity around what should be on a list and to make sure everything is captured and that no further gaps arise. A reason has not been found for the current multiple lists.

As existing Project Superintendent for the project, the Gap analysis report recommends a direction to DCWC that they be responsible for generating the one single list and actioning that list. This recommendation is based on the professional expectation that in the role of Project Superintendent, DCWC have been the owners of all formal project documentation and its subsequent release to stakeholders for the duration of the project. It is recommended that the list contains similar levels of detail as other project documentation, such as responsible owner, status and completion by date.

An additional list detailing processes, management plans, communications and engagement activities should be drafted independently between the Town and Belgravia Leisure. The Town and Belgravia Leisure would use both lists for the coordination of transitional and operational activities.

3. Drafting a close out program that includes all the outstanding items with firm completion dates, with item owners.

This program could also be referred to as the roadmap to the 'desired state'. It should be informed by key drivers / fixed dates such as contractual obligations, commitments in leases, sub-leases and licences and events such as Football games.

At time of writing this report the following key dates have been provided and considered 'active':

- 30 April – Café to open
- 30 April – Playgroup to occupy Sumpton Green
- 2 May - Liquor Licences
- 7 May – Kitchen and Bar opens
- 9 May – gym opens
- 14 June – WAFL to test Oval surface – Practical Completion for Oval
- 22 June – EFCP activation event/official opening
- 29 June – first WAFL game

To ensure that all key stakeholders are across the close-out works, a weekly report or status snap-shot is recommended to be provided to the Town. The Town's resource would provide more frequent updates to the Executive and CEO to ensure no additional slippage in transitioning the Community Park to full operations.

The community garden, eastern bank works and operational terms for the Management Committee could be added to this program for tracking by the Town.

It is finally recommended that on the completion of the three items above that a schedule of project maintenance dates for the greens and ovals be drafted. This should include hand over dates, reference levels of service provided and the dates of handover to Belgravia Leisure.

CONCLUSION

This report recommends Council endorses the expenditure of $46,800 from the East Fremantle Oval Redevelopment Reserve to provide external assistance through a consultant (Full Fat Consulting) to the Town for implementation of the recommendations of the Gap Analysis as detailed above.

The report also requests Council endorses the provision for $60,000 expenditure to be taken from East Fremantle Oval Reserve for the purposes of a contingency for the Town to ensure funds are available to implement the transition of the project to full operations by Belgravia Leisure. This contingency will be set aside for any unforeseen variations after 11 April 2024, for a contract extension to Paatsch Group and for operational transition.

OFFICER RECOMMENDATION

That Council:

1. endorses the expenditure of $46,800 from the East Fremantle Oval Redevelopment Reserve to provide external assistance through a consultant to the Town for implementation of the recommendations of the Gap Analysis as detailed above;
2. endorses the provision for $60,000 expenditure, to be taken from East Fremantle Oval Redevelopment Reserve for the purposes of an end of project contingency and operational transition;

3. accepts the Paatsch Group's proposal for the extension of their services, with such expenditure taken from the $60,000 contingency referred to in recommendation 2 above;
4. approves the CEO to expend the $60,000 as required and within the current purchasing delegations and policies of Council; and
5. pursuant to section 6.8 of the Local Government Act 1995, by absolute majority approves a budget variation of $106,800 against the East Fremantle Community Park project to facilitate the payment of the above consultant and contingency as outlined in this report and as detailed in the schedule of variations below:

Account Number	Account Description	Current Budget	Amended Budget	Variance
E11738	East Fremantle Oval Redevelopment	($21,548,142)*	($21,654,942)	($106,800)
2428	Transfer from East Fremantle Oval Redevelopment Reserve	$1,030,213*	$1,137,013	$106,800

*based on budget as amended by the Head Contract variation report

The CEO provided advice in regard to point 3 of the recommendation and an alternative form of words to ensure clarity of intent and compliance with relevant Council Procurement Policies.

Alternative Motion

Moved Cr White, seconded Cr Donovan

That Council:

1. *endorses the expenditure of $46,800 from the East Fremantle Oval Redevelopment Reserve to provide external assistance through a consultant to the Town for implementation of the recommendations of the Gap Analysis as detailed above;*
2. *endorses the provision for $60,000 expenditure, to be taken from East Fremantle Oval Redevelopment Reserve for the purposes of an end of project contingency and operational transition;*
3. *approves a variation to the Paatsch Group contract for client lead services to a maximum value of $30,000 with such expenditure taken from the $60,000 contingency referred to in recommendation 2 above;*
4. *approves the CEO to expend the $60,000 as required and within the current purchasing delegations and policies of Council; and*
5. *pursuant to section 6.8 of the Local Government Act 1995, by absolute majority approves a budget variation of $106,800 against the East Fremantle Community Park project to facilitate the payment of the above consultant and contingency as outlined in this report and as detailed in the schedule of variations below:*

Account Number	*Account Description*	*Current Budget*	*Amended Budget*	*Variance*
E11738	*East Fremantle Oval Redevelopment*	*($21,548,142)**	*($21,654,942)*	*($106,800)*
2428	*Transfer from East Fremantle Oval Redevelopment Reserve*	*$1,030,213**	*$1,137,013*	*$106,800*

**based on budget as amended by the Head Contract variation report*

Amendment

Moved Mayor O'Neill, seconded Cr Natale

That the figure $30,000 be replaced with $15,000 in part 3 of the recommendation.

(LOST 3:6)

For: **Mayor O'Neill and Crs Natale and Harrington**

Against: **Crs Wilson, Collinson, Donovan, Maywood, White & McPhail.**

The substantive motion was put.

13.7 ALTERNATIVE RECOMMENDATION / COUNCIL RESOLUTION

Council Resolution 071604

OFFICER RECOMMENDATION:

Moved Cr White, seconded Cr Donovan

That Council:

1. **endorses the expenditure of $46,800 from the East Fremantle Oval Redevelopment Reserve to provide external assistance through a consultant to the Town for implementation of the recommendations of the Gap Analysis as detailed above;**
2. **endorses the provision for $60,000 expenditure, to be taken from East Fremantle Oval Redevelopment Reserve for the purposes of an end of project contingency and operational transition;**
3. **approves a variation to the Paatsch Group contract for client lead services to a maximum value of $30,000 with such expenditure taken from the $60,000 contingency referred to in recommendation 2 above;**
4. **approves the CEO to expend the $60,000 as required and within the current purchasing delegations and policies of Council; and**
5. **pursuant to section 6.8 of the Local Government Act 1995, by absolute majority approves a budget variation of $106,800 against the East Fremantle Community Park project to facilitate the payment of the above consultant and contingency as outlined in this report and as detailed in the schedule of variations below:**

Account Number	Account Description	Current Budget	Amended Budget	Variance
E11738	East Fremantle Oval Redevelopment	($21,548,142)*	($21,654,942)	($106,800)
2428	Transfer from East Fremantle Oval Redevelopment Reserve	$1,030,213*	$1,137,013	$106,800

***based on budget as amended by the Head Contract variation report**

(CARRIED BY AN ABSOLUTE MAJORITY 6:3)

For: **Crs Wilson, Collinson, Donovan, Maywood, White & McPhail.**

Against: **Mayor O'Neill and Crs Natale and Harrington**

Ms Parker left the meeting at 8.05pm prior to Council debating this motion.

REPORT ATTACHMENTS

Attachments start on the next page

East Fremantle Community Park – Gap Analysis Report

Background

A typical Gap Analysis process reviews the current status of an entity (in this case a project), reconfirms the desired state, which then in turn, identifies any gaps. An action plan for the closure of the gaps is drafted along with time frames for delivery, to guide the project to the desired state. Within the action plan, recommendations on resource allocation, roles and responsibilities are also provided. This helps to ensure that there is adequate capacity / resourcing to close the gaps as well as forecast realistic timeframes for delivery, to keep the plan to an agreed program and ensure accountability.

After further discussion with the Town's Executive and in line with the original proposal, I focused on four key areas. These are:

- Construction completion and compliance certification
- Transition to operation
- Management of Belgravia's contract
- EFCP Business as usual operations and Town based works

In addition to identifying gaps, I have made a recommendation to 'fill the gaps' and complete outstanding items. The recommendations are made with consideration to the following points:

- Project knowledge base in existing contractors and consultants and the impacts / risk of losing this
- Risk to timely close out of items with Head Contractor with PC issued, under guidance, on 28th March 2024
- Reputational risk with back lash from EFFC and WAFL with specific regard to the Oval
- Potential risk of additional fees from Belgravia now that the Operational Agreement is active
- Relationship infancy of the Town with Belgravia
- Annual leave for Andrew Malone, Executive Manager Regulatory Services

Report summary

Through the process of conducting the Gap Analysis, the report finds that the current state of the project is:

'Neither the building as a facility or the operational framework (processes and plans) are at the appropriate level for Belgravia to conduct their commercial operations as termed in their Operator Agreement'.

The desired state of the project, as advised by the Town is:

'for Belgravia to have transitioned in to the building / precinct with limited defects and able to commence operations as per the current operator agreement, with all supporting processes and management plans in place'.

At the back of this report is a list of items under each of the four focus areas which provided the background informing the 'current state' statement above. Furthermore, the building has only been issued with temporary occupancy licence and this expires in 2 months, from the date of issue (28th March 2024).

It is important to note that the report finding extends further than the physical construction of the building, (including the readiness of the oval / bowls or croquet green surfaces) to include the operational readiness of Belgravia and the Town.

For context this includes but is not limited to:

a) Processes for the close out of the construction project and works / operations during the Defects Liability Period are yet to be drafted and approved
b) Operational processes that are outstanding in definition and approval e.g. communication channels, escalation points, responsible persons and level of delegations
c) Incomplete Management Plans that are at varying stages of revision or approval and then subject to further confirmation of their alignment with the Tender specifications and the Town's Policies
d) A Town-side financial year schedule / calendar for the management of Belgravia's contract
e) Decision around the Community Garden: scope and ongoing use and management of
f) Management Committee: scope, members, level of delegation, frequency of meeting and sphere of influence

Report Recommendations

3 recommendations are made to assist in the closing of the reported gaps. These are:

1. Provision of additional / extension of existing project team members:

1. Accept the Paatsch Group's proposal for the extension of their services.

   The risk to the completion of the project in not retaining the Paatsch Group is both large and high in my opinion. The extensive background knowledge of the project journey, variations and relationships with contractors is critical at this point in the project. To wrap up their engagement, would mean that resources left to close out gaps would spend time getting up to speed on current items (cost), 'relationships' won't be there to lean on (cost and loss of integrity behind claims or information provided by contractors / other project stakeholders).

   In addition, it is a recommendation that The Paatsch Group's relationship with and understanding of the EFFC is likely to be more to be of benefit to the Town, in getting EFFC to sign their lease and licences, than not. The Paatsch Group's position on a number of

items to do with the EFFC has been in support of the Town not EFFC. Along with their wealth of experience in AFL, teams, operational nuances of clubs.

There could also be a reputational risk to the Town, it the Paatsch Group's extension is not approved and they are not here to oversee / assist with the completion of the football oval and subsequent communications with WAFL and the Football Association etc.

2. Engage an additional resource to guide the close out of the gaps as a representative of the Town. This role would deliver a variety of tasks including but not limited to:

    a) Define governance process for the close out of the Project
    b) Determine and seek approval for areas of responsibility within the close out program
    c) Define processes for additional works, changes, or deletions, with timeframes for turn around
    d) Work with Paatsch Group, monitoring the progression of items with them for completion and accountability
    e) Work with Paatsch Group to initiate the review of commercial terms within the operator agreement
    f) Act as a single point of contact for Belgravia, working with them to review draft operational processes, reviewing their alignment with Town Policies (as outlined in the Tender documentation) stakeholder and community expectations
    g) Provide support to the Town as cover for Andrew Malone in part as his role of project contact for the Project during his leave period
    h) Report to CEO, daily / weekly as needed on the progress of the defects / close out list, seek guidance on strategic matters and decisions as needed.

3. Optional suggestion: Executive Manager of Corporate Services to review the Towns budget forecast against the Operators Agreement, considering opening delays to the facility and proposed charges and change requests from Belgravia

2. Facilitating both the compilation and the ongoing tracking of, a single list of outstanding items which includes operational processes and plans.

At the time of writing this report, action lists are currently held by 4 of the major stakeholders; DCWC, Copper & Oxley, Carabiner and Belgravia. The lists appear to be different and have ranging detail on defects, outstanding works and variations.

One, single, central list is needed to remove any ambiguity around what is or isn't on a list and to make sure everything is captured and that no further gaps arise. People naturally create their own to-do lists, but a single, centrally referenced list is best practice for Projects of this nature with defined governance structures.

As existing Project Superintendent for the project, this report recommends a direction to DCWC that they are the responsible for generating the one single list. *This recommendation is based on the professional expectation that in the role of Project Superintendent that DCWC have been the owners of all formal project documentation and its subsequent release to stakeholders for the duration of the project.*

An additional list detailing processes, management plans, comms and engagement activities, could be drafted independently between the Town, Belgravia and Paatsch, to then be released for information to other stakeholders. The Town, Belgravia and Paatsch would use both lists for the coordination of transitional and operational activities.

It is recommended that the list contains similar levels of detail as other project documentation such as responsible owner, status and completion by date.

3. Drafting a close out program that includes all of the outstanding items with firm completion dates, with item owners.

This program could also be referred to as the roadmap to the 'desired state'. It should be informed by key driver / fixed dates such as contractual obligations, commitments in leases and licences and events such as Football games.

At time of writing this report he following key dates have been provided and considered 'active':

30th April – Café to open
30th April – Playgroup to occupy Sumpton Green
2nd May - Liquor Licences
7th May – Kitchen and Bar opens
9th May – gym opens
11th June – EFCC activation event
14th June – WAFL to test Oval surface
29th June – first WAFL game

The program would then be drafted from the single defects / outstanding works list. An additional program for the rectification works of the Oval would also be produced, but making sure that the two programs are linked to the same key milestones.

To ensure that all key stakeholders are across the close-out works, a weekly report or status snap-shot is recommended. This also helps if matters needing escalation arise. The Town's resource would provide more frequent updates to the Executive and CEO. The resource would have either no or limited decision making authority on a case by case basis.

The Community garden, east bank revegetation works and operational terms for the Management Committee could be added to this program for tracking within the Town.

It is recommended that on the completion of the 3 items above, that a schedule of project maintenance dates for the greens and ovals be drafted. This should included hand over dates, reference levels of service provided and the dates of handover to Belgravia and Programmed.

Gap Analysis – Identified Gaps *N.B the lists are not exhaustive*

The lists below were formed from meetings attended, emails and project documentation along with further discussions with members of the Executive and the CEO.

Construction completion and compliance certification:

- Overarching governance structure for the completion and close out of the EFCP Project
- AFL Oval remediation works – turf, reticulation control boxes, synthetic turf installation
- CCTV for liquor licence
- Security and access system integration and compliance
- Handrails – compliance check and replacement
- Painting of steps and ceilings
- Additional fire exit signage and changes to door hardware
- Croquet lawn completion and remediation works
- Bar and restaurant – equipment either missing or late
- East bank turfing and planting
- AV items – installation and commissioning
- Building Occupancy Licence – transition from temporary to permanent
- Comms Racks – labelling and associated documentations
- Builders clean and deep clean
- Playground – compliance checks / audits, change to items of equipment
- Oval Lighting tests
- Bowls Club installation of shelters
- Cooper & Oxley full demobilisation from site

Transition to operation

- Completion of Belgravia's Transition / opening program including evacuation testing etc
- Approval of all Operating plans either outstanding or yet to be drafted (e.g. grounds maintenance)
- Alignment of Belgravia's Operating Agreement with Town policies and Community expectations – Day 1 and strategic
- Formal adoption of aforementioned Operator Agreement
- Outstanding Leases and Licences – EFFC, CAHS, Playgroup, Bowls
- Final Commissioning and testing of items of equipment (kitchen, access and security)
- Liquor Licence – application by Belgravia based interdependent on the completion of items above.

- Engagement with clubs / community groups to share operational parameters of liquor license
- Ongoing workshops with clubs to understand the Food and Beverage Payment Policy
- Workshop with Belgravia to discuss relevant LGA guidelines, Town's operations such as waste collection, Ranger services and approval processes
- Governance process for operator requests during final completion stages and future to be defined, approved and adopted
- Defects Liability Period – process to be defined for reporting of and rectification
- Finalising of facility branding, website and ongoing management
- Programme coordination of contracted maintenance warranty periods for Oval and Greens
- Update Town records and systems (ECM, sharepoint, synergy, Intramaps) with all the Project As Con's, plans, service agreements and warranties

Management of Belgravia's contract

- Tracking of Belgravia's performance in line with KPI's and SLA's
- Development of a schedule / calendar of actions and deliverables for Belgravia and the Town specific to the EFCP project, that aligns with the Towns Financial Year calendar and Budget process. For example - reporting dates, budget reviews, payments, asset checks and possible audits
- Training / familiarisation of Belgravia with LGA Processes surrounding the aforementioned point
- Agree reporting / maintenance process for assets bought as part of project and any additional assets requested by Belgravia
- Investigate the validity of a 'Calendar of touch points' with user groups to secure successful integration of the groups into a new management regime (settling period). Suggestion of up to the first 12 months in line with the DLP

EFCP Business as usual operations and additional works

- Monitor and agree on the official change date from DLP to Full Operations
- Define Review and Change Process for post DLP
- Community Gardens – Confirmation of scope, budget allowance, delivery of, and ongoing management / use agreements
- East Bank turfing and planting works

14 MOTIONS OF WHICH PREVIOUS NOTICE HAS BEEN GIVEN

Nil

15 NOTICE OF MOTION FOR CONSIDERATION AT THE NEXT MEETING

Nil

16 QUESTIONS BY MEMBERS OF WHICH DUE NOTICE HAS BEEN GIVEN

Nil

17 NEW BUSINESS OF AN URGENT NATURE

Nil

18 MATTERS BEHIND CLOSED DOORS

PROCEDURAL MOTION

Moved Cr White, seconded Cr McPhail

That the meeting be closed to the public to discuss confidential item "Waste Management Services – Contractor Approval" under the terms of the Local Government Act 1995, Section 5.23(2)(c), (d) & (e).

CARRIED UNANIMOUSLY 9:0)

For: **Mayor O'Neill, Crs Wilson, Collinson, Donovan, Harrington, Natale, Maywood, White & McPhail.**

Against: **Nil**

18.1 WASTE MANAGEMENT SERVICES - CONTRACTOR APPROVAL

(Confidential Report)

18.1 OFFICER RECOMMENDATION / COUNCIL RESOLUTION

Council Resolution 081604

OFFICER RECOMMENDATION:

Moved Cr Natale, seconded Cr Collinson

That Council:

1. **awards tender RFQ05 2023/24 Waste Management Services to Veolia Recycling and Recovery PTY LTD at an estimated cost of $837,330.80 pa excluding GST, noting the contract period of five (5) years commencing 1 July 2024 with the option of two (2) x one (1) year extensions at the discretion of the Chief Executive Officer;**
2. **notes the tendered price is an approximate estimate and will vary based on a number of factors:**
   - **actual number of bins presented for collection.**
   - **actual tonnes processed.**

- **gate fee adjustments for changes in the landfill levy.**
- **commodity price adjustment for the recycling gate fee.**
- **annual CPI adjustment.**

3. **authorises the CEO to vary the contract prior to execution if required pursuant to delegation DA7, on the proviso that any variation is necessary in order for the goods and services to be supplied and does not change the scope of the contract; and**
4. **authorises the Mayor and CEO to sign and affix the Town's Common Seal to the contract RFQ05 2023/24 Waste Management Services, and any other related documents.**

(CARRIED UNANIMOUSLY 9:0)

For: **Mayor O'Neill, Crs Wilson, Collinson, Donovan, Harrington, Natale, Maywood, White & McPhail.**

Against: **Nil**

PROCEDURAL MOTION

Moved Cr Wilson, seconded Cr White

That the meeting be re-opened to the public at 8.15pm.

CARRIED UNANIMOUSLY 9:0)

For: **Mayor O'Neill, Crs Wilson, Collinson, Donovan, Harrington, Natale, Maywood, White & McPhail.**

Against: **Nil**

19 CLOSURE

There being no further business, the Presiding Member declared the meeting closed at 8.15pm

*I hereby certify that the Minutes of the ordinary meeting of the **Council** of the Town of East Fremantle, held on **16 April 2024**, Minute Book reference **1.** to **19.** were confirmed at the meeting of the Council on*

21 MAY 2024

Presiding Member