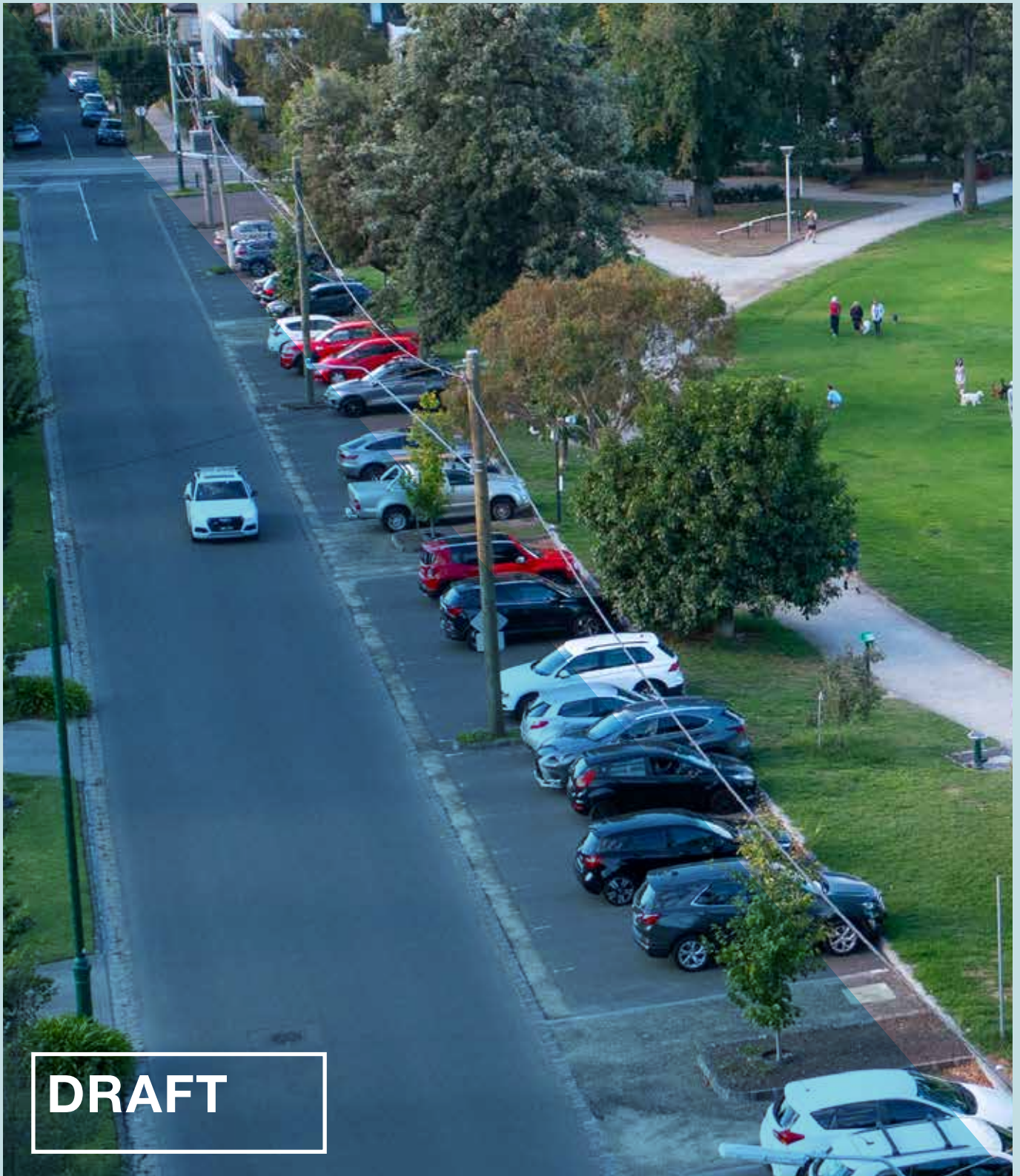


# Asset Plan

May 2022



City of  
**STONNINGTON**



**DRAFT**

Contents

01	Executive Summary	04
02	Purpose	06
03	Business Context	06
04	Financial	13
05	Governance	16
06	Stakeholder engagement	19
07	Quality and continual improvement	20
08	Roads	22
09	Drainage	28
10	Buildings	34
11	Open Space	40
12	Glossary	46
13	Version control	47

Acknowledgement of Traditional Owners

The City of Stonnington respectfully acknowledges the Traditional Lands of the Wurundjeri Woi Wurrung and Bunurong peoples of the East Kulin Nations and pays respect to their Elders past, present and emerging.

We extend that respect to all Aboriginal and Torres Strait Islander peoples. We acknowledge their living connection to Country, relationship with the land and all living things extending back tens of thousands of years.



Mayor’s Message

**One of the things that makes Stonnington neighbourhoods such wonderful places to live, work and visit is the quality of the City’s infrastructure, with well-maintained roads, footpaths, community buildings, parks and other community assets adding to the liveability of our suburbs.**

As an inner-Melbourne local government, we boast well-established infrastructure assets that require ongoing programs of maintenance, repair and renewal to ensure they are in the best shape possible to service our community.

This is the first City of Stonnington Asset Plan to combine our four major infrastructure asset classes – roads, buildings, drainage and open space – into one document, and support the integrated planning framework outlined in the Local Government Act 2020.

This Plan considers the financial implications of managing our infrastructure assets and discusses each asset class in detail including the challenges and opportunities to managing them.

This is the first step in our three-year plan to deliver a Strategic Asset Management framework that will uplift our asset management capability through improved systems, data, processes and resources.

With a portfolio of nearly \$3 billion in infrastructure assets – including a 256km road network, pedestrian paths extending 580kms, 373kms of stormwater drainage pipes, 74 parks, 56 playgrounds and 145 community buildings – this document and the planned Strategic Asset Management framework will ensure our important community assets are maintained to the highest quality now and into the future.





Executive Summary

01

**This Asset Plan (the Plan) is the City of Stonnington’s first asset management plan under the Local Government Act 2020 legislative framework. The Plan is structured so that there are several general sections that relate to matters common to all asset classes and four asset class chapters that contain nuanced information and data relevant to the Roads, Drainage, Buildings and Open Space asset classes.**

The Plan represents the status of the four main asset classes and their respective operational activities and foreshadows the development of a Strategic Asset Management (SAM) Framework. The SAM Framework will be delivered through a three-phase development program over three years.

Once developed, the SAM Framework will uplift the City’s asset management capability in terms of systems, data, business processes and resource skills. The SAM Framework will align with requirements of ISO 55001 – Asset Management. At this stage the City is not seeking to obtain formal certification of the asset management system against the ISO Standard.

Aligning asset management practices with ISO 55001 ensures the asset management system supports the National Asset Management Assessment Framework (NAMAF) which provides a methodology for assessing the maturity of asset management practices and processes across the Local Government sector.

The cornerstone of the City of Stonnington SAM Framework, which includes this Plan, is the establishment of asset management objectives that define and shape asset management practices to align with and support the City’s business objectives. The current Asset Management Objectives are shown here:



Asset Management Objectives

- > **Objective 1:** Define service levels for major asset classes that are sustainable and fit for purpose in consideration of user and customer expectations and technical and legislative requirements.
- > **Objective 2:** Ensure resources engaged in asset management activities are appropriately qualified and experienced.
- > **Objective 3:** Adopt a ‘whole of life’ perspective for the development and management of Council’s assets to minimise life cycle costs and risk while maximising service delivery potential.
- > **Objective 4:** Embed a Risk and Benefit approach to the life cycle management of Council’s assets.
- > **Objective 5:** Comply with relevant legislative frameworks, industry standards and Codes of Practice.
- > **Objective 6:** Embed a culture of continual improvement in the development and life cycle management of Council’s assets.
- > **Objective 7:** Data and information relevant to Council’s asset management framework shall be ‘fit for purpose’ and procured and maintained in a sustainable manner.

The objectives were formulated in consideration of the deliberative engagement process undertaken to formulate the City of Stonnington Community Vision 2040 and Council Plan 2021-25.

The stakeholder engagement process specific to development of this Plan consists of a community consultation element and engagement with key internal stakeholders through the City’s Communities of Practice network.

The Local Government Act 2020 requires the Plan be reviewed at least every ten years. The Plan will be a live, operational document

and will be updated in accordance with the Council Plan review cycle to ensure it reflects current aspirations for service driven infrastructure requirements and operations. Future revisions of the Plan will capture and reflect developments and maturity uplift from the SAM Framework development program. This approach is consistent with and supports Council’s commitment to continual improvement as a key operating principle.

A key focus of the Plan is the consolidated asset renewal forecast and specific renewal forecasts for asset classes contained in the Plan. These forecasts are generated using asset modelling methodologies and inform the ongoing review and development of the City’s Financial Plan, as per Section 91 of the Local Government Act 2020.

It is important to note that renewal forecasts for different asset classes will always be inherently different due to the variability in decay profiles and unit cost structures. It is also worth noting that the level of confidence in any system driven renewal forecast is directly proportional to the quality and accuracy of the supporting asset condition data and profile.

With this in mind, opportunities for improvement in data management and associated processes identified during phase one of the SAM Framework will enable proactive and sustainable management of future asset liabilities over the next ten years.

These opportunities include considering effects of climate change in the development of service level standards, development of a data management framework and improving clarity over budget assumptions and expenditures. The latter will increase the level of confidence in relation to the sustainability and adequacy of planned renewal expenditure in the long term as capital upgrade / expansion projects, and significant maintenance actions, often include opportunistic renewal investment.

Overall, high level modelling indicates the current level of asset renewal investment is sufficient to maintain existing service levels provided by the four main asset classes in the short- to medium-term. It is recognised strategies are currently being implemented to guarantee the City’s long term renewal investments are proportionate and sustainable.



Purpose

02

To document the City of Stonnington’s approach to the strategic and operational management of its road, drainage, buildings and open space assets. Council is committed to asset management practices that maximise service delivery potential from its asset portfolio in the most cost-effective manner while, always meeting community expectations and regulatory requirements.

Adopting a long-term strategic approach in the management of assets ensures the cumulative effects of short- to medium-term operational decisions achieve the best outcomes for the Stonnington community and users of assets today and into the future.

Assets enable the delivery of services to the community and other users. The adoption of a strategic asset management approach that recognises the qualitative and quantitative way assets are managed during their entire life cycle will have a direct impact on the level of service experienced by the community.

The Plan addresses the main asset life cycle elements - planning, operation, acquisition, renewal, upgrade, expansion and disposal - to address short- and long-term planning needs.

Business Context

03

Council developed its Future Stonnington framework following a nine-month deliberative engagement process that involved extensive conversations with the community. Future Stonnington incorporates the Stonnington Community Vision 2040, which articulates the community's aspirations for the future, and the Council Plan 2021-25 (Council Plan) which details Council’s vision for the City for its next strategic planning term. The City also developed an Annual Plan to articulate activities planned in the current financial year.

The community vision for Stonnington

*“To be a safe, inclusive and creative City that celebrates and embraces its vibrancy of cultures and pays respect to the influence of the Nation’s First Peoples past and living in a modern, sustainable and interconnected way of life that supports the good health and wellbeing of all.”*

The community vision also embraces a sustainable and interconnected way of life that supports the good health and wellbeing of all.

The Council Plan sets the strategic directions, objectives and priorities to guide the organisation for the next four years.

The Council Plan articulates Operating Principles for the strategic management of the City's business operations and activities:

- Operating Principle 1:**  
Continuous improvement
- Operating Principle 2:**  
Good governance and transparency
- Operating Principle 3:**  
Aligned purpose and capabilities
- Operating Principle 4:**  
Climate leadership

These Operating Principles define how 61 priorities identified across the following three high level directions:

- Direction 1:**  
A thriving and unique place
- Direction 2:** An inclusive and healthy community
- Direction 3:** A people-centred and future-ready city

Of 61 Priorities in the Council Plan, 13 have specific relevance to Council's and the Stonnington community's aspirations for infrastructure based services.

The 13 infrastructure-related Priorities were considered in the development of the City's draft Strategic Asset Management Policy (Policy). The draft Policy is founded on the following principles:

- Levels of service provided by City of Stonnington assets shall be defined and reviewed in consultation with the community and key stakeholder groups in accordance with the City's community engagement processes.
- Asset management system shall be adequately resourced with competent staff and align with relevant requirements of ISO 55001 – Asset management – Management systems – Requirements.
- Asset management objectives shall be developed and periodically reviewed to ensure they adequately support the City's business priorities and community vision.
- A whole-of–life approach shall be adopted in the management of Stonnington assets to optimise the provision of agreed service levels at the lowest life-cycle cost and risk profile.

- A strategic long-term asset investment approach shall be adopted within a context of predictable and stable cash flows.
- A risk and benefit approach shall be implemented in alignment with the City of Stonnington Enterprise Risk Management Framework.
- Assets shall be operated and maintained in a safe and sustainable manner.
- Full compliance with all relevant Acts, Regulations, Codes of Practice and relevant industry standards shall always be maintained.
- A culture of continual improvement shall be adopted through innovation, asset multi-purposing and smart infrastructure initiatives to deliver better asset management outcomes.
- Existing assets shall be appropriately protected through clear and robust business processes and sound third party engagement practices.
- Robust data management protocols and consistent decision-making processes shall be implemented to ensure asset management objectives are met or exceeded.





Strategic Asset Management Framework

The draft Policy principles, the City's current asset risk profile and the Chief Executive Officer's one-year priority vision for the City were used to inform the development of a Strategic Asset Management Plan (SAMP).

The SAMP documents the Strategic Asset Management (SAM) Framework through which the City will manage its assets in a strategic and tactical sense. The SAMP also provides the setting

for the development of asset management objectives, designed to give focus and direction to the SAM Framework.

The SAM Framework is founded on a three-phase (three-year) development roadmap designed to uplift the City's asset management capability with a strong emphasis of systems, data, business processes and resource competence. At its core, the SAM Framework embodies a commitment to continual improvement as one of the City's key operating principles.

The elements of the SAM Framework are mapped in Figure 1 below.

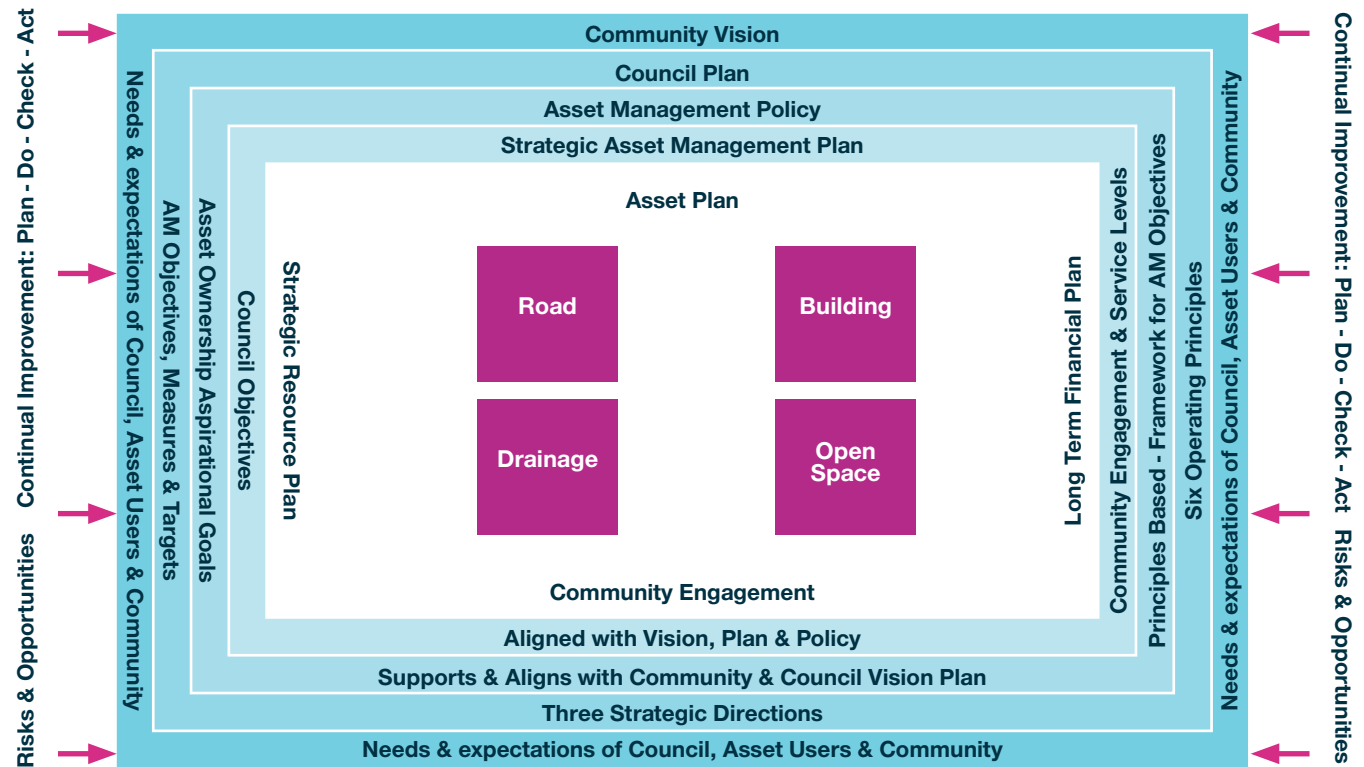


Figure 1: Strategic Asset Management Framework Architecture Model

Asset management objectives are the driving influencers that shape and configure the Plan. Each objective is supported by a series of actions, some of which are reflected in the Plan and others as key performance indicators delivered via regular business processes.

The Local Government Act 2020 requires the Plan be reviewed at least every ten years, however the Plan is considered a live

document and will be updated more frequently to ensure it consistently captures and reflects contemporary improvements in asset management operations and the SAM Framework.

The Plan is made up of general sections that are common to all asset classes and four chapters of nuanced information and data relevant to specific asset classes – roads, drainage, buildings and open space.

Together with the Policy and SAMP, the Plan supports the following City of Stonnington planning documents:

- Future Stonnington: 20-year Vision and 4-year Council Plan.
- Financial Plan: Local Government Act 2020 S91.
- Annual Budget.
- City of Stonnington Service Plans.

Figure 2 below illustrates the key elements of the Stonnington SAM Framework and the interrelationship with each document - from the Community Vision at the highest level through to tactical and operations plans and business process workflows at the other end. The illustration clearly represents how the SAM Framework provides a 'line of sight' between strategic business objectives and operational practices and processes. The asset management objectives are pivotal to achieving 'line of sight'.

The Plan has been prepared in accordance with guidelines set out in the National Asset Management Support (NAMS) document, the International Infrastructure Management Manual (IIMM), ISO 55001 and it aligns with the National Asset Management Assessment Framework (NAMAF). NAMAF provides a methodology for assessing the maturity of asset management practices and processes across the Local Government sector.

The SAM Framework, and Plan in particular are key elements in the delivery of the City of Stonnington's Future Stonnington asset-related priorities and draft asset management objectives as they outline actions for whole of life management of built infrastructure. They link practices including business rules, processes, asset condition assessments and data management to the City's business objectives.

The Plan also meets the legislative requirements set out in section 92 of the Local Government Act 2020 and guides sustainable service delivery, long-term financial planning and regulatory reporting.



Figure 2: Strategic Asset Management Framework Relationship Model



Asset management objectives and key actions

A total of 33 actions were identified from the City's draft asset management objectives as being activities necessary to realise the objectives via the three-year (three-phase) SAM Framework implementation roadmap. The draft objectives and the actions most relevant to the realising this Plan are:

Objective 1:

Define service levels for major asset classes that are sustainable and fit for purpose in consideration of user and customer expectations and technical and legislative requirements.

- > Develop service level definitions for asset classes
- > Ensure sustainability is considered in service level definitions
- > Develop a condition assessment framework
- > Develop a drainage capacity study (flood modelling)

Objective 2:

Ensure resources engaged in asset management activities are appropriately qualified and experienced.

- > Develop a competency framework
- > Identify competency gaps
- > Review and update professional development plans for relevant staff

Objective 3:

Adopt a 'whole of life' perspective for the development and management of assets to minimise life cycle costs and risk while maximising service delivery potential.

- > Document current maintenance strategies and processes
- > Consider service level requirements and capacity in maintenance and renewal decision making
- > Introduce optimised decision making when considering investment options for major projects
- > Introduce 'whole of life' discounted cash flow analysis of investment options for major projects

Objective 4:

Embed a risk and benefit approach to the life cycle management of assets.

- > Consider climate change risk factors in asset life cycle decision making
- > Develop asset risk assessment methodology
- > Introduce 'deferral risk' consideration into asset maintenance and renewal decision making

Objective 5:

Comply with relevant legislative frameworks, industry standards and codes of practice.

- > Safety compliance audits for relevant assets
- > Monitor changes in legislative requirements and implement as required

Objective 6:

Embed a culture of continual improvement in the development and life cycle management of assets.

- > Develop and maintain a procedure manual to centralise business process workflows
- > Develop audit schedule for business process workflows compliance
- > Develop business and functional requirements for asset management technologies
- > Develop and deploy strategic asset management culture and awareness program

Objective 7:

Data and information relevant to asset management framework shall be 'fit for purpose' and procured and maintained in a sustainable manner.

- > Develop data management framework
- > Develop CCTV survey prioritisation strategy for drainage assets
- > Develop GIS strategy to support asset management uplift capability



Risks and opportunities

The City of Stonnington operates a robust methodology for the assessment and ongoing management of risks in accordance with its Enterprise Risk and Opportunity Management Framework (EROMF). The EROMF provides a structured approach to managing risks and control mechanisms to mitigate the risks to the lowest level practicable in consideration of the City's risk appetite.

Risks

Risks are categorised in a corporate risk management system which has the capability to manage:

- Inherent risk rating - no controls in place.
- Residual risk rating - with controls in place.
- Management of the controls.
- Management of actions necessary to realise the objective of individual controls.

Specific risks and opportunities relevant to asset management functions are shown in the table below:

Risks	Controls
Inadequate strategic management of assets	<ul style="list-style-type: none"><li>• Governance - Asset Management Steering Committee.</li><li>• Strategic Asset Management Program</li><li>• Open Space Strategy for management of existing and new open spaces</li><li>• Asset Plan for main asset classes.</li><li>• Strategic Asset Management Policy and Strategic Asset Management Plan</li><li>• Flood mapping and special building overlay (SBO 1 and SBO 2)</li><li>• Road Management Plan</li><li>• Condition Assessment Framework</li><li>• Climate Emergency Action Plan</li><li>• Sustainable Assets Policy</li><li>• Competency framework and resource capacity</li></ul>
Inadequate quality and/or management of asset data	<ul style="list-style-type: none"><li>• Data collection systems and procedures continually reviewed and updated.</li><li>• Asset condition assessments</li><li>• Condition Assessment Framework</li><li>• Drawing register</li><li>• GIS business process redesign to ensure robust and up to date spatial data</li></ul>
Inadequate or sub-optimal maintenance of assets	<ul style="list-style-type: none"><li>• Infrastructure maintenance and facilities management operations</li><li>• Strategic asset management program</li><li>• Maintenance of special or bespoke assets</li><li>• Parks, gardens and open space assets maintenance operations</li></ul>
Asset damage due to third party interventions	<ul style="list-style-type: none"><li>• Annual asset condition and defect inspections based on programmed repairs.</li><li>• Pre and post construction inspections for road occupancy, road opening, build over easements and drain connection permits of private developments</li><li>• Review of national heavy vehicle regulator permit applications</li><li>• Works on City assets resulting from private developments by third parties subject to permits, approvals and assurance audits.</li><li>• Review of State Government development proposals and application of development and construction conditions, approvals and assurance audits.</li></ul>

Opportunities

Opportunities are presented in the form of areas in which the City has a chance to improve outcomes for its infrastructure-based service delivery, including lifecycle outcomes and fiscal or resourcing benefits.

Opportunities	Controls
Climate change resilience	<ul style="list-style-type: none"><li>Enhancing existing assets to ensure they are resilient to climate impacts.</li><li>Linking the waste strategy with asset management practices to avoid waste, increase reuse and maximise resource recovery.</li><li>Building climate change resilience into projects and ensuring new assets deliver broad carbon reduction, climate adaptation, and circular economy and biodiversity benefits.</li></ul>
Changes in population demographics	<ul style="list-style-type: none"><li>The City of Stonnington will likely experience population growth of approximately 16.44 per cent to 2036.</li><li>Stonnington has a young population demographic with 35 per cent of residents aged 18–34 years and a median age of 35 years.</li><li>Stonnington has a culturally and economically diverse population and the community's contrasting lifestyles, needs and expectations.</li><li>Appropriate strategic infrastructure planning of new and existing infrastructure accommodates for changes in population demographics and asset service level requirements for now and into the future.</li></ul>
Technology and innovation	<ul style="list-style-type: none"><li>The City's culture of continual improvement serves to modernise and leverage contemporary systems and technologies to become a 'future ready' organisation.</li><li>Embracing the implementation of 'Smart Cities' technologies and the adoption of mobility or digital services across the infrastructure realm.</li><li>Initiatives are underway to better manage corporate data, providing a source point of valuable information that adds value to service areas within Council.</li></ul>
Multi-purpose facilities and assets	<ul style="list-style-type: none"><li>A renaissance of live and work local from the COVID-19 pandemic means many more residents are living and working locally.</li><li>The economic development and recovery process has seen increases in community participation at a local level.</li><li>Managing increased density within the municipality through the provision of open space, amenities, services and transport options.</li><li>Committing to the development of a community infrastructure plan that includes a strategy to develop multifunctional and community-centric facilities and spaces.</li></ul>
Proactive Asset Management	<ul style="list-style-type: none"><li>The fundamental premise of the SAM Framework is developing systems, data, business processes and enhancing practitioner capabilities to enable focussed strategic decision making for the life cycle of assets.</li><li>Undertaking predictive modelling processes to develop asset maintenance and renewal plans strategies, maximising service level offerings at the lowest whole of life cycle cost and asset intervention deferral risk.</li></ul>



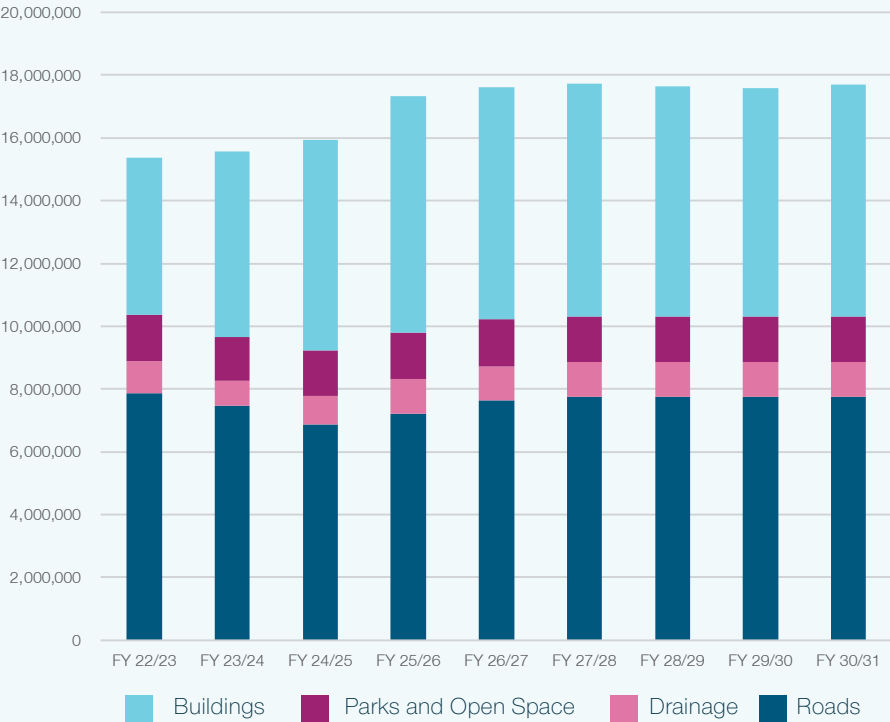
Financial

10-year renewal forecast

The City of Stonnington undertakes 10-year renewal forecasting annually to inform the Financial Plan and the annual budget development process. Renewal forecasts provide a high-level perspective of potential funding gaps and are updated in line with ongoing asset condition assessment programs that generate remaining life data for the relevant asset classes.

Figure 3 shows a consolidated renewal forecast for the four major asset classes included in the Plan.

Figure 3: 10 Year Renewal Forecast for Main Asset Classes



While specific asset class renewal forecasts are presented in relevant asset class chapters, it should be noted renewal forecast profiles are inherently different for different asset classes as each asset class exhibits different decay patterns and has varying condition and age profiles.

Overall, the City's high level financial modelling indicates that, based on current asset condition knowledge, the current level of asset renewal investment is adequate to maintain the prevailing service levels provided by the four main asset classes in the short- to medium-term.

In the long-term, City is well positioned to proactively and sustainably manage future asset liabilities over the next ten years. This will be achieved through planned consideration of the effects of climate change in the development of service level standards, enhanced data governance practices and improving clarity over budget assumptions and expenditures for maintenance, renewal, upgrades and growth programs and projects.

The City's capital budgeting process typically blends renewal projects with upgrade projects to provide economies of scale in terms of project delivery. This pragmatic approach is effective in ensuring asset renewals leverage contemporary design and construction practices to modern engineering equivalent standards. Improving clarity over budget assumptions and expenditures will increase the level of confidence in relation to the sustainability and adequacy of planned renewal expenditure in the long term.

The level of confidence in the road asset (roads, kerb and channel, footpaths) renewal forecast is high as good quality condition and defect data is retained for these assets. This is evidenced by the City's high level of compliance with its Road Management Plan since 2017.



For buildings, the City is finalising a General Building Condition Audit (GBCA) to provide up-to-date condition and defect data as well as remaining life estimates for all buildings and their respective components. A similar audit has been completed for open space assets. As many of the City's building and open space assets are subject to ongoing safety and compliance audits (e.g. electrical safety systems and playgrounds), it is anticipated the actual condition of many of these assets is likely to be good.

Given the high attention to detail applied to the GBCA and open space asset condition audits, it is likely that the renewal forecast profile for these two asset classes will increase in the medium- to long-term, with open space assets movement being less.

Understanding the overall condition of drainage assets is a high priority. With drainage assets predominately buried in the ground, completing physical inspections is challenging. For this reason, a strategy to improve the City's knowledge of the condition of its drainage infrastructure is in development as a key deliverable of the SAM Framework. The drainage strategy incorporates flood analysis and catchment risk assessments to determine a targeted condition survey and CCTV program.

A further dimension to the assessment of the drainage networks' capacity is an acknowledgement of the effects of climate change on rainfall intensity and associated stormwater runoff. In this regard, the City is working in collaboration with Melbourne Water to develop a Flood Management Plan for the municipality. The Flood Management Plan will incorporate innovative management strategies such as flood mitigations and water sensitive urban design practices to minimise these impacts.

The City uses proprietary asset management software to undertake modelling. As the City progresses the implementation of its SAM Framework and enhances its understanding of the condition of the overall asset portfolio, it is anticipated the renewal profile may change. This is an expected outcome from a commitment to continuous improvement.

The financial models in the Plan are based on and link with the annual budget and Financial Plan projections. Ongoing affordability and financial sustainability are considerations in the Financial Plan ensuring the Plan supports the delivery of services.

Built into the SAM Framework, and aligning with draft Asset Management Objective 3: Adopt a 'whole of life' perspective for the development and management of Council's assets to minimise life cycle costs and risk while maximising service delivery potential, is the development of modelling techniques to optimise intervention selections for deteriorating assets.

A further modelling technique uses discounted cash flow analysis to forecast life cycle costs in net present value terms to enable financial viability assessment of new major capital initiatives with a view of selecting the options that represent the lowest cost of ownership over the asset's entire life cycle.

Pandemic

The COVID-19 pandemic has significantly impacted the City of Stonnington's financial position over the past three years. Lower than anticipated activity volumes across several service areas has resulted in an accumulated loss of revenue of over \$40 million between 2020 - 2023.

Pandemic related material and labour shortages resulting in higher than expected tender prices across the construction sector has challenged the delivery of capital investment initiatives against budget. The challenges of the pandemic to the City's fiscal position will remain for some time with no clear timing to its conclusion.

Despite the pandemic challenges, the City has and continues to maintain responsible fiscal management and investment in its infrastructure portfolio to maintain current levels of service now and into the future.

Sustainability

The City of Stonnington is committed to action on climate change and has invested significant resources over many years towards reducing corporate emissions, adapting to climate change and supporting change locally.

Council declared a climate emergency on 20 February 2020 recognising that urgent action is required by all levels of government, including local councils. Climate change is already impacting the environment, economy and the health and wellbeing of the community and will continue to have a significant impact on the City's strategic goals and present many challenges across all operations, assets and areas of service delivery.

The Climate Emergency Action Plan outlines the City of Stonnington's pathway towards 2030 and a zero carbon and climate-ready future city. Council's commitment is framed around an overarching principle of leadership and three strategic priorities that address both climate mitigation and adaptation:

- 1. Zero carbon Stonnington
- 2. Thriving in a changing climate
- 3. Working together for change

Council is committing to futureproofing the city, planning and adapting to a changing climate for its operations and across

the community. Climate impacts such as increasing urban heat, reduced rainfall, flooding and storm events place the community at risk, as well as the infrastructure (built and natural) and services.

The City is working to better understand and mitigate climate change risks associated with infrastructure and operations to ensure the city thrives in a climate-changed future. A climate-ready future involves ensuring the built environment can withstand climate impacts, such as increased intensity of storms, flooding and heatwaves, providing safety and enhancing liveability.

Sustainable Assets Policy

Council is committed to embedding environmentally sustainable design, climate resilience and other sustainability considerations through all phases of the asset lifecycle. Improving sustainability outcomes through the asset development, renewal and operational phases requires a holistic approach and an organisational culture that supports this.

The Sustainable Assets Policy is Council's response to ensuring that sustainability outcomes are paramount across the full life cycle management of assets, from design, renewal, upgrade and ultimately the retirement of redundant assets.

Procurement

The City purchases assets, services and works to support service delivery and the maintenance, renewal and development of infrastructure. The Procurement Policy outlines best practice

principles and methodology for contracting and purchasing to achieve best value, including a commitment to sustainable procurement whilst displaying high levels of probity, transparency and ethical behaviour.

There are numerous robust requirements around ethics, probity and governance for procurement aiming to achieve best value. The best value approach determines which activities and services are undertaken in-house and which are provided by external sources. The procurement of fixed infrastructure assets falls within the financial delegation of the Environment and Infrastructure Division and the Chief Executive Officer, or is approved by Council.

Asset renewal works are completed under the capital works program by external contractors in line with procurement guidelines. Internal resources manage these projects with support from the procurement team.

The City utilises several annual supply contracts to deliver asset renewal, maintenance and upgrades for infrastructure assets with contractors selected through an open tender process in line with the City's procurement requirements. The City also has panels of consultants and subject matter experts for the procurement of bespoke projects and services as required.

The majority of reactive and proactive maintenance of infrastructure and parks assets are undertaken through a blend of internal direct labour, multi-year service contracts and one-off procurements.





Governance

05

Legislative frameworks

The Local Government Act 2020 (the Act) is the principal legislation in Victoria that governs the operations and responsibilities of Council. The Act requires local governments to have an integrated, long-term and transparent approach to asset planning, including a ten-year plan that forms an integral part of an integrated planning framework.

The outcomes of the Future Stonnington framework community engagement process were considered in the development of the draft Policy, SAMP and the draft asset management objectives. These settings form the cornerstones of the SAM Framework with a key element being this Asset Plan.

Good governance and transparency are critical elements for the life cycle management of community assets so providing responsible and transparent governance to foster trust in Council's asset management processes and decision-making has a substantial bearing on this Plan.

Acts, regulations, standards and codes of practice relevant to the four main asset classes represented in the Plan are outlined in the relevant asset class chapters below. Compliance with these frameworks and instruments is a fundamental obligation embedded intot *Asset Management Objective 5: Comply with relevant legislative frameworks, industry standards and codes of practice.*

Asset management steering committee

The City of Stonnington has established an Asset Management Steering Committee (AMSC) that provides a governance and oversight framework to key asset management activities.

AMSC membership is predominately from the executive and middle management so as to maintain a strategic focus on the matters brought to the AMSC. The AMSC provides oversight and guidance in decision-making in accordance with the following principles:

- Implementation and operation of an asset management system that is compliant with legislative and reporting frameworks within which it operates, (e.g. Local Government Act 2020 and National Asset Management Assessment Framework respectively).
- Commitment to the development of a 'fit for purpose' strategic

- asset management system that aligns with best practice standard ISO 55001 – Asset Management.
- Commitment to asset planning that meets community and service needs, whilst managing risks and environmental impacts.
- Commitment to establish asset management capability founded on the provision of excellence in customer service experience.
- Enhancement and continual improvement of asset management competence and capability of City of Stonnington personnel involved in the development and operation of the asset management system.
- Data and information management to be a high priority to enable advanced service and asset performance analytics, reporting and predictive modelling opportunities in response to service delivery needs.
- Operational mechanisms maintained for the effective engagement of internal and external stakeholders with interests in asset management practices and service delivery.
- Corporate governance and risk management policies, procedures and guidelines applied consistently to the management of assets.

The City also operates various working groups in relation to specific asset management activities. Outcomes and progress reports from working groups are reported into the AMSC for the purpose of collaboration and knowledge sharing. This approach supports the principle that asset management at the City of Stonnington is a whole of business discipline.

The AMSC also serves as an escalation point of reference for any unresolvable matters within working groups.

Data management

The City of Stonnington manages asset related data and information within the context of a formal data management methodology. This methodology incorporates a governance element to ensure that the volume, type, integrity and structure of the data captured is fit for purpose and directly support's business and strategic asset management objectives.

It is recognised that every unit of data collected and managed attracts a resource overhead over its life cycle. Therefore, it is critical that the expected outcomes and defined service levels for various asset classes are used to shape what 'fit for

purpose' means in terms of related data and information. Asset management objectives guide the assessment of the expected outcomes and service level definitions for this purpose.

Asset data and information is corporate information with many 'touch points' across the City. Therefore the data governance methodology seeks to define the roles and responsibilities across the whole of the City in relation to data ownership and custodianship. Some key elements in the data management methodology include data relationship models, hierarchies, componentisation structures and defined business processes.

A further key element of data management methodology is a strategic approach to asset and component inspections for assessing condition ratings and remaining life estimates. The City has a process in place for scheduling cyclical condition and defect inspections for its main asset classes. This includes using various technologies such as laser profilometers and falling weight deflectometers for road assets and robot mounted camera inspections for critical drainage infrastructure.

Various proprietary systems and technologies are also used for strategic asset planning, modelling, financial reporting, maintenance management, customer interaction and day-to-day tactical decision-making. The proprietary asset management

technology system is interoperable with, and interfaces with its geographical information system (GIS), finance system, document management system, renewals modelling software and customer relationship management system.

Asset class chapters within the Plan provide further insights and information relevant to the four main asset classes.

Service areas and responsibility

The SAM Framework incorporates a competency framework to define the specialist qualifications, skills and experience required for roles with 'touch points' into the overall City of Stonnington asset management system.

The competency framework supports the ongoing review and updating of existing position descriptions and success profiles for relevant roles and enables the identification of capability gaps for individuals. It also serves as a strategic planning tool to formulate professional development and training plans for key personnel. The competency framework is a complementary system to the existing and highly effective staff development program.

The following table shows a high-level view of key service areas at the City of Stonnington and the respective responsibilities in relation to the management of assets.

Service Area	Responsibility
Chief Executive Officer	<ul style="list-style-type: none"><li>• Provide leadership, governance and direction for organisation</li></ul>
Customer and Technology	<ul style="list-style-type: none"><li>• Provide guidance on the customer experience, customer requests and enable digital transformation of processes.</li><li>• Provide business analyses and support for asset management systems.</li><li>• Guide 'Smart Cities' data collection and management.</li><li>• Set the corporate data governance and security protocols to support the data management and condition assessment frameworks.</li></ul>
Planning and Place	<ul style="list-style-type: none"><li>• Provide advocacy and liaisons with State Government projects which may impact the City.</li><li>• Provide Infrastructure planning inputs into serviceability of assets.</li></ul>
Community and Wellbeing	<ul style="list-style-type: none"><li>• Management of art assets and recreation facilities.</li></ul>
Chief of Staff	<ul style="list-style-type: none"><li>• Provide guidelines for governance and legal advice.</li></ul>

Service Area	Responsibility
Chief People Officer	<ul style="list-style-type: none"><li>Assist with resourcing, organisational culture development and training facilitation.</li><li>Provide risk management guidance.</li></ul>
Chief Financial Officer	<ul style="list-style-type: none"><li>Asset accounting and valuations.</li><li>Provide frameworks for procurement and contract governance.</li><li>Property coordination and lease / licence management.</li></ul>
Environment and Infrastructure	<ul style="list-style-type: none"><li>Manage, maintain and deliver infrastructure assets.</li><li>Leadership and guidance for asset management.</li><li>Managing and monitoring asset renewal budget.</li></ul>
City Operations	<ul style="list-style-type: none"><li>Maintenance of road, drainage and building assets.</li></ul>
Asset Management and Planning	<ul style="list-style-type: none"><li>Develop asset strategies and maintain asset systems and data.</li><li>Manage geographical information system.</li><li>Provide asset protection function for third party works.</li></ul>
Project management and Delivery	<ul style="list-style-type: none"><li>Design, deliver and manage the capital works program.</li></ul>
Open Space and Environment	<ul style="list-style-type: none"><li>Management and maintenance of parks and open space assets, trees and water sensitive urban design assets.</li><li>Provide guidance on sustainability and climate change.</li></ul>
Transport and Parking	<ul style="list-style-type: none"><li>Car park management.</li><li>Road safety initiatives.</li><li>Transport Planning advice.</li><li>Shared path development and sustainable transport assets.</li></ul>

In addition to the responsibilities listed above, the City of Stonnington is the coordinating authority for municipal roads, parks, buildings and drains listed in the City’s asset register. This includes responsibility for associated components related to the services the City delivers. State Government authorities, such as the Department of Transport and the Department of Environment, Land, Water and Planning and utility service providers own assets within the municipality:

- Water:** pits, trenches, pipes, valves and fittings.
- Gas:** pits, trenches, pipes, valves and fittings.
- Telecom:** towers, overhead cables, pits, trenches and underground cables.
- Energy:** power poles, electricity cables, pits, trenches and street lighting.
- Tram:** poles, overhead cables, tracks and abutting road surfaces.
- Train:** tracks, crossings and signage.

Communities of Practice

Communities of Practice (CoP) are a collection of key stakeholders with a common interest in the life-cycle management of City of Stonnington assets providing quasi formal forums to collaborate and collectively develop strategies for the operational and tactical management of specific asset classes.

Three CoPs exist across the four major asset classes, and meet regularly to share knowledge and experiences with the objective of maintaining a whole of business perspective in the management of assets. The buildings and open space asset classes are incorporated in the same CoP to align with the organisational management structure.

Stakeholder engagement

External consultation

Council has adopted an Engagement Policy that defines the level of engagement appropriate and proportional to the activity being referred. The levels of engagement include: Inform, Consult, Involve, Collaborate, and Empower. The nature of these engagement levels is outlined below:

Inform: Can be used at particular points in a lifecycle of any matter (e.g. the early stages, key points or conclusion) and to meet a legislative requirement or meet safety requirements/ standards.

Consult: When seeking ideas/input to inform development of a concept, seeking feedback on a draft concept/ document or checking back in with our community that we have adequately captured and interpreted their ideas/concerns.

> Involve:

When seeking deeper input from the community in finding solutions to challenging issues or where specific sectors of the community may be more deeply impacted by a decision than others (e.g. complex local issues or strategies that impact particular communities of interest).

> Collaborate:

When a complex problem requires deeper understanding of the challenges and a more informed community input is sought to work collaboratively towards a solution.

> Empower:

When Council is willing to accept and implement the recommendations made to them.

Under the provisions of the Local Government Act 2020, the level of engagement for the Plan must be undertaken in accordance with Engagement Policy. The Engagement Policy mandates engagement at the Consult level is required.

The Future Stonnington framework was supported by an extensive deliberative engagement process with the outcomes having a substantial influence on the development of the SAM Framework, including the asset management objectives and the Plan.

Internal consultation

The internal consultation methodology adopted for the development of the Plan utilised the Communities of Practice (CoP) that represent the four major asset classes within the scope of the Plan.

The CoPs have clear and defined terms of reference with representation from many Stonnington service areas (e.g. finance, maintenance, operations, asset planning, asset strategy and project delivery). The inputs from these service areas enrich the outcome of the Plan in recognition of the ‘whole of business’ context of asset management at City of Stonnington.





Quality and continual improvement

07

The City of Stonnington's SAM Framework, including the Plan, underpins Council's commitment to operating business systems and processes within a framework of continual improvement in line with:

Operating Principle 1:	Continuous Improvement.
Asset Management Objective 6:	Embed a Culture of Continual Improvement in the Development and Life Cycle Management of Council's Assets.
Council Plan Priority 3.2.3:	Embed a data-informed insights approach to inform continuous improvement and achieve an effective service.
Council Plan Priority 3.4.2:	Ensure Council's service offerings and resources are identified and reviewed to align with strategy, community needs, value for money and respond to change.
ISO 55001 Clause 10.3:	Relates quality management methodology of Plan-Do-Check-Act where: <ul style="list-style-type: none"><li>Plan: Recognise an opportunity for improvement and plan a change.</li><li>Do: Test pilot or trial the proposed change at a small scale.</li><li>Check: Review the results of the trial to identify key learnings.</li><li>Act: Implement learnings and repeat cycle if implementation unsuccessful.</li></ul>

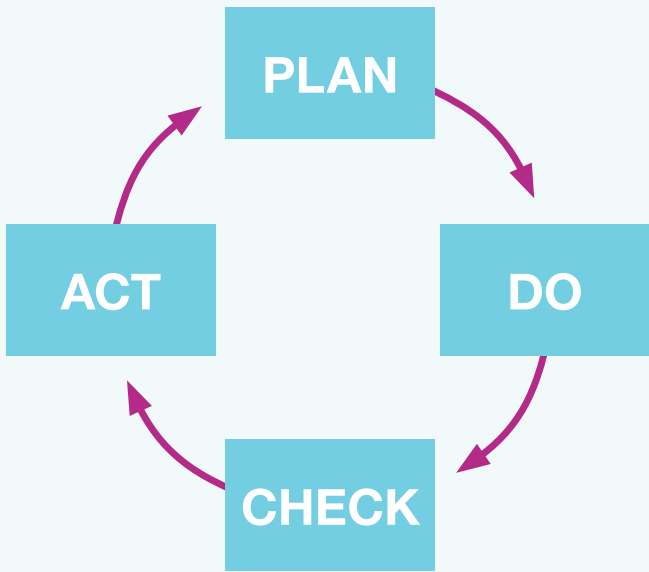


Figure 4: Plan-Do-Check-Act Model

The City is committed to continuous improvement with best value service delivery as a core business principle, seeking to ensure Council understands the needs of the community and responds accordingly. The improvement of asset systems, business processes and data provide valuable insights to drive Council's decision-making and ensure the infrastructure related services remain relevant and align to community needs now and in the future.

The Plan will be updated and improved on an iterative basis so that it is a live document that captures the City's ongoing maturity and improvements in asset management systems, data and capability.

The City's SAMP, asset management objectives and this Plan will be updated in line with the next Council Plan and associated business priorities review in 2025.

The consultation process likely to be adopted for subsequent Asset Plans will likely be at the Collaborate level as the expected uplift in maturity of data and business processes will enable strong reciprocal dialogue with the community around service levels and associated sustainable funding models.



Roads

08

Portfolio

This portfolio includes asset types beyond the road reserve that the City manages, such as off-street car parks and bridges

but excludes State Government arterial roads managed by Department of Transport (DoT), trees and nature strips.

	<b>Road pavement</b> (base and surface)	255.75 km
	<b>Laneways</b>	71.54 km
	<b>Pedestrian only laneways</b>	3.16 km
	<b>Kerb and channel</b>	652.65 km
	<b>Footpaths</b>	542.96 km
	<b>Shared paths</b>	36,726 m <sup>2</sup>

	<b>Street furniture</b> (benches, bins, bollards, fences, tree protection etc.)	5,641 items
	<b>Local area traffic management</b> (speed humps, roundabouts etc.)	958 items
	<b>Signage</b> (within the road reserve)	9,829 items
	<b>Off-street car parks</b>	84 car parks 146,650 m <sup>2</sup>
	<b>Bridges</b>	Road Bridges: 4 Pedestrian Bridges: 22 Culverts: 0

Legislative framework

The legislative framework applicable to road assets including the following Acts, supporting legislation, industry standards and codes of practice:

Acts and regulations

- Local Government Act 2020: Outlines purpose and objectives and the requirements for this Plan.
- Road Management Act 2004/Regulations: Sets out the roles and responsibilities of road infrastructure managers.

Industry standards and codes of Practice

- Austroads publications
- Institute of Public Works Engineering Australasia (IPWEA) practice notes
- VicRoads - Road Structures Inspection Manual 2018
- Codes of practice under the Road Management Act
- AS1742.13 – Local Area Traffic Management

The City has an approved Road Management Plan (RMP) pursuant to the provisions of the Road Management Act 2004 and a Bridge Management Plan to strategically and tactically manage its 26 bridges.

Financial

The current replacement value of City of Stonnington road assets is currently in the order of \$393 million, excluding bridges and road furniture.

As there are very few new road assets added to the road network yearly, other than the effects of inflation, it is expected that this replacement value will remain fairly stable over the next ten years.

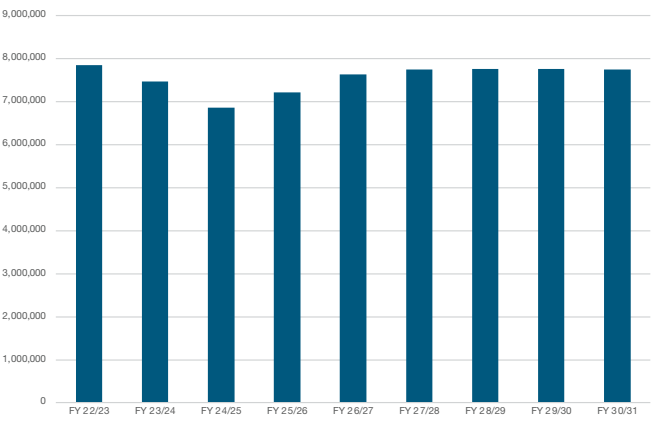


Figure 5: 10 Year Renewal Profile for Road Assets.

DRAFT

This ten-year renewal forecast excludes upgrades, new or expansion initiatives and equates to an average 40-year nominal life for these road assets, which is in line with the service life expectancy.

Council currently invests approximately \$12.06 million per annum on road and footpath renewals, therefore it is reasonable to conclude the current overall renewal investment is adequate to maintain the existing level of service for road assets over a ten year horizon.

It is anticipated future maintenance and operating costs will increase over time due to the increasing number of bespoke assets being installed within Stonnington’s streetscapes annually.

Consequently, the current level of renewal and maintenance expenditure is adequate to enable the City to meet defined service standards under the Road Management Plan.

Operational controls

The City undertakes many operational activities in relation to road assets to maintain them to a safe and fully operational condition and to ensure required service levels are maintained. Typical operational activities for road assets include:

- Annual defect inspections completed in accordance with the City’s Road Management Plan.
- Condition surveys undertaken every four years to:
  - keep asset inventory contemporary,
  - update current condition ratings, condition based remaining lives and asset renewal models, and
  - inform the development of the capital investment program.
- Manage some pedestrian signals and standard streetlights.
- Special charge schemes typically implemented when constructing/sealing a previously unconstructed road/laneway.
- Street sweeping is completed proactively based on seasonal and high leaf drop area considerations.
- Weed spraying is completed upon request, particularly in laneways.
- Preventative and reactive maintenance activities.





Maintenance

Reactive

The main sources of reactive maintenance activities are via requests for action from the public and other customers. Figure 6 below describes the workflow process for customer driven reactive maintenance activities for road and drainage assets.

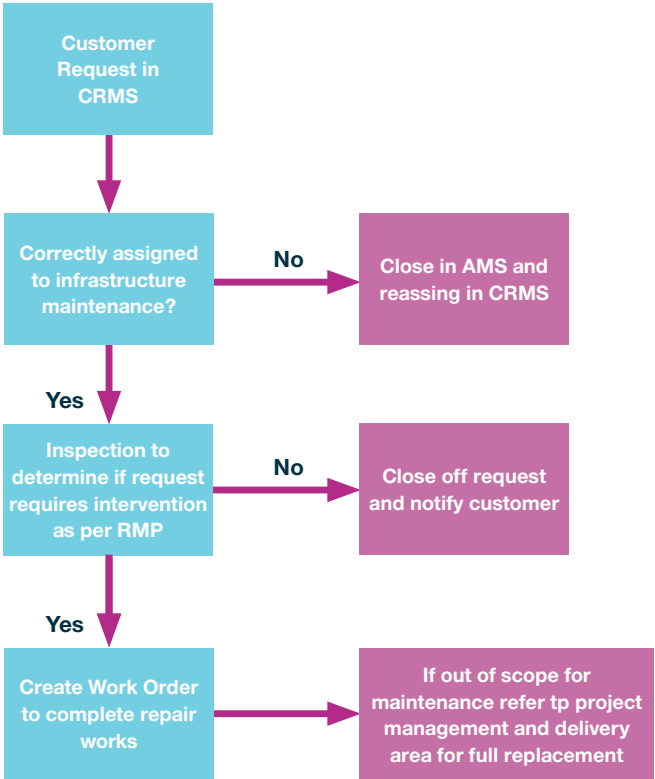


Figure 6: Business Process for Managing Customer Requests

Proactive defect inspections (Road Management Plan)

The RMP provides details of inspection frequencies and inspection standards. The inspections relate to road surfaces, laneways, walkways, kerb and channel, footpaths, street furniture and local area traffic management (LATM) and signage.

Following these inspections, defects are entered against a work order created in the corporate asset management system. Works are prioritised based on public risk and actioned for repair. The RMP provides details on the maintenance standards, including response times.

A proportion of parking signage and line marking is inspected weekly with identified defects repaired, cleaned or replaced on a risk based priority basis.

Roads

Typical road maintenance activities include:

- Pothole patching using bituminous materials to restore a smooth ride condition surface.
- Application of a levelling course of bituminous materials to restore a smooth ride condition surface.
- Repair edge breaks using bituminous materials to restore the line and level of the road surface.
- Laneway surface patching using bituminous materials.
- Crack sealing.

Kerb and channel

Typical kerb and channel maintenance activities include:

- Replacing bluestone or concrete sections.
- Complete asphalt fillings.
- Repairing retaining walls.

Footpaths and pathways

Typical footpath and pathway maintenance activities include:

- Restoring alignment and surface level by patching of potholes, grinding displacements, asphalt filleting and concrete slurry.
- Several bays may be replaced if the above repair methods are not suitable.

Shared paths

- Maintenance work is mostly reactive and includes general repairs to furniture, signs and signals, reported by the community.
- Typical maintenance activities are similar to those used for footpaths and pathways.

Car parks

Car park maintenance is mostly reactive and includes general repairs to furniture, signs and signals.

- Car parks are inspected monthly to check for defects, line marking issues, cleanliness, signage issues and drainage and vegetation problems.
- Quarterly inspections are conducted of car park lighting adequacy.

Bridges

Bridge maintenance is usually identified through the Level 1 bridge inspection program while replacement and renewal works are identified via more detailed Level 2 and 3 inspections.

For additional detail in relation to the management of bridge assets see the Bridges section below.

Road furniture and signs

Road furniture and signage maintenance is predominantly reactive with typical activities including replacing and cleaning road signs, seats, bollards, bike and tree hoops, bin surrounds, and pedestrian fencing.

Local area traffic management (LATM)

These include roundabouts, traffic islands, speed humps, raised pavements etc. and are implemented to allow for the safe traffic and pedestrian movements.

Bridges

The City of Stonnington is responsible for 26 bridge structures which includes four road bridges and 22 pedestrian bridges with a replacement value of in excess of \$6.7 million. The current annual maintenance and renewal expenditure for bridge assets is approximately \$90,000 which is adequate to maintain current service levels.

The City uses a proprietary software system to store and manage bridge inspection, condition and useful life data. This system assists with the ongoing refinement of the Bridge Management Plan which guides the bridge renewal and maintenance program.

The Bridge Management Plan is updated every four years and includes a five-year minor renewal program and an annual works schedule.

Bridges are inspected via an industry standardised three-level inspection methodology that is incorporated in the VicRoads - Road Structures Inspection Manual 2018. A summary of each inspection level is shown below:

Level 1:

Routine visual/maintenance inspections to check the general serviceability of a structure and to ensure the safety of road-users. Level 1 inspections are undertaken directly by the City every six months.

Level 2:

Detailed condition inspections to rate the condition of structures and their components. Level 2 inspections are undertaken by specialist contractors every two years.

Level 3:

Detailed engineering investigations and assessments of individual structures are conducted to:

- investigate a significant defect identified during a Level 1 or 2 inspection,
- prepare a detailed report on the condition and/or load carrying capacity of a structure,
- prepare a detailed report on potential candidate structures for rehabilitation, strengthening, widening or replacement,
- prepare a detailed assessment of the adequacy of a structure for use by current or proposed heavy vehicles, and
- general investigations into the performance or condition of individual structures, classes of structures, structural components and materials in different environments or subjected to different levels of loading.

Acquisition / expansion / upgrade / disposal / decommissioning

Relevant asset life cycle stages of acquisition, expansion, upgrade, disposal and decommissioning for road assets are shown below:

Acquisition:

New or acquired assets are usually from external projects, either State Government or major private developments. The existing network is stable due to Stonnington being a built-up local government with no new subdivisions.

Expansion:

Expansion of assets may occur when completing capital works projects which include constructing missing links in Stonnington's pathway network.

Upgrade:

Upgrades will usually be driven by masterplans for a particular precinct, which normally include footpath, street furniture and signage works.

Disposal:

Disposal is rare in this road asset class. It usually only occurs when there is a road discontinuance because of a private request.

Decommissioning:

Decommissioning or changing the purpose of a road asset is usually the result of a masterplan development, (e.g. a road carrying vehicular and pedestrian traffic is closed and repurposed to a walkway/pocket park). This change of use of the asset may trigger the road to be formally closed to vehicle traffic and removed from the City's RMP Road Register.

Asset protection

Council is focussed on delivering relevant and highly functional asset protection activities to protect road assets from third party actions which impact the road assets. The main administrative mechanism to support the road asset protection function is the issuance and administration of road opening permits for private works within road reserves of roads that the City of Stonnington has jurisdiction over.

The head of power to conduct this function is derived from the Road Management Act with road opening permits initiated from two sources:

- Service authorities, e.g. CitiPower, Yarra Valley Water and South East Water, etc.
- Private developers

Applications for road opening permits are assessed in consideration of:

- Local traffic impact.
- Proximity to schools and commercial centres and related road restrictions.
- Waste collection and street cleaning schedules.
- Asset reinstatement requirements.
- Proximity to State Government assets.
- Requirement for a legal point of drainage discharge.
- Linking of any traffic management plans.

Challenges

Typical challenges faced in relation to the management of roads:

Challenge	Change	Impact
Increasing population	Increasing traffic volumes resulting from population growth.	Increasing population will: <ul style="list-style-type: none"><li>• Increase demand for safe and accessible paths which may impact levels of service.</li><li>• Detrimental effect on the rate of decay of road surfaces, especially roads that may be already significantly deteriorated.</li></ul>
Bespoke assets	The demand to provide a unique character and bespoke built assets in shopping strips.	Places additional challenges on maintenance operations as the variety of materials and products increase.
Renewal funding gap	Like all local governments, the City of Stonnington is revenue constrained which limits funding options and capacity to fund capital works projects. At the same time an increase in construction costs and constrained supply chains are resulting in higher than anticipated construction costs.	Adds additional pressure on the prioritisation of competing infrastructure renewal initiatives.
Private development increase	Increasing private development activity within the municipality.	Direct impact on asset protection activities.
Ageing assets	The City of Stonnington is a fully developed inner metropolitan local government with an increasing average age, condition and renewal liability of its road asset portfolio.	Further strain on asset renewal funding capacity.

Opportunity

Recognising challenges usually results in improvement opportunities. In relation to road assets, the following opportunities have been identified:

Opportunity	Change	Impact
Optimisation	Optimise the balance between proactive and reactive road maintenance and operational activities.	Will reduce life cycle costs and risk while improving asset availability.
Review systems and business processes	Ongoing review of current systems and business processes and implement innovative technologies such as mobility solutions, artificial intelligence for defect inspections, predictive modelling and internet of things (IOT) sensors.	Provides a more strategic asset management setting in line with SAM Framework.
Sustainability	Explore sustainable materials for use in road construction and maintenance, e.g. recycled materials and permeable pavements	Will assist in achieving sustainability targets.
Proactive traffic count program	Develop a proactive traffic count program to align with road resurfacing program.	Improves safety and drive efficiency while also improving the efficiency of organising civil works.
Strategic alliances	Forming strategic alliances with other local governments or the private sector.	Will allow collaborative procurement, knowledge and resource sharing and learnings from trial projects.
Renewal modelling	Improve integration of current renewal forecasting processes with condition modelling, financial forecasting and works programming.	Will improve the efficiency of capital works programs and reduce asset failures.





## Drainage09

### Portfolio

The City of Stonnington is responsible for an extensive network of stormwater drainage assets to protect, maintain and enhance public health and safety and support the general welfare of the community by safeguarding against damage from storms and flooding.

The drainage network represents a significant investment and minimises the impact of storm events by providing a means to safely discharge stormwater from built-up areas and safely diverting flow into main drains and waterways e.g., Murrumbeena Main Drain; Scotchman’s Creek; Chadstone Main Drain; Prahran Main Drain; and Tooronga Road Main Drain.

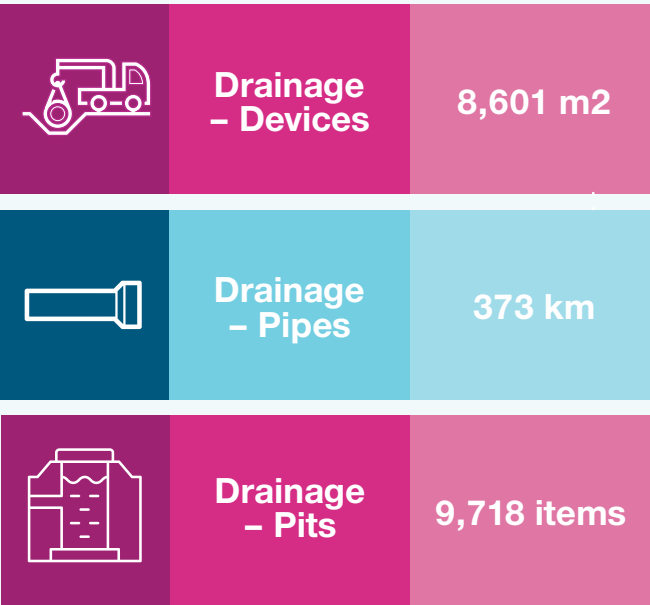
As an established urban area, the City of Stonnington has large areas of impervious surface and sections of older underground drainage systems which makes drainage management challenging.

With the effects of climate change becoming more evident, the frequency and severity of heavy storm events are set to increase, resulting in greater risk of inundation and damage to properties.

To better understand potential risks, flood mapping studies have been undertaken using hydraulic modelling to determine flood levels. Additionally, Council adopted a Special Building Overlay

(SBO2) in 2018 (C221) to ensure buildings works are designed to allow the efficient and safe movement of stormwater.

The City’s drainage network consists of stormwater pipes, pits, and Water Sensitive Urban Design (WSUD) devices such as raingardens, tree pits and wetlands.



### Legislative framework

The relevant legislative frameworks applicable to drainage assets including the following Acts, supporting legislation, industry standards and codes of practice:

#### Acts and regulations

- Local Government Act 2020: Outlines purpose and objectives and requirements for this Plan.
- Environment Protection Act 2017: Legal requirements for stormwater quality from building and construction work sites.
- Water Act 1989: Liability for any person who causes unreasonable flows which result in damage or injury
- Road Management Act 2004: Sets out roles and responsibilities of road infrastructure managers
- Catchment and Land Protection Act 1994: Framework for

- management and protection of catchments.
- Building Act 1993 and associated Building Regulations: Provides regulations for build over easement consent, legal points of discharge, control of building in flood prone areas.
- Emergency Management Act 1986: Responsibility for emergency plan and response officer.

#### Industry standards and codes of Practice

- Flood Management Strategy for Port Phillip and Western Port 2021-2031: The City is working with Melbourne Water to deliver its Flood Management Plan based on this Strategy.
- Australian Rainfall and Runoff 2019: Recently completed flood management guidelines developed by Engineers Australia National Committee on Water Engineers (NCWE).

### Financial

The current replacement value of drainage assets is in the order of \$90 million, excluding WSUDs. New drainage assets are being added to the network annually to improve drainage capacity and mitigate the impacts of climate change. With the addition of new drainage and WSUD assets and the effects of inflation, it is expected that the current replacement cost of drainage assets will steadily increase over time.

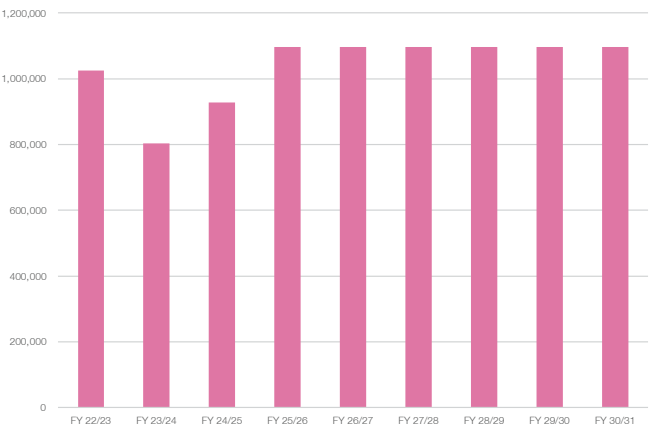


Figure 7: 10 Year Renewal Profile for Drainage Assets

Table 7 above shows a ten year high-level renewal forecast model for drainage assets, excluding upgrades, new or expansion initiatives and equates to an average nominal life for these assets of 90 years, which is in line with the service life expectancy.

As the City currently invests approximately \$3.69 million per annum on drainage renewal works it can be concluded that the current level of investment in the City’s drainage infrastructure is adequate to maintain the current level of service over the short to medium term.

As part of the City’s commitment to continual improvement it is proposed to refine business processes to enable better clarity over future renewal budgets and related expenditures.

The above renewal forecast relies heavily on asset condition data to generate the renewal requirements. As understanding of the condition ratings and condition-based remaining life of buried drainage assets is low, this renewal profile is generated based on high level summary data including age profiles.

As the level of confidence in this profile is low, the City is developing a strategy to assess a more accurate condition

profile based on CCTV inspections in high-risk catchments and a statistical extrapolation methodology. This approach is aligned with the SAM Framework commitments to continual improvement and the structuring of asset renewal commitments based on identifying service level capability gaps.

It should be noted that the above renewal profile is based on end-of-life renewals only and does not include any allowance for investment drivers:

- Drainage upgrades to cater for flood mitigation.
- Infrastructure requirements to cater for increased rainfall intensity due to climate change.
- Trialling innovative drainage solutions, e.g., structural soils, permeable paving, passive irrigation and other WSUD measures.

As the above investment drivers mature and materialise, they will be incorporated into the drainage asset forward investment planning and Financial Plan.

### Operational controls

The City of Stonnington undertakes many operational activities in relation to drainage assets to maintain the assets in a safe and fully operational state and ensure the required service levels are maintained.

Typical operational activities for drainage assets:

- Defect inspections:
  - Undertaken in response to complaints, however a program is currently underway to convert this activity to a more proactive approach through the internal drainage Community of Practice.
- Condition surveys:
  - Currently undertaken as a reactive program, however a strategy is currently under development to establish a risk-based prioritisation of CCTV inspections followed by a statistical extrapolation of results to inform the overall condition state of buried drainage assets.
- Street cleaning:
  - Street sweeping to clear debris from kerbs and channel currently proactively undertaken based on the seasonal considerations. During the heavy leaf drop months, the frequency of street sweeping is increased.

Maintenance

Typical drain maintenance activities:

- Defect inspections.
- Condition surveys.
- 'Hot-spot' maintenance.

Defect inspections

Reactive

If a drainage complaint has been issued, the City will inspect the pit or use CCTV to investigate the pipe.

Defect	Rectification	Response Time
Blocked drains causing water to pond on the trafficable sections of the road surface.	Clear pipe blockage and make surrounding area safe.	10 business days
Missing or severely damaged/ broken drainage pit lids.	Replace missing or broken pit lid.	Five business days

Note: These intervention thresholds are incorporated into the City of Stonnington Road Management Plan.

Routine

Planned or scheduled drain cleaning services:

- Street cleaning
  - Seasonally based proactive service that seeks to clear debris from the kerb and channel. The frequency of this service is increased in identified heavy leaf drop months.
- Drainage pit cleaning:
  - Suction cleaning of drainage 'hot spots' across the network is completed several times per year to ensure all litter/rubbish that is swept into the drains are cleaned out. Known flood prone areas are completed 12 times per year.
- Gross pollutant traps (GPTs):
  - GPTs are cleaned two to three times a year on a rolling annual program.

Monitoring

The City receives drainage related requests through its customer relationship management system, like road-based requests. The workflow for this is described in Figure 6 – Business Process for Managing Customer Requests (Page 23).

Planned

Roadside drainage pits are inspected monthly.

Maintenance

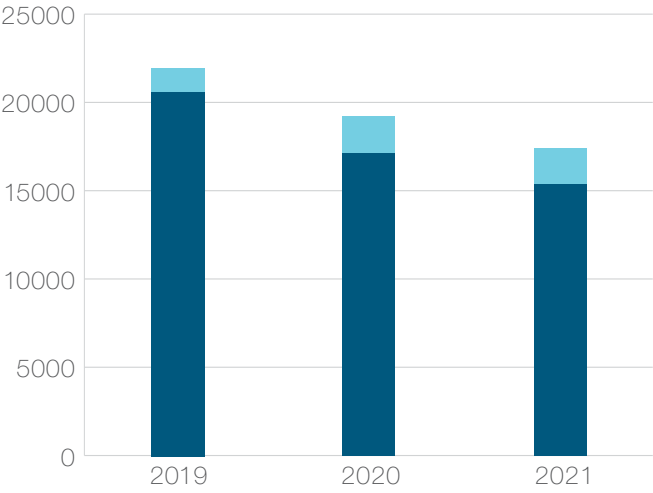
Reactive

If a drainage complaint has been issued, the City will inspect the pit or use CCTV to investigate the pipe.

Planned

The City responds to the following defects within the allocated period shown in the table below.

Proactive vs Reactive drainage pit cleaning



As part of Council's commitment to continual improvement, customer requests are continually monitored to identify 'hot spots' to proactively undertake clearing prior to forecast major storm events.

Asset condition

The City currently undertakes a scheduled CCTV program that targets drainage lines based on:

- Pipe diameters of 450mm or greater.
- Identified flooding areas and issues.
- Old drainage lines with higher probability of damage or tree root incursion.
- Critical locations, e.g. road reserves or under properties.

CCTV footage is analysed to produce a program of works with the most urgent works identified based on a risk methodology that considers consequence and likelihood of failure.

Asset renewal

Typical drainage renewal treatments:

- Pipeline patching
- Pipeline relining
- Asset replacement
- Trialling innovative solutions

A risk-based approach is used to decide which treatment option to adopt, which considers site accessibility and cost-benefit assessments with the relining option being the predominant strategy over the last 15 years.

It is proposed that as we better understand the condition rating of individual drainage lines, this data will be used as part of a more holistic approach to prioritising renewal based on maintaining the average condition of the pipeline above a certain score. The results of these analyses will indicate any funding gaps.

Acquisition / expansion / upgrade / disposal / decommissioning

Acquisition:

Major new/acquired assets are usually from external projects, either from State Government, Melbourne Water, or major private developments. Drainage improvement projects identified to alleviate regular flooding of properties are designed to allow for the following, where possible:

- Easement drain designs meet the one in five annual recurrence interval standard (ARI).
- Road and street drain designs meet the one in ten ARI.
- Drains in designated flood paths meet the one in 20 ARI.

Expansion:

Expansion of assets may occur when completing capital works projects. For augmentation of drains the City's approach is to upgrade capacity within the flood designated areas from one in five years ARI to one in 20 years ARI where possible. The road system is considered part of this conveyance system if it can achieve a safe egress risk.

New and upgrade works expenditure is necessary due to the network expansion requirements associated with higher density developments and the impacts of climate change.

Stonnington's Flood Management Plan was developed with Melbourne Water. This is under review, with the focus on developing a new plan that will comply with the Port Phillip and Westernport Flood Management Strategy 2021-2031. The plan will consider and address various flood and drainage related gaps identified and clarify the roles and responsibilities between the City of Stonnington, Melbourne Water and VicSES.

Upgrade:

Upgrades are usually driven by condition assessments, identifying the flood risk from modelling to real events. This program is driven by the drainage system conditions, flood risk and reported drainage issues.

Disposal:

Given the nature of development within the municipality, it is unlikely that drainage assets will be disposed without replacement. There may however be some assets that are discontinued.

Decommissioning:

Decommissioning of drains will only be undertaken as a last resort measure based on sound rationale. Valid reasons would be Occupational Health and Safety or to manage flood risk.





Water Sensitive Urban Design

Rainwater collects pollutants on its way to rivers and creeks via pervious and impervious surfaces and the drainage system. This valuable resource can be cleaned, harvested and add capacity to the existing drainage systems.

From a drainage capacity perspective, the City collaborates with internal and external stakeholders to explore and quantify the benefits of WSUD. While the WSUD approach has water quality benefits, the City is seeking to better understand if drainage capacity benefits are applicable.

The City's WSUD assets have a current replacement value in the order of \$15 million.

WSUD works at all levels – lot, street, and precinct – as well as regional scales. It includes a range of possible treatment options, some of which are shown in Figure 8.

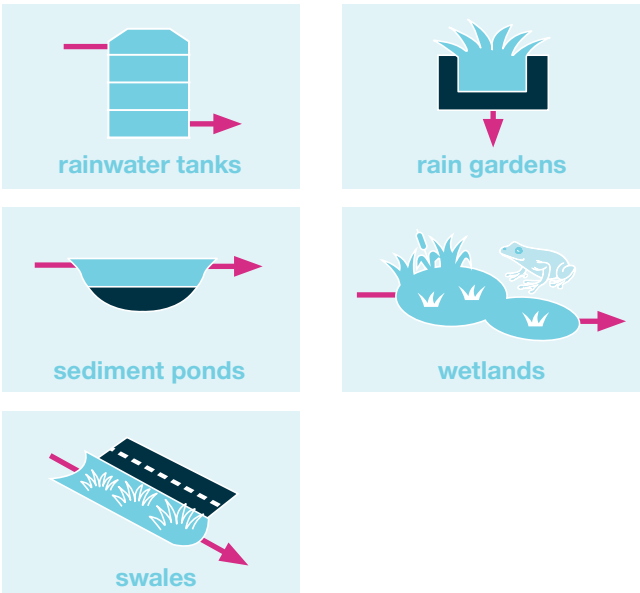


Figure 8: Water Sensitive Urban Design Treatment Options

Challenges

The table below summarises challenging factors that impact the effective management of the City's drainage network.

Challenge	Change	Impact
Demographics	<p>The City of Stonnington's population has grown from 106,000 in 2016 to its current level of over 118,000.</p> <p>South Yarra's population is predicted to increase the most followed by Malvern East and Prahran.</p>	<p>Increased development to accommodate increasing population with the greatest effect expected to be in South Yarra, Malvern East, and Prahran.</p>
Dwelling Density	<p>Increased dwelling density due to urban consolidation and minimal green field development.</p> <p>Development is planned to occur within the municipality including refurbishment or construction of denser residential accommodation</p>	<p>Construction of new pipes, pits and retention systems likely to be necessary to address increased flows.</p> <p>Flood study projects may be necessary to determine best approach to manage flows.</p> <p>Opportunity to address gaps in the existing underground drainage system - the construction of new drains could be incorporated into redevelopment designs.</p>
Climate change	<p>Daily rainfall events will increase in frequency and intensity, affecting the capacity and maintenance of drainage infrastructure.</p> <p>Increased ground movement due to changes in groundwater (from droughts) affecting the structure of foundations.</p> <p>Fatigue of drainage structures from extreme stormwater events.</p>	<p>May face capacity issues where the network is not designed to cater for high frequency extreme rainfall loads.</p> <p>Significant damage repair costs resulting from the inability of stormwater systems to cope with extreme events or multiple events in a season.</p> <p>Pipes may fail early due to long periods of drought impacting on the ground condition. Accelerated degradation of materials has potential to reduce the life expectancy of infrastructure, increase maintenance costs and lead to structural failure.</p>
Ageing assets/obsolescence	<p>Deteriorating condition of assets.</p> <p>Capacity issues of old brick drains.</p>	<p>Increased demand for drainage system renewal and upgrade.</p>

Opportunities

The table below summarises opportunities that may assist make more informed decisions in relation to the drainage network.

Challenge	Change	Impact
Changes in technology	Robotic and laser technology makes it easier to access previously inaccessible drains.	Can replace or reline drains where this was previously not feasible or cost effective.
Emphasis on integrated water management.	New approaches to water treatment and re-use of rainwater at the source may alter the future runoff patterns, e.g. raingardens, onsite storages, wetlands and pervious surfaces.	May add additional capacity during less intense, more frequent rain events.
New guidelines in flood modelling – Australian Rainfall and Runoff 1987 and Runoff 2019	<p>Current modelling was completed using Australian Rainfall and Runoff 1987 methodology.</p> <p>Modelling using ARR 2019 methodology may reveal changes to drainage system level of service.</p>	<p>May need to reprioritise the drainage program.</p> <p>Review Special Building Overlay and strategic drainage management.</p>
Climate change flood modelling	Flood model a climate change flood extent, i.e. 1 per cent AEP design extent by year 2100.	<p>Daily rainfall events increase in frequency and intensity affecting capacity and maintenance of drainage infrastructure.</p> <p>May identify capacity issues where network is not designed to cater for high frequency extreme rainfall loads.</p>



Buildings

10

Portfolio

The City of Stonnington’s buildings portfolio has 145 buildings categorised according to the function they perform.

Main Asset Function / Type of Facility and Services	No. of Buildings
Administrative	
Civic Centres (Offices and Town Halls)	7
Depot, Transfer Station	2
Diversity and Aged Services	
Senior Citizen Centres	4
University of the Third Age (U3A)	3
Events, Arts and Culture	
Community Centres	9
Performing Arts Venues	2
Car park	
Car park Structures	5
Commercial	
Animal Compound	1
Golf Course	1
Restaurants, Cafes	2
Retail, Shops	5
Residential Accommodation, Caretaker’s Flats	11
Family and Children	
Child Care Centres	8
Kindergartens	4
Toy Library, Play Group	2
Maternal and Child Health Centres (with some Play Groups)	5
Library and Information	
Libraries	4
Parks and Gardens	
Conservatory	1
Work and Storage Sheds	17
Public Toilet	
Public Toilets	12
Exeloo Toilets	7
Recreation	
Aquatic Centres (including ancillary buildings)	4
Scout Halls	4
Sports Pavilions including Kiosks	25
TOTAL	145

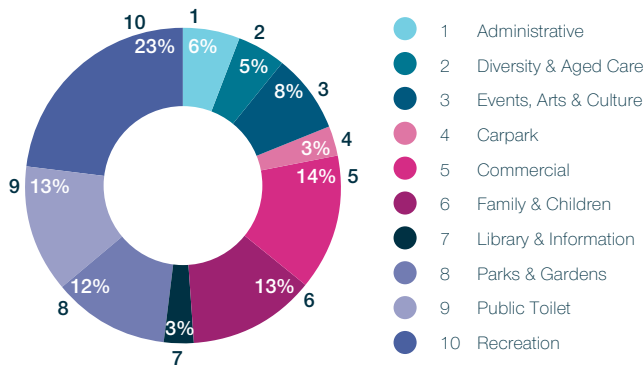


Figure 9: Percentage of Buildings by Asset Function

Legislative framework

The relevant legislative frameworks applicable to buildings assets including the following Acts, supporting legislation, industry standards and codes of practice:

Acts and regulations

- Local Government Act 2020: Outlines purpose and objectives and requirements for this Plan.
- Planning and Environment Act 1987: Framework for planning use, development and protection of land.
- Building Act 1993 and associated Regulations: Legal framework for design, construction and maintenance of buildings.
- Essential Safety Measures Legislation: Legislation on life and fire safety systems in buildings.
- Heritage Act 2017: Provides for the protection and conservation of the cultural heritage of the State.
- Environmental Protection Act 2017: Framework for protection of human health and environment.
- Disability legislation: Protection against discrimination on the grounds of disability.
- Occupational Health and Safety Act 2004: Framework to secure health, safety and welfare of employees and other persons at work.
- Health legislation: Legislation to protect public health
- Retail Leases Act 2003: Legislation for retail leasing.
- Stonnington Planning Scheme: Directs land use within the Stonnington municipal district.

Industry standards and codes of practice

- National Construction Code 2019: Provides minimum required level of safety, heath, amenity, accessibility and sustainability of buildings.

- Residential Development Standards (ResCode): Applies to all land zoned for residential use across Victoria with buildings that are three stories high or lower.
- Australian Standards: Industry specific information relevant to the building industry, including information relevant to manufacturers, importers and suppliers of building products

Financial

The current replacement value of City of Stonnington building stock is approximately \$260 million. Notwithstanding the ongoing effects of inflation, it is likely that the current replacement value will increase at a moderate rate over the forthcoming ten-year forecast period as the effects of the City’s active investment program in new buildings is somewhat offset by a rationalisation of the buildings portfolio through facility multi-purposing.

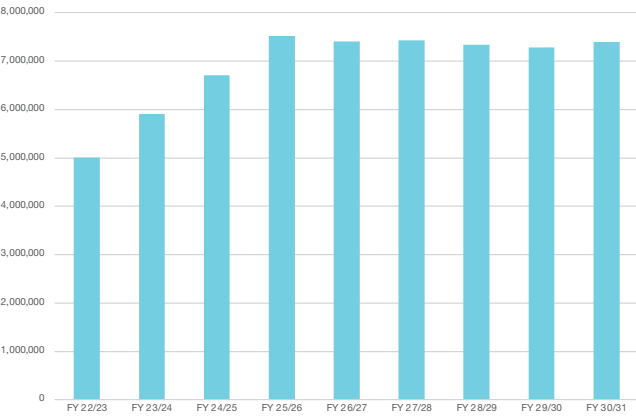


Figure 10: 10 Year Renewal Profile for Building Assets

Figure 10 above shows a high level renewal forecast for the City of Stonnington’s building portfolio based on a partial building condition audit conducted in FY2016/17.

This above profile represents the life cycle renewal of building components at end of life and excludes building upgrades, new works and expansion initiatives. This level of investment equates to an average nominal life of 40 years for these assets, which is in line with the service life expectancy.

The current annual renewal investment in the City’s building stock is approximately \$4.85 million. As many building upgrade and expansion projects incorporate some renewal activity, it can be reasonably concluded that the current overall renewal investment is adequate to maintain the existing level of service in the short to medium term.

It is also likely that the above renewal forecast will increase following the upload of the latest condition and remaining life data derived from the GBCA which covers the entire building portfolio.



Operational controls

The City undertakes many operational activities to maintain building stock in a safe and operational condition to maximise utilisation and effectiveness. Typical activities:

- Property Coordination:
  - Property management including leases, licences, acquisitions and disposals of commercial building stock to optimise building utilisation by the community.
- Snap Send Solve:
  - Proprietary software that integrates with customer request management system to report maintenance issues
- Asbestos audit:
  - A central Asbestos Register and Management Plan is maintained and a Division five Audit undertaken every five years
- Security (including access control):
  - Control access to buildings and manage CCTV security network
- Graffiti:
  - Removal of graffiti from commercial and residential private property
- Emergency management:
  - Documented scheme of assigned responsibilities, actions and procedures within a designated section of the Emergency Plan to respond to and manage emergencies as laid out in AS3745-2010.
- Emergency evacuation:
  - Corporate guidance for emergency response situations
- Pest control:
  - Managing pest infestation at City of Stonnington buildings
- Cleaning and housekeeping:
  - Managing general cleaning and housekeeping activities in selected buildings
- Multi-functional facilities:
  - Bookings management with external and internal stakeholders
- Arts and community centres:
  - Managing events and special community activities
  - Managing artworks and culturally significant assets
- Aquatic centres:
  - Management and maintenance of pools and associated specialised plant and equipment

Maintenance

A mix of reactive and proactive routine inspections and maintenance is undertaken to ensure buildings are safe for use, compliant with relevant statutory regulations, are well-maintained and fully operable.

Maintenance services are outsourced to a specialist facilities maintenance provider and supplemented by a building maintenance contractor.

Programmed inspections (regulatory)

- Essential safety measures activities:
  - Emergency and Exit lights / signs.
  - Fire systems.
  - OWIS / EWIS system.
  - Auto Exit doors.
  - Safety shower.
  - Eye wash station.
  - Smoke doors.
  - Exit doors.
  - Bloc plans.
  - Exist / paths of travel.
  - Evacuation / egress plans.
- Routine inspections / servicing:
  - Trade waste, grease traps, pits.
  - Backflow prevention devices.
  - Waste treatment systems.
  - Electrical testing and tagging.
  - Roof safety access equipment.
  - Rainwater tanks and pumps.
  - HVAC – cooling towers.

Preventative maintenance

Contracted preventative maintenance services:

- Routine maintenance services in various trades such as building, electrical, plumbing and painting.
- Routine maintenance of major building components such as lifts, fire services, air conditioning, emergency exit lighting.
- Regular maintenance services such as gutter cleaning, lighting, electrical test and tagging, pest control, alarms, glazing and shutters.
- Compliance with essential safety measure legislation such as fire services, lifts, paths of travel and exit lighting.

Reactive maintenance

Reactive maintenance works are typically undertaken in response to customer requests generally in line with Figure 6: Business Process for Managing Customer Requests.

Maintenance requests are typically prioritised based on safety, compliance and the impact and number of users affected.

Reactive maintenance activities include:

- Air conditioning and heating repairs.
- Electrical and mechanical repairs.
- Carpentry.
- Plumbing.
- Fire systems.
- General repairs.
- Roof works.
- Glazing.

Acquisition / expansion / upgrade / disposal / decommissioning

Decisions on property acquisitions, renewal, expansion, upgrade and disposals are based on current and future strategic operational requirements.

Acquisition:

As the City of Stonnington is essentially a built-up municipality, building acquisitions typically relate to properties in strategic locations with a view to acquiring the building and either converting the land into valuable open space or new community facilities as required.

Expansion:

Asset expansion considerations typically originate from a

Council Plan Priority to plan for community infrastructure assets and facilities which are multi-functional and meet the changing needs of the community. To this end, The City is in the process of developing a Community Infrastructure Plan that will prioritise multi-functional, well located and highly utilised community infrastructure that is environmentally responsible, supports economic development and provides best value for the community.

Upgrade:

Requests to upgrade existing facilities and buildings are identified either organically by the City or by facility users and stakeholders through a robust community engagement processes. These initiatives undergo a process of review and prioritisation against other competing priorities through Council's capital investment review process.

Disposal:

The disposal of infrastructure assets, in particular buildings, is not a high volume activity other than the disposal of building assets that have been strategically acquired with a view to creating open space.

Decommissioning: The decommissioning of buildings, or part thereof, is undertaken if the asset is considered to be surplus to needs or is part of a broader asset expansion or upgrade project that replaces redundant or obsolete elements.

Renewal:

Building renewal projects feature prominently in the City's capital works program as there is a baseline program to replace building elements and components as they approach end of life on a life-for-like basis, typically with a contemporary architectural and engineering equivalent version.



Challenges

The table below summarises the challenges that will impact the effective management of buildings.

Challenge	Change	Impact
Demographics	The City of Stonnington's population has grown from 106,000 in 2016 to its current level of over 118,000.	Population growth will have a substantial impact on the usage patterns of buildings.  Review and refine appropriate levels of service that are sustainable.
Climate change	Frequency of heatwaves and droughts will increase and become more intense.	The functionality of buildings without climate change resilience will decrease due to a loss in thermal comfort and poor indoor air quality.  Deterioration of building assets structural integrity and performance.
	Heavy rainfall and flood events will increase in frequency and impact on building.	Buildings will require additional weather proofing and fire resistance retrofitting.  Building services such as ventilation, heating and cooling systems and power supply may fail or experience accelerated degradation, leading to a reduction in life expectancy and increases to maintenance costs or failure.
Optimisation of building usage	Some buildings are under-utilised and/or no longer fit-for-purpose if they do not meet the requirements for the services they are intended to provide, or industry standards have changed	Under-performing assets may be left vacant or under-utilised and maintenance resources wasted.  Some buildings do not provide the required service levels required as they are not fitted out with the correct safety measures or industry standards required to deliver the services, e.g. accessible emergency exits or temperature control for infants or the elderly.  Some buildings are energy inefficient and costly to heat or cool thereby negatively impacting on operating and maintenance costs.



Opportunity

The table below summarises the opportunities that may assist more informed decisions in relation to buildings.

Opportunity	Change	Impact
Integrated services	A shift towards an integrated services approach and facility planning to deliver community infrastructure and service priorities.	The functional requirements and standards for the community spaces are established based on the service levels according to the community needs.  Building assets achieve compliance requirements in relation to the use of hazardous materials, accessibility and building regulations.  The assessed environmental risks are mitigated and safety considerations are implemented.
Demand management	Increasing need to provide equitable and quality community infrastructure to meet the changing service level demands of the community	To meet the changes, demands will be guided by principles and priorities: <ul style="list-style-type: none"><li>• co-location and shared usage</li><li>• walkability and accessibility functionality and flexibility</li><li>• environmental sustainability</li></ul>
Universal design	New standards requiring buildings create an accessible, usable, convenient and a pleasure to use environment.  New considerations for the diverse needs and abilities of all throughout the design process. Universal design creates services and environments that meet peoples' needs	The consideration of universal design principles in building design leading to: <ul style="list-style-type: none"><li>• equitable use</li><li>• flexibility in use</li><li>• simple and intuitive use</li><li>• perceptible information</li></ul>
Smart City Strategy	Advancements in technology becoming more cost-effective will allow real-time information capture and sharing	Smart Cities innovations will help deliver convenient, citizen-centric services that are tailored to the demand and anticipated needs of the community





Open Space

11

Portfolio

The City of Stonnington open space asset portfolio consists of parks and other 'non-traditional' areas of open space such as the green spaces, open areas adjacent to transport corridors and natural areas supporting biodiversity. Open spaces are highly valued and well used by the community, varying greatly in size and function, providing recreation areas for the Stonnington community and those who live outside our local government area to enjoy.

There are over 1.2 million square metres of recreational, leisure, parks, streetscapes and public open spaces within the City of Stonnington.

The following table shows the number of open space assets categorised by function or type.



The City of Stonnington is primarily a residential municipality with some commercial, industrial, and institutional land uses. It is well known for its shopping and lifestyle precincts, parks and gardens, leafy streets and historical architecture. To facilitate the effective and equitable management of parks, a hierarchy of parks and reserves has been developed so that the City can prioritise its open space development.

There are eight significant premium historical parks and gardens within the municipality, many dating back to the Edwardian period. These spaces give Stonnington a distinctive identity and public space heritage. They are managed via heritage management plans and master plans.

The tables following shows the hierarchy of parks, sportsgrounds and playgrounds.

Sportsground hierarchy	Definition
Class A	High profile sportsgrounds used for high standards of senior competition
Class B1	Medium profile sportsgrounds often used for junior sports
Class B2	Low profile sportsgrounds used for training and junior sports

Playground Hierarchy	Definition
Significant regional playgrounds	Specialised play equipment and associated infrastructure with high demand. Large facilities with equipment catering for both Public Junior (3-7) and Public Senior (7-15) age groups. Sites chosen regarding location, visibility and accessibility.
Regional playgrounds	Provide for the immediate suburb or district. Sizes vary depending on location relative to other facilities and demographics of the area but have a larger provision of play than neighbourhood playgrounds.
Neighbourhood playgrounds (local)	Small facilities located to provide pedestrian access without long travel distances nor crossing of main roads. Sizes vary depending on location relative to other facilities and demographics of the area. Play structures designed for Public Junior (3-7) with standard access to all levels. Equipment carefully sited to maximise open space for ports and activities.

Legislative framework

The relevant legislative frameworks applicable to open space assets including the following Acts, supporting legislation, industry standards and codes of practice:

Acts and regulations

- Local Government Act 2020: Outlines purpose and objectives and requirements for this Plan.
- Planning and Development regulations: Specifies open space matters relating to subdivisions
- Planning and Environment Act 1987: Framework for planning use, development and protection of land.
- Heritage Act 2017: Provides for the protection and conservation of the cultural heritage of the State.
- Environmental Protection Act 2017: Framework for protection of human health and environment.
- Disability legislation: Protection against discrimination on the grounds of disability.
- Occupational Health and Safety Act 2004: Framework to secure health, safety and welfare of employees and other persons at work.
- Health legislation: Legislation to protect public health.

Industry standards and codes of practice

- Australian Standards.
- Australian Accounting Standards.
- AS4685.0:2017 Playgrounds and equipment surfacing
- AS4422:2016 Playground surfacing (Level 1 routine inspections and Level 2 operational inspections).

Financial

The current replacement value of Open Space assets is approximately \$1.05 million. It is anticipated that the replacement cost of open space assets will steadily increase over time due to the effects of inflation and the City's ongoing commitment to improve public amenity through the addition of new open space community infrastructure.

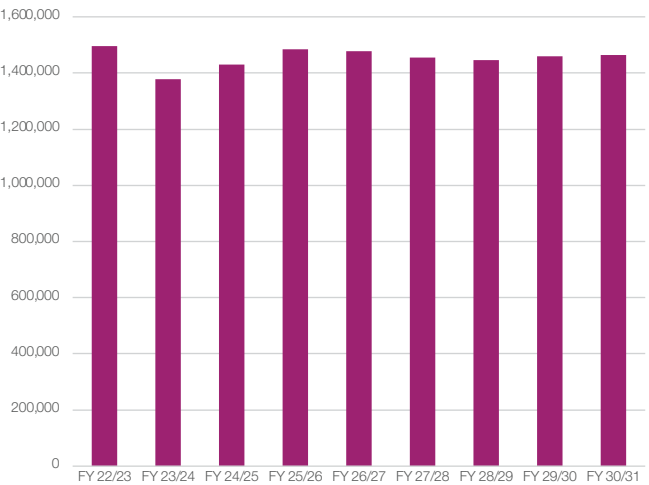


Figure 11: 10 Year Renewal Profile for Open Space Assets

Figure 11 above shows a high level renewal forecast for open space assets based on a condition audit conducted in FY2016-17. This forecast represents the life cycle renewal of open space components at end of life and does not reflect any operating and maintenance investment.

This profile represents the life cycle renewal of open space assets at end of life and typically excludes upgrades, new works and expansion initiatives. This level of investment equates to an average nominal life of 70 years for these assets, which appears adequate given the diverse nature and scope of assets within this portfolio, e.g. from complex and major community assets through to local playgrounds.

The City's current renewal investment in Land Improvements, including parks and open space assets, is approximately \$7.4 million, therefore it can be concluded that the current renewal investment in open space assets is adequate to maintain existing levels of service.

Operational controls

The City of Stonnington undertakes many operational activities to maintain its open space assets in a safe and operational state to maximise utilisation and effectiveness. Typical activities:

- Parks maintenance program and systems including:
  - Turf management service quality measures.
  - Horticulture and infrastructure management
- Floodlight maintenance and renewal program, including sports facility lighting audits:
  - Ensure compliance with safety and security requirements for community facilities.
  - Program upgrades to meet energy efficiency requirements and regulatory standards.
- Tree management audits:
  - Identify and assess the condition of managed trees.
  - Deliver routine pruning and tree management program to ensure good tree health and maintain tree safety.
- CCTV system audits:
  - Monitor the security and functionality of existing surveillance systems.
  - Implement operating and upgrade procedures to support CCTV systems management.
- Audio-visual system audits:
  - Check AV equipment to determine if working correctly and need for maintenance.
  - Applications for maintenance or new equipment.
- Playground safety inspections and audits:
  - Weekly examination of playgrounds to check compliance with standards and identify safety hazards.
  - Comprehensive playground maintenance and renewals program.

Maintenance

A combination of reactive and proactive routine inspections and maintenance is undertaken to maintain open space assets in a safe condition and in compliance with relevant regulatory requirements.

Open space assets include historic gardens, significant parks, neighborhood parks, bushland areas, wetlands, pocket parks, pop up parks and urban / streetscape parks. Several large and historically significant parks require extensive maintenance, including a daily presence, while other parks and reserves require a lower frequency of servicing.

This also includes the provision of high quality sporting grounds that deliver a range of playing surfaces to meet the varied needs of sports activities and sporting clubs, as well as the high-quality public golf course.

Below is a list of key maintenance programs performed on open space assets:

- Annual fencing maintenance and renewal.
- Annual furniture maintenance and renewal.
- Annual irrigation system maintenance and renewal.
- Annual golf course maintenance and renewal.
- Annual playground safety and compliance.
- Annual playground renewal.
- Annual structures maintenance and renewal.
- Annual paths maintenance and renewal.
- Signage maintenance and renewal.
- Sportsgrounds consolidated maintenance and renewal.
- Minor equipment upgrades for all parks.

Acquisition / expansion / upgrade / disposal / decommissioning

As the City of Stonnington is an established municipality, the availability of land for new parks is limited. Capital investment is focused on improving existing assets and strategically purchasing properties to enhance open spaces.

Acquisition:

Major new/acquired assets are usually from the purchase of land parcels for open space, or from State Government or developer contribution schemes.

Expansion:

Expansion of assets may occur when completing capital works projects which include constructing links to open spaces.

Upgrade:

Upgrades will usually be driven by masterplans and include soft landscaped streetscapes, upgrading to synthetic pitches and indoor stadiums.

Typical sportsground upgrade activities:

- change of ovals to warm season grasses,
- irrigation system augmentation,
- sportsground improvements,
- cricket wicket upgrades, and
- park fencing upgrades.

Park upgrades may occur in response to customer requests, sustainable environment initiatives and risk based inspections.

Disposal:

Disposals are rare in the open space asset class. They usually only occur when there is an asset replacement or land has been acquired by the State Government.

In relation to trees, if a species is found to be deteriorating rapidly or it presents a safety risk, a staged replacement of that species with a more suitable one may be implemented.

Decommissioning:

Decommissioning, or changing the purpose of an open space asset, is usually the result of a masterplan development, e.g. pocket park is closed to make way for a larger community facility. This change of use of the asset may trigger the park to be closed and the land use changed.

Renewal:

Open space infrastructure renewal usually occurs in response to vandalism, asset aging, technical assessment of structures and issues identified through customer requests.

Sportsgrounds renewal works are either based on community service needs as identified from customer requests or from knowledge of the assets' condition. An example of a typical open space asset renewal is the replacement of synthetic tennis courts.

The City currently has in place a five-year condition and risk based playground equipment replacement program.





Challenges

Some historical asset management activities undertaken for open space assets may no longer be suitable and require a review in line with the City's commitment to continual improvement. Typical challenges and tasks to be considered include:

Challenge	Change	Impact
Activity centres and precincts strategic plans	Adoption of Open Space Strategy changing strategic planning process for Activity Centres and Precincts.	Understanding the strategic planning process for open spaces in activity centres and precincts will likely increase the stock of open space assets and their complexity.
Management and maintenance gaps	Increasing costs and resources required in managing and maintaining the current stock and added open space assets.	Gaps in the processes for managing and maintaining the open space assets may result in open space assets not reaching asset life span potential thereby increasing their whole of life costs.
Proactive maintenance	Increasing need for proactive maintenance activities for ongoing maintenance of flood lighting and other bespoke assets, e.g. catenary lighting and artwork.	Enhanced visibility of maintenance information and ongoing related activities.
Open space data management	Increasing complexity in the categorisation and componentisation of open space assets due to custom built assets.	Ongoing reviews and updates required to maintain a contemporary register.
Asset handover process gap	Capital projects for open space assets have many components generate an increasing amount, and complexity, of data that needs to be managed.	Continually improve and optimise current handover process for capital works projects to better manage post construction administrative project closeout.

Opportunity

The table below summarises opportunities that may assist more informed decisions in relation to open space assets.

Opportunity	Change	Impact
Open Space Strategy development	Development of Open Space Strategy.	Ensure 'whole of life' consideration is included in asset planning and creation.
Open space masterplans	Implementation of masterplans for open space and landscape assets.	Ensure asset management considerations are included in the early design and implementation of phases.
Community of Practice	Refine and mature the established open space (and buildings) Community of Practice.	Deliver synergies and improve the outcomes in the delivery of open space assets.





Glossary

12

Term	Definition
Actions	Detail on specific activities to be delivered to achieve a specific outcome.
Annual Plan	Program of activities for the financial year.
Asset	An asset is an item, thing or entity that has potential or actual value to an organisation. The value varies depending on the stakeholders, and can be tangible or intangible, financial or non-financial.
Asset condition assessment	The process of continuous or periodic inspection, assessment, measurement and interpretation of the resultant data to indicate the condition of a specific asset to determine the need for preventative or remedial action
Asset class	A group or umbrella of assets that have similar characteristics or purpose. For example, "Stormwater Drainage" assets all help to contribute towards the safely remove storm water from roads, buildings or open spaces.
Asset management	The discipline of balancing asset life cycle costs, risks and opportunities to ensure assets deliver maximum service potential today and into the future.
Asset management objectives	Goals and how they will be achieved relating to the strategic asset management framework
Asset management system	A set of interrelated or interacting elements to establish strategic asset management policy, asset management objectives and processes to achieve those objectives
Best value	Getting the most out of assets by renewing them at the most optimal time to maximize return on investment, minimise risk while delivering agreed service level.
Climate change resilience	Susceptibility to the adverse effects of climate change, such as climate variability and extremes, and how to mitigate these effects
Community of Practice	Like minded stakeholders who provide input into the life cycle management of an asset class.
Community Vision	The Community's twenty-year aspirational vision for the City of Stonnington.
Component	An individual part of an asset which contributes to the composition of the whole and can be separated or detached. Components typically have specific useful lives, cost structures, risk profiles and maintenance requirements.
Componentisation	Representation of interoperable components that collectively make up an asset.
Condition rating	The assessed state and value of an asset, provided on a scale of generally 1 (new) to 5 (end of life).
Continual improvement	Quality based principle to ensure the ongoing review and enhancement of an outcome.
Council Plan	Council's four year description of how it will achieve its Vision and the Community Vision
Future Stonnington	City of Stonnington's integrated planning framework which incorporates the Community Vision and the Council Plan.
Infrastructure assets	Physical assets that enable Council to deliver relevant services to the Stonnington community and transient users.
ISO 55001 - Asset Management -Management systems - Requirements	International standard that describes the requirements to achieve certification of an organisations asset management system
ISO	International Organisation for Standardisation
Level of service	Defined service quality for a particular service from an asset that relates to quality, quantity, reliability, responsiveness, environmental, acceptability and cost.
Lifecycle	The entire life cycle of an asset including planning, design, construction, acquisition, operation, maintenance, rehabilitation and disposal.
Objective	Statement of what needs to be done to achieve a goal.
Operating principles	Describe how Council operates and key considerations taken into account.
Reactive maintenance	Unplanned repair work carried out in response to service requests.
Stakeholder/interested party	A party that can affect, be affected by, or perceive itself to be affected by a Council decision or action

Term	Definition
Strategic Asset Management Plan (SAMP)	Framework document to establish Asset Management Objectives in consideration of the needs and expectations of stakeholders and interested parties (Community Vision / Council Plan) in alignment with asset management practices documented in Asset Plans.
Value	Varies depending on stakeholder perspective but can be tangible or intangible, financial or non-financial.
Vision statement	Overarching statement set by the community to guide Council's strategy and actions.

Version Control

13

This Asset Plan is a controlled document and as such is subject to version control. Details relating to the approval of all major and minor version updates are recorded below.

Document Control					
Version No.	Date	Details	Author	Reviewer	Approval Level
1.0	March 2022	Pre Community Engagement	DRL/TSH	DRL	Executive Team
2.0	May 2022	Approval			Council





# DRAFT



City of  
**STONNINGTON**

#### Contact us

8290 1333  
PO Box 58, Malvern Victoria 3144  
[council@stonnington.vic.gov.au](mailto:council@stonnington.vic.gov.au)

#### Visit us





[stonnington.vic.gov.au](http://stonnington.vic.gov.au)

Stonnington City Centre  
311 Glenferrie Road, Malvern

Stonnington Services and Visitor Hub  
Chatham Street, Prahran Square,  
Prahran

Stonnington Depot  
(Administration Building)  
293 Tooronga Road, Malvern

#### Connect with us

-  [facebook.com/stonningtoncouncil](https://facebook.com/stonningtoncouncil)
-  [twitter.com/StonningtonNews](https://twitter.com/StonningtonNews)
-  [instagram.com/whats\\_on\\_stonnington](https://instagram.com/whats_on_stonnington)
-  [linkedin.com/company/city-of-stonnington](https://linkedin.com/company/city-of-stonnington)

ISSN: 2652-855X (Print)  
ISSN: 2652-8568 (Online)

#### Community Languages

Call the Stonnington Community Link,  
a multilingual telephone information service.

Mandarin	普通話	9280 0730
Cantonese	廣東話	9280 0731
Greek	Ελληνικά	9280 0732
Italian	Italiano	9280 0733
Polish	Polski	9280 0734
Russian	Русский	9280 0735
Indonesian	Bahasa Indonesia	9280 0737
All other languages		9280 0736

#### We are national relay service friendly

If you are deaf, or have a hearing impairment  
or speech impairment, contact us through  
the National Relay Service:

- » TTY user phone 133 677 then ask for  
8290 1333
- » Speak and Listen users phone  
1300 555 727 then ask for 8290 1333
- » Internet relay users connect to the NRS  
then ask for 8290 1333