Asset Management Strategy

2020–2024

Shire of Serpentine Jarrahdale

HPRM #, Version 1, Endorsed by Council MONTH 2020

Table of Contents

Executive Summary

This Strategy outlines the Shire's implementation and integration of best practice Asset Management (AM) planning, systems and processes into organisation's operations.

The Strategy is linked to the Shire's Asset Management Policy and Asset Management Plans (AMPs) and is a key element of the Shire's Integrated Planning and Reporting Framework.

The Strategy arises from several strategic objectives of the Strategic Community Plan, principally:

- **People** – Strategy 1.1.1 Provide well planned and maintained public open space and community infrastructure.
- **Place** – Strategy 2.2.1 Develop, maintain and implement plans for the management and maintenance of Shire controlled parks, reserves and natural assets.
- **Prosperity** – Strategy 3.3.1 Maintain, enhance and rationalise the Shire's transport network in accordance with affordable sound Asset Management Plans.
- **Progressive** – Strategy 4.1.1 Provide efficient, effective, innovative, professional management of Shire operations to deliver the best outcome for the community within allocated resources.

The implementation of the Strategy is to be principally managed and delivered by the Shire's Asset Coordinator along with the Asset Management Technical Advisory Group.

It outlines the current State of our Assets, a majority of which are in "Good" to "Very Good" condition due to significant subdivision development experienced in the past 10 years. The gifted assets taken over by the Shire as an obligation which will require due consideration of the financial implications to deliver a consistent level of service.

There are three key performance indicators for financial sustainability as recommended in the Department of Local Government and Communities (DLGC) Asset Management National Framework and Guidelines.

The Shire's ratios reported:

- **74%** Asset Consumption Ratio (ACR)
- **94%** Asset Sustainability Ratio (ASR)
- **70%** Asset Renewal Funding Ratio (ARFR)

The Asset Consumption Ratio and Asset Sustainability Ratio meet the target ratio, and detailed in section 2.1 of this Strategy.

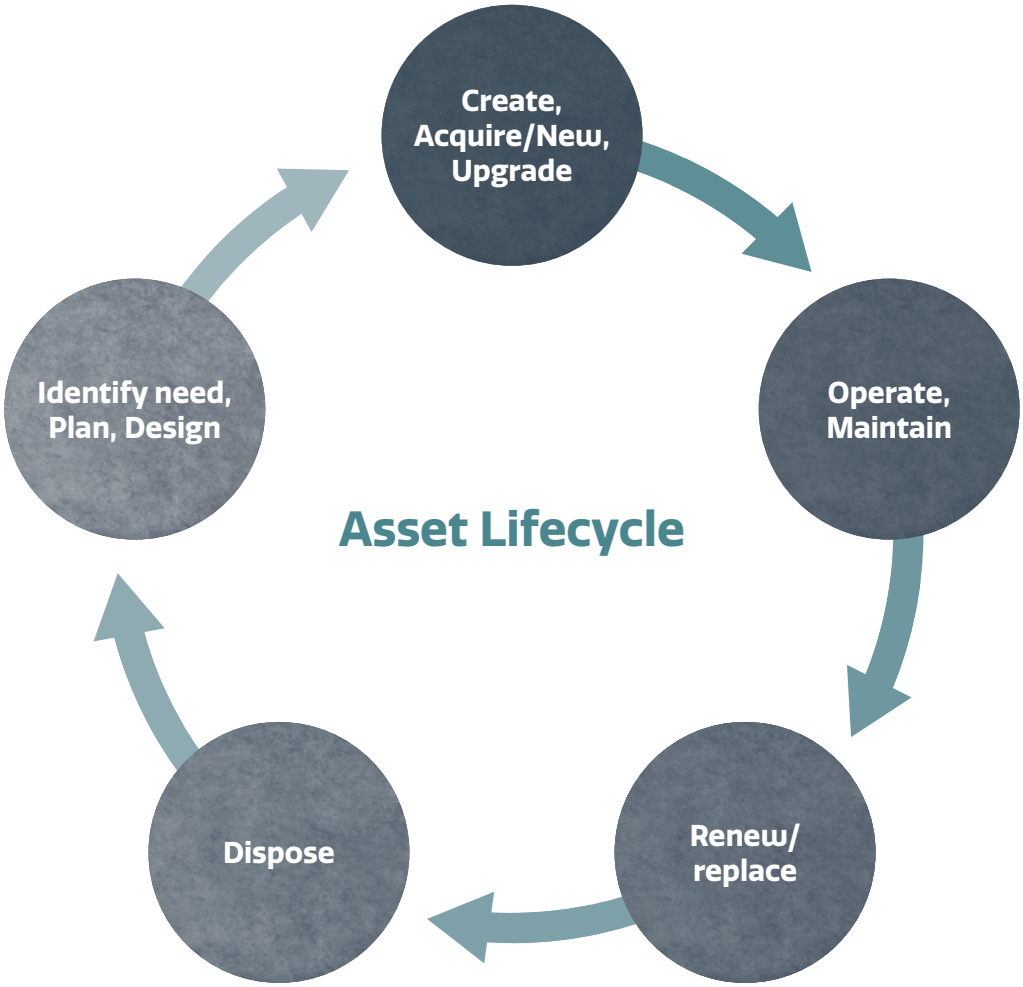
It should be noted that at present the Asset Renewal Funding Ratio is 70% where it is recommended to be between 95% and 105%.

To address this issue, the Shire is focused on directing a greater proportion of its income to asset renewal. This is a key objective to underpin effective and sustainable asset management.

Asset Lifecycle Management

Asset Lifecycle Management is the process of managing the lifecycle of an asset from conceptual design to disposal/ decommission.

- Lifecycle management is a holistic approach to optimising the Lifecycle of an asset, its performance and usage.
- Thorough planning, analysis and timely execution allow appropriate data-driven decision-making to occur and enable asset Lifecycle management to deliver optimum outcomes.
- Lifecycle cost is the total cost of an asset during the entirety of the assets life.



A robust asset management solution/information system allows for the easier tracking of thousands of assets in each stage of the lifecycle.

To ensure effective asset decision-making and to achieve sustainable results in performance, the Shire must take a holistic approach that addresses not only infrastructure assets, but also the supporting resources, business processes, data and enabling technologies that are critical to success.

Major Objectives

Four major objectives will enable the Shire to improve its implementation of best practice asset management throughout the life of this strategy:

1. **Service levels** are set with the aim of achieving an acceptable standard that meets community expectations without over servicing and thus incurring unnecessary costs for the Shire.
   The Shire recognises the importance of its responsibility to manage its assets to achieve optimum life whilst maintaining levels of service, and any **risk** monitored and managed in conjunction. The Shire also seeks to deliver infrastructure that is suited to its intended function.
2. Review and update the Shire's **Asset Management Plans (AMPs)** ensuring that AMPs, Capital Works Programs and Renewal projections for the Long Term Financial Plan (LTFP) are the very latest condition based asset data.
3. Maintaining an up-to-date asset register and asset condition assessments in order to show the **current state of the assets** and provide an indication of the extent of upgrade, or renewal required, to keep the asset at an acceptable level.
4. Realise **Asset Lifecycle Management (ALM)** with the implementation and development of the Technology One System, ALM will hold the Asset Register, Works Management and Capital Projects Management (for infrastructure) systems, providing the capital and operational asset management activities and costs for better financial reporting and understanding of the lifecycle costs.

These objectives are further broken down into key tasks and actions in Section 3 of this Strategy.

Strategic Actions for Asset Management Improvement

All Shire directorates have a role to play in asset management. The Asset Management Technical Advisory Group (AM-TAG) includes representatives from all areas within the Shire, which have a direct relationship with assets and service delivery.

The AM-TAG group has the crucial role of leading the implementation and delivery of asset management and ensuring continuous improvement and awareness is ongoing within the Shire and community.

The key tasks that the AM-TAG intends to focus on over the next four years to ensure that the Shire's assets are managed in a sustainable manner are:

- Governance and management arrangements
- Levels of Service
- Data Management
- Condition Surveys
- Renewal Programs
- Revaluation
- Risk Management
- Asset Management Plans, Policy, Strategy

Details of these key tasks and the strategic actions of how we improve in these areas of asset management are provided in Section 3 of this Strategy.

Asset Management System

The Shire has procured a new Enterprise Resource Planning (ERP) system from Technology One's software suite, also known internally as "OneComm". Implementation of the ALM system has integration to Financials, Property and Geographic Information System (GIS).

The system consists of registers of infrastructure assets, work systems, asset maintenance activities and infrastructure capital project management. Additionally the system provides extensive reporting capability with work scheduling and mobile update functionality.

Developing mechanisms for determining the accurate cost of delivering services remains a significant undertaking for many local governments, as it requires structured operational activities and an asset management system that has the functionality to capture, report and monitor those activities to form a true and real life baseline of current and historical performance.

For each asset class, the current technical and community levels of service are to be established and documented in the relevant Asset Management Plans.

1. Introduction

Vision

The Shire's Asset Management vision is to:

"Develop and maintain asset management governance, skills, processes, systems and data in order to provide the level of service the community need at present and in the future, in the most cost-effective and sustainable manner."

Asset Management Policy

The Shire's Council Policy 2.0.1 - Asset Management has a key objective to:

"...ensure that services delivered by the Shire of Serpentine Jarrahdale continue to be sustainably delivered. This will be achieved by ensuring that the Infrastructure Assets used to support the service delivery continue to function to the level of service determined by Council"

To achieve the AM Policy's key objective, the Shire must be committed to ensuring that Asset Management is recognised as a major corporate function of Council, and that staff are committed to supporting the function.

The following objectives in the AM Policy are actioned in this Strategy for improvement:

- The Shire seeks to engage with the community and key stakeholders when developing Levels of Service for infrastructure assets.
- Appropriate resources to ensure the asset management practices are undertaken effectively, including timely maintenance and renewal to ensure that lifecycle costs are optimised for both existing and new assets.
- Council will seek to adopt an annual Infrastructure Works Budget that reflects the objectives of asset management planning, with adequate funding allocated for maintenance, capital renewal and capital upgrade of existing assets.

This Strategy outlines how the Shire will implement and integrate best practice Asset Management Planning into Shire operations to ensure systems and processes are robust and focus on continuous quality improvement.

Asset Management Framework

The Shire's Asset Management Framework comprises of Council's Asset Management Policy 2.0.1, this Strategy and the Shire's Asset Management Plans for Stormwater Drainage (E19/2941), Roads (E19/2940), Paths (E19/2939), Parks and Reserves (E19/2938), and Buildings (E19/2937). The hierarchy and purpose of each part of the Asset Management Framework is outlined below.

Asset Management Policy

Sets the Asset Management Framework principles that the Administration must work within to ensure services delivered by the Shire are sustainable.

Asset Management Strategy

Guides the implementation of Asset Management practices across the organisation including an outline of the major improvement strategies underway.

Asset Management Plans

Outlines the day-to-day business practices to acquire new assets and renew, upgrade or dipose of existing assets.

The Shire's Asset Management Policy, Strategy, Plans and objectives are aligned to the Government of Western Australia, Department of Local Government and Communities (DLGC) Asset Management Framework ensuring the direction and delivery of the Shire's Asset Management Strategies are aligned to best practice and Australian industry standards.

The Asset Management Framework is an intrinsic part of the Shire's Integrated Planning and Reporting Framework and works in tandem with the development of the Long Term Financial Plan, Workforce Plan, Strategic Community Plan and Corporate Business Plan. As the following infographic illustrates.

Strategic Community Plan (SCP)

The Asset Management Framework links to the community aspirations in the Strategic Community Plan

Long Term Financial Plan (LTFP)

Ensures the Shire has the financial capacity to deliver asset management priorities into the future

Corporate Business Plan (CBP)

Major asset projects planned to be undertaken as feasible in the LTFP and linked to the SCP are outlined in the Corporate Business Plan

Workforce Plan

Ensures the Shire has adequate human resources to deliver the Asset Management Framework

Links to the Strategic Community Plan 2017–27

The Strategy supports the following objectives of the Shire's Strategic Community Plan 2017–27:

People

"A connected, thriving, active and safe community"

Outcome 1.1 – A healthy, active, connected and inclusive community	
Strategy 1.1.1	Provide well planned and maintained public open space and community infrastructure

Place

"A protected and enhanced natural, rural and built environment"

Outcome 2.2 – A sustainable natural environment	
Strategy 2.2.1	Develop, maintain and implement plans for the management and maintenance of shire controlled parks, reserves, and natural assets

Prosperity

"An innovative, commercially diverse and prosperous economy"

Outcome 3.3 – An innovative, connected transport network	
Strategy 3.3.1	Maintain, enhance and rationalise the Shire's transport network in accordance with affordable sound Asset Management Plans

Progressive

"A resilient organisation demonstrating unified leadership and governance"

Outcome 4.1 – A resilient, efficient and effective organisation	
Strategy 4.1.1	Provide efficient, effective, innovative, professional management of Shire operations to deliver the best outcome for the community within allocated resources

Monitoring and Review

Monitoring and Reporting

This Strategy will be a standing agenda item on the AM-TAG meeting agenda and it is a requirement for the AM-TAG to provide and record an update against the improvement actions detailed within this Strategy. On a quarterly basis, the AM-TAG will provide a progress report to the Executive Management Team. Any amendments to the improvement actions (such as timelines and/or additional actions) will be formally recorded within this Strategy at the annual review process.

Annual Review

This Strategy's duration is four-years and will be reviewed on an annual basis as part of the Shire's Integrated Planning and Reporting (IPR) Framework and is tabled below:

Review Cycle	**DESKTOP REVIEW**	**MINOR STRATEGIC REVIEW**	**MAJOR STRATEGIC REVIEW**
Inputs:	Integrate Annual Budget & CBP	Includes Community Survey feedback	Incorporate Strategic Community Plan inputs
Year 1 – 2021	✓		
Year 2 – 2022		✓	
Year 3 – 2023	✓		
Year 4 – 2024			✓

The desktop review is to ensure actions remain relevant and integrated with the Annual Budget and Corporate Business Plan.


BYFORD
HALL

2. Current Status of Asset Management (AM)

2.1 Asset Management Plans

The five AMPs listed below, and endorsed by Council in April 2019, include an Improvement Plan and those tasks have been incorporated into this strategy.

1. Stormwater Drainage (E19/2941)
2. Roads (E19/2940)
3. Paths (E19/2939)
4. Parks and Reserves (E19/2938)
5. Buildings (E19/2937)

AMP Improvement Plan

Task No	Task	Timeline	*Addressed in Strategy*
1	Develop a process to record the details of the asset and its area of concern from the community's consultation workshops. To be considered in future capital works or maintenance programs.	2022/23	***Section 3.4***
2	Display future capital works programs on GIS Intramaps for the community to refer to and identify areas of concern.	2020/21	***Section 3.1***
3	Develop current and desired levels of service to understand sustainable levels of service. This includes improving the recording of customer requests and complaints against the measurable service.	2019/20	***Section 3.1, 3.2***
4	Review internal maintenance specifications and schedules to capture the costs for better reporting against the service level.	2019/20	***Section 3.2***
5	Update Risk Management Plan.	Ongoing	***Section 3.3***
6	Implement a continuous improvement strategy to capture the requirements for updating the AMP.	2019/20	***Section 3.5***
7	Undertake a review of the financial reporting prior to budget planning. Review process improvements to determine planned/unplanned expenditure, operating costs, and ratios.	2020/21	***Section 3.4***

The AMPs 10 Year Renewals Programs have been incorporated into the Shire's 10 Year Long Term Financial Plan and are reviewed for the Annual Budget preparation.

State of the Assets

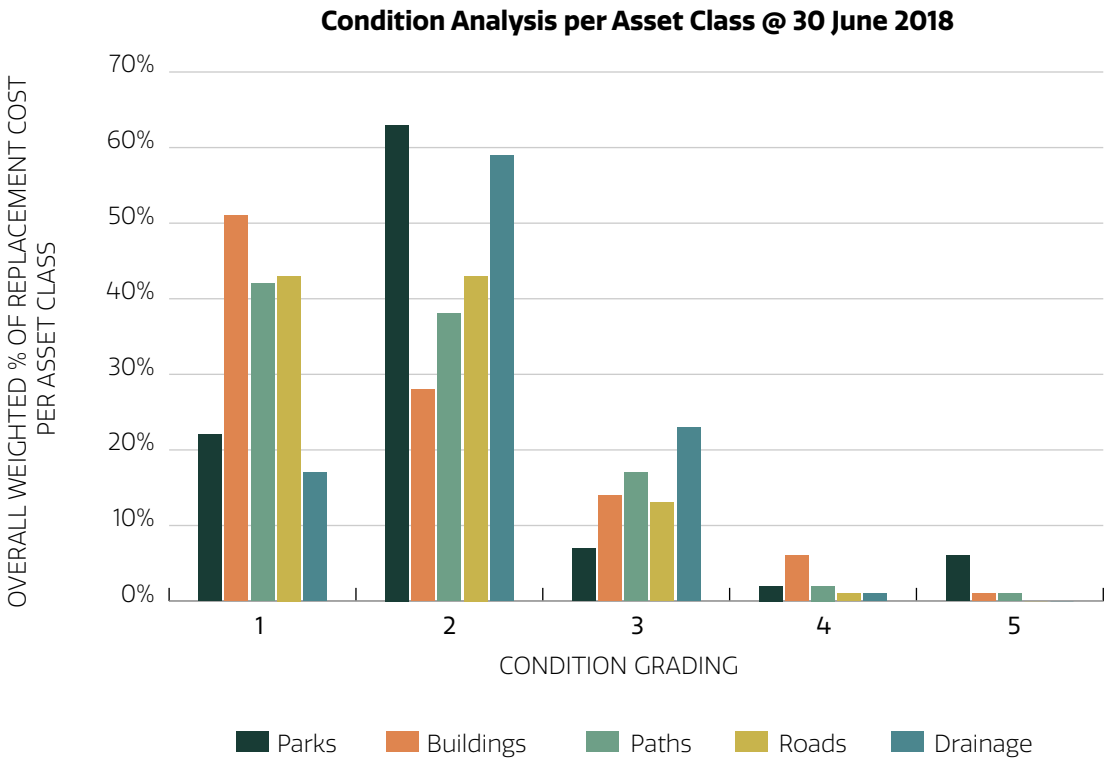
The financial status of the Shire's owned assets as at 30 June 2019 is summarised in the table below.

Asset Class	Current Replacement Cost	Depreciation	Fair Value
Parks	$45,379,277	$12,111,503	$33,267,774
Buildings	$45,762,946	$16,022,144	$29,740,802
Paths	$25,515,650	$5,943,798	$19,571,852
Roads	$306,798,909	$65,740,015	**$241,058,894**
Drainage	$98,243,738	$27,539,328	$70,704,410
TOTAL	**$521,700,520**	**$127,356,788**	**$394,343,732**

Condition

The condition analysis graph of the Shire's owned assets summarised according to their classes as at 30 June 2018 shown in the table below.

In 2017-18, an external consultant commissioned to undertake a full inventory verification and condition survey of the Shire's five asset classes listed below.



The condition profile for the Shire's assets are measured using a 1 to 5 grading system 1 to 2 being Good, 3 = Fair and 4 to 5 being Poor as outlined below.

Condition Grading	Description of Condition
1	**Very Good:** A new asset or an asset in overall very good condition with only a slight condition decline and planned maintenance required
2	**Good:** An asset in an overall good condition but with minor signs of deterioration evident, serviceability may be slightly impaired. Minor maintenance is required plus planned maintenance
3	**Average:** An asset with obvious signs of deterioration. Significant maintenance is required
4	**Poor:** An asset in a poor condition. Condition deterioration is severe and serviceability is becoming limited. Significant renewal or upgrade is required
5	**Very Poor:** An asset that has failed and is no longer serviceable. There would be a risk in leaving the asset in service. Replacement is required

The graph on page 15 shows that 80% of the Shire's assets are in good and very good condition. It also highlights we have a relatively new asset base that is primarily due to the significant subdivision development experienced over the past 10 years.

The relatively small portion of the network in poor and very poor condition is due to the influence of older areas within the Shire and the relatively short lifecycle of assets. Historically there has been insufficient expenditure on intervention works to increase the life of assets.

The basic principle of asset renewal is to intervene at strategic points in an asset's normal Lifecycle to extend the expected service life, and thereby maintain its performance. Typically, a long-life-cycle asset requires multiple intervention points including a combination of repair and maintenance activities and even overall rehabilitation. Costs decrease with planned maintenance rather than unplanned maintenance. Yet, excessive planned maintenance increases costs. Thus, a balance between the two must be recognised.

While each improvement raises an asset's condition curve, each rehabilitation resets an asset's condition curve, and complete replacement returns condition curve to new level or upgraded level. Therefore, strategically timing these interventions will aid in extending an asset's Lifecycle.

Sustainability Ratio Performance

There are three key performance indicators for financial sustainability as recommended in the DLGC Asset Management National Framework and Guidelines.

The aim of the Framework is to enhance the sustainable management of local government assets by encouraging 'whole of life' and 'whole of organisation' approaches and the effective identification and management of risks associated with the use of the assets.

The following results extracted from the Annual financial report at 30 June 2019 are displayed on the next page.

74%

Asset Consumption Ratio (ACR)

- This ratio shows the written down current value of the Shire's depreciable assets relative to their 'as new' value in up to date prices.

  It is calculated by dividing the written down value, also known as the Fair Value, by the current replacement cost from the Shire's operational and financial asset registers.

  The target ratio should be between 50% and 75%. A ratio of less than 50% indicates a rapid deterioration of the asset base, whilst a ratio greater than 75% may indicate either an over investment in the asset base, assets with a longer useful life or an organisation that is still experiencing growth.

94%

Asset Sustainability Ratio (ASR)

- This ratio indicates whether assets are being replaced or renewed at the same rate that the overall asset stock is wearing out.

  It is calculated by dividing the annual capital expenditure spent (funding) on renewals by the annual depreciation expense

- The ASR is calculated based on a projected yearly depreciation increase of 1.75%. from the Long Term Financial Plan (LTFP).

  The target ratio should be between 90% – 110%.

70%

Asset Renewal Funding Ratio (ARFR)

- This is an indicator as to the ability of the Shire to fund the projected asset renewals in the future and therefore continue to provide existing levels of service, without additional operating income or reductions in operating expenses, or an increase in net financial liabilities above that currently projected.

  It is calculated by dividing the projected capital expenditure on renewals (condition based) over the 10 years by the LTFP budget allocation on renewals over the same period.

  The target ratio should be between 95% and 105%. A ratio of between 50% and 75% indicates that adequate provision is not being made for the future renewal of assets = **Problem 1.**

Growth – Donated/Gifted Assets

The Shire continues to experience growth in its assets across all infrastructure areas through its own construction works and from external sources arising from developer handover of new subdivisions and other donated/gifted assets.

The Shire has had a significant number of assets contributed by developers over the past 10 years. This growth will need to be managed and balanced to available funding if it is to sustainably deliver a consistent level of service.

The total replacement cost for donated/gifted assets for the year ending 30 June 2019 has been valued at $6.5 Million.

2.2 Levels of Service

Levels of Service are the defined service qualities for a particular activity (e.g. road maintenance) or service area (e.g. street lighting) against which service performance may be measured. Service levels usually relate to quality, quantity, reliability, responsiveness, environmental considerations, acceptability and cost.

With no Works Management system to capture the allocation of the maintenance costs, the Level of Service section of the AMPs needs developing. Assets and Operations business units are currently working together on this development.

Following the launch of OneComm in February 2020, the Human Resources and Payroll (HRP) and Finance modules are scheduled for implementation are live, and the Asset Lifecycle Management (ALM) module is scheduled for implementation in early 2021.

Community Consultation

Whilst the Asset Management Strategy did not engage in community consultation directly, the Shire has undertaken a number of engagement sessions that effectively assist to guide the setting of service levels for key assets related to the management and maintenance.

Engagement forums for projects SJ 2050 and SJ Real Choices resulted in the following results:

SJ 2050

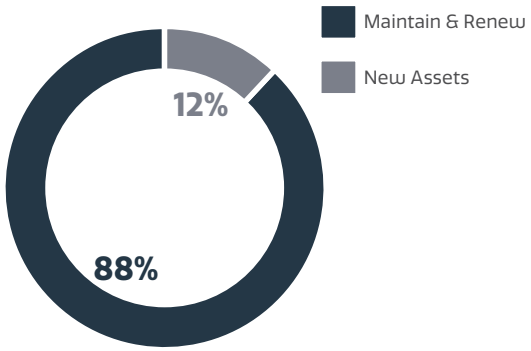
Through a series of community workshops, Facebook comments, postcards and emails, the most common theme identified from this engagement that relates to asset management is History and Heritage, and specifically, the importance to the community of restoring and celebrating the local heritage and history.

SJ Real Choices

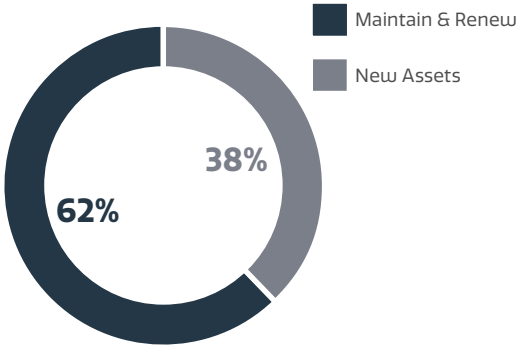
The SJ Real Choices engagement was conducted in March 2017. From this consultation, the following responses were received in regards to asset management:

- 88% of participants at workshops and 62% of participants on the panel agreed that the Shire must maintain and renew our existing assets and facilities, even if it means they have to wait longer for the new facilities for our growing community; as opposed to providing new facilities.

Workshops



Panel



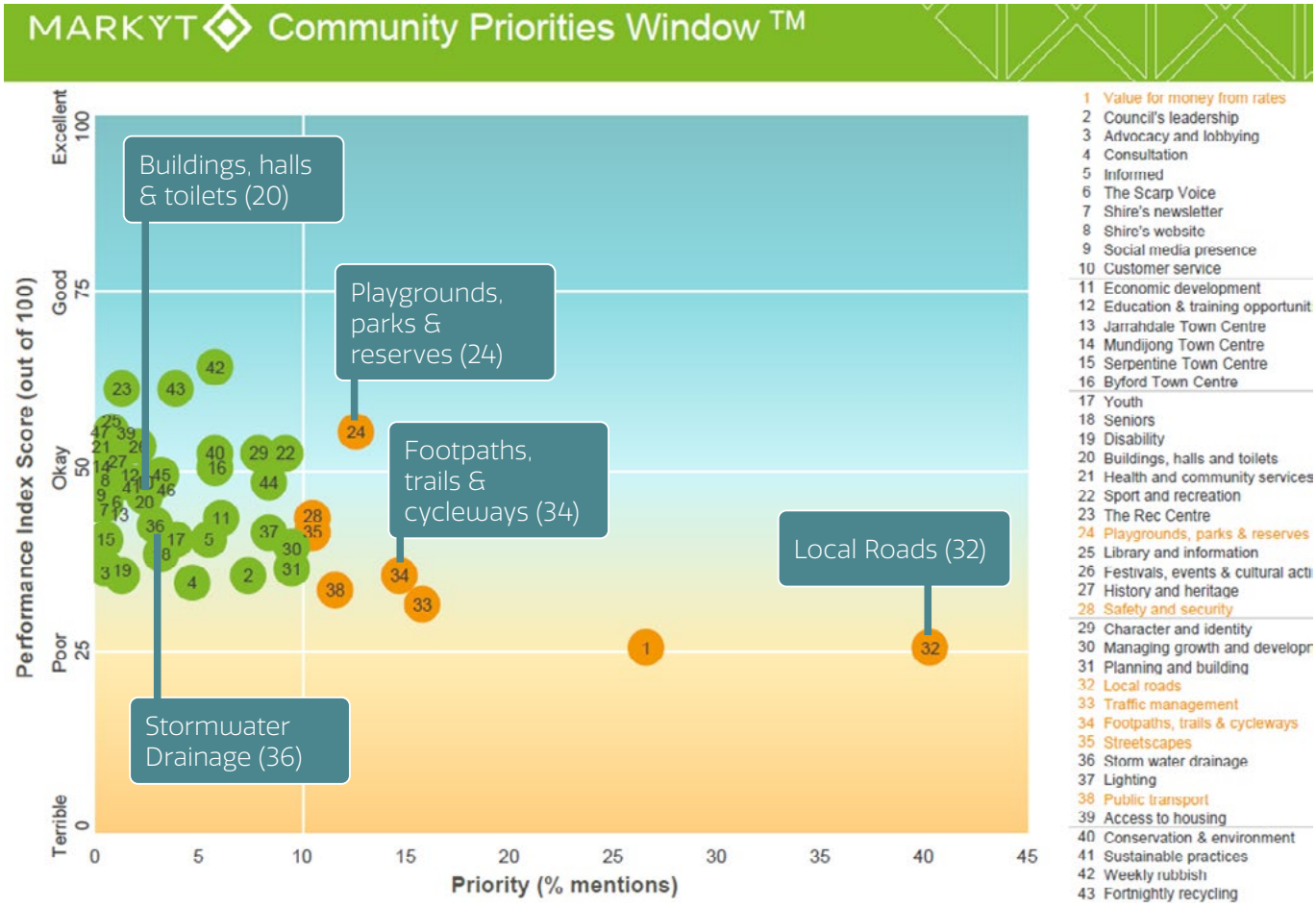
- 78% of workshop participants and 84% of panel participants agreed, I would rather go without new facilities or pay higher rates than borrow money to pay for them.
- 65% of workshop participants and 70% of panel participants agreed that *I would be willing to pay higher rates to afford to maintain our existing assets and invest in the new ones we need*; as opposed to going without new facilities and accepting a lower standard of assets than pay higher rates.

Community Perceptions Survey 2018 – Markyt Community Scorecard Report

The Shire also participated in the biennial Community Perceptions Survey conducted by an independent research company, Catalyse Pty Ltd in September 2018. Scorecard invitations were sent to 4,000 randomly selected households, over 600 residents responded, and the results relating to the asset classes were documented in the relevant Asset Management Plan.

The survey indicated that the Shire's overall performance index score has increased over the past 5 years from 64 to 70, however still sits below the industry standard score of 77. Residents like the Shire as a place to live, but feel change and improvement is necessary.

Looking at the five asset classes' score displayed below, the local roads have been identified as the community's highest priority of 40% and holds a poor performance index score. The community voiced the poor quality of maintenance and upgrades to the road network are the main drivers but should the Shire improve in both of these areas, safety concerns will decrease and subsequently, the road conditions upturn. Footpaths and Playgrounds, parks & reserves are the communities' next priority and sit between the poor and okay performance index score.



2.3 Risk Management

The risk that the Shire does not realise Asset Lifecycle Management in order to obtain quality long-term asset management is a key strategic risk identified on the Shire's Strategic Risk Register.

In addition, the Shire has identified that the following will be vital to risk management in order to achieve the objectives of this Strategy:

We must...	*which links to strategy objective...*	*and has the following uncertainties that require risk management...*
Set the level of service and understand our community's needs.	1	▪ Councillor buy-in ▪ Gifted assets ▪ Population growth ▪ Suitability of historical assets ▪ Volume of Councillor requests ▪ Changes to community group leaders
Recognise whole of lifecycle costs.	3	▪ Methods of calculation (ratios) ▪ Methods of communication (reports)
Have sound financial management.	All	▪ Future rate strategies ▪ Ability to match grant funding ▪ Management of Developer Contribution Plans
Ensure best practice processes are in place for record keeping, inspections, maintenance, renewal and decision-making.	All	▪ Staff retention ▪ Legislation amendments
Understand what assets we do have.	2, 3	▪ Data gaps and missing assets ▪ Roles and responsibilities ▪ Process of identification
Have a clean, accurate and complete data source.	2,3,4	▪ Staff resources
Communicate effectively across business units and departments.	All	▪ Roles and responsibilities ▪ Individual accountability

Further information on these risks, including their ratings, controls and mitigation strategies are detailed on the AM-TAG's Risk Management Register. AM-TAG is responsible for ensuring the risk register is reviewed at each meeting and continuously monitored for risk level changes, timely completion of actions and any new and emerging risks.

2.4 Data and Information Systems

The Shire currently maintains its assets data in the Road Assessment and Maintenance Management software, RAMM. This asset database is represented in Intramaps, the Geographic Information System (GIS). The accessibility and display of data is increased by a direct connection with GIS.

The Shire has embraced the international specification "ASpec" for roads, drainage, and open space hard infrastructure, along with a consortium of local and state government agencies, to ensure the digital 'As-Constructed' data captured is the correct format for importing into GIS and asset system.

The roads specification "RSpec" includes paths and street lighting. The bridges previously managed by Main Roads WA have only in recent years handed over to the Shire. Building assets not aligned to ASpec but based on the Shire's internal data requirements.

Finance also holds a high-level asset register in Synergy.

Some operational works maintenance programs are managed using excel spreadsheets.

2.5 Governance and management arrangements

Asset Management Technical Advisory Group (AM-TAG)

The purpose of the AM-TAG formed in 2018 is to:

- Support asset management by providing specialised asset information or reports and to make recommendations in terms of operational issues.
- Allow representatives from specialised units to share valuable information relevant to specific asset classes that could impact on the Shire's asset management strategy.
- Consult with stakeholders to develop "levels of service".
- Support the implementation of asset management across each business unit including data collection and recording.

This Strategy will provide the AM-TAG with a list of tasks/actions to complete over the next 4 years. This group has the crucial role of leading the implementation and delivery of asset management ensuring continuous improvement and ongoing awareness to the Shire and community.

DLGC Asset Management Framework and Guidelines

Three components (listed below) from the guidelines have been indirectly considered as the Shire's awareness and 'whole of organisation' approach towards asset management is being improved:

1. Link to Workforce Plan
2. Set governance and management arrangement
3. Incorporate improvement of skills and processes

3. Strategic Actions for AM Improvement

3.1 Asset Management Plans

As the Shire's AM practices have become recognised in the Corporate Planning Framework, the AMPs will be revised and updated in a five-year cycle to align with the Financial Revaluation process and Long Term Financial Plan, further reinforcing the plans as key informing strategies.

The five AMPs completed in 2019 require improvements listed in this Strategy and with the implementation of the OneComm system providing a tool for better reporting and outcomes for planning.

In the AM Policy, a sixth AMP for Plant & Fleet Asset Management Plan requires developing and programming in the coming 2 years, in conjunction with the Fleet Manager. The Bridges Asset Management Plan and Land to be included in the Buildings AMP are also considered.

Actions – Timeline

Development/Update of Asset Management Plan:

Yr 2021/22	Yr 2022/23	Yr 2023/24
▪ Bridges (new) ▪ Plant & Fleet (new)	▪ Buildings include Land (new)	▪ Parks & Reserves ▪ Paths ▪ Roads ▪ Stormwater Drainage

3.2 Levels of Service

Service levels are set with the aim of achieving an acceptable standard that meets community expectations with consideration of the ability for Council to support this sustainably.

Developing mechanisms for determining the accurate cost of delivering services remains a significant undertaking for many local governments, as it requires structured agreed operational activities and an asset management system that has the functionality to capture, report and monitor operational activities to form a true and real life baseline of current and historical performance.

The Asset Lifecycle Management module is recognised as a market leader and as an advanced asset management system across the Western Australian local government community.

Outcomes from ALM:

- Implementation of Work Management and Mobility
- Capabilities of Financial Reporting of maintenance costs against the Asset, providing the actual Asset Lifecycle Costs.
- Capable of measuring performance for planned and reactive maintenance against services levels
- Utilising electronic Timesheets to capture operational activities of works performed

For each asset class, the current technical and community levels of service should be established and documented in the relevant Asset Management Plans and community consultation with these results.

Actions – Timeline

Levels of Service	Complete
Develop Maintenance Schedules for all Asset Classes to ascertain Current Level of Service (AMP Improvement Plan task 4).	**Dec–2020**
Develop Level of Service table from AMP: Quality and cost standards for service delivery.	**Dec–2021**
Engage community/surveys with service levels results and expectations	**Dec–2022**
Improve/ensure the capture of costs associated with LoS for better reporting against the service level. (AMP Improvement Plan task 3).	**Dec–2023**

3.3 Risk Management

Whilst the Shire's Corporate Risks associated with Asset Management are identified and managed (as outlined in section 2.3), there is work to be done to further develop the risk profiles of the Shire's individual assets and this will be the focus for improving the Shire's risk management processes in relation to assets over the duration of this strategy.

Actions – Timeline

Risk Management	Complete
Review existing risk management procedures across organisation.	**Dec–2021**
Record infrastructure risks and table for AMPs update. (AMP Improvement Plan task 5).	**Dec–2022**
Communicate risks to Leadership Team.	**Dec–2022**

3.4 Data and Information Systems

Data Management

The alignment of the "ASpec" specifications and our asset registers needs developing to ensure the handover of assets from surveyors into the Shire's asset register are simplified and streamlined. ASpec is consistent with established industry standards therefore; the Shire's asset register requires this configuration.

Formalising the ASpec handover processes for new subdivisions and construction works will improve as the Infrastructure and Assets, GIS and Finance business units make this information available to external surveyors, developers and contractors.

Data quality checks by the subdivision engineers and project managers of the Shire's infrastructure capital works provides that added assurance that the asset register holds accurate data.

Outcomes:

- Process maps for Data Management
- Subdivision Design specification available on the Shire's website
- Data quality assurance
- Alignment and integration of ASpec data specification into the Shire's GIS and Asset Register (ALM)

Actions – Timeline

Data Management	Complete
Update Process Map for receiving ASpec data from Subdivision Developers and Capital Works Contractors. Moreover, create checklist for data quality assurance at handover of assets.	**Dec–2020**
Update Process Map for minor works projects for new, renewed and disposed assets.	**Dec–2020**
Update Asset Register with AsCons from all sources.	**Dec–2020**
Develop Buildings Components Level 2 in line with Australian Accounting Standards Board (AASB)	**Jun–2021**
Improve Spatial Asset datasets for reporting to local government and Main Roads WA. Includes developing IRIS report for MRWA.	**Jun–2021**
Align Asset Register structure with ASpec attributes. Review with Finance, Engineers and Operations for reporting requirements.	**Dec–2021**
Review process improvements to determine planned/unplanned expenditure, operating costs, and ratios (AMP Improvement Plan task 7).	**Jun–2022**

Asset Condition Surveys and Revaluation

The Shire recognises the importance and its responsibility to manage its assets to achieve optimum life whilst maintaining levels of service. The need for the Shire to schedule five yearly surveys for major asset groups will ensure that the Shire has a greater understanding of what assets we have and how they are performing.

The scheduling of condition surveys will fall due prior and/ or during the next revaluation financial year, as tabled below.

Development of the Shire's Asset Management Plans ensuring that AMPs, infrastructure capital work programs and renewal projections for the LTFP are formed from the very latest condition based asset data.

The audit process for the condition surveys is to be developed and managed by Infrastructure & Asset Services, Asset Coordinator in conjunction with key personnel from Operations and other business units to ensure the following.

Outcomes:

1. Alignment with ASpec Data Standards (R,D & O Specs).
2. All assets condition rated on a 1-5 scale.
3. Data provided spatially to provide easy transition into the Shire's asset register.

The Shire is intending to carry out asset condition surveys typically on rolling five-year cycles for each of the major asset classes as displayed below:

Bridges	**Yr 2020/21 Condition Survey** *Revaluation*
Buildings & Land	**Yr 2020/21 Condition Survey** *EOFY 2021/22 Revaluation*
Parks	**Yr 2021 Condition Survey** *EOFY 2022/23 Revaluation*
Paths	**Yr 2020/22 Condition Survey** *EOFY 2022/23 Revaluation*
Roads	**Yr 2022 Condition Survey** *EOFY 2022/23 Revaluation*
Drainage	**Yr 2023 Condition Survey** *EOFY 2022/23 Revaluation*
Fleet, Plant & Equipment	**Yr 2024 Condition Survey** *EOFY 2023/24 Revaluation*

Actions – Timeline

Condition Surveys	Complete
Develop a condition survey program for each asset class, in line with revaluation timelines. Suggested above.	**Dec 2020**
Develop a condition assessment manual for all asset classes.	**Dec 2021**

Actions – Timeline

Revaluation	Complete
Review finance revaluation methodology for buildings, conducted by external valuers.	**Jun 2021**
Review and create a methodology for the charge out rates/costs for all asset classes.	**Jun 2022**
Review and create methodology for useful life of assets.	**Jun 2022**
Develop and approve Revaluation program and process for all asset classes	**Jun 2023**

Asset Renewal Programs

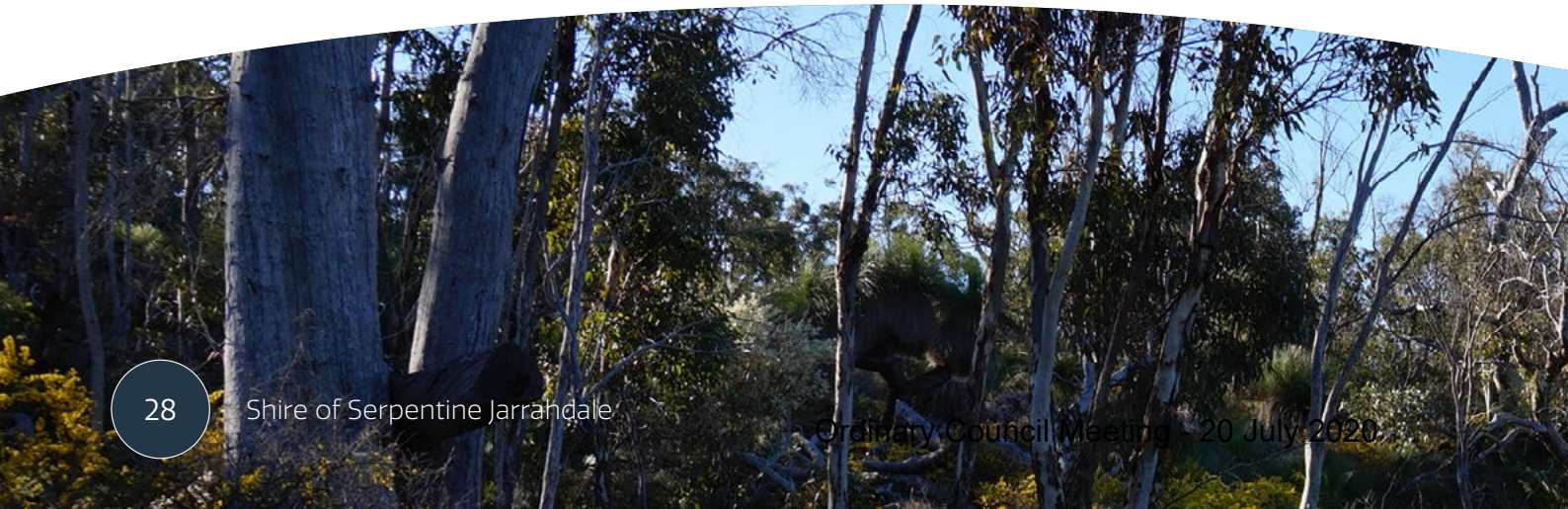
The renewal programs provide 10 year projections based on asset condition, useful life and various asset attribute data to determine replacement costs depending on the projected year for replacement/rehabilitation.

Renewal programs have been integrated into the previous two LTFP's.

- Forward works programs for all major asset classes
- Asset revaluations for cost estimating purposes and long term planning
- Development of renewal programs (10 year) for inclusion in the Long Term Financial Plan (LTFP)

Actions – Timeline

Renewal Programs	Complete
Evaluate AMPs renewals for all asset classes: to align with CBP 4 years.	**Annually**
Establish a process for updating the Asset Register accordingly (AMP Improvement Plan task 7).	**Dec 2020**
Incorporate Year 1 of Renewal Program into Annual Budgets	**Annually**
Display future Infrastructure capital works programs on GIS Intramaps. Include the community's areas of concern (AMP Improvement Plan task 1,2),	**Dec 2020**



Information System

Asset Lifecycle Management (ALM) system

The ALM module will hold the Asset Register, Works Management and the Infrastructure Capital Projects Management systems, providing the capital and operational asset management activities and costs for better financial reporting.

Expected Functionality and Benefits:

1. A single corporate asset register, in which financial calculations including depreciation have one source of truth.
2. Works system to capture service levels and risk for planned and reactive maintenance activities.
3. Maintenance processing functionality for scheduled/planned maintenance.
4. System reporting including AMP related data extracts and reports.
5. Work management mobility.
6. Scheduling of Inspections and defect management.

Works Management Mobility system

The OneComm project will be heavily investing in the deployment of workforce mobility across the Operations Business Unit with 20 tablets purchased for undertaking work practices from Go-Live.

Expected Functionality and Benefits:

1. Removal of the daily paper based work orders.
2. Remove double handling of data entry for the completion of work orders.
3. Electronic processes for notifying crew of reactive works.
4. Electronically created work orders for scheduled maintenance.
5. Enhance the decentralised processes for capture/updating of asset data.

ALM Capital Project Management system

The targeted implementation for the ALM module, Capital Project Management system for infrastructure capital works will be post Go-Live, to align with financial year commencement.

Expected Functionality and Benefits:

1. Staging of the capital works projects.
2. Work order to capture the actual costs of the asset.
3. Creating and capitalising the asset in one register.
4. Better financial reporting against budget and timeframes.

Electronic Timesheets for Operational Activities

The electronic timesheets for Operational Services with the Crew Leaders responsible for capturing the actual hours electronically via the work order systems is being developed in OneComm.

Expected Functionality and Benefits:

1. Removal of the daily paper based timesheet.
2. Reduced resources required by Finance and Payroll Services to process operational staff timesheets.
3. Introduce a concept of weekly exception reporting signed off by supervisor and/ or lead staff.
4. Improved data accuracy as actual hours are entered electronically to work orders via tablets.
5. Remove double handling of data.
6. Integration to assets worked on.

Strategic Asset Management (SAM)

The implementation of the SAM module is to enhance and evolve the Shire's ALM providing a higher level of visibility and confidence in terms of prediction modelling & optimisation of our assets.

During the life of this Strategy the Shire intends to invest in the Technology One Strategic Asset Management (SAM) Prediction Modelling & Optimisation solution.

Expected Functionality and Benefits:

1. Manage asset lifecycle risk, renewal and maintenance costs.
2. Understand assets with pre-defined degradation curves for all asset groups for condition, risk, maintenance and renewal.
3. Annual review of degradation curves based on asset work history.
4. Asset optimisation and deterioration modelling.
5. Funding prioritisation for future rolling capital work programs and 10 year renewal funding projections for the LTFP.

3.5 Governance and management arrangements

Asset Management Technical Advisory Group

All Shire directorates have a role to play in asset management. The Asset Management Technical Advisory Group (AM-TAG) includes representatives from all areas within the Shire, which have a direct relationship with assets and service delivery.

The AM-TAG group has the crucial role of leading the implementation and delivery of asset management and ensuring continuous improvement and awareness to the Shire and community is ongoing.

The key tasks that the AM-TAG intends to focus on over the next 4 years to ensure that the Shire's assets are managed in a sustainable manner are:

- Governance and management arrangements
- Levels of Service
- Data Management
- Condition Surveys
- Renewal Programs
- Revaluation
- Risk Management
- Asset Management Plans, Policy, Strategy

All the actions in the Strategy are to be monitored and reported annually as detailed in the introduction section of this Strategy.

Actions – Timeline

Asset Management Strategy, Policy	Complete
Review AM Policy (currently under review with Managers).	**Dec–2022**
Update AM Strategy (AMP Improvement Plan task 6).	**Annually, 2024**

Roles & Responsibilities

The Shire should utilise functionality from the ALM system and Intramaps GIS solutions to establish and ensure ongoing management, responsibility and quality assurance of asset data. This is supported further by the creation and acceptance of documented processes with defined roles, responsibilities and ownership that is auditable and accountable.

The creation of process maps will provide clear roles and responsibilities across the organisation to ensure that data management is a fundamental element of day-to-day business. The below two process maps have been listed in the Data Management actions in section 3.4 of the Strategy:

1. New Assets Capture: Final Design or ASpec formatted As Constructed data (Major Capital Projects only) or New Subdivisions (Donated/ Gifted Assets) ASpec formatted As Constructed data.
2. New/Renewal and Disposal of Assets (Minor Capital Projects i.e. resurfacing, playgrounds, building infrastructure.

Outcomes:

- Greater responsibility and ownership for the management of data by Managers & Asset Custodians

Actions – Timeline

Governance and management arrangement	Complete
Update AM-TAG members - those required to complete these tasks	**Dec–2020**
Develop AM-TAG Roles & Responsibilities Matrix	**Dec–2021**
Ensure responsibilities for asset management are identified and incorporated into staff position descriptions. AM training is scheduled.	**Dec–2022**

4. Reference and Demographic Information

1. Strategic Community Plan 2017 – 2027
2. Asset Management Policy 2.0.1
3. Asset Management Plans V5 2019
4. Western Australian Department of Local Government and Communities, Asset Management Framework and Guidelines

5. Definitions

ALM
Asset Lifecycle Management

AM
Asset Management

AMP
Asset Management Plan

AMS
Asset Management Strategy

ASPEC
The key objective of the specifications is to record and provide "As Constructed" digital data in a GIS ready format

CRC
Current Replacement Cost

DLGC
Department of Local Government and Communities

DSPEC
As constructed digital asset data specification Drainage Infrastructure

GIS
Geographical Information System

LG
Local Government

LTFP
Long Term Financial Plan

OSPEC
As constructed digital asset data specification for Open Space Hard Infrastructure

RSPEC
As constructed digital asset data specification for Road & footpath Infrastructure

Shire of
Serpentine
Jarrahdale

6 Paterson Street Mundijong
Western Australia 6123
T: **9526 1111** E: **info@sjshire.wa.gov.au**
W: **www.sjshire.wa.gov.au**

This document is available
in alternate format on request
by phoning 9526 1111