



AGENDA

Works Committee Agenda Tuesday, 27 September 2022 6:30:00 PM

Disclaimer

The purpose of this Council meeting is to discuss and, where possible, make resolutions about items appearing on the agenda.

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 (e)) establish procedures for revocation or rescission 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.

Copyright

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Procedure for Deputations, Presentations and Public Question Time at Council Meetings

Council thanks you for your participation in Council Meetings and trusts that your input will be beneficial to all parties. Council has a high regard for community input where possible, in its decision making processes.

<p>Deputations</p> <p>A formal process where members of the community request permission to address Council or Committee on an issue.</p>	<p>Presentations</p> <p>An occasion where awards or gifts may be accepted by the Council on behalf of the community, when the Council makes a presentation to a worthy recipient or when agencies may present a proposal that will impact on the Local Government.</p>
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Procedures for Deputations

The Council allows for members of the public to make a deputation to Council on an issue related to Local Government business.

Notice of deputations need to be received **by 5pm on the day before the meeting** and agreed to by the Presiding Member. Please contact Executive Support Services via telephone on 9339 9339 or email admin@eastfremantle.wa.gov.au to arrange your deputation.

Where a deputation has been agreed to, during the meeting the Presiding Member will call upon the relevant person(s) to come forward and address Council.

A Deputation invited to attend a Council meeting:

- (a) is not to exceed five (5) persons, only two (2) of whom may address the Council, although others may respond to specific questions from Members;
- (b) is not to address the Council for a period exceeding ten (10) minutes without the agreement of the Council; and
- (c) additional members of the deputation may be allowed to speak with the agreement of the Presiding Member.

Council is unlikely to take any action on the matter discussed during the deputation without first considering an officer’s report on that subject in a later Council agenda.

Procedure for Presentations

Notice of presentations being accepted by Council on behalf of the community, or agencies presenting a proposal, need to be received by **5pm on the day before the meeting** and agreed to by the Presiding Member. Please contact Executive Support Services via telephone on 9339 9339 or email admin@eastfremantle.wa.gov.au to arrange your presentation.

Where the Council is making a presentation to a worthy recipient, the recipient will be advised in advance and asked to attend the Council meeting to receive the award.

All presentations will be received/awarded by the Mayor or an appropriate Councillor.

Procedure for Public Question Time

The Council extends a warm welcome to you in attending any meeting of the Council. Council is committed to involving the public in its decision making processes whenever possible, and the ability to ask questions during ‘Public Question Time’ is of critical importance in pursuing this public participation objective.

Council (as required by the **Local Government Act 1995**) sets aside a period of ‘Public Question Time’ to enable a member of the public to put up to three (3) questions to Council. Questions should only relate to the business of Council and should not be a statement or personal opinion. Upon receipt of a question from a member of the public, the Mayor may either answer the question or direct it to a Councillor or an Officer to answer, or it will be taken on notice.

Having regard for the requirements and principles of Council, the following procedures will be applied in accordance with the **Town of East Fremantle Local Government (Council Meetings) Local Law 2016**:

1. Public Questions Time will be limited to fifteen (15) minutes.
2. Public Question Time will be conducted at an Ordinary Meeting of Council immediately following “Responses to Previous Public Questions Taken on Notice”.
3. Each member of the public asking a question will be limited to two (2) minutes to ask their question(s).
4. Questions will be limited to three (3) per person.
5. Please state your name and address, and then ask your question.
6. Questions should be submitted to the Chief Executive Officer in writing by **5pm on the day before the meeting and be signed by the author**. This allows for an informed response to be given at the meeting.
7. Questions that have not been submitted in writing by 5pm on the day before the meeting will be responded to if they are straightforward.
8. If any question requires further research prior to an answer being given, the Presiding Member will indicate that the “question will be taken on notice” and a response will be forwarded to the member of the public following the necessary research being undertaken.
9. Where a member of the public provided written questions then the Presiding Member may elect for the questions to be responded to as normal business correspondence.
10. A summary of the question and the answer will be recorded in the minutes of the Council meeting at which the question was asked.

During the meeting, no member of the public may interrupt the meetings proceedings or enter into conversation.

Members of the public shall ensure that their mobile telephone and/or audible pager is not switched on or used during any meeting of the Council.

Members of the public are hereby advised that use of any electronic, visual or audio recording device or instrument to record proceedings of the Council is not permitted without the permission of the Presiding Member.

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NOTICE OF MEETING

Elected Members

An Ordinary Meeting of the Works Committee will be held on 27/09/2022 6:30:00 PM in the Council Chamber, 135 Canning Highway, East Fremantle and your attendance is requested.



GARY TUFFIN

Chief Executive Officer

AGENDA

1 DECLARATION OF OPENING OF MEETING/ANNOUNCEMENTS OF VISITORS

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 RECORD OF ATTENDANCE

4 MEMORANDUM OF OUTSTANDING BUSINESS

5 DISCLOSURES OF INTEREST

6 PUBLIC QUESTION TIME

7 PRESENTATIONS/DEPUTATIONS

8 CONFIRMATION OF MINUTES OF PREVIOUS MEETING

8.1 WORKS COMMITTEE TUESDAY, 23 AUGUST 2022

OFFICER RECOMMENDATION

That the minutes of the Works Committee meeting held on Tuesday, 23 August 2022, with the deletion of Cr McPhail in the list of attendees, be confirmed as a true and correct record of proceedings.

9 ANNOUNCEMENTS BY THE PRESIDING MEMBER

10 REPORTS AND RECOMMENDATIONS OF COMMITTEES

Reports start on the next page

10.1 BUILDING MAINTENANCE & IMPROVEMENT PROGRAM

Report Reference Number	WCR-3
Prepared by	Nicholas King
Supervised by	Gary Tuffin
Meeting date	Tuesday, 27 September 2022
Voting requirements	Simple Majority
Documents tabled	
Attachments	Nil

PURPOSE

The Works and Services Committee is requested to receive this report regarding the Town's Building Maintenance & Improvement Program.

EXECUTIVE SUMMARY

The Town has approximately \$37 million in building asset portfolio and 44 individual asset items relating to buildings. Considering this number the Town has allocated \$80,000 to the 2022/23 financial year for maintenance and upgrades.

BACKGROUND

The Town's last building condition assessments were undertaken in 2017, with most of the Town's assets in good condition, and only needing minor maintenance. Since then the allocation to maintenance of buildings annually has been below what was recommended within the asset management plan. The next Building condition assessments will be undertaken in October and November 2022, with the services out to the market for prices in September 2022.

In addition to the maintenance program the Town is undertaking the upgrade of the Fremantle City Women's soccer club building upgrade. The project has an existing budget of \$720,000, with an additional \$200,000 requested from the Department of Local Government, Sport and Cultural Industries.

CONSULTATION

Nil

STATUTORY ENVIRONMENT

Local Government Act 1995
 Building Code of Australia 2005
 Environment Protection Act 1994
 Heritage Act 2004
 and Regulations
 Crown Lands Act 1989

POLICY IMPLICATIONS

Purchasing Policy 2.1.3

FINANCIAL IMPLICATIONS

Allocation of \$80,000 for the 2022/23 financial year for building maintenance and upgrades.

Fremantle City Women’s soccer club building upgrade has a budget of \$700,000 in the 2022/23 financial year with \$20,000 spent in the 2021/22 financial year. This project is 100% funded externally by the State Government (Department of Local Government, Sport and Cultural Industries), and the Club.

STRATEGIC IMPLICATIONS

The Town of East Fremantle Strategic Community Plan 2020-2030 states:

Strategic Priority 1 – Social - A socially connected, inclusive and safe community.

1.2 Inviting open spaces, meeting places and recreational facilities

Strategic Priority 3 – Built Environment – Accessible, well planned built landscapes which are in balance with

the Town’s unique heritage and open spaces

3.2 Maintaining and enhancing the Town’s character

3.3 Plan and maintain the Town’s assets to ensure they are accessible, inviting and well connected

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)
If buildings are not maintained they deteriorate and costs become more long term	Possible (3)	Moderate (3)	Moderate (5-9)	SERVICE INTERRUPTION Medium term temporary interruption - backlog cleared by additional resources <1 week	Manage by updating asset management plans and maintenance budgets to avoid long term issues

Risk Matrix

Consequence		Insignificant	Minor	Moderate	Major	Extreme	
		1	2	3	4	5	
Likelihood	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	5
Does this item need to be added to the Town’s Risk Register	No
Is a Risk Treatment Plan Required	No

SITE INSPECTION

Nil

COMMENT

With the condition assessment quote sent to market in September 2022, this will flow into the five year capital building plan. Once the condition assessments are received, the priority list can be provided to the Works committee, proposed for November 2022.

Fremantle City Women’s soccer club building upgrade is at 70% design completion, with no confirmation from the Department regarding the additional funding as of mid-September 2022. Irrelevant of this, the design package is being worked on by the architect, to go to tender for Construction in October 2022.

CONCLUSION

The Towns building assets are a major component of its asset portfolio, meaning it is important to maintain our buildings to a suitable standard at all times. Considering the limited use of some of the Towns buildings they may get neglected, however the Town should be maintaining all assets to a suitable standard, so that the wider public and stakeholders can utilize them when required.

CHOOSE AN ITEM. OFFICER RECOMMENDATION / COMMITTEE RESOLUTION

<p>Committee Resolution Choose an item. Click or tap to enter a date.</p> <p>OFFICER RECOMMENDATION That the Works Committee receive and note the Building maintenance and improvement report.</p>
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REPORT ATTACHMENTS

Nil

10.2 CAPITAL WORKS PROGRESS REPORT

Report Reference Number	ACR-323
Prepared by	Nicholas King
Supervised by	Gary Tuffin
Meeting date	Tuesday, 27 September 2022
Voting requirements	Simple Majority
Documents tabled	
Attachments	
	1. Capital Works Progress Report

PURPOSE

The Works Committee is requested to receive this report regarding the Town's Capital works program progress until August 2022.

EXECUTIVE SUMMARY

The Council's adopted 2022/23 budget consists of over \$2 million of capital renewal and upgrade projects. Consisting of four categories; Plant and Equipment, Furniture and Equipment, Buildings, and Infrastructure. Progress costing and comments are provided monthly to Council through the Council Concept forum and as part of the monthly Council reporting.

BACKGROUND

Following the adoption of the budget, the Officers have planned out the 2022/23 capital works program for the financial year ahead. Particular works required early procurement due to seasonal conditions, such as the Wauhop Oval resurfacing project which needs to be commenced in September/October 2022. All other major capital projects are planned to be completed by December 2022, with procurement under way and planned to be completed by October 2022.

CONSULTATION

Internal consultation with impacted Officers, including the Executive Management Team.

STATUTORY ENVIRONMENT

Local Government (Functions and General) Regulations 1996 – (11)

Require that tenders be publicly invited for such contracts where the estimated cost of providing the total service is expected to be, more or worth more, than \$250,000.

POLICY IMPLICATIONS

Purchasing Policy 2.1.3

FINANCIAL IMPLICATIONS

As per the attached Capital works report, the Capital works renewal and upgrade program is worth over \$2 million.

STRATEGIC IMPLICATIONS

The Town of East Fremantle Strategic Community Plan 2020-2030 states:

Strategic Priority 3 – Built Environment – Accessible, well planned built landscapes which are in balance with the Town’s unique heritage and open spaces

3.3 Plan and maintain the Town’s assets to ensure they are accessible, inviting and well connected

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)
Individual quotes will need to be sought for minor works, delaying works and compromising capital works completion within financial year.	Unlikely (2)	Minor (2)	Low (1-4)	FINANCIAL IMPACT \$250,001 - \$1,000,000	Manage by undertaking procurement early in the financial year to ensure works can be completed.

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

Nil

COMMENT

Major Capital works projects timing and information is provided below:

Job	Description	Original Budget	Comments
	Plant & Equipment	\$425,450	Fleet being procured at the moment, with one vehicle locked in, waiting prices for other vehicles
E04634	Furniture & Equipment - IT Equipment - Capex - New - Administration	\$25,000	General allocation, used on an as required basis
E14605	Buildings - Specialised - Capex - Renewal - Unclassified Property	\$80,000	Works being investigated and priced: Dovenby internal/external painting, Roof repairs at Town hall, Rowing club and scouts
E11739	Buildings - Specialised - Capex - Fremantle Women's Football Club	\$900,000	Final design ready to be provided to Council October 2022
E11743	Infrastructure - Parks & Ovals - Playground - Various Upgrades	\$30,000	Several playgrounds noted for minor equipment upgrades. Equipment being ordered Sept 2022
E11744	Infrastructure - Parks & Ovals - Playgrounds - Nature Playground	\$120,000	Nature playground opened Aug 2022, pump track commencing Sept 2022
E11741	Infrastructure - Parks & Ovals - Retic Upgrades	\$50,000	Bore pump and cabinet replacement at Gourley Park being undertaken Aug 2022
E11742	Infrastructure - Parks & Ovals - Retic Controllers	\$32,000	Prices being sought for controllers
E11740	Infrastructure - Parks & Ovals - Turf - Wauhop Oval	\$150,000	Quotes sought, minor change of scope to fit within budget. Works to commence late Sept 2022
E11735	Capex - Bench Seats - Various Locations	\$15,000	General bench seat upgrades where required
E11745	Infrastructure - Parks & Ovals - Ancillary - Drink Fountains	\$10,000	Two Drink fountains to be purchased to upgrade old fountains
E12827	Infrastructure - Car Parks - Surface/Pavement - Capex - Renewal - Maintenance Streets, Roads & Bridges	\$15,000	General allocation for maintenance. Some works to commence Sept 2022
E12833	Capex - Drainage Rationalisation - Foreshore	\$100,000	Works to commence in dryer months, Nov-Feb
E12840	Infrastructure - Roads - Renewal - Marmion St - East St	\$361,127	Tender approved by Council Aug 2022, works to commence Sept 2022
E12841	Infrastructure - Footpaths - Renewal - Canning Hwy (Fortescue - Irwin)	\$66,000	Term contract being put to Council Sept 2022
E12842	Infrastructure - Footpaths - Renewal - Canning Hwy (Irwin - Oakover)	\$80,000	Term contract being put to Council Sept 2022
E12843	Infrastructure - Footpaths - Renewal - Petra St (View Tce - Preston Point Rd)	\$68,000	Quotes being sought Sept 2022, works to commence October 2022
E12844	Infrastructure - Footpaths - Renewal - George St (East St - Glyde St)	\$36,000	Quotes being sought Sept 2022, works to commence October 2022
		\$2,563,577	

CONCLUSION

With the early adoption of the 2022/23 budget this allows Officers to begin procurement for major projects, which will see most of the major projects completed before December 2022. Further explanation of the major project as below:

- Marmion Street resurfacing initial onsite meeting occurred in early September 2022, with works proposed to commence in mid-October 2022.

- Two Canning Highway footpath upgrades are awaiting the September Council meeting to approve the relevant contractor to lock in the works, planned to begin in late October 2022.
- Two asphalt footpath upgrade projects sent to market mid-September 2022, contractor to be approved October 2022, with works planned to commence late October 2022.
- Wauhop Oval resurfacing, quotes were received by three companies in August 2022, with all being well above the budget. Re-scope of works being put together and re-quoted to commence October 2022.

CHOOSE AN ITEM. OFFICER RECOMMENDATION / COMMITTEE RESOLUTION

Committee Resolution Choose an item. Click or tap to enter a date.

OFFICER RECOMMENDATION

That the Works Committee receive and note the Capital Works Program for August 2022.

REPORT ATTACHMENTS

Attachments start on the next page

TOWN OF EAST FREMANTLE - CAPITAL WORKS REPORT - 31 August 2022												
COA/ Job	Description	Original Budget	Budget Amendments	Current Budget	YTD Actual	Order Value	Total Actual	Variance (\$)	Variance (%)	Indicator	Completion %	Comments
E04629	Plant & Equipment - Light Fleet - Capex - Renewal - Administration	\$86,200	\$0	\$86,200	\$0	\$0	\$0				0%	CEO and EMCS Vehicle
E04635	Capex - New - Ev Charging Station - Town Hall	\$0	\$0	\$0	\$0	\$0	\$0				0%	Works completed Sept 2022
E07495	Plant & Equipment - Light Fleet - Capex - New - Health Inspection & Admin	\$40,000	\$0	\$40,000	\$0	\$0	\$0				0%	EHO Vehicle
E10648	Plant & Equipment - Light Fleet - Capex - Renewal - Town Planning & Regional Development	\$40,000	\$0	\$40,000	\$0	\$0	\$0				0%	EMRS Vehicle
E11716	Plant & Equipment - Light Fleet - Capex - Renewal - Other Recreation & Sport	\$56,000	\$0	\$56,000	\$0	\$0	\$0				0%	Parks Supervisor Ute + Oval and Verges Ute
E14609	Plant & Equipment - Light Fleet - Capex - Renewal - Unclassified Property	\$62,000	\$0	\$62,000	\$0	\$33,993	\$33,993				0%	EMTS Vehicle + Works Ute
E11685	Plant and Equipment - Public Art - Capex - New - Other Culture	\$85,000	\$0	\$85,000	\$0	\$13,090	\$13,090				0%	
E11720	Plant & Equipment - Mobile Plant - Capex - Renewal - Other Recreation & Sport	\$30,000	\$0	\$30,000	\$0	\$0	\$0				0%	Toro Mower investigation being undertaken for new mower
E11741	Plant & Equipment - Public Art - Capex - New - Other Culture - EF Oval Commemoration Artwork	\$26,250	\$0	\$26,250	\$0	\$26,500	\$26,500				0%	
Plant & Equipment		\$425,450	\$0	\$425,450	\$0	\$73,583	\$73,583	-\$425,450	-100.00%		0%	
E04634	Furniture & Equipment - IT Equipment - Capex - New - Administration	\$25,000	\$0	\$25,000	\$0	\$12,777	\$12,777				0%	
Furniture & Equipment		\$25,000	\$0	\$25,000	\$0	\$12,777	\$12,777	-\$25,000	-100.00%		0%	
E14605	Buildings - Specialised - Capex - Renewal - Unclassified Property	\$80,000	\$0	\$80,000	\$0	\$0	\$0	-\$80,000	-100.00%		0%	Building condition assessments being sent to market for prices in Sept 2022
E11738	Buildings - East Fremantle Oval Precinct Redevelopment	\$13,000,000	\$0	\$13,000,000	\$344,914	\$970,653	\$1,315,567				3%	
E11739	Buildings - Specialised - Capex - Fremantle Women's Football Club	\$690,000	\$0	\$690,000	\$4,235	\$0	\$4,235				1%	Final design ready to be provided to Council October 2022
Buildings		\$13,770,000	\$0	\$13,770,000	\$349,149	\$970,653	\$1,319,802	-\$13,420,851	-97.46%		3%	
E11743	Infrastructure - Parks & Ovals - Playground - Various Upgrades	\$30,000	\$0	\$30,000	\$0.00	\$0	\$0				0%	Several playgrounds noted for minor equipment upgrades. Equipment being ordered Sept 2022
E11744	Infrastructure - Parks & Ovals - Playgrounds - Nature Playground	\$120,000	\$0	\$120,000	\$65,000	\$0	\$65,000				54%	Nature playground opened Aug 2022, pump track commencing Sept 2022
E11727	Infrastructure - Parks & Ovals - Turf - Capex - New - Other Recreation & Sport	\$0	\$0	\$0	\$0	\$0	\$0				0%	
E11741	Infrastructure - Parks & Ovals - Retic Upgrades	\$50,000	\$0	\$50,000	\$0	\$8,736	\$8,736				0%	Bore pump and cabinet replacement at Gourley Park in progress, Aug 2022
E11742	Infrastructure - Parks & Ovals - Retic Controllers	\$32,000	\$0	\$32,000	\$0	\$0	\$0				0%	Prices being sought for controllers
E11740	Infrastructure - Parks & Ovals - Turf - Wauhop Oval	\$150,000	\$0	\$150,000	\$0	\$0	\$0				0%	Quotes sought, minor change of scope to fit within budget. Works to commence late Sept 2022
E11734	Capex - Tricolore - Bbq Replacement	\$10,000	\$0	\$10,000	\$0	\$0	\$0				0%	Goods ordered, waiting delivery
E11735	Capex - Bench Seats - Various Locations	\$15,000	\$0	\$15,000	\$4,065	\$0	\$4,065				27%	Goods ordered, waiting delivery
E11745	Infrastructure - Parks & Ovals - Ancillary - Drink Fountains	\$10,000	\$0	\$10,000	\$0	\$3,452	\$3,452				0%	Goods ordered, waiting delivery
E12827	Infrastructure - Car Parks - Surface/Pavement - Capex - Renewal - Maintenance Streets, Roads & Bridges	\$15,000	\$0	\$15,000	\$0	\$0	\$0				0%	
E12833	Capex - Drainage Rationalisation - Foreshore	\$100,000	\$0	\$100,000	\$0	\$0	\$0				0%	Works to commence in dryer months, Nov-Feb
E12840	Infrastructure - Roads - Renewal - Marmion St - East St	\$361,127	\$0	\$361,127	\$1,940	\$0	\$1,940				1%	Contractor approved by Council Aug 2022, works to commence Sept 2022
E12841	Infrastructure - Footpaths - Renewal - Canning Hwy (Fortescue - Irwin)	\$66,000	\$0	\$66,000	\$0	\$0	\$0				0%	Term contract being put to Council Sept 2022
E12842	Infrastructure - Footpaths - Renewal - Canning Hwy (Irwin - Oakover)	\$80,000	\$0	\$80,000	\$0	\$0	\$0				0%	Term contract being put to Council Sept 2022
E12843	Infrastructure - Footpaths - Renewal - Petra St (View Tce - Preston Point Rd)	\$68,000	\$0	\$68,000	\$0	\$0	\$0				0%	Quotes beight sought Sept 2022, works to commence October 2022
E12844	Infrastructure - Footpaths - Renewal - George St (East St - Glyde St)	\$36,000	\$0	\$36,000	\$0	\$0	\$0				0%	Quotes beight sought Sept 2022, works to commence October 2022
E12648	TRAFFIC MANAGEMENT - MOSS/FLETCHER & MAY/ST PETERS	\$0	\$0	\$0	\$0	\$0	\$0				0%	
E12835	Capex - Irwin Street Kerbing	\$0	\$0	\$0	\$0	\$0	\$0				0%	
E12739	Infrastructure - Leeuwin Carpark Upgrades - Paid Parking Management Solution	\$0	\$0	\$0	\$2,319	\$0	\$2,319				0%	
Infrastructure		\$1,143,127	\$0	\$1,143,127	\$73,324	\$12,188	\$85,512	-\$1,069,803	-93.59%			
		\$15,363,577	\$0	\$15,363,577	\$422,473	\$1,069,201	\$1,491,674	-\$14,941,104	-97.25%		3%	

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

10.3 ENGINEERING MAINTENANCE ITEMS

Report Reference Number	ACR-331
Prepared by	Nicholas King
Supervised by	Gary Tuffin
Meeting date	Tuesday, 27 September 2022
Voting requirements	Simple Majority
Documents tabled	
Attachments	

1. Footpath Condition Map

PURPOSE

The Works Committee is requested to receive this report regarding Engineering Maintenance items.

EXECUTIVE SUMMARY

Engineering maintenance items within the Town are generally reactive and dealt with by the Towns engineering field officers or contractors. With the highest risk asset the Town has footpaths, the Town have implemented an annual footpath inspection program which a consultant investigates and rates all of the Towns footpath network. The inspection will be undertaken in January and February every year, with the condition of the footpaths the basis for the following years budget.

BACKGROUND

The Towns Engineering maintenance budget is approximately \$300,000 annually, and accounts for two of the Towns external work force. Although the workforce is small the importance on the department is high, with footpaths and roads some of the Towns high risk assets. One of the highest cost materials and contracts item within the engineering maintenance budget is street sweeping (E12215) \$89,917, which the contractor sweeps all of the streets and car parks once per month.

The Towns also have several bus shelters under its care and control, which the Public Transport Authority (PTA) are looking to upgrade all stops to be to the relevant standard.

CONSULTATION

Nil

STATUTORY ENVIRONMENT

Local Government Act 1995

POLICY IMPLICATIONS

Purchasing Policy 2.1.3

FINANCIAL IMPLICATIONS

The Towns Engineering maintenance budget is approximately \$300,000 for the 2022/23 financial year

STRATEGIC IMPLICATIONS

The Town of East Fremantle Strategic Community Plan 2020-2030 states:

Strategic Priority 3 – Built Environment – Accessible, well planned built landscapes which are in balance with the Town’s unique heritage and open spaces

3.3 Plan and maintain the Town’s assets to ensure they are accessible, inviting and well connected

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)
High risk items like footpath repairs are left and public liability claims increase	Possible (3)	Moderate (3)	Moderate (5-9)	REPUTATIONAL Substantiated, low impact, low news item	Manage by making sure assets are maintained and repaired in a timely manner

Risk Matrix

Consequence		Insignificant	Minor	Moderate	Major	Extreme	
		1	2	3	4	5	
Likelihood	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

Nil

COMMENT

The footpath condition assessment was undertaken in early 2022, with the results informing the 2022/23 budget. Outside of the capital budget, minor footpath maintenance works that were isolated to very small

sections are planned to be ground down, rather than replace whole footpath sections. An example of the condition assessment pickup is attached.

Street sweeping is one of the larger materials and contractors budget items, with the Town receiving complaints regarding the issue of vehicles being parked on the street while sweeping occurs in the Plympton ward. It was proposed to undertake sweeping on a specific side of the road on one week and then the opposite side of the road the following week, with letters sent to affected residents, encouraging residents to have vehicles moves for the street sweeper. The trial seemed somewhat unsuccessful with only some residents moving vehicles, and the street sweeper too large to be able to fit between vehicles, meaning that there were still leaves and debris on the street once the sweeper was done within each street.

A minor maintenance item under the Towns control is bus shelters on PTA bus stops, of which the Town have 26 shelters noted from the last asset valuation in 2021. In mid 2022 the PTA informed the Town that it planned to upgrade specific bus stops within the Town, meaning some existing shelters may be removed as the new concrete pad cannot be poured with the shelter in place.

CONCLUSION

With Engineering assets being highly visible and high risk to the Town it is important that these assets are maintained to a high standard. The external work crew for engineering maintenance are proactive when queries or complaints are received, this includes assisting in the mitigation of trip hazards within the Towns footpath network which we are progressing with each month.

CHOOSE AN ITEM. OFFICER RECOMMENDATION / COMMITTEE RESOLUTION

Committee Resolution Choose an item. Click or tap to enter a date.

OFFICER RECOMMENDATION

That the Works Committee receive and note the Engineering Maintenance report.

REPORT ATTACHMENTS

Attachments start on the next page



10.4 PARKS & GARDENS

Report Reference Number	ACR-333
Prepared by	Nicholas King
Supervised by	Gary Tuffin
Meeting date	Tuesday, 27 September 2022
Voting requirements	Simple Majority
Documents tabled	
Attachments	Nil

PURPOSE

The Works Committee is requested to receive this report regarding the Town's Parks and Gardens.

EXECUTIVE SUMMARY

The Towns Parks, Ovals and reserves asset portfolio has an estimated value of approximately \$8 million, excluding non-depreciable assets (passive parks, sports fields and natural areas). The majority of its external work force are based within the parks and gardens team, maintaining the Towns parks and gardens on a schedule program which runs fortnightly. In addition to the maintenance, capital projects within parks account for approximately \$400,000 for the financial year 2022/23.

BACKGROUND

The Towns parks and gardens are the most visible asset to its residents and stakeholders, meaning that the maintenance of these areas is important in keeping the Town looking proactive and mindful of its stakeholders values in relation to the environment.

In the 2022/23 financial year the Town have four major parks and gardens related projects as below:

- Wauhop Park resurfacing.
- Urban Canopy tree planting.
- Niergarup track.
- Street tree planting.
- Sports Ovals maintenance.

CONSULTATION

Nil

STATUTORY ENVIRONMENT

Local Government Act 1995
 Environment Protection and Biodiversity Conservation Act 1999
 Australian Standards

POLICY IMPLICATIONS

Purchasing Policy 2.1.3

FINANCIAL IMPLICATIONS

Capital projects of approximately \$400,000 for the 2022/23 financial year
 Operating costs of approximately \$600,000 for the 2022/23 financial year

STRATEGIC IMPLICATIONS

Strategic Priority 1 – Social - A socially connected, inclusive and safe community.

1.2 Inviting open spaces, meeting places and recreational facilities

Strategic Priority 3 – Built Environment – Accessible, well planned built landscapes which are in balance with the Town’s unique heritage and open spaces

3.2 Maintaining and enhancing the Town’s character

Strategic Priority 4 – Natural Environment - Maintaining and enhancing our River foreshore and other green, open spaces with a focus on environmental sustainability and community amenity

4.1 Conserve, maintain and enhance the Town’s open spaces

4.2 Enhance environmental values and sustainable natural resource use

4.3 Acknowledge the change in our climate and understand the impact of those changes.

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)
Parks become degraded and look poor	Possible (3)	Moderate (3)	Moderate (5-9)	REPUTATIONAL Substantiated, public embarrassment, moderate impact, moderate news profile	Manage by making sure out maintenance standards are high and checked by senior staff.

Risk Matrix

Consequence		Insignificant	Minor	Moderate	Major	Extreme	
		1	2	3	4	5	
Likelihood	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

Nil

COMMENT

The maintenance and upgrade of the Towns parks is very important as it is an amenity that is seen and used daily by residents and stakeholders. The Towns major maintenance works and projects are listed below with relevant timeframes:

- Wauhop Park resurfacing – Quotes were sent to market in Aug 2022, with three submissions, all of which were well above the existing budget. Decided to re-scope the works to get within budget. New scope being evaluated and sent to contractors, to begin works in October 2022.
- Urban Canopy tree planting underway, planted up to 200 of the urban canopy trees. All planting completed, with no watering needed at this stage. Watering to commence when rain stops.
- Niergarup track zone 1 planting complete, part of zone 2 planted, and weed control being undertaken in zone 2 in early September 2022. Areas to be assessed in September 2022, to determine next course of action.
- Street tree planting to begin Sept 2022, works to begin late Sept 2022.
- Turf renovations, fertilizer to be carried out on Sports fields, commencing Sept 2022. Quotes need to be sent to contractors due to cost. Works will only take one week on ground, however the ovals will be un-used by the clubs for approximately 3-4 weeks to allow the ovals to recover.
- Retic Controllers – Prices being sought Sept 2022, if materials are available all should be in before December 2022.

CONCLUSION

As works in parks and gardens is generally seasonal in terms of tree planting and recovery, most of the capital works relating to parks and gardens is undertaken in the winter months between July and September. In addition to the capital projects the Towns external work force work on a fortnightly maintenance schedule to maintain the Towns parks and gardens.

CHOOSE AN ITEM. OFFICER RECOMMENDATION / COMMITTEE RESOLUTION

Committee Resolution Choose an item. Click or tap to enter a date.	Committee Res
OFFICER RECOMMENDATION That the Works Committee receive and note the Parks and Gardens report.	

10.5 RISK & HAZARDS

Report Reference Number	ACR-335
Prepared by	Nicholas King
Supervised by	Gary Tuffin
Meeting date	Tuesday, 27 September 2022
Voting requirements	Simple Majority
Documents tabled	
Attachments	Nil

PURPOSE

The Works Committee is requested to receive this report regarding Risk & Hazards and OHS/WHS matters.

EXECUTIVE SUMMARY

As there are no items to report on these matters for this month, items may be raised during the meeting.

BACKGROUND

Risk & Hazards and OHS/WHS matters are important for the Town, as reporting and mitigating risk is a key component on reducing the Towns public liability. If done correctly the Town, residents and other stakeholders will benefit from a safe Town of limited risks and hazards.

CONSULTATION

Nil

STATUTORY ENVIRONMENT

Work Health and Safety Act 2020

POLICY IMPLICATIONS

Policy 2.2 Risk Management

FINANCIAL IMPLICATIONS

No direct costs associated with this item, however the Towns insurance policies may be impacted indirectly.

STRATEGIC IMPLICATIONS

The Town of East Fremantle Strategic Community Plan 2020-2030 states:

Strategic Priority 5 – A proactive, approachable Council which values community consultation, transparency and accountability

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)
If risks are not identified then hazards can become worse, and the impact can sometimes be fatal	Unlikely (2)	Major (4)	Moderate (5-9)	REPUTATIONAL Substantiated, public embarrassment, high impact, high news profile, third party actions	Manage by identifying risks and mitigating them early

Risk Matrix

Consequence		Insignificant	Minor	Moderate	Major	Extreme	
		1	2	3	4	5	
Likelihood	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	8
Does this item need to be added to the Town’s Risk Register	No
Is a Risk Treatment Plan Required	No

SITE INSPECTION

Nil

COMMENT

As no items for this month, this section will be filled as required in coming meetings.

CONCLUSION

Risk & Hazards and OHS/WHS are items that are important to the Town as its reputation can be damaged and the financial implications can be high if the severity of incidents is serious. It is the Towns responsibility to mitigate these risks and identify hazards, in trying to prevent serious incidents.

CHOOSE AN ITEM. OFFICER RECOMMENDATION / COMMITTEE RESOLUTION

Committee Resolution Choose an item. Click or tap to enter a date.

OFFICER RECOMMENDATION

That the Works Committee receive and note the Risk & Hazards and OHS/WHS report.

REPORT ATTACHMENTS

Nil

10.6 STRATEGIC PROJECTS

Report Reference Number	ACR-327
Prepared by	Nicholas King
Supervised by	Gary Tuffin
Meeting date	Tuesday, 27 September 2022
Voting requirements	Simple Majority

Documents tabled

Attachments

1. MP Rogers & Associates Report
2. Operations Review Update

PURPOSE

The Works and Services Committee is requested to receive this report regarding the Town's Strategic Projects.

EXECUTIVE SUMMARY

The Town has several strategic projects which align with its Strategic Community Plan, Corporate Business Plan and Strategic Resource Plan. Four key projects have been identified and will be updated within this report, being:

- Implementation of Works Review
- Implementation of Integrated Traffic Management Plan
- Implementation of Foreshore Management Plan
- Implementation of Asset Management Plan

BACKGROUND

The four key strategic projects have varied background information, with relevant information as below.

Implementation of Works Review

Works review undertaken by GFG Consulting in early 2020, with the report finalised in March 2020. 66 individual recommendations were put forward within the report to increase efficiencies in the Operations Department, and create greater transparency.

Implementation of Integrated Traffic Management Plan

The Integrated Traffic Management Plan was undertaken by Cardno in 2020, with the final report finalised in April 2021. With over 100 individual recommendations put forward, the Officers have broken the recommendations into three categories: Parking, Traffic and Active Transport. Which an implementation plan has been created to target recommendations in the next five years.

Implementation of Foreshore Management Plan

The Town commissioned Ecoscape in 2015 to undertake a foreshore management plan, which put forward a 10 year asset maintenance priority plan. This plan has been used as the basis for subsequent foreshore management documents, including the River wall 10 year priority plan which was undertaken by MP Rogers in early 2022, with a first draft presented at the works committee in August 2022.

Implementation of Asset Management Plan

The Town has many asset categories, with asset management plans in place for Buildings, Drainage, Footpaths, Parks, Plant and Equipment, and Roads. Best practice is to review these plans annually if not bi-

annually, with the most recent review undertaken in late 2021. Asset conditions are not reviewed annually for all categories, however for high risk assets such as footpaths an annual inspection has been put in place to identify and mitigate and hazards.

CONSULTATION

All strategic projects have had varied levels of consultation, including.

Implementation of Works Review

Finalised report went to Council informally upon completion, with updates provided to Council in late 2021 at the Council Concept Forum.

Implementation of Integrated Traffic Management Plan

The finalised report was presented to Council at the Council Concept Forum in mid-2021.

Implementation of Foreshore Management Plan

Different iterations have been presented to Council both formally and informally since the 2015 plan, however the updated condition assessment and plan has not been presented to Council as of yet.

Implementation of Asset Management Plan

The asset management plans have not been presented to Council as of yet. With updated documents to be presented to an upcoming Council Concept Forum.

STATUTORY ENVIRONMENT

Local Government Act 1995

POLICY IMPLICATIONS

Nil

FINANCIAL IMPLICATIONS

The four strategic projects have an impact on the Towns long term financial plan and the current 2022/23 financial year budget.

STRATEGIC IMPLICATIONS

The Town of East Fremantle Strategic Community Plan 2020-2030 states:

Strategic Priority 3 – Built Environment – Accessible, well planned built landscapes which are in balance with

the Town’s unique heritage and open spaces

3.3 Plan and maintain the Town’s assets to ensure they are accessible, inviting and well connected

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)
If strategic plans are not updated or maintained the long term financial plan may be adversely impacted	Possible (3)	Minor (2)	Low (1-4)	FINANCIAL IMPACT \$50,000 - \$250,000	Manage by annually reviewing strategic projects to make sure we are aligning with the plans and long term financial planning

Risk Matrix

Consequence		Insignificant	Minor	Moderate	Major	Extreme	
		1	2	3	4	5	
Likelihood	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	5
Does this item need to be added to the Town’s Risk Register	No
Is a Risk Treatment Plan Required	No

SITE INSPECTION

Nil

COMMENT

Updates on the individual projects are as below:

Implementation of Works Review

The Operations review is reviewed monthly by the CEO and EMTS, with the recommendations commented on and updated if completed. To date of the 66 recommendations the status is below for each:

Status	66	%
Ongoing	40	61%
Completed	15	23%
No Action	11	17%

Implementation of Integrated Traffic Management Plan

Following the plan being presented to Council in mid 2021, the Officers set out an implementation plan with the relevant implementation year and comments from relevant managers. With some recommendations needing further investigation, it is proposed that within the 2022/23 budget, minor projects are concentrated on, with a budget allocation of \$60,000 for this financial year.

Implementation of Foreshore Management Plan

The updated condition assessment and five year plan outlines the Towns capital upgrade program moving forward. Within the 2022/23 financial year the Council has allocated approximately \$250,000 towards river wall upgrades, including a contribution of \$75,000 from the DBCA.

The Towns officers met with the DBCA in September 2022 to agree on river wall works starting date. Works planned to begin the week of 3 October, with project signage to be placed near the two sites before the works commence. Traffic and pedestrian management will be in place, detouring pedestrians around the site.

Implementation of Asset Management Plan

All Asset management plans were reviewed in late 2021, however condition assessments were only undertaken for Footpaths and Roads being too high risk assets. In the existing financial year a building condition assessment will be undertaken for all buildings the Town owns or maintains, in addition to the annual playground inspections undertaken near December every year.

CONCLUSION

The Towns strategic projects are vital in capturing and updating the Towns assets and priorities in aligning with its long term financial plan. It is important that the Town review these projects regularly to make sure our annual capital program and maintenance budgets are aligning with the long term plans.

CHOOSE AN ITEM. OFFICER RECOMMENDATION / COMMITTEE RESOLUTION

Committee Resolution Choose an item. Click or tap to enter a date.

OFFICER RECOMMENDATION
That the Works Committee receive and note the strategic projects update.

REPORT ATTACHMENTS

Attachments start on the next page

R1692 Rev 0

August 2022

Town of East Fremantle

**East Fremantle Riverwalls
10 Year Priority Plan**

marinas
boat harbours
canals
breakwaters
jetties
seawalls
dredging
reclamation
climate change
waves
currents
tides
flood levels
water quality
siltation
erosion
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Suite 1, 128 Main Street, Osborne Park, WA 6017
 p: +618 9254 6600
 e: admin@coastsandports.com.au
 w: www.coastsandports.com.au

K1977, Report R1692 Rev 0
Record of Document Revisions

Rev	Purpose of Document	Prepared	Reviewed	Approved	Date
A	Draft for MRA review	T Irvine	T Hunt	T Hunt	29.07.22
0	Issued for Client use	 T Irvine	T Hunt	 T Hunt	17.08.22

Form 035 18/06/2013

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1. Introduction

The Town of East Fremantle (Town) has engaged specialist coastal and port engineers, M P Rogers & Associates Pty Ltd (MRA) to prepare a 10-year riverwall maintenance priority plan. The Town manages approximately 3.5 km of foreshore which is comprised of mixed built, natural and private foreshore assets. The riverwalls and other built foreshore assets managed by the Town are the focus of this maintenance priority plan. It should be noted that while most of the Town's foreshore built assets can be classified as vertical block walls, some other built assets such as mortared rock revetments and groynes also exist and have been included the development of this riverwall maintenance priority plan. The foreshore managed by the Town extends from East Street in the west to Petra Street in the east as shown Figure 1.1.

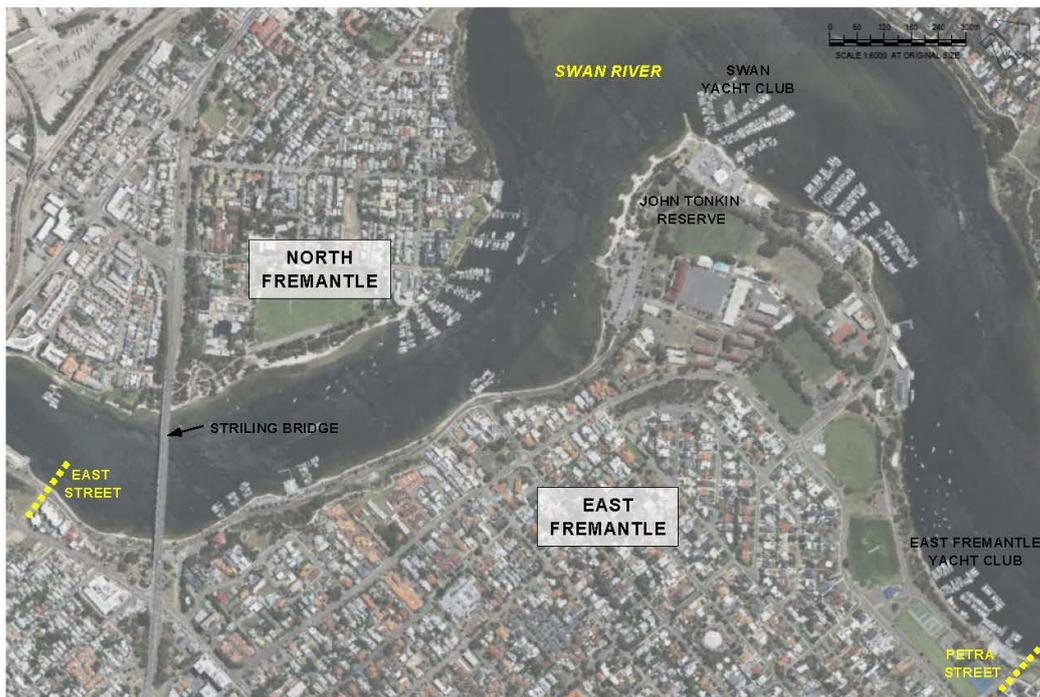


Figure 1.1 East Fremantle Foreshore Extent

2. Site Background

2.1 Previous Studies

The Town's foreshore has been the subject of many previous studies. Notably, MRA's work with Ecoscape in 2015 in developing a Foreshore Master Plan (Ecoscape, 2015). An earlier Foreshore Landscape Plan prepared by Ecoscape in 1993 was also an important document in the management of the Town's foreshore. These master plan documents provide a holistic view of the Town's previous foreshore management strategies and discuss the background and context of the site.

As part of the 2015 Foreshore Master Plan, MRA completed a Foreshore Condition Inspection which included a 10 year maintenance priority plan (MRA, 2014). It is not entirely clear exactly how many of, or to what extent these recommendations were acted on. The planning timeframe of this previous priority plan is now nearing completion, and is therefore due for an update. It is noted that the context and background information included within the 2015 master plan is still generally relevant. As such, this report will focus explicitly on the Town's current riverwall condition and future maintenance requirements.

MRA has also completed a number of inspections and condition assessments along the Town's foreshore. In late 2020 and early 2021, MRA provided updated condition assessments for the Town's riverwalls. Later In 2021, MRA completed an updated condition assessment of Swan Canning River built assets for the DBCA, which included reassessment of the Town's riverwalls and other built assets. The condition ratings developed from the most recent works for the DBCA have been utilised in this priority plan.

The previous maintenance priority plan along with the more recent condition inspections have been considered in the development of this 10 year maintenance priority plan (MRA, 2015, 2020 & 2021). Additionally, MRA completed a condition assessment for riverwall assets adjacent to and fronting the East Fremantle Yacht Club. This assessment has been included later in this report.

2.2 Survey

The Town has recently completed a feature survey for the entire extent of its accessible foreshore. The survey aim was to provide information to allow review and design of maintenance or replacement requirements for the Town's foreshore assets. The survey brief specified an extent of approximately 10 metres into the water and back a distance approximately to the road kerb, picking up notable features.

This survey was completed in June 2022 and recently provided to MRA.

2.3 Acid Sulfate Soils

Acid Sulfate Soils (ASS) are known to exist in wetland areas of the Swan Coastal Plain. ASS are harmless when left undisturbed, however when exposed to air, the iron sulfides in the soil oxidise to produce iron compounds and sulfuric acid. This acid can react with other compounds and release harmful substances, including the acids and heavy metals themselves, into the environment and waterway (DER 2015).

When actual ASS is identified or disturbed it must be managed by an approved Acid Sulfate Soil Management Plan (ASSMP). Management of ASS can be an expensive exercise and encountering unexpected/unidentified ASS can cause major cost blowouts to a project.

The Department of Water & Environmental Regulation (DWER) ASS risk dataset of the Swan Coastal Plain (DWER-055) was used to identify the risk of potential ASS occurring at the site. The map is available at <http://www.der.wa.gov.au/your-environment/acid-sulfatesoils/65-ass-risk-maps/>. The ASS map of the site is as shown in Figure 2.1.



Figure 2.1 Acid Sulphate Soil Risk Map of Site (DWER-055)

The ASS map shows a High to Moderate risk (Class 1 – Red) of ASS occurring along the foreshore edge throughout the extent of the Town. Therefore, should more than 100 m³ of material be planned to be excavated during any foreshore works, an ASS investigation will be required and, depending on the outcomes, an ASS Management Plan (ASSMP) may be needed. This may have significant cost implications on any works which include excavation of the foreshore. It may also influence dewatering works, which may be required for riverwall maintenance or replacement.

2.4 Aboriginal Heritage

The Swan River is an integral part of the Aboriginal culture as a site of significance to the Whadjuk Noongar people and all impacts to the river are to be carefully considered. Any works on registered aboriginal heritage sites (such as Site S3536, the Swan River) require approval from the Department of Planning, Lands and Heritage. MRA understands that the Town has Section 18 approval for works on its riverwalls and foreshore which should be reviewed prior to undertaking any works arising from this maintenance priority plan.

3. Riverwall Condition Assessment

3.1 Site Inspection

Recent site inspections of the East Fremantle riverwalls were completed by MRA engineers Trent Hunt & Todd Irvine on 11 October 2021, 25 May 2022 and additionally on 19 July 2022. Assets were inspected visually above water for condition and defects. Drainage outlets and structural items such as jetties, boardwalks and boat ramps were not included in the assessments.

The inspections were carefully timed to coincide with low water levels so that the majority of the assets, including typically below water components, could be inspected. Despite timing the inspections at low water levels, some assets extend below the water level. In addition, the inspections were visual only and no intrusive investigations were undertaken. For these reasons, additional defects may exist that were not visible during the inspection.

3.2 Asset Rating System

As part of the inspection, MRA assigned each asset a condition and consequence rating. The condition and consequence ratings for use have been previously confirmed by the Department of Biodiversity, Conservation & Attraction (DBCA), and are consistent with previous rating systems developed by MRA and DBCA. The condition and consequence ratings are presented in Tables 3.1, 3.2 and 3.3.

A matrix of Condition and Consequence Rating was then used to provide an Overall Condition Index (OCI), presented in Table 3.4. The relevant OCI for each asset can be used to determine maintenance priorities, which are related to the recommended works timings in Table 3.5.

Table 3.1 Condition Rating

Rating	Condition Description	Performance	Action Plan	Maintenance Classification
1	Asset that has been recently installed or re-conditioned back to as new	Good Condition	Predictive Maintenance	Planned Maintenance
	Asset should not show any wear or fatigue characteristics			
	Asset is expected to function fully as designed and deliver service level fully as intended			
2	An asset shows early stages of deterioration and wear	Minor Deterioration	Preventative Maintenance	Planned Maintenance
	There is no reduction in service level delivery of the asset			
3	Asset shows very obvious signs of deterioration	Fair Condition	Cyclic Maintenance	Planned Maintenance
	There will be some service delivery loss			
	Planned maintenance action required to restore asset service level delivery			
4	An asset showing severe signs of deterioration	Poor Condition	Reactive Maintenance	Unplanned Maintenance
	Prompt actions have to be taken to avoid major service delivery failure			
5	Asset has failed and is no longer capable of delivering services as intended	Failed Asset	Breakdown Maintenance / Asset Renewal	Unplanned Maintenance
	In some cases, it will be a risk in leaving the asset in service			
	Urgent action will be required to replace or rehabilitate the asset			
0	Unable to Inspect / Missed Inspection		Investigate	
NA	Not Applicable			
CYNA	Condition Not Yet Assessed		Inspection Plan	

Table 3.2 Condition Rating Examples for Vertical Block Wall

Rating	Description	Typical Photo
1 Good	Sound physical condition No Work Required No voids, cracks or erosion present	
2 Moderate (Minor Deterioration)	Acceptable physical condition; Minimal short term failure risk but potential for further deterioration. Minor Work Required Minor erosion to blocks or joints	
3 Fair	Significant deterioration evident; failure unlikely in near future but further deterioration likely. Work required but asset is still serviceable Joints have voids or blocks eroding, or voids present behind wall	
4 Poor	Failure likely in the short term Substantial work required in short term, asset barely serviceable Large voids or crack in wall, blocks eroded	
5 Very Poor / Failed	Failed or failure imminent / safety risk Major work or replacement required urgently Footings undermined or blocks/joints heavily eroded	

Table 3.3 Consequences Rating Matrix

Rating	Consequence Name	Consequence Description
NA	Not Assessed	Not Assessed
1	Insignificant	No injuries. Loss of \$0 - \$1,000 Impact resolved; can be repaired within 1 month. Unlikely to be raised in public; Complaints unlikely to be received.
2	Minor	First aid treatment required. Loss \$1,000 - \$10,000. Impact repairable; can be repaired within 1 - 6 months. Local adverse media coverage; some complaints received.
3	Moderate	Medical treatment required. Loss \$10,000 - \$100,000. Environmental damage; can be repaired within 6 - 12 months. Adverse media coverage; coordinated representation demand additional resource.
4	Major	Serious injury. Loss \$100,000 - \$1.0M. Long term environmental damage; will require at least 12 months to repair.
5	Catastrophic	Death. Loss of more than \$1.0M. Irreversible impact; cannot be repaired or restored. Inquiry, dismissal or prosecution. Long term reputation damage at state level.

Table 3.4 Overall Condition Index (OCI)

		Condition Rating				
		1	2	3	4	5
Consequence Rating	5	5	10	15	23	25
	4	4	9	14	20	24
	3	3	8	13	19	22
	2	2	7	12	18	21
	1	1	6	11	16	17

Table 3.5 Recommended Works Timing

Combined Rating	Works Timing
1-3	10 Yrs +
4-6	5- 10 Yrs
7-11	2 – 5 Yrs
12-17	1 – 2 Yrs
18-21	6 Mth – 1 Yr
22-25	Urgent < 6 Mths

The recommended timings presented in Table 3.5 are commonly used by DBCA and local governments around the Swan Canning Estuary. However, these can be tailored to suit the Town's budget and overall works priorities.

3.3 Asset Condition Assessment

As part of the works, MRA produced a chainage system for the East Fremantle riverwalls which can be viewed in the Condition Rating Plan in Appendix A. It is recommended that this section of the report be read in conjunction with the Condition Rating Plan. This condition assessment refers to the built assets by their approximate chainage as well as their respective DBCA asset identifier (MRA, 2022). The assets were broken up into segments where a clear change in the riverwall condition or construction material/methodology was evident. The Town's riverwall assets have been assessed as follows in order of chainage starting from the west.

It should be noted that some of the Town's assets may have slightly changed DBCA asset identifiers when compared to previous inspections. This is due to the 2021 DBCA built asset inspection which consolidated or removed redundant assets and listed previously unidentified assets. Generally, only the number forming the last part of the asset identifier is all that has been changed. This is particularly notable for the Norm Mackenzie Reserve and John Tonkin Park & Preston Point asset identifiers.

SLFr01 Fremantle Bridge. B01

Asset ID	Approximate Chainage (m)	Asset Type	Condition Rating	Consequence Rating	OCI
SLFre01 Fremantle Bridge.B01	0-20	Rock Revetment	4	3	19



Figure 3.1 Path Behind Revetment (L) & Overtopping Damage (R)

This asset straddles the boundary of the City of Fremantle and the Town of East Fremantle. It appears that most of the asset is within the City of Fremantle's jurisdiction, however approximately 20 metres appear to lie within the Town's boundary. The asset is a limestone rock revetment in poor condition. It features undersize rock with steep sections, insufficient width and damage from uncontrolled surface runoff. There is evidence of voids and overtopping damage behind the crest.

SLEFr06 Stirling Bridge J Dolan Park. B03

Asset ID	Approximate Chainage (m)	Asset Type	Condition Rating	Consequence Rating	OCI
SLEFr06 Stirling Bridge J Dolan Park.B03	20-80	Wall	3	3	13



Figure 3.2 J Dolan Park Wall Looking East (L) & Looking West (R)

The asset is a vertical wall made from mortared natural limestone rock backed by a concrete pedestrian path which serves as a capping. Some mortar decay around the toe is evident, causing voids and loose rock. The path is cracked in places, possibly due to a loss of fines through voids. Repointing and void repair maintenance works are recommended to prevent further damage to the path.

SLEFr06 Stirling Bridge J Dolan Park. B02

Asset ID	Approximate Chainage (m)	Asset Type	Condition Rating	Consequence Rating	OCI
SLEFr06 Stirling Bridge J Dolan Park. B02	80-240	Wall	3	3	13



Figure 3.3 Limestone Block Wall (L) & Access Stairs (R)

The asset is a low vertical limestone block wall backed with a concrete pedestrian path which serves as capping. Panel/post toe protection is present at the upstream and downstream extents. The wall is generally in fair condition, with the face and crest showing signs of recent regrouting. The limestone block steps are in poor condition and require rebuild. The concrete path on crest appears to be relatively new and is in good condition. Scheduled maintenance is recommended to maintain the asset to its current condition.

SLEFr06 Stirling Bridge J Dolan Park. B01

Asset ID	Approximate Chainage (m)	Asset Type	Condition Rating	Consequence Rating	OCI
SLEFr06 Stirling Bridge J Dolan Park. B01	240-370	Wall	3	3	13



Figure 3.4 Sandy Beach (L) & Downstream Void (R)

The asset is a low vertical limestone block wall backed with a concrete pedestrian path which serves as a capping. The concrete path is generally in good condition and the wall exhibits signs of recent repointing works. A sandy beach is protecting the lower portion of the wall, with panel and post toe protection visible in parts. Some of the panels were displaced or damaged. One notable void was present at the downstream end which required maintenance. Scheduled maintenance is recommended to maintain the asset to its current condition.

SLEFr05 Merv Cowan Park. B06

Asset ID	Approximate Chainage (m)	Asset Type	Condition Rating	Consequence Rating	OCI
SLEFr05 Merv Cowan Park. B06	370-500	Wall	3	3	13



Figure 3.5 Limestone Blockwall with Jetty Abutments

The asset is a vertical limestone blockwall with intermittent panel and post toe protection and some scattered rock rip rap. The wall features multiple jetty abutments and a public concrete path at the rear of crest. The condition of the wall was generally fair, with signs of recent repointing works, however, there was some grout loss in the lower courses. Scheduled maintenance is recommended to maintain the asset to its current condition.

SLEFr05 Merv Cowan Park. B05

Asset ID	Approximate Chainage (m)	Asset Type	Condition Rating	Consequence Rating	OCI
SLEFr05 Merv Cowan Park. B04	500-580	Revetment	3	3	13



Figure 3.6 Pitched Revetment Looking North (L) & South (R)

The asset is a pitched (grouted) limestone revetment supporting a concrete path and protecting a high use carpark. The top sections were in good condition, with the overall structure in fair condition. Some loss of mortar and rock was evident at the toe. The asset requires toe protection to prevent further undermining. Lack of action could lead to further material loss and development of voids beneath path/carpark.

SLEFr05 Merv Cowan Park. B04

Asset ID	Approximate Chainage (m)	Asset Type	Condition Rating	Consequence Rating	OCI
SLEFr05 Merv Cowan Park. B04	600-630	Wall	4	4	20



Figure 3.7 Weathered Blockwall (L) & Cracking of Concrete Wall (R)

The section of walling on the northern side of the Dome is in poor condition. There is a short limestone blockwall extending from the Dome about 5-10 metres. The blockwall is heavily deteriorated with little mortar still visible, heavily weathered blocks and signs of settlement. There has been significant loss of material behind the wall, settlement, and movement of pavers.

Adjacent to the blockwall is a concrete panel wall which is also in poor condition. The concrete panels are heavily cracked and settled and are nearing end of service life. The wall through this section supports a public path and a carpark which services the dome and foreshore.

The section of wall from the Dome to the nearest jetty is considered a high priority for replacement or significant upgrade.

SLEFr05 Merv Cowan Park. B03

Asset ID	Approximate Chainage (m)	Asset Type	Condition Rating	Consequence Rating	OCI
SLEFr05 Merv Cowan Park. B03	630-940	Wall	4	3	19



Figure 3.8 Low Limestone Blockwall (L) & Voids Beneath Path (R)

The limestone blockwall exhibited signs of recent repointing maintenance. The lower courses of the wall display loss of mortar, and there was evidence of voids behind the wall / below the path. Recent maintenance efforts have helped slow the deterioration, however further works will be required with attention to the lower courses and filling voids behind the wall.

SLEFr05 Merv Cowan Park. B02

Asset ID	Approximate Chainage (m)	Asset Type	Condition Rating	Consequence Rating	OCI
SLEFr05 Merv Cowan Park. B02	940-1050	Wall	4	3	19



Figure 3.9a Limestone Armour in Front of Vertical Wall



Figure 3.9b Tie In (L) & Sheet Pile Wall (R)

The asset is a terraced blockwall with a bituminous pavement present on the lower-level landing (now closed off to pedestrians). A concrete path is present behind the top wall, and is in fair condition. Rock armour is present fronting the wall and provides some protection from wave energy. However, the wall is deteriorated with loss of fines and voids opening up behind the crest, resulting in a poor visual aesthetic. Recommended remediation options for this stretch could include adaption measures such as removal of the bitumen, blockwall maintenance and vegetation of the lower level.

A short section of heavily corroded sheet pile wall connects the block wall to the Department of Transport Boatshed Facility. It appears that geotextile and concrete has been used to repair voids behind sheet pile wall. This entire section requires significant upgrade.

SLEFr05 Merv Cowan Park. B01

Asset ID	Approximate Chainage (m)	Asset Type	Condition Rating	Consequence Rating	OCI
SLEFr05 Merv Cowan Park. B01	940-1050	Wall	3	3	13



Figure 3.10 Block Wall Section (L) & Settled Path (R)

The asset is a limestone blockwall featuring a concrete path capping and toe scour protection. The wall is generally in a fair condition with signs of recent repointing maintenance. The lower courses require further repointing.

A short section of path is rotated and settled, which appears to be due to uncontrolled surface runoff from the road increasing the loss of fines under/through the wall. Minor maintenance works are required to the wall and path, along with addressing the underlying surface drainage issue.

SLEFr04 John Tonkin Park & Preston Point. B11

Asset ID	Approximate Chainage (m)	Asset Type	Condition Rating	Consequence Rating	OCI
SLEFr04 John Tonkin Park & Preston Point. B11	1330-1380	Wall	2	2	7



Figure 3.11 Limestone Block Wall & Sandy Beach

The asset is in moderate condition, showing signs of minor deterioration. A sandy beach in front of the wall is protecting the lower courses. Scheduled repointing maintenance is recommended to maintain the asset to its current condition.

SLEFr04 John Tonkin Park & Preston Point. B10

Asset ID	Approximate Chainage (m)	Asset Type	Condition Rating	Consequence Rating	OCI
SLEFr04 John Tonkin Park & Preston Point. B10	1420-1520	Revetment	4	3	19



Figure 3.12 Grouted Revetment (L) & Voids Under Path (R)

The asset is a pitched (mortared) limestone rock revetment in poor condition. The grout has cracked as a result of toe undermining, allowing the lower rocks to settle. Extensive voids were present throughout revetment structure. The path exhibits cracks which is indicative of voids underneath.

It is unclear how far the voids extend under the path and potentially the car park and this are therefore provides some risk. This section is considered to be a high priority item for a recommended rebuild.

SLEFr04 John Tonkin Park & Preston Point. B09

Asset ID	Approximate Chainage (m)	Asset Type	Condition Rating	Consequence Rating	OCI
SLEFr04 John Tonkin Park & Preston Point. B9	1540-1570	Revetment	3	3	13



Figure 3.13 Revetment Around Boat Ramp

The limestone rock revetment around the Leeuwin boat ramp was observed to be in fair condition. Minor maintenance involving repacking of armour and loose material is required.

SLEFr04 John Tonkin Park & Preston Point. B08-B03

Asset ID	Approximate Chainage (m)	Asset Type	Condition Rating	Consequence Rating	OCI
SLEFr04 John Tonkin Park & Preston Point. B08	1600-1620	Wall	1	3	3
SLEFr04 John Tonkin Park & Preston Point. B07	1600-1620	Groyne	1	2	2
SLEFr04 John Tonkin Park & Preston Point. B06	1640-1660	Groyne	1	2	2
SLEFr04 John Tonkin Park & Preston Point. B05	1700-1720	Groyne	1	2	2
SLEFr04 John Tonkin Park & Preston Point. B04	1740-1760	Groyne	1	2	2
SLEFr04 John Tonkin Park & Preston Point. B03	1800-1820	Groyne	1	2	2



Figure 3.14 Block Wall (L) & Groyne Example (R)

The above assets were all observed to be in good condition. The maintenance requirements include ongoing monitoring.

SLEFr04 John Tonkin Park & Preston Point. B02

Asset ID	Approximate Chainage (m)	Asset Type	Condition Rating	Consequence Rating	OCI
SLEFr04 John Tonkin Park & Preston Point. B02	1760-1840	Gabion	2	2	7



Figure 3.15 Buried Gabion/Reno Mattresses

The asset is a mostly buried gabion basket/reno mattress, with visible portions in moderate condition. No works required.

SLEFr04 John Tonkin Park & Preston Point. B01

Asset ID	Approximate Chainage (m)	Asset Type	Condition Rating	Consequence Rating	OCI
SLEFr04 John Tonkin Park & Preston Point. B01	1900-1940	Groyne	2	2	7



Figure 3.16 Preston Point Groyne

The asset is a low limestone rock groyne and was observed to be in moderate condition. Minor repacking of loose rock is required. However, this is not considered to be a high priority maintenance item.

SLEFr03 Norm McKenzie Reserve. B10-B06

Asset ID	Approximate Chainage (m)	Asset Type	Condition Rating	Consequence Rating	OCI
SLEFr03 Norm McKenzie Reserve. B10-B06	1940-2040	Wall	Varies	Varies	Varies

The condition of the structures within the Swan Yacht Club was documented in an inspection previously completed by MRA (2021) for the Town and is outside of the scope of this plan.

SLEFr03 Norm McKenzie Reserve. B05

Asset ID	Approximate Chainage (m)	Asset Type	Condition Rating	Consequence Rating	OCI
SLEFr03 Norm McKenzie Reserve. B05	2055-2065	Wall	3	3	13



Figure 3.17 Limestone Block Wall

The asset is a short (approx. 5-10m long) limestone block wall. The wall supports a high use public path and protects the foreshore immediately in front of a building. Some weathering of the face evident and wall is slightly rotated, but overall the asset is in reasonable condition. The wall should be upgraded with improved tie-ins to the neighbouring structures in the long term.

SLEFr03 Norm McKenzie Reserve. B04

Asset ID	Approximate Chainage (m)	Asset Type	Condition Rating	Consequence Rating	OCI
SLEFr03 Norm McKenzie Reserve. B04	2060-2090	Gabion	4	2	18



Figure 3.18 Limestone Gabions Rotated (L) & Lost Material (R)

The gabion baskets forming the wall appear to have rotated forward and are beginning to deteriorate. Holes in the baskets have allowed the loss of some of the limestone material. The wall supports high use path and protects a navy cadets building. The asset requires maintenance in the short term to maintain serviceability. Long term planning should include upgrading this entire stretch of foreshore.

SLEFr03 Norm McKenzie Reserve. B03

Asset ID	Approximate Chainage (m)	Asset Type	Condition Rating	Consequence Rating	OCI
SLEFr03 Norm McKenzie Reserve. B03	2090-2100	Gabion	3	2	12



Figure 3.19 Limestone Gabions

The gabion baskets protect the beach area and kayak ramp. Some deformation and damage of the baskets was evident, and the baskets appeared to have been previously repaired. Asset requires additional maintenance in the short term to maintain serviceability. Long term planning should include upgrading this entire stretch of foreshore.

SLEFr03 Norm McKenzie Reserve. B02

Asset ID	Approximate Chainage (m)	Asset Type	Condition Rating	Consequence Rating	OCI
SLEFr03 Norm McKenzie Reserve. B02	2100-2155	Revetment	3	3	13



Figure 3.20 Steps (L) & Pitched Revetment (R)

The asset here includes a pitched limestone revetment, steps and a ramp that service the Fremantle Rowing Club. The steps appear to be in good condition, and are partially buried by the beach. The crest of the revetment also appears to be in good condition, however the toe is severely undercut. Overall, the pitched revetment is in average condition. The mortar here has cracked and limestone material has settled and/or been lost offshore.

The extent of the voids is unclear and there is a potential they extend to the car park, providing a high risk. Maintenance action to improve the toe protection is therefore required urgently.

SLEFr03 Norm McKenzie Reserve. B01

Asset ID	Approximate Chainage (m)	Asset Type	Condition Rating	Consequence Rating	OCI
SLEFr03 Norm McKenzie Reserve. B01	2240-2260	Wall	4	2	18



Figure 3.21 Undermined Limestone Block Wall

The asset is a short limestone block wall that retains the public path above. The wall appears to be undermined with signs of flow coming from under the wall and path. This could indicate a potential drainage/pipe outflow issue. There are evidence of voids under the path with cracks and signs of movement present. The condition has significantly deteriorated since previous inspections. Remediation of the wall is required for public safety.

SLEFr02 Wayman Reserve – Jerrat Drive. B02

Asset ID	Approximate Chainage (m)	Asset Type	Condition Rating	Consequence Rating	OCI
SLEFr02 Wayman Reserve – Jerrat Drive. B02	2425-2550	Revetment	3	2	12



Figure 3.22 Pitched Limestone Revetment

The asset is a pitched limestone revetment protecting a grassy foreshore reserve and public path in places. The wall is generally in fair condition, with some loss of mortar observed through the lower sections. The toe is undercut throughout the western extent and requires maintenance.

SLEFr02 Wayman Reserve – Jerrat Drive. B01

Asset ID	Approximate Chainage (m)	Asset Type	Condition Rating	Consequence Rating	OCI
SLEFr02 Wayman Reserve – Jerrat Drive. B01	2820-2895	Wall	4	3	19



Figure 3.23 Deteriorated Limestone Block Wall

The foreshore features a deteriorated limestone block wall fronting Camp Waller Sea Scouts Hall. The blocks are weathered and exhibit a total loss of mortar through the lower courses. There is evidence of material loss through the wall leading to voids opening up behind wall crest. The voids behind wall are a safety hazard with uneven surfaces and potential for unstable ground to give way. Although outside the scope of this assessment, the jetty was also noted to be in poor condition and requires further investigation and monitoring.



Figure 3.24 Deteriorated Crib Wall

The foreshore upstream of the building features a deteriorated crib wall which supports the concrete path behind. Many cracked and dislodged units were observed. It is recommended that the entire foreshore at this site is investigated for future significant upgrade.



Figure 3.25 Limestone Block Wall & Concrete Apron

The asset consists of a recently constructed limestone retaining wall and a recently repaired concrete apron and path. The condition of the asset is as new. The concrete path is supported by deteriorated crib wall (aforementioned) which requires rebuild.

SLEFr02 Wayman Reserve – Jerrat Drive. B03

Asset ID	Approximate Chainage (m)	Asset Type	Condition Rating	Consequence Rating	OCI
SLEFr02 Wayman Reserve – Jerrat Drive. B03	2970	Abutment	3	2	12



Figure 3.26 Concrete Stair Abutment

The asset is the concrete stair abutment at the base of the accessway. It is noted that the assessment does not directly include the stairs further up the slope.

The lower section of the stairs have settled to one side and there is a large drop off from the last stair to the sand. Further erosion would accelerate the undermining of the stairs above the base. It is recommended as a minimum to backfill under the eroded section of stairs, provide scour protection to the sides and add an additional lower step.

Alternatively, the lower stair abutment could be adapted to incorporate a FRP/steel viewing area or an accessway similar to that investigated by MRA (2018). Minimal changes were evident from the previous inspections in 2015.

East Fremantle Yacht Club – 01

Asset ID	Approximate Chainage (m)	Asset Type	Condition Rating	Consequence Rating	OCI
EFYC 01	3100-3120	Wall	3	3	13



Figure 3.27 Grout Filled Bags

The asset is a low-lying wall comprised of a concrete footing and weathered grout bags. The wall protects the downstream end of the East Fremantle Yacht Club (EFYC) carpark and is utilised by members only.

East Fremantle Yacht Club – 02

Asset ID	Approximate Chainage (m)	Asset Type	Condition Rating	Consequence Rating	OCI
EFYC 02	3120-3200	Wall	4	4	20



Figure 3.28 Limestone Blockwall



Figure 3.29 Carpark Pot Holes & Repairs

The asset is a low-lying wall comprised of cut natural limestone blocks. The blocks are heavily weathered and some are displaced below the water line, with a total loss of mortar throughout. The below water sections could not be properly assessed however appeared to be deteriorated and undermined. The wall supports a section of carpark used by EFYC members only.

Pot holes and evidence of several bituminous repairs were present in the car park behind the wall, which are indicative of voids behind the wall. This can be caused by loss of fines through the joints or holes in the wall. Cars were observed to be parked immediately behind the wall, which may have a reduced structural capacity and significant voids throughout. It is strongly recommended that urgent maintenance and underwater investigations are completed to determine the condition of the footing/base of the wall and confirm the suitability of continuing to use this area by vehicles.

East Fremantle Yacht Club – 03

Asset ID	Approximate Chainage (m)	Asset Type	Condition Rating	Consequence Rating	OCI
EFYC 03	3200-3260	Wall	3	4	14



Figure 3.30 Concrete Panel & Steel Pile Wall



Figure 3.31 Carpark Bitumen Repairs & Settlement

The wall is generally in reasonable condition, and is comprised of concrete panels and driven H-section steel bearers. The steel piles are beginning to show signs of corrosion, however not yet of structural significance. Maintenance could include repair to the protective paint coating on the steel section. The above water portion of the concrete panels generally appeared to be in reasonable condition.

The water through this section is quite deep and therefore the base of the wall was not able to be assessed during the inspection. However, based on the condition of the carpark with multiple potholes and repairs, it is possible that some material is being lost through the wall. Underwater inspections will be required to further investigate the cause of any material loss (ie potential damaged or displaced panels).

East Fremantle Yacht Club – 04

Asset ID	Approximate Chainage (m)	Asset Type	Condition Rating	Consequence Rating	OCI
EFYC 04	3260-3280	Wall	3	4	14



Figure 3.32 Limestone Blockwall with Dinghy Rack

The asset is a limestone blockwall in reasonable condition. The faces are weathered and most of the mortar is no longer evident. Repointing and refacing in the short term will prolong the lifetime of this structure considerably. The wall supports a dinghy rack and retains the road immediately behind the wall which services the carpark. Short-term maintenance will provide value in prolonging service life and reducing the risk of damage to the road.

East Fremantle Yacht Club – 05

Asset ID	Approximate Chainage (m)	Asset Type	Condition Rating	Consequence Rating	OCI
EFYC 05	3300-3340	Wall	4	4	20

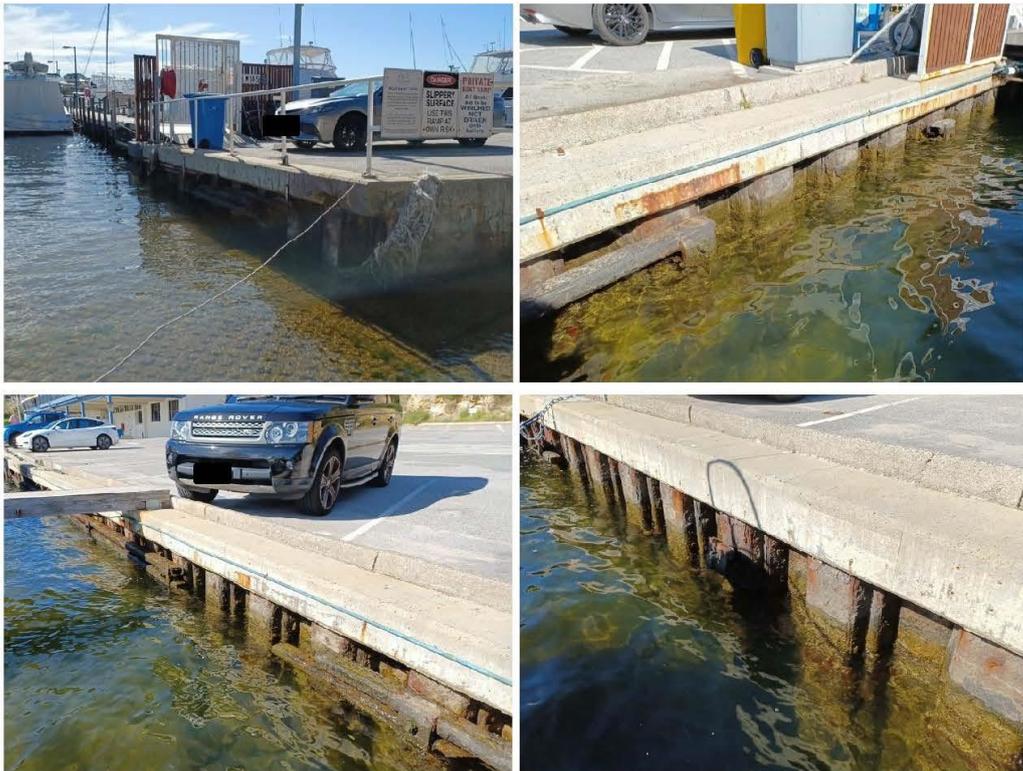


Figure 3.33 Sheet Pile Wall with Concrete Pile Cap

The asset features a heavily corroded steel sheet pile wall with a concrete pile cap, immediately backed by bituminous carpark. The steel RHS walers are heavily corroded and entirely missing in places. The concrete capping beam supports multiple finger jetties. Bituminous repairs to the carpark at the rear of the wall are indicative of material loss through the wall. The carpark allows vehicles to park almost directly above the sheet pile wall which likely has a reduced structural capacity. Assets which are fronted by deep water and allow vehicular access to the rear of the crest are considered to have a particularly high consequence of failure. This section of wall should be planned for upgrade in the near future along with a monitoring plan and additional underwater inspections in the interim.

East Fremantle Yacht Club – 06

Asset ID	Approximate Chainage (m)	Asset Type	Condition Rating	Consequence Rating	OCI
EFYC 06	3340-3400	Wall	2	4	9



Figure 3.34 Concrete Panel & Steel H-Pile Wall

The wall asset is generally in good condition, and is comprised of concrete panels and driven H-section steel columns similar to EFYC 03 albeit in a slightly better condition. The steel piles are beginning to show signs of corrosion with blistering of the paint, however do not appear to yet be of structural significance. The above water portion of the concrete panels generally appeared to be in good condition. Maintenance could include repairs to the protective paint coating on the steel section.

East Fremantle Yacht Club – 07

Asset ID	Approximate Chainage (m)	Asset Type	Condition Rating	Consequence Rating	OCI
EFYC 07	3400-3420	Wall	2	2	7



Figure 3.35 Limestone Blockwall

The asset is a low-lying limestone blockwall, and was generally in good condition. A sandy beach was present which was covering the lower courses of wall at the time of the inspection. Maintenance requirements include ongoing monitoring and future repointing.

4. Maintenance Regime

MRA has developed a maintenance priority regime for the Town's marine assets based on the most recent condition assessments. The maintenance regime recommended by MRA (2015) has been reviewed and considered in this 10 year priority plan.

The Town has advised MRA that an annual allocation of at least \$150,000 per year for construction works should be considered for budgetary purposes. It is noted that \$150,000 may only be enough to complete minor maintenance items each year, and some assets require larger scale maintenance such as full replacement. MRA has developed this priority plan based on the approximate \$150,000 per year budget constraint. It is noted that where additional funding is secured, efforts should be made to expedite this maintenance program.

The Town should also actively seek contributions from the DBCA Riverbank Grants Funding for undertaking the works, as well as any other state or federal funding opportunities that may arise. This priority plan may be used as supporting documentation when applying for funding. Indicative repair/replacement costs have been provided for budgetary/scheduling purposes. Please note these indicative costs are based on the following assumptions:

- Costs are based on either repair or replacement of a similar asset, and do not include consideration for significant alternatives.
- Does not include environmental investigations, approvals or landscaping costs.
- Does not include design and management costs.
- The cost estimate is based on recent tendered rates for similar works in the Perth Metropolitan Region. However, it is noted that there is currently a high demand for construction resources (eg steel, FRP, rocks and other construction materials along with labour) and prices are rapidly increasing. Availability of material is also limited, with long lead times.
- Future escalation has not been included. As the marine construction industry in WA has limited resources and is currently in high demand, prices can vary significantly from one project to another. It is noted that prices may increase significantly over the coming years and within the timeframe of this priority plan.
- The effects of delays and costs due to COVID-19 have not been included and should be taken into consideration by the Town.
- The accuracy of the costs can range significantly depending on the market conditions at the time, the availability of Contractors and materials, and the methodology accepted for the works.

It is noted that costs for marine works are highly variable, with Tendered prices varying up to 100% of the lowest Tendered price. Contractor prices are subject to a number of factors including availability and location of resources, perceived competitiveness, perceived risk and the experience of the Contractor. With marine works, it is highly desirable to heavily favour experience over cost in terms of assessing Tenders for works. This generally is the most cost effective longer term option for the Town as there are generally less variations required throughout a project and management requirement of the Contractor by the Town/Superintendent are significantly less.

Additionally, undertaking more moderate scale projects as opposed to small items allows a Contractor to setup some efficiency with the project which will provide the Town with a cheaper overall rate for the works and some opportunity for value adding.

Onsite inspections from an engineer experienced in the coastal and marine masonry works are recommended to ensure that the repair works are of suitable standard to extend the structural service life of the walling. Poor quality works become only minor aesthetic improvements to the walling which degrade quickly and do not improve the structural performance of the walling. MRA would be able to provide the Town with technical advice and site inspections during the construction works.

A summary of the priority works and expected order of magnitude budgetary costs for the works is provided in Table 4.1. The works have then been scheduled over a 10 year regime based on MRA's opinion of probable cost and priority in the subsequent section.

In addition to the maintenance regime, Town operations, parks and garden staff should routinely monitor the pathways and adjacent areas next to the riverwalls for any signs of voids or significant cracking. The presence of any voids should be reported and then investigated and backfilled. Early identification of voids and issues can result in minor insignificant repairs to the walling only and prevent the formation of a large void which causes the collapse of a pathway or wall section.

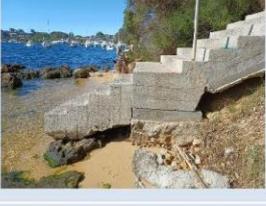
The Swan Yacht Club and East Fremantle Yacht Club assets have not been included in the following priority plan. The recommended maintenance measures and further investigations for SYC and EFYC assets should be negotiated with the respective Yacht Club.

Table 4.1 Riverwall Maintenance Priorities by OCI

Asset ID	Approximate Chainage (m)	OCI	Typical Defect Photo	Maintenance Requirement	Cost Estimate ¹ (per metre length)
SLEFr05 Merv Cowan Park.B04	600-630	20		Mixed Concrete panel and limestone block wall. Walls require replacement/rebuild.	\$5,000
SLEFr04 Jon Tonkin Park and Preston Point.B10	1420-1520	19		Pitched limestone revetment. Requires replacement/rebuild.	\$4,000
SLEFr05 Merv Cowan Park.B03	630-940	19		Limestone block wall weathered and needs repointing. Some voids under path require backfill.	\$1,000-\$2,000
SLEFr05 Merv Cowan Park.B02	940-1050	19		Terraced limestone blockwall. Requires repointing maintenance to top wall. Develop adaption option for lower level such as planter boxes and repack revetment with additional armour.	\$4,000
SLEFr02 Wayman Reserve-Jerrat Drive.B01	2820-2895	19		Sea Scouts natural limestone block wall, Mortar missing from lower courses. Appears to be founded on rock. Voids opening behind wall, loss of blocks.	\$5,000
SLFre01 Fremantle Bridge.B01	0-20	19		Revetment requires repacking. May be an opportunity to collaborate at the appropriate time with the City of Fremantle and cost save.	\$3,000
SLEFr03 Norm McKenzie Reserve.B01	2240-2260	18		Block wall retaining path behind. Wall undermined, likely voids under path, cracking & signs of movement. Wall requires further investigation, probable rebuild of undermined section.	\$5,000

Attachment -1

SLEFr03 Norm McKenzie Reserve.B04	2060-2090	18		Gabion Basket wall, appears to have rotated forward, eastern end basket failed, some material missing. Baskets require patching in the short-term. Long-term involves larger upgrade of foreshore.	\$2,000
SLEFr06 Stirling Bridge J Dolan Park. B03	20-80	13		Near vertical mortared limestone rock with concrete coping. Between block wall and rock revetment. Voids under path likely due to loss through gaps in mortar. Path cracked. Loss of mortar and rocks at toe providing scour protection. Requires further remortaring of lower levels and monitoring of path.	\$1,500
SLEFr06 Stirling Bridge J Dolan Park. B02	80-240	13		Further repointing required with attention to lower courses. Steps to be removed or redesigned.	\$1,000-\$2,000
SLEFr06 Stirling Bridge J Dolan Park. B01	240-370	13		Low limestone blockwall, panel and post at toe in parts. Requires further repointing works with attention to DS void.	\$1,000-\$2,000
SLEFr05 Merv Cowan Park. B06	370-500	13		Limestone block wall condition reasonable. Further repointing focussing on the lower courses.	\$1,000-\$2,000
SLEFr05 Merv Cowan Park. B05	500-580	13		Pitched Limestone rock revetment. Reasonable condition, minor toe scour and damage. Requires toe protection to prevent further undermining.	\$1,000
SLEFr05 Merv Cowan Park. B01	1070-1340	13		Limestone block wall to North of Boatshed. Wall reasonable condition. Repointing of lower courses and addition of toe scour protection. Western end appears to have voids under path from unmanaged drainage/runoff. Recommend remove path and fill over 20m.	\$2,000-\$3,000

SLEFr04 John Tonkin Park & Preston Point. B9	1540-1570	13		Rock revetment around boat ramp, reasonable condition. Requires repacking of loose armour rock and undersize material.	\$1,000
SLEFr03 Norm McKenzie Reserve. B05	2055-2065	13		Short limestone blockwall to the east of slipway, some weathering of the face and rotation evident. Repointing in the short-term, whole stretch should be upgraded in long-term.	\$1,000
SLEFr03 Norm McKenzie Reserve. B03	2090-2100	13		Gabion groyne, protects adjacent ramp and holds beach to north. Some Baskets failed or have sections missing. Patch wire baskets and re-pack rock. Long-term upgrade this stretch.	\$1,000
SLEFr03 Norm McKenzie Reserve. B02	2100-2155	13		Stone pitching toe undercut, generally in moderate condition. Steps in reasonable condition. Re-pack rock and mortar toe.	\$1,500
SLEFr02 Wayman Reserve – Jerratt Drive. B02	2425-2550	13		Limestone pitching. Condition reasonable, toe undercut at western end, requires toe protection, loss of mortar in lower sections.	\$1,500
SLEFr02 Wayman Reserve – Jerratt Drive. B03	2970	12		Lower section of concrete stairs has settled to one side. Large drop off from the last stair to the sand. Undermining of sections of stairs above the base with further erosion. Backfill under the eroded section of stairs, provide scour protection to the sides and additional bottom steps or reconstruct lower section.	Dependant on outcome of concept maintenance treatment. Lower section could be replaced with a FRP structure or similar.
SLEFr04 John Tonkin Park & Preston Point. B02	1760-1840	7		Gabion baskets completely covered by beach and vegetation. Wire fence protecting vegetation and preventing pedestrian access. No works necessary, ongoing monitoring.	N/A

Attachment -1

SLEFr04 John Tonkin Park & Preston Point. B01	1900-1940	7		Limestone rock groyne, reasonable condition. Ongoing monitoring.	N/A
SLEFr04 John Tonkin Park & Preston Point. B11	1340-1380	7		Block wall covered by beach appears to be in reasonable condition. Future repointing. Ongoing monitoring.	N/A
SLEFr04 John Tonkin Park & Preston Point. B08	1600-1620	3	N/A	Ongoing Monitoring	N/A
SLEFr04 John Tonkin Park & Preston Point. B07	1600-1620	2	N/A	Ongoing Monitoring	N/A
SLEFr04 John Tonkin Park & Preston Point. B06	1640-1660	2	N/A	Ongoing Monitoring	N/A
SLEFr04 John Tonkin Park & Preston Point. B05	1700-1720	2	N/A	Ongoing Monitoring	N/A
SLEFr04 John Tonkin Park & Preston Point. B04	1740-1760	2	N/A	Ongoing Monitoring	N/A
SLEFr04 John Tonkin Park & Preston Point. B03	1800-1820	2	N/A	Ongoing Monitoring	N/A

Note: 1. Budgetary figures only based on typical unit rates from similar works.
 2. Does not include SYC or EFYC assets.

4.1 10 Year Maintenance Priority Planning

As a guideline for budgeting and programming maintenance activities along the foreshore infrastructure, the following plan could be adopted. It is recommended that the actual priority of works is reviewed annually depending on the rate of deterioration of different segments and activities could be moved around as seen fit by the Town. Some sections may fail quickly and be required to be attended to immediately, while others may degrade slowly and be deferred to later years. This would require annual or biennial inspection of the items of infrastructure.

This approach has been adopted by other government agencies for their foreshore assets and has assisted with the identification and quick repair of minor issues. This has allowed them to reduce the instances of large failures and concentrate on rehabilitation and capital upgrades rather than reactive replacements. It is noted that proactive maintenance actions will typically prolong the service life of the asset, so delaying proactive maintenance to reactively deal with deteriorated assets is not the ideal approach.

Based on advice received from the Town, yearly totals for repair works have aimed to be in the order of \$150,000 per year to fit it within the Town's budget. However, some of the more major remediation works will easily exceed this amount and are urgent in nature therefore exceeding this budget figure. Should other funding sources be made available, such as contribution funding from the DBCA Riverbanks Grant, then the Town may be able to progress some sections quicker. As mentioned earlier, the Town should where possible look to complete works in larger sections to allow the contractor to setup some efficiency and in return increase value.

It is reiterated that the approximate cost is indicative only and that during any detailed design documentation phase of work a more accurate Construction Cost Estimate may be produced to assist with funding applications for the following year. It is also noted that due to rising construction costs and inflation these estimates may become outdated within the duration of this priority plan, it is therefore recommended that the Town's budget and these cost estimations be indexed as appropriate with respect to rising cost of construction and inflation over the coming decade.

Each year it is recommended the Town prepare the design documentation, funding applications and approvals for the following year of construction (ie during Year 1 the Town shall be preparing for Year 2 construction works).

Typically, each year the construction works should be aimed to completed in the warmer months (spring to autumn) during the period where low tide coincides with daylight hours for ease of construction and to reduce the likelihood of dewatering being required. Experienced marine contractors will be aware of this and consider this in their programming and tender submissions. As a rule of thumb, targeting construction activities for the spring to autumn seasons is good practice, however, some works may be of sufficient elevation above the water that the seasonal timing is of less significance.

Table 4.2 Year 1 Items

Activity	
Undertake internal investigation into management of surface runoff and drainage issues at footpath North of Pier Street (SLEFr05 Merv Cowan Park. B01) for upgrade in year 1.	
Complete detailed design for a replacement riverwall for the approximately 30 m long deteriorated section of wall north of the Dome (SLEFr05 Merv Cowan Park. B04) for construction in year 1.	
Install fencing and/or signage at SLEFr02 Wayman Reserve-Jerratt Drive.B01 wall fronting the Camp Waller Scouts Hall to manage risk to public safety (chainage 2820-2895m).	
Organisation of drawings, technical specifications, approvals and funding applications for year 2 construction projects.	
Construction Project	Approximate Cost
SLEFr05 Merv Cowan Park. B01 Removal of short section of settled path (approx. 20m), complete maintenance to rear of wall, place geotextile, backfill and replace path. Address surface runoff/drainage issues.	\$60,000
SLEFr05 Merv Cowan Park. B04 Removal of short section (approx. 30 m) of deteriorated wall north of Dome and replace with engineered riverwall as per detailed design.	\$150,000

Note: 1. Budgetary figures only based on typical unit rates from similar works.
2. Figures does include cost for detailed design work or management fees.

Table 4.3 Year 2 Items

Activity	
Organisation of drawings, technical specifications, approvals and funding applications for year 3 construction projects.	
Construction Project	Approximate Cost
SLEFr04 Jon Tonkin Park and Preston Point.B10 Reconstruction of pitched limestone revetment and path over approx. 100 m.	\$400,000

Note: 1. Budgetary figures only based on typical unit rates from similar works.
2. Figures does include cost for detailed design work or management fees
3. Construction project recommended as a whole, but can be staged to suit budget if required.

Table 4.4 Year 3 Items

Activity	
Complete concept & detailed design for adaptation options of the terraced riverwall and sheet pile wall south of the DoT boatshed facility (SLEFr05 Merv Cowan Park. B02) for construction in year 4.	
Organisation of drawings, technical specifications, approvals and funding applications for year 4 construction projects.	
Construction Project	Approximate Cost
SLEFr03 Norm McKenzie Reserve.B01 Replacement of the small undermined block wall and path (approx. 20 m long).	\$60,000
SLEFr03 Norm McKenzie Reserve.B02 Re-pack toe rock, including additional toe rocks and re-mortar (approx. 15 m).	\$30,000
SLEFr03 Norm McKenzie Reserve.B03 Maintenance to gabion baskets including repacking lost material and patching baskets.	\$10,000
SLEFr03 Norm McKenzie Reserve.B04 Maintenance to gabion baskets including repacking lost material and patching baskets.	\$30,000
SLEFr03 Norm McKenzie Reserve.B05 Repointing to short limestone block wall (approx. 5 m).	\$5,000

Note: 1. Budgetary figures only based on typical unit rates from similar works.
2. Figures does include cost for detailed design work or management fees.

Table 4.5 Year 4 Items

Activity	
Organisation of drawings, technical specifications, approvals and funding applications for year 5 construction projects.	
Construction Project	Approximate Cost
SLEFr05 Merv Cowan Park. B04 Adaptation of the terraced walling to the south of the DoT boatshed facility (approx. 120 m long) pending outcome of concept and detailed design.	\$240,000

Note: 1. Budgetary figures only based on typical unit rates from similar works.
2. Figures does include cost for detailed design work or management fees
3. Construction project recommended as a whole, but can be staged to suit budget if required.

Table 4.6 Year 5 Items

Activity	
Organisation of drawings, technical specifications, approvals and funding applications for year 6 construction projects.	
Construction Project	Approximate Cost
SLEFr05 Merv Cowan Park. B03 Repointing of the long (approx. 310 m) stretch of limestone block wall and filling voids behind.	\$310,000

Note: 1. Budgetary figures only based on typical unit rates from similar works.
 2. Figures does include cost for detailed design work or management fees
 3. Construction project recommended as a whole, but can be staged to suit budget if required.

Table 4.7 Year 6 Items

Activity	
Organisation of drawings, technical specifications, approvals and funding applications for year 7 construction projects.	
Construction Project	Approximate Cost
SLEFr02 Wayman Reserve – Jerratt Drive. B02 Addition of toe scour protection and repointing/regrouting of limestone pitching over approx. 125 m.	\$180,000
SLEFr05 Merv Cowan Park. B05 Addition of toe scour protection to stone pitched revetment south of Dome (approx. 80 m).	\$80,000

Note: 1. Budgetary figures only based on typical unit rates from similar works.
 2. Figures does include cost for detailed design work or management fees

Table 4.8 Year 7 Items

Activity	
Organisation of drawings, technical specifications, approvals and funding applications for year 8 construction projects.	
Construction Project	Approximate Cost
SLEFr06 Stirling Bridge J Dolan Park. B02 Repointing of limestone blockwall with attention to lower courses and steps removal or replacement over approx. 160 m.	\$160,000
SLEFr06 Stirling Bridge J Dolan Park. B01 Repointing of limestone blockwall and void repair over approx. 130 m..	\$130,000

Note: 1. Budgetary figures only based on typical unit rates from similar works.
 2. Figures does include cost for detailed design work or management fees
 3. Construction project recommended as a whole, but can be staged to suit budget if required.

Table 4.9 Year 8 Items

Activity	
Concept and detailed design for Jerrat Drive riverwall assets (near Scout Hall). Complete cost benefit analysis of maintenance vs replacement based on updated condition assessment at the time. Include landscape architect input.	
Organisation of drawings, technical specifications, approvals and funding applications for year 9 construction projects.	
Construction Project	Approximate Cost
SLEFr05 Merv Cowan Park. B06 Repointing of limestone blockwall with attention to lower courses over approx. 130 m.	\$130,000
SLEFr02 Wayman Reserve – Jerrat Drive. B01 Upgrade of bottom section of concrete stairs with code compliant solution.	\$40,000

Note: 1. Budgetary figures only based on typical unit rates from similar works.
 2. Figures does include cost for detailed design work or management fees

Table 4.10 Year 9 Items

Activity	
Organisation of drawings, technical specifications, approvals and funding applications for year 10 construction projects.	
Construction Project	Approximate Cost
SLEFr02 Wayman Reserve – Jerratt Drive. B01 Replacement of riverwall pending outcome of previous concept and detailed design work over approx. 80 m.	\$400,000

Note: 1. Budgetary figures only based on typical unit rates from similar works.
 2. Figures does include cost for detailed design work or management fees
 3. Construction project recommended as a whole, but can be staged to suit budget if required.

Table 4.11 Year 10 Items

Activity	
Update to the East Fremantle Riverwalls 10 Year Priority Plan.	
Construction Project	Approximate Cost
SLEFr04 Jon Tonkin Park and Preston Point.B9 Repacking of loose armour rock and undersize material over approx. 30 m.	\$30,000
SLEFr04 John Tonkin Park & Preston Point. B01 Repacking of loose armour rock and undersize material over approx. 80 m.	\$80,000
SLEFr06 Stirling Bridge J Dolan Park.B03 Remortaring and addition of toe scour protection over approx. 60 m.	\$60,000

Note: 1. Budgetary figures only based on typical unit rates from similar works.
 2. Figures does include cost for detailed design work or management fees

Table 4.12 Other Items

Construction Project	Approximate Cost
SLFre01 Fremantle Bridge.B01 Upgrade revetment in conjunction with City of Fremantle at an appropriate time.	\$60,000

Note: 1. Budgetary figures only based on typical unit rates from similar works.
 2. Figures does include cost for detailed design work or management fees

It is noted that this 10 year maintenance priority plan had been developed on the basis of approximate funding allocations advised by the Town. The plan includes all Town assets with an OCI of 12 or above.

The general recommended works timing, presented earlier in Table 3.5, recommends that assets with an OCI of 12 or higher be upgraded within a 2 year time-frame. Further to this, it is recommended that any asset with an OCI of 18-21 should be upgraded within a year of being

assessed as such. The 10 year priority plan above does not achieve this due to the funding availability and as a result it is strongly recommended the Town takes every opportunity to secure additional funding. Where possible the maintenance priority plan should be expedited to approach the recommended works timings in Table 3.5.

5. Summary & Recommendations

The Town of East Fremantle has engaged M P Rogers & Associates Pty Ltd to provide an updated 10 year maintenance priority plan for the Town's riverwall built assets. The priority plan has been developed on the basis of multiple built asset condition assessments completed by MRA in recent years and on budget constraints as advised by the Town.

The review and updated condition assessment revealed that most of the Town's existing foreshore built assets are in moderate condition, with signs of heavy weathering and deterioration of primarily the mortar joints and toe protection. Without a maintenance program put in place in the next few years, it is likely that the Town will begin to experience larger failures of these structures and associated damage to adjacent structures such as paths, carparks and roads.

The deterioration of assets is likely a symptom of assets coming into the backend of their design service life along with a lack of maintenance efforts over the last 10-15 years. Aging assets require more frequent and larger scale maintenance to maintain a serviceable condition.

5.1 Recommendations

MRA has provided several recommendations to ensure the successful facilitation of this priority plan as well as public safety and upkeep of the Town's built foreshore assets to a serviceable condition.

- The Town actively follow this maintenance priority plan, and where possible, complete the works in larger size chunks to set up contractor efficiency and associated value adding.
- The Town negotiate maintenance works with the respective Yacht Clubs (particularly EFYC) and urgently organise a diver inspection to assess the underwater components of all EFYC riverwalls. The riverwalls with vehicle parking immediately behind the crest are considered to have a high consequence of failure, hence an ongoing monitoring plan should be established for these Yacht Club assets.
- The Town actively seeks additional government funding (ie riverbank grants) for the annual maintenance works outlined in this plan.
- Town operations, parks and garden staff should routinely monitor the pathways and adjacent areas next to the riverwalls for any signs of voids or significant cracking and ensure any changes are properly documented and brought to the attention of technical staff.

MRA would be able to assist the Town with detailed design and documentation of the forthcoming maintenance works, tender and construction phase assistance and future updates to this plan.

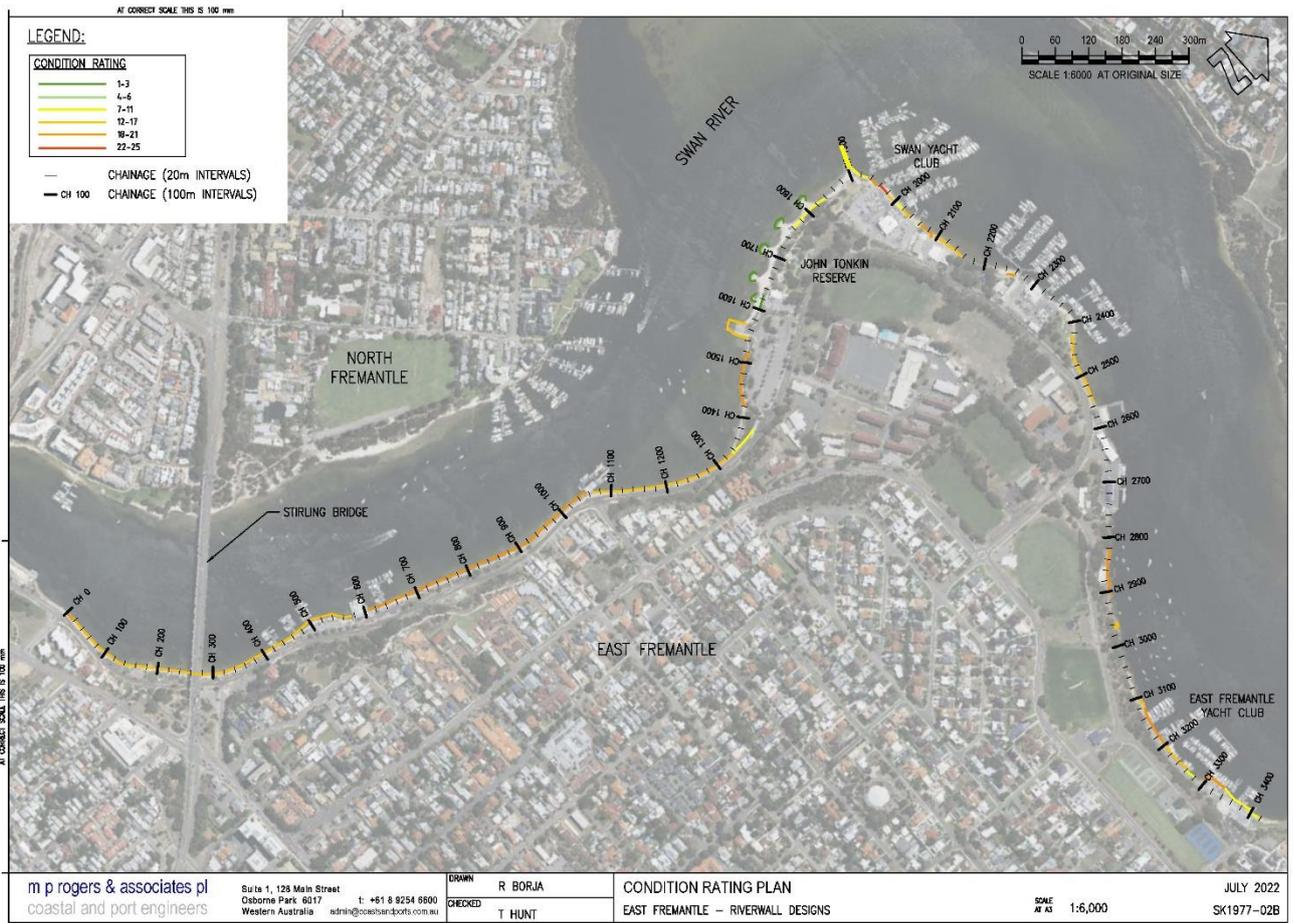
6. References

- M P Rogers & Associates Pty Ltd (MRA), 2015. *East Fremantle Foreshore Structures Condition Inspection, R623 Rev 0*. Prepared for Ecoscape.
- M P Rogers & Associates Pty Ltd (MRA), 2018. *Foreshore Access Way – Specifications for Design, R1053 Rev 1*. Prepared for Town of East Fremantle.
- M P Rogers & Associates Pty Ltd (MRA), 2021. *Riverwalls near Swan Yacht Club Condition Assessment, R1497 Rev 0*. Prepared for Cockburn Cement Ltd.
- M P Rogers & Associates Pty Ltd (MRA), 2021. *Riverwalls Condition Assessment: 2021 Update, R1530 Rev 0*. Prepared for Town of East Fremantle.
- M P Rogers & Associates Pty Ltd (MRA), 2022. *Swan River Built Assets Inspection 2021. R1623 Rev 1*. Prepared for Department of Biodiversity, Conservation and Attractions.

7. Appendices

Appendix A Condition Rating Plan

Appendix A Condition Rating Plan





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Attachment 2

Operations Review 2021-22 - Update

Jan-22

Jan-22

High Priority
Medium Priority
Low Priority

Status	66	%
Ongoing	40	61%
Completed	15	23%
No Action	11	17%

Focus Area	No	Priority	Recommendations	Timeline (year to be completed)	Action taken as of 21/10/21	Status
Culture	1	M	Investigate why the Operations Department has such a high level of absenteeism, and what measures could possibly be introduced to lower this rate.	2022-23	Levels have decreased in 2021, but ongoing discussions with outside staff on reasons why.	Ongoing
Culture	2	L	Schedule regular field visits by Senior Management, including the Chief Executive Officer and Executive Managers.	2021-22	Ongoing. CEO attends regular toolbox meetings to inform of Council decisions, and events.	Ongoing
Culture	3	M	The MOS and OS be provided with training in effective performance management including how to have 'hard conversations' and deal with conflict.	2022-23	Ongoing, with more training to be looked at in future.	Ongoing
Culture	4	H	Develop and implement specific measurable performance goals and targets to drive greater efficiency and effectiveness of operations.	2021-22	Parks schedules in draft form as of October 2021, needs final review.	Ongoing
Culture	5	M	That the MOS & OS proactively monitor performance against individuals' goals and targets throughout the year.	2021-22	Individual goals to be created for each staff member, annual performance based, does HR have a template?	No action
Management	6	H	Develop Active Management tools and techniques for implementation.	2022-23	Ongoing	Ongoing
Management	7	H	Provide training on Active Management for Operations staff.	2021-22	Training requirements to be incorporated into performance reviews annually. All outside staff are also spending 2 hours a fortnight undertaking computer training.	Ongoing
Management	8	M	Develop Active Management KPIs and integrate into Monthly Performance Reviews for the MOS and OS.	2021-22	Similar to no 5 & 7.	Ongoing
OSH	9	M	Raise the Safety Culture in Operations by regularly reviewing the OSH practises and the use of the OSH Policy and other OSH documents within Operations.	2021-22	Started in Feb 2021, with SWM looked at, with all reviewed and updated by September 2021.	Ongoing
OSH	10	L	Provide additional appropriate OSH training for the MOS & OS.	2022-23	EMTS attends OHS meetings and is aware of requirements.	Completed
OSH	11	L	Implement Safety Action Plans for the MOS and OS.	2022-23	OHS Action plan completed and being implemented.	Completed
OSH	12	L	Investigate the feasibility of contracting a qualified OSH Coordinator on a part time basis to provide support to the development of OSH processes and practices and staff training.	2021-22	Employed SA to run with this process.	Completed
Customer Request Management	13	M	That the Customer Service Group further review and map the workflow process for CSR's that require action by the Operations Department.	2021-22	Coordinator Operations created matrix for customer service, May 2021.	Completed
Customer Request Management	14	M	A process be put in place to ensure the MOS & OS take greater responsibility and accountability for CSR response performance.	2021-22	Weekly meetings between EMTS and all individual direct reports to keep on top of CSR responses. CRS vastly improved in 2021.	Ongoing
Customer Request Management	15	M	Implement a process to ensure a monthly review is undertaken of Operations' CRS performance and identify areas where maintenance improvement is required.	2022-23	Maintenance schedules created, to align with staff performances.	Ongoing
Customer Request Management	16	L	Introduce a Maintenance/Works Management System that generates and manages work using work orders.	2022-23	Long term, if required.	No action
Asset Management	17	H	Develop Technical Levels of Service and Maintenance Standards for all work carried out by Operations Crews.	2021-22	Asset management plans being created and drafted by December 2021.	Ongoing
Asset Management	18	H	Develop and implement a parks & reserves hierarchy and maintenance standard(s) as soon as possible to ensure appropriate standards are maintained all year round.	2021-22	To be created, with public opens spaces strategy.	No action
Asset Management	19	H	Establish a regular testing and maintenance program for all reticulation systems, and that during the summer months the maintenance levels be increased to ensure any faults are identified as early as possible.	2021-22	Discussing with Supervisor of Parks, with a possible town wide retic pick up, to capture the data.	No action
Asset Management	20	H	Develop a Verge Maintenance Policy / Statement with community input that can then be used to develop a work program and work standards to drive and guide Operations in the carrying out of Verge maintenance.	2022-23	Verge policy updated by Sustainability officer in conjunction with Operations.	Completed
Work Planning	21	H	Development of a spreadsheet for infrastructure assets that contains service level information and relevant asset information to assist in programming maintenance.	2022-23	Asset management plans to include spreadsheet and levels of information needed.	Ongoing
Work Planning	22	H	That as a priority the Operations Department review the loss of productive time, and implement measures to ensure more efficient work practices.	2021-22	Reduced works staff coming into depot at morning tea as of May 2021.	Ongoing

Work Planning	23		Operations to develop and implement an Annual Works Plan covering all the work to be done for the year, including resource capability.	2020-21	Started in Feb 2021, which includes all scheduled works for parks & Eng. Buildings also being worked on by Coordinator Operations	Ongoing
Work Planning	24	M	Develop and implement four/six weekly maintenance plans for each crew based on the Master Schedule	2021-22	Schedules created, aligning service delivery expectations and staff numbers	Completed
Work Planning	25	L	Review and monitor maintenance plans on a fortnightly basis to adjust for seasonal variation and unplanned activity	2021-22	Schedules being created, aligning service delivery expectations and staff numbers	Ongoing
Work Planning	26	M	Supervisor and team leaders are to be made accountable for the delivery of work on the plans	2020-21	Majority of capital works to be completed before December 2021	Ongoing
Work Planning	27	M	Manager and supervisor to actively manage employees in the delivery of maintenance plans	2021-22	Something to include in annual performance reviews	Ongoing
Work Planning	28	L	Develop an internal effectiveness checklist for quality of work that can be used by Manager, Supervisor and Team Leaders when undertaking site visits	2022-23	Long term, if required	No action
Work Planning	29	L	The Manager, Supervisor and Team Leaders to meet regularly to discuss the checklists and identify remedial actions	2020-21	EMTS meets weekly with staff	Ongoing
Oval Mowing and Gardening Service Areas	30		Develop a detailed scope of works and maintenance standards for the oval mowing, horticultural gardening and tree maintenance work required. Improve the work planning, scheduling and management of this work to determine if this work can be performed more effectively and efficiently in-house.	2020-21	Public open spaces strategy to include all of this information	No action
Oval Mowing and Gardening Service Areas	31	M	Implement a process to collect data to enable the calculation of robust garden maintenance work	2022-23	Long term, if required	No action
Parks and Reserves - Service Area	32		Develop a detailed scope of works and maintenance standard for the maintenance of Parks and Reserves	2021-22	Schedules being created, aligning service delivery expectations and staff numbers	Ongoing
	33		Improve in-house work planning, scheduling and management of Parks and Reserves work to improve efficiencies or to explore contracting this work out.	2021-22	Schedules being created, aligning service delivery expectations and staff numbers	Ongoing
Verge Management Service Area	34		Develop a policy or statement that sets out why the Town is mowing certain verges and when, and to what standard the mowing will be carried out	2021-21	Mowing of town wide verges being reviewed, to go to a Council forum in November 2021	Ongoing
Verge Management Service Area	35	M	Develop a process for identifying and documenting which verges the Town will be mowing	2021-22	Mowing of town wide verges being reviewed, to go to a Council forum in November 2021	Ongoing
Verge Management Service Area	36	M	Develop a detailed scope of works and maintenance standards for the maintenance of verges	2022-23	Mowing of town wide verges being reviewed, to go to a Council forum in November 2021	Ongoing
Street Maintenance Service Area	37		Develop a detailed scope of works and maintenance standards for Street Maintenance work	2021-22	Asset management plans to include relevant information.	Ongoing
Street Maintenance Service Area	38	M	The Street Maintenance Crew be reduced to one FTE.	2022-23	Technical Services review being undertaken with staff numbers being looked at	Ongoing
Street Maintenance Service Area	39		Assess fitness for work for both incumbents in the Street Maintenance crew	2021-22	Reg on extended leave. To be reviewed before end of 2021	Ongoing
Works Maintenance Service Area	40	M	Review the requirements of the AMP's for Roads, Footpaths and Drainage and develop a preventative maintenance program for these assets	2021-22	AMPs being reviewed and updated, to be completed by August 2021	Ongoing
Works Maintenance Service Area	41	M	Develop a detailed scope of works and maintenance standards for work that is to be done on Roads, Footpaths and Drainage assets	2022-23	Asset management plans to include this information	Ongoing
Works Maintenance Service Area	42	L	Improve the collection of data that will enable the calculation of robust unit rates for this work	2021-22	Long term, if required	Ongoing
Road Sweeping	43		Undertake a review of the current contract for road sweeping of Local Roads with a view to reducing service level, excluding business areas and other priority areas	2021-22	Street sweeping tender being approved by Council in November 2021. Completed	Completed
Capital Works Program	44	M	The Town employ a Technical Officer (or equivalent) to provide assistance to the MOS (New created EMTS) in the delivery of the annual works program and operations services departments.	2021-22	Hired ISA	Completed
Capital Works Program	45	M	If a TO is not employed, a Project Management Consultant specialising in the delivery of capital works be engaged to provide project assistance as and when required	2021-22	Hired ISA	Completed
Insourcing v Outsourcing	46	L	No further services in this area be considered for outsourcing until adequate data is collected and available, upon which a thorough cost/benefit comparative analysis can be undertaken	2022-23	All possibilities being looked at	Ongoing
Vehicle, Plant & Equipment Review	47		The current Plant List and 10 Year Plant Replacement Programme be updated as a priority	2021-22	Updated and current	Completed
Vehicle, Plant & Equipment Review	48	M	Work with Finance to explore Fleet Data Capture and Management opportunities within the Town's existing "Synergy" Financial System. Also, connectivity with Fuel and GPS systems.	2021-22	EMTS to discuss with finance	Ongoing
Vehicle, Plant & Equipment Review	49	M	Re-establish formal VPE maintenance and servicing process in electronic format	2022-23	Use of tablets being rolled out with outside staff	Ongoing
Vehicle, Plant & Equipment Review	50	M	Ensure ALL VPE is registered on Asset Register and managed accordingly	2022-23	Asset management plans to include	Ongoing
Vehicle, Plant & Equipment Review	51	L	Review and consider alternate approach(es) to light fleet replacement cycle and ownership	2021-22	Reviewed and fleet management guidelines created as of May 2021	Ongoing

Attachment 2

Vehicle, Plant & Equipment Review	52	M	Reintroduce appropriate cost benefit rigour into proposed VPE replacement, disposal and improvement decisions	2022-23	Asset management plans to include	Ongoing
Vehicle, Plant & Equipment Review	53	L	Explore additional resource either internal or external to assist in managing the VPE assets	2022-23	Databases to be managed internally. Data pickup may be outsourced for assets such as footpaths	Ongoing
Vehicle, Plant & Equipment Review	54	L	Develop and implement a policy, practice or guideline in terms of obligations for Officers allocated vehicles	2022-23	Vehicle policy created and implemented in early 2021	Completed
Staffing and Organisational Structure	55	H	As a first stage implement the following changes to the Operations structure: The Operations Manager position to be made obsolete, and a new Executive position (Executive Manager Technical Services) be created to better reflect the expectations for this position; The creation of a new position of a Technical Officer and The removal of the currently vacant General Hand Position	2021-22	Completed	Completed
Staffing and Organisational Structure	56	L	As a second stage implement a 4 crew structure within the Operations Structure with the removal of 2 General Hand Positions	2022-23	Technical Services review being undertaken with staff numbers being looked at	Ongoing
Data Collection & Performance Reporting	57	M	Identify relevant efficiency measures and commence data collection	2022-23	Long term, if required	No action
Data Collection & Performance Reporting	58	M	Implement a regime of the regular review of efficiency and effectiveness data	2022-23	Long term, if required	No action
Data Collection & Performance Reporting	59	M	Improve time recording methods to separate out non-work activities	2022-23	New payroll system implemented	Completed
Data Collection & Performance Reporting	60	M	Develop appropriate measures of performance and a reporting process for Operations	2022-23	Long term, if required	No action
Data Collection & Performance Reporting	61	M	Implement a Weekly Reporting Sheet for each team in Operations	2022-23	Maintenance schedules created, to align with staff performances	Ongoing
Data Collection & Performance Reporting	62	M	Develop a monthly reporting format for the information of the CEO	2022-23	Monthly cap works updated created, and individual worksheet for EMTS & CEO created to keep up to date	Completed
Data Collection & Performance Reporting	63	M	Instigate monthly performance review meeting for the Manager, Supervisor and Team Leaders	2022-23	Weekly meetings between EMTS and all individual direct reports to, monthly reporting required?	Ongoing
Information Technology Review	64	M	Implement the use of iPads by Team Leaders for managing timesheets, work check sheets and CSR's	2021-22	Completed	Completed
Information Technology Review	65	L	Investigate the option of implementing a tree management system	2021-22	Discussed with EMRS to get a tree pickup	Ongoing
Information Technology Review	66	L	Investigate the introduction of a Works Management System	2022-23	Long term, if required	No action

11 MATTERS BEHIND CLOSED DOORS

12 CLOSURE OF MEETING