Sustainable Asset Management Strategy

Version 3.00

September 2020

Schedule of Changes and Amendments

Version	Date	Changes/Amendment
V1.00	02/2011	Endorsed by Council at its meeting 24 February 2011
V2.00	10/2017	Draft prepared during 2017 by Council officers
V3.00	09/2020	Draft prepared during 2020 by Council officers

NB: 1. Primary number changes to Versions (eg V1.00 to V2.00) will be made when the document undergoes its regular review and when significant changes are made to standards and guidelines for inspections, intervention levels or work

2. Secondary number changes (V1.00 to V1.01) will apply to minor amendments that do not materially impact the document and are intended only to clarify or update issues.

Sustainable Asset Management Strategy

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1. Introduction

This Sustainable Asset Management Strategy has been developed to show how Northern Grampians Shire Council (NGSC) infrastructure asset portfolio will be able to deliver quality sustainable infrastructure services to meet the needs of residents, businesses and visitors, in the short, medium and long-term.

The document supports the implementation of the Sustainable Asset Management Policy which takes the objectives of Council Plan 2017-21 and develops Asset Management principles which helps Council to realise its organisational objectives.

Once the Sustainable Asset Management Strategy has been approved by Council, it will replace the 2011 Council adopted version and set the framework for developing Service Asset Management Plans for each asset portfolio. Under the *Local Government Act 2020* section 92, it is a requirement for Council to develop, adopt and maintain Asset Plan in accordance with the Community Engagement Policy. The financial summaries in the Service Asset Management Plans are to be linked to the Long Term Financial Plan (LTFP).

2. Asset Management System Scope

Council's Asset Management System is centred on providing service to customers. The Asset Management System is informed by both external and internal business drivers as illustrated in figure 1 below. Key external business drivers informing the Asset Management System include customer requirements, *Local Government Act 2020*, regulatory standards and legislation, commercial and economic environment. Internal drivers influencing the Asset Management System include Council vision, goals, policies, financial constraints and risk appetite. This alignment between Council objectives and actions, and asset management activities on the ground is crucial for Council to be able to achieve its targets.

Council Asset Management System has a clear and consistent hierarchy of documents as illustrated in figure 1 below. The three key documents are :

- Sustainable Asset Management Policy - *State the principles and intentions of Council with regard to asset management.*
- Sustainable Asset Management Strategy (this document) - *Long-term plan adopted to deliver Asset Management Policy*, and
- Service Asset Management Plans - *Applicable to all asset categories within the jurisdiction of Council. The Asset Management Plans identify services standards and contain long-term*

projections on asset maintenance, renewal and upgrade cost, which is linked to Long Term Financial Plan.

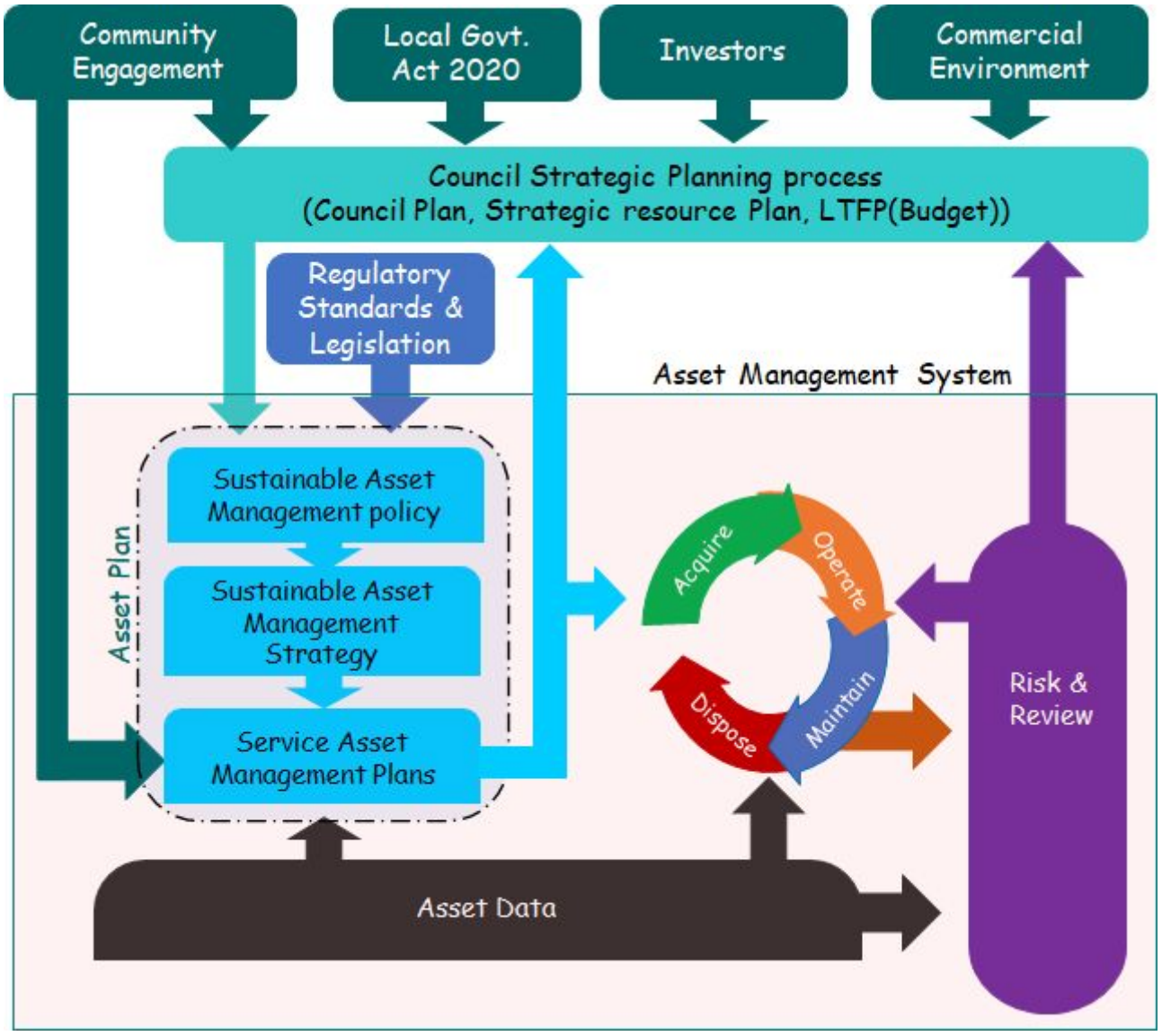

Figure 1: *Northern Grampians Shire Council Asset Management System outline*

These three Asset Management System documents:

- Link Council strategic objectives with the asset management objectives required to deliver them,
- Link Council strategic objectives with the level of service that the assets should deliver, and
- Guides asset management priorities, the work required on the assets to achieve the objectives, and the finances needed to support that work.

2.1 Our Strategic Assets

Council is responsible for managing a wide range of infrastructure assets. An indicative list is provided in Table 1 below. These assets represent a major investment built up over many generations and the majority of these assets are in need of renewal and/or upgrade. The combined replacement value of these assets is $517m as of 2019/2020 financial statements.

Table 1 - *Council asset summary for providing services*

Asset Category	Quantity	Unit
Sealed Roads	738	km
Unsealed Roads	2203	km
Formed Roads & Tracks	540	km
Footpath	102	km
Kerb & Channel	145	km
Drainage Pits	2296	No.
Drainage Pipes	59	km
Car Parks	16956	sqm
Bridge & Major Culverts	543	No.
Building	170	No.
Parks and Gardens	1,342,450	sqm

The social, economic and environmental well-being of Northern Grampians Shire residents, businesses and visitors depends on the strategic management of these assets. The treatment of each asset category is discussed separately in the Service Asset Management Plans.

3. Management of Our Assets

At present Council is unable to fully fund asset renewal requirements but will endeavour to provide a sufficient level of annual funding to meet ongoing renewal needs. This has resulted in some deferrals on asset renewal work, increasing the level of backlog. Backlog is the renewal works that Council has not been able to fund over the past years and is equivalent to asset renewal gap.

3.1 Service Level and Asset Performance

The Level of Service is the defined service quality for a particular activity or service area against which service performance can be measured. It provides the basis for the life cycle management strategies and works programmes within Asset Management Plans. Currently Council is working on assumed Customer Levels of Service, which has not yet been tested with the community. Some community consultation work, in the form of customer satisfaction surveys, will be carried out at the time of Service Asset Management Plans review, in order to verify the assumed levels of service. These consultations will be based on the community's expectations for quality of service and their willingness to pay.

Currently Council uses only one grading criteria, which is "asset physical condition grading". This will be changed to a three grading criteria based on NAMS.PLUS2 guidelines, to establish Level of Services, and these are:

- Asset physical condition grading,
- Asset functionality grading, and
- Asset capacity (utilisation) grading.

3.1.1 Asset Condition (Quality) Grading

Quality is defined as the overall condition of the asset required to meet the intended level of service. Council has a standard condition grading system as detailed in Table 2 shown below.

Table 2: *Condition Grading*

Grade	Condition Description
Very Good	Only planned maintenance is required
Good	Minor maintenance and planned maintenance is required.
Fair	Significant maintenance is required
Poor	Significant renewal is required
Very Poor	Beyond rehabilitation

3.1.2 Asset Functionality Grading

Function is defined as the overall ability of the asset to meet the delivery needs. This standard grading system is detailed in Table 3 shown below.

Table 3: *Function Grading*

Grade	Function Description
Good	Meets service delivery needs in acceptable manner
Fair	Meets most of service delivery needs and some inefficiencies and ineffectiveness present.
Poor	Does not meet service delivery needs.

3.1.3 Asset Capacity (utilisation) Grading

Capacity (Utilisation) is defined as the overall ability of the asset to meet the service. The standard grading system is as detailed in Table 4 shown below.

Table 4: *Capacity Grading*

Grade	Usage Description
Good	Usage is within design capacity and occasional or no operational problems experienced.
Fair	Usage is approaching design capacity and/or operational problems occur frequently.
Poor	Usage exceeds or is well below design capacity and/or significant operational problems are evident.

3.2 Budgetary Framework

The current annual budgetary framework has four funding areas as per Table 5 below. The capital commitment is to fund the ongoing asset renewal and upgrades requirements to ensure longevity of Council assets.

Table 5: *Asset Management Budget Process*

Recurrent/ Operational Budget	Capital Works Budget		Capital Works Budget (Consequential Recurrent)
Reactive and Proactive Maintenance	**Renewal**	**Upgrade & New**	**Upgrade & New**
Building Parks & Gardens Roads Bridges Drainage Footpath Kerb & Channel	Resheeting Program Resealing Program Road Rehabilitation Program Bridges Renewal Program Major Culvert Renewal Program Drop Structures & Floodway	Streetscapes Urban Road Improvement Program Rural & Residential Program Town Street Sealing Program Footpath Program Major Rural Roads Program Kerb & Channel Program Drainage Program Transport Development Buildings Open Spaces	Final Sealing Program
Non-Discretionary	Non-Discretionary	Discretionary	Non-Discretionary

It is essential that when Council considers its discretionary capital expenditures for new and upgrade assets that it also considers the consequential imposition of recurring operational and maintenance costs that will occur once the new or upgraded asset becomes operational. The consequential cost is 'non-discretionary' as it will be incurred if the new asset is provided.

As new and upgrade projects are brought forward for consideration with the annual budget, they will also have an assessment of whole of life costs presented to Council as part of the overall project cost projections.

3.3 Asset Evaluation

Life cycle asset management evaluation requires an asset to be replaced or refurbished when it reaches the end of its useful life and has effectively become economically unserviceable. This is when it no longer meets the standards or level of service that it was originally built to meet.

Evaluation of the renewal to an asset should also include:

- Need for the asset (short term / long term);
- Legislative requirements;

- Opportunity for rationalisation;
- Future liability of retention;
- Opportunity for multiple use; and
- Improved efficiency.

3.4 Acquisition of new assets & acceptance standards

Council can acquire new assets by the following means:

- Existing assets handed over, or taken over from other statutory agencies or community group with or without ongoing funding support;
- Purchase of existing assets from a private sector by Council to fulfil a Council provided service;
- Creation or purchase of new assets by way of Council's own works program; and
- Handing over of new assets created by a developer in a new subdivisions that once accepted by Council will have ongoing maintenance & renewal responsibilities.

New assets place an ongoing asset management responsibility on Council and Council ensure that standards of those new assets are acceptable. These standards will either be consistent with Council's basic standards that minimise ongoing financial commitment or be higher than normal and impose additional financial demands.

3.5 Disposal of Assets

Consideration of disposal of assets is initiated when the economic life of the asset has expired, when its service specification is no longer relevant or when the need for the service provided by the asset has disappeared.

Decisions to dispose of an asset require thorough examination and economic and social appraisal. Like acquisition decisions, they need to be taken within the integrated planning framework that takes into account service delivery needs, corporate objectives, financial and budgetary constraints and Council's overall resource allocation objectives.

4. Strategic Challenges

Northern Grampians Shire Council is facing some critical challenges to its sustainability in the long term and this has triggered Council to initiate some work to align asset management planning with Long Term Financial Planning. Some of these challenges require immediate attention and some a planned approach over time and these present threats and opportunities to the level of service and the assets providing the service. The critical challenges are as shown in table 6 below.

Table 6: *Strategic Challenges*

No.	Strategic Challenge
1	**Long Term Financial sustainability** - *Long term funding strategy for reasonable service levels into the future.* Current funding level is inadequate to maintain the current level of service over the next ten years. The cost of providing services at the current level of service is increasing faster than revenue, particularly rate increases.
2	**Ageing Infrastructure** - *Management of ageing infrastructure in need of renewal and replacement.* The funding gap over the past years has led to some deferrals on asset renewal and this has increased the risks associated with providing services and also assets awaiting renewal and upgrade.
3	**Documented Level of service** - *Transition to a community engagement process to shape the Level of Service.* Currently Council is working on an assumed customer Level of Services which have not been tested with the community. Both the Technical and Customer Level of Service need to be documented so that Council can estimate the cost in modifying them. There is a need to take the conversation to the community to ensure their understanding of what they are paying for and the cost implication of changing the levels.
4	**Managing Seasonal Variations in Demand** - *High seasonal demand for infrastructure services.* In areas like Halls Gaps there has been an increased demand for infrastructure services during peak seasons. The Shire is also receiving more requests from transport operators and agricultural producers to open new heavy vehicle routes in the local road network in order to make the movement of goods easier, faster, and less expensive. This increasing demand for services has a significant impact on the long term financial sustainability.

5	**Road Pavement Condition and Maintenance** Council extensive road network includes 738 km of sealed road, 2203 km of gravel road and 540 km of formed roads. These roads vary considerably in surface standard. Weather conditions often dictate the appropriate and most efficient time to undertake maintenance works. Hence there are times when the surface condition may be outside desirable intervention levels. Some of the material used to surface the road may not meet community expectations and/or may have high maintenance requirements.
6	**Climate change** - *More frequent severe weather events e.g. storms, flooding, fires and dry hotter summers.* Over the years infrastructure assets have taken a hit from ever increasing extreme weather conditions and there is a need for Council to remain prepared to carry out emergency response. For example drier and hot summers increase demand on irrigation on parks and also melt bitumen in roads.
7	**Asset Management treatments for Heritage Asset** - *Strategies to deal with the treatment of Heritage assets that recognises their ongoing preservation rather than renewal.* Northern Grampians Shire has a sizable number of Heritage assets mainly buildings. These assets are irreplaceable and maintenance and refurbishment should be funded to a level to preserve the assets.
8	**Cumulative effect of depreciation on gifted/acquired assets** - *Consider full life costs when making the decision to acquire new assets.* The impact of grant funded or gifted assets on ongoing operation, maintenance, depreciation and renewal should be fully understood to inform decision making.

5. Our Strategic Vision

Council's vision for its asset management function is to provide and maintain assets in a sustainable manner to improve the quality of the life and safety of the Northern Grampians community and visitors. Northern Grampians Shire Council will achieve this vision by ensuring that,

- All Council assets exist to provide services to the community in a way to improve their quality of life and environment.
- All assets are acquired, operated, maintained and made obsolete to enable Council to meet its Council Plan strategies and objectives.
- All Council asset management activities will take place within a strategic framework that is driven by service delivery needs within resource limitation.

The achievement of the above will depend on the following:

- Practises and processes are consistently applied across the organisation.
- Information is readily accessible and able to be used to monitor and report on the performance of assets. (Better & informed decision making).
- There is an intrinsic link between asset management information system (Assetic Cloud) and other Council systems such as the Geographical Information System (GIS), Finance etc (greater resource efficiency through the use of integrated systems).
- Outcomes of asset management, including necessary funding to meet the required levels of service, are directly linked to Council's annual budget, Council Plan & Strategic Resources Plan.

6. Our Key Strategies

Council's goals in managing the infrastructure assets is to deliver the level of service, as amended from time to time, that meet the needs of Northern Grampians Shire residents, business owners and its visitors, in the most cost effective manner in both short and long term. The following actions will be implemented:

Table 7: *Key Strategies*

No.	Key Strategy
1	Council to continue partnering with the State Government to access grants to fund the renewal of existing assets. Additional funding may be sought through contributions where appropriate .
2	Council will undertake community engagement work to adjust the level of service to affordable levels. Part of the discussions will include changing intervention levels and extending the age of assets.
3	All critical assets in the asset hierarchy will be fully funded. Assets will be reviewed and consolidated to reduce ongoing operation and maintenance costs.
4	The budgeting process to give priority to asset renewal and fit for purpose upgrades over creation of new assets.
5	Council to link financial summaries in Asset Management Plans with Long Term Financial Plan.
6	Developers will have the option to pay for developer contributions as part of development approval or build the infrastructure at their cost.
7	Council has identified the following opportunities to manage demand: • Promoting and encouraging high asset utilisation as opposed to providing new facilities, • Build new assets in well planned locations to minimise travel distances and meet demand.
8	Council to continue to investigate and review maintenance priority to reduce life cycle costs. (E.g. greater use of primer seals to reduce unsealed road maintenance).
9	A number of assets fall on boundary with neighbouring Councils. NGSC to continue making provision for shared capital and maintenance costs in these instances, with the provision that all work will be cost neutral, with no financial advantage to either Council.
10	Council to explore innovative technologies to enhance asset efficiency and lifespan. These include: • Re-use of materials, e.g old road pavement material used to build components of new assets, • Re-lining of pipes in-situ rather than the conventional method of digging and replacing.

11	Council to undergo a rigorous bridge and major culvert strength testing program inorder to make informed decisions on opening new heavy vehicle routes. This will be followed by a bridge and major culvert upgrade or strengthening program in order to meet high demand for these routes. This is a very costly exercise and will depend heavily on successful grant application.
12	Council to ensure that reseals are undertaken during summer months to reduce the likelihood of bleeding.
13	Council to review the materials used for the gravel road resheeting to ensure inappropriate materials are not used.
14	Council also to review the road shoulder grading and table drain cleaning program and sealed road maintenance response times in accordance with the Road Management Plan.
15	All new assets will be designed to incorporate sustainable design principles for increased asset lifespan.
16	New assets will be designed to maximise multipurpose use and minimise life cycle costs. The new assets will also be energy efficient and environmentally friendly.
17	Council will also consider temporarily closing or signposting assets that are in poor condition, and also to recycle assets that are no longer required.

7. Asset Management Planning Elements

Council measures its asset management maturity in the context of the National Asset Management Assessment Framework (NAMAF). The NAMAF makes an assessment against 11 elements, as drawn from the Local Government and Planning Ministers' Council National Local Government Sustainability Frameworks.

7.1 Strategic Planning

Council has an Asset Management Strategy which was adopted in 2011 and was later on reviewed by the Asset Management Steering Committee (AMSC) in 2014. This Asset Management Strategy is a replacement of the former. Council is updating Asset Management Plans to include information on long-term projections on asset maintenance, renewal and upgrade cost, which will be linked to the Long Term Financial Plan (LTFP).

7.2 Annual Budgeting

Every year Council develops a Capital Works budget for renewals, upgrades and new works and a recurrent budget for maintenance and operations expenditure for its assets. The Budget is prepared in full consideration of Council strategic objectives identified in the Council plan and other Strategic documents. The financial summaries in the asset Management Plans are linked to the Long Term Financial Plan.

7.3 Annual Report

Council produces an Annual Report each year to comply with the *Local Government Act 1989*. The report contains information on Council's assets and financial performance. This report contains an audited financial report and performance statement and is presented to Council upon approval by the Audit and Risk Committee.

7.4 Asset Management Policy

Council has an existing Asset Management Policy which was adopted in 2010 and was reviewed in 2017 and is now being updated. The Asset Management Policy guides the development of the Asset Management Strategy by setting out the framework and provides for the integration of the Asset Management System with the rest of Council systems. The Policy makes provisions for a community engagement process to guide the service levels.

7.5 Asset Management Strategy

This Asset Management Strategy is an update of the previously adopted 2011 version and is linked

to the Asset Management Policy and Asset Management Plans. The Asset Management Strategy provides the framework to guide the planning, maintenance, renewal and upgrade of essential assets that enables Council to provide services to the community.

7.6 Asset Management Plans

Council latest Asset management Plans for all asset categories were developed and adopted in 2009 and are in the process of being updated. The financial summaries in the Asset Management Plans will influence the Long Term Financial Plan.

7.7 Governance and Management

The Asset Management Policy, Asset Management Strategy and Asset Management Plans go through a reviewing process by the Asset Management Steering Committee before being approved by the Executive Leadership Team (ELT). Once approved by ELT, the documents will be referred to Council for approval and endorsement before made published on Council website. The governance and management structure is illustrated in figure 2 below.

Figure 2: *Asset Management System Governance and Management Structure*

7.8 Level of Service

Council is currently working on Levels of service that is assumed to be expected by the community. Some community consultation work will form part of the Asset Management Plans update, just to ensure the assumptions on the Levels of service are a true reflection of the community, and amendments will be done.

7.9 Data and Systems

Assetic Cloud is Council's Asset Management Information System. All Assets data is collected and stored accurately in the asset register which can be updated at any time in Assetic Cloud. The Asset data which includes Asset condition, treatments, network measure, valuation and depreciation is

all kept current in the Assetic Cloud software.

7.10 Skills and Processes

Council has processes in place to ensure the Sustainable Asset Management Policy, Sustainable Asset Management Strategy and Service Asset Management Plans are working documents which are based on current information. The Sustainable Asset Management Policy and Sustainable Asset Management Strategy are reviewed, updated and adopted by Council every four years or at every Council cycle. The Service asset Management Plans are reviewed and updated annually.

7.11 Evaluation

There will be regular review updates of the Sustainable Asset Management Strategy to ensure relevance and currency, and evaluation of implementation. Processes have been put in place to ensure identification of asset management improvements, timelines establishments and resources allocation.

8. Improvement Implementation

An improvement plan has been prepared to address the improvement issues identified. Implementation of the plan will be generally managed by the relevant departments within Council and overseen by the Asset Management Steering Committee. The below table illustrates the management of the improvement process.

Table 8: *Asset Management Improvement plan.*

Improvement Plan Task	Responsibility	Timeframe
1. Periodic monitoring and review of the Sustainable Asset Management Policy, Sustainable Asset Management Strategy, Service Asset Management Plans including Long Term Financial Plan. Sustainable Asset Management Policy and Sustainable Asset Management Strategy have four years (Council cycle) and are due for review and update within 6 months of each Council. Service Asset Management Plans are reviewed and updated annually.	Manager Infrastructure	Ongoing
2. Update Service Asset Management Plans for major asset portfolio.	Manager Infrastructure	June 2023
3. Ensure asset lives are reflective of the actual asset life.	Asset Engineer	Ongoing
4. Ensuring Levels of Service are key components of the community consultation process.	Manager Infrastructure	March 2021
5. Document confirmed Community Level of Service.	Manager Infrastructure	June 2021
6. Ensure that Assetic Cloud is one source of truth for all our assets and data is collected and reviewed regularly.	Asset Engineer	Ongoing

7. Review Building assets hierarchy and develop a centralised asbestos register.	Asset Engineer	Ongoing
8. Investigate new treatments for heritage assets to ensure their perpetuity.	Manager Infrastructure, Manager Operations	June 2022
9. Check the completeness of our asset register and ensure asset lives are conforming to ongoing depreciation.	Asset Engineer	Ongoing
10. Perform Level of Service modelling under different scenarios to inform the annual budget process.	Asset Engineer	Ongoing
11. Develop and implement annual maintenance plans for all asset categories.	Manager Infrastructure Manager Operations	Ongoing
12. Review and update the ten year Long Term Financial Plan (every year).	Manager Finance	Ongoing
13. Align Capital Works Program with Long Term Financial Plan and Project Management system.	Manager Infrastructure	June 2022

9. Appendices

Appendix 1:

Appendix 1: - Definitions

Asset - Is an item owned and/or managed by Council.

Hierarchy - A framework for segmenting an asset base into appropriate classifications.

Asset Management - The combination of financial, economic, engineering management and other practices provided to maintain an asset at the required level of service.

Benchmarking - Measuring performance or practices against recognised industry standards.

Capital Evaluation Process - A process in Council's New Works and Services (Capital Works) Program where projects are evaluated according to certain criteria and prioritised for implementation.

Capital Expenditure – Creation of new assets or to increase the capacity of existing assets.

Components – Individual parts of an asset.

Continuous Improvement - A program of review of service delivery, procedures, practices and plans to assess and implement improvement opportunities.

GIS Geographic Information System - GIS is a computer based mapping system used to manipulate, analyse and present information that is tied to a ground location.

Intervention Level - that stage of deterioration of the asset component at which it is no longer 'tolerable'. It is impracticable for any defect to be remedied at the time it first appears, so a level of tolerance is required.

Level of Service - Service level is standard to which an asset is maintained and relates to the quality, quantity, reliability, responsiveness, environmental acceptability and costs of related activities.

Maintenance -Activities necessary to retain an asset as near as practical to its original condition for it to reach its expected life.

- Periodic - sustains the design life of an asset.
- Routine/Programmed – condition monitoring activities used to predict failure.
- Preventive –reactive maintenance through notification of defects.

Pavement Management System (PMS) - An asset management (AM) system designed to model road condition data and provide the outputs for managing annual and long term maintenance activities.

Performance - A measure of a service or activity used to compare actual performance against a standard.

Rehabilitation - Works to rebuild or replace parts or components of an asset, to restore it to a required functional condition and extend its life, (i.e. heavy patching of roads) without significant upgrading or renewal.

Renewal - Works to refurbish or replace existing facilities of equivalent capacity or performance quality.

Repair - Action to restore an item to its previous condition after failure or damage.

Replacement - Replacement of an asset that has reached the end of its life to an agreed level of service.

Risk Assessment - The process used to determine the level of risk against predetermined standards.

Risk Management - A management technique used to identify and analyse potential risks and responses.

Strategy - A plan containing the long-term goals and strategies of an organization or function.