

INFRASTRUCTURE AND ASSET MANAGEMENT PLAN

2023-2033



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OVERVIEW

The purpose of Infrastructure and Infrastructure and Asset Management Plans

Infrastructure and Infrastructure and Asset Management plans (AMPs) are used to guide the planning, construction, maintenance and operation of each of our asset classes.

The Municipal Council of Roxby Downs undertakes a comprehensive process to ensure delivery of services from infrastructure is provided in a financially sustainable manner.

Infrastructure and Asset Management Planning Includes

- developing an Infrastructure and Asset Management policy and strategy and linking this plan to our long-term financial plan.

This plan is prepared as a core level maturity which means we use a top down approach with analysis applied at a network level to determine how we:-

- maintain current levels of services, determine our forward replacement programs, and calculate the associated cash flow projections.

Considerations

- Risk – Consideration of critical assets,
- Comprehensive asset registers using the Assetic platform as a base standard,
- Regular auditing of asset condition and performance, and
- Regular reporting of asset performance against community expectation and needs.

Assets included in this Infrastructure and Asset Management plan

The Council is responsible for approximately 20,500 assets and asset components with a total value of approximately \$174.5m. This includes many different asset classes that provide services to the community. This plan provides information on how we intend to manage the following assets.



Transport

Council manages a sealed road network of 40.6km, 4km of unsealed roads, 75.5km of kerbing and 25.4km of footpaths.



Power

Council manages a Power network of 75.2km of low/high voltage cables, 38 transformers, 3 generators and 2,331 commercial and private meters, 776 street & path lights, 205 section pillars and 715 service pillars



Water

Council manages a water network of 37.84 km, 678 nodes and 1,715 water meters



Buildings and other Structures

Council manages 46 buildings, including Houses community facilities, tennis courts, netball courts, waste transfer station and dog park.



Wastewater

Council manages a sewer network of 35km, 2,150 sewer nodes, 9 pump stations and approximately 7.5 hectares of effluent ponds.



Parks and Gardens

Council manages a comprehensive portfolio of community parks, gardens, reserves, skate park, ovals and emu walk track



Stormwater

Council manages a stormwater network of 17.4km, 3.88 Ha of catchment ponds and 2 x pump stations.



Plant and Equipment

Council manages a comprehensive portfolio of plant and equipment assets

OUR PAST

The township of Roxby Downs exists to support the BHP Olympic Dam mine site and is unique in its youth and structured development.

Diagram 1 below shows how the town has developed since its inception in 1987 to the present day and includes possible future developments for population growth as seen in the bottom below Lot 3001.

This important information assists us to consider future works and life cycle management recognizing the staged development of Roxby Downs and associated overall condition, rating and indexes.

Diagram/Map 1: Roxby Downs Build Dates

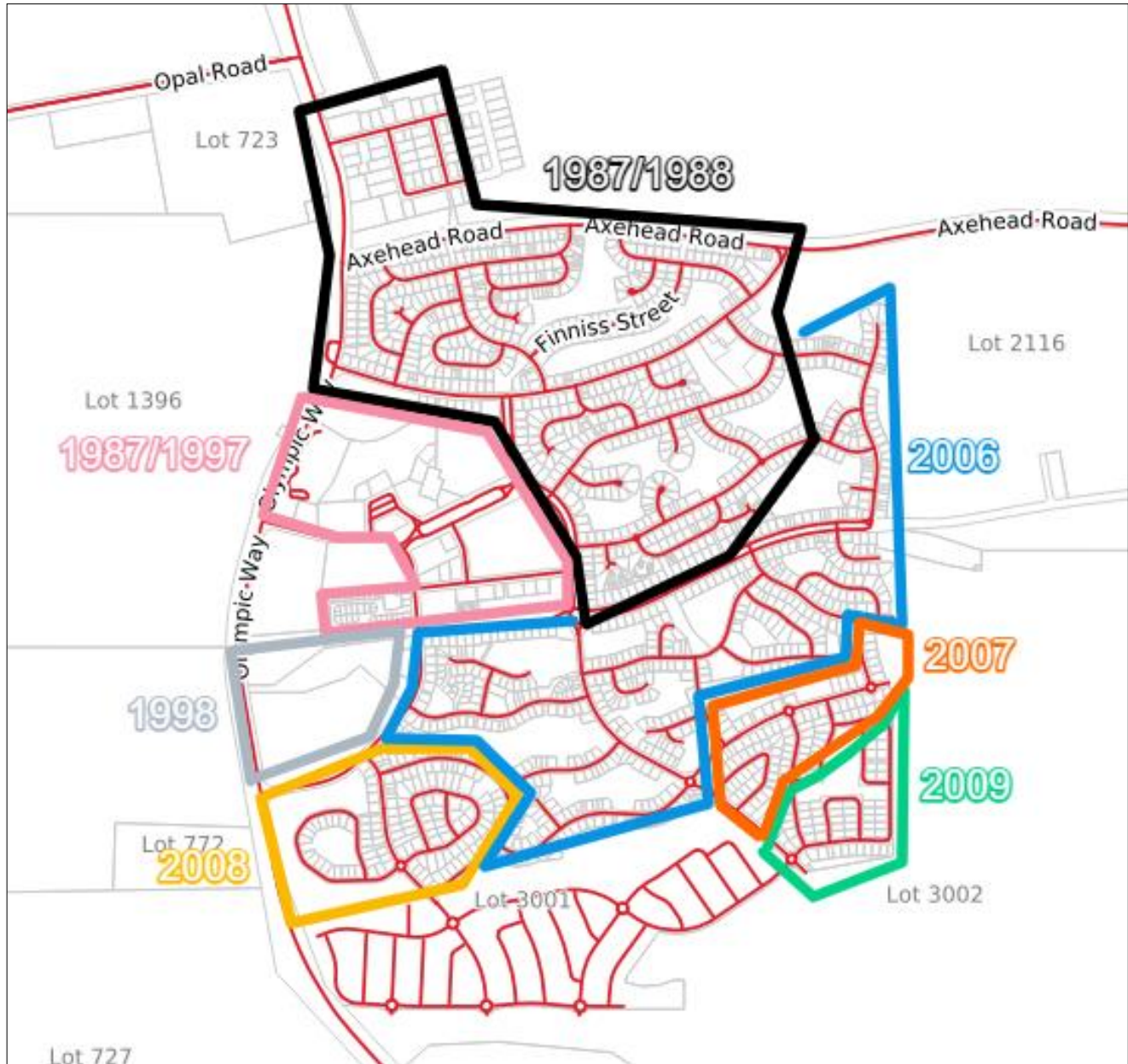
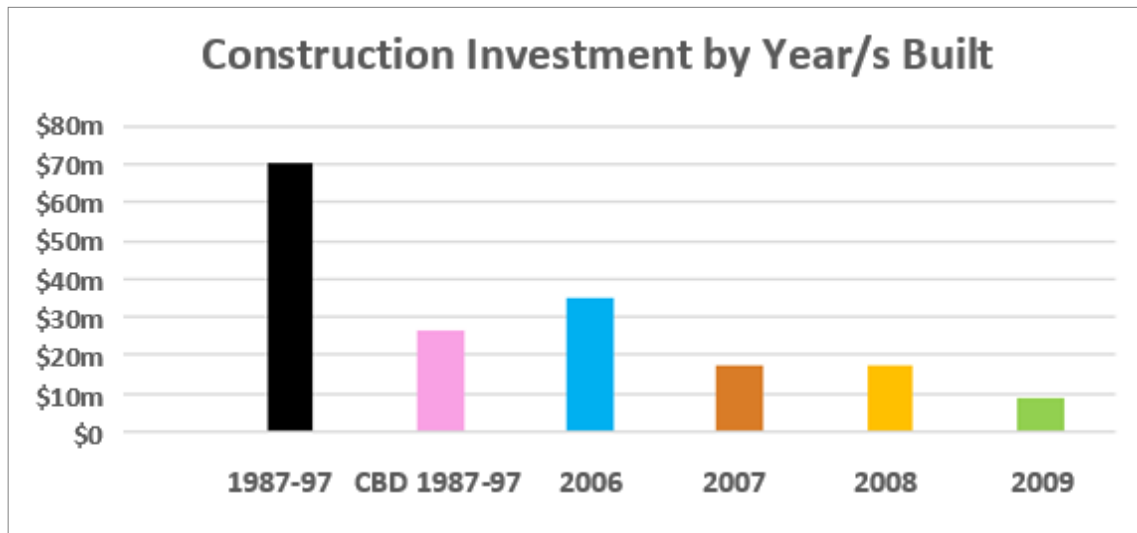


Figure 1

Council's historic level of asset renewal expenditure has been low due to the common age of the infrastructure assets. This presents a significant challenge for future planning of Infrastructure and Asset Management. Consideration is given to future renewal versus future replacement options across all Council assets.

The below chart highlights the amounts invested within each development area relative to its construction years. The colours in Graph 1 below reference the same colours in Figure 1.

Graph 1 Construction Investment by year built



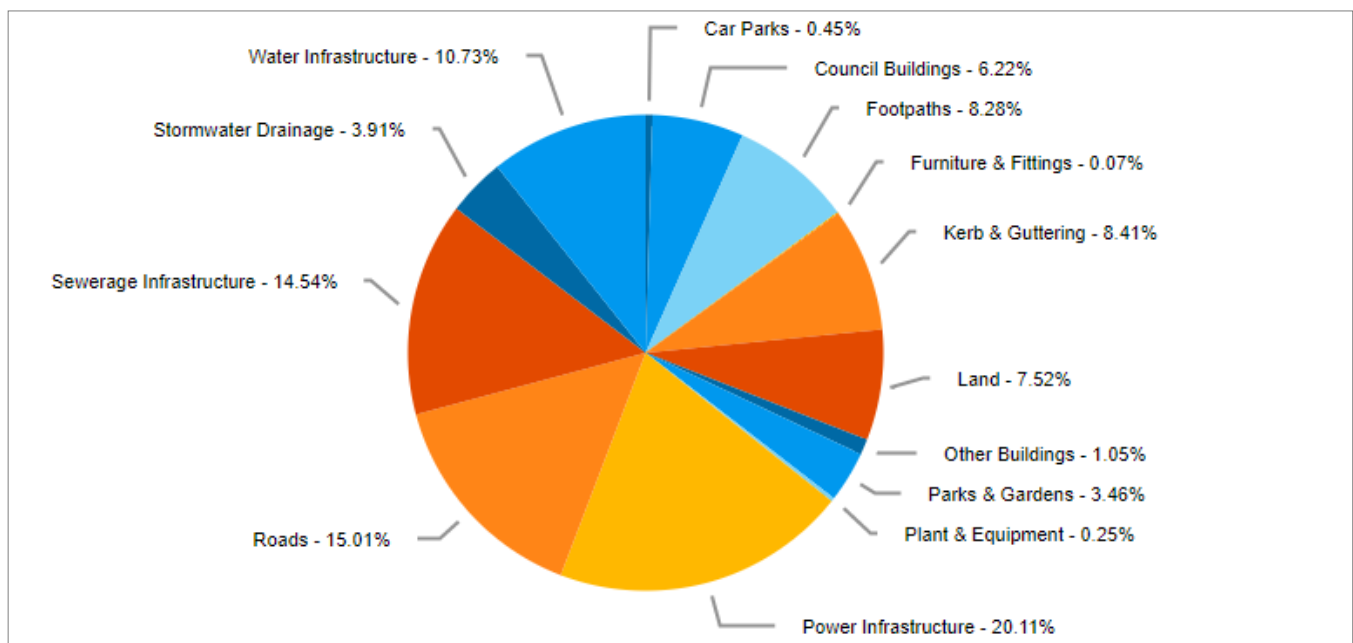
The total value of all assets currently held and managed by Council in 2023 is \$174.5m.

Investments made in the early development will progress through their useful life (Overall Condition Index - OCI) sooner than the newer developments. More detail regarding this is provided for each Asset Class.

OUR PRESENT

Overall, our assets are performing well. Over 53% of our assets (by value) are less than 20% consumed, and 90% (by value) are less than 50% consumed. Less than 1% are approaching their end of useful life, becoming due for renewal/replacement.

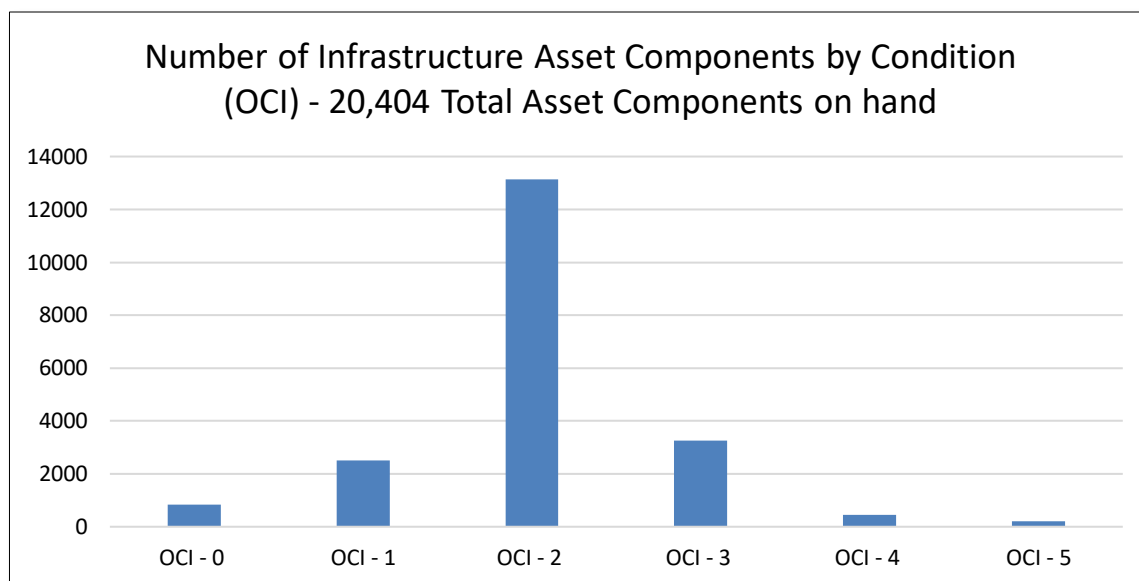
Graph 2 Our assets classes as a Percentage of whole of business



Due to the unique development stages of Roxby Downs and the possible common expiration of whole asset classes across large areas, the Council has been prudent in its financial decisions. Council has done this to make sure we can renew or replace our infrastructure assets when needed in a way that will not require reductions in service levels or significant increases in the rates we charge.

Council manages a total of 20,404 asset components at the time of preparing this report. Where it is not possible to visually inspect an asset i.e., subterranean assets like sewer, water and power, the condition is determined by calculating the percentage of years used, versus manufacture recommendations of serviceable life expectancy.

Graph 3 Representation of our assets Overall Condition Index by volume



As a reference, 0 = New condition and includes land which does not age, 1 = New Condition, 2 = Good Condition, 3 = Fair Condition, 4 = Useable condition, and 5 = Poor Condition.

Table 1 Asset Replacement Cost and Depreciation FY22

FS CLASS	ACCOUNTING REPLACEMENT COST	ACCOUNTING ACCUMULATED DEPRECIATION	ACCOUNTING DEPRECIATED REPLACEMENT COST	ANNUAL DEPRECIATION
Land	\$ 8,631,500	\$ -	\$ 8,631,500	-
Council Buildings	\$ 14,934,979	\$ 7,993,381	\$ 6,941,598	\$ 114,165
Other Buildings	\$ 2,007,087	\$ 731,689	\$ 1,275,398	\$ 25,309
Infrastructure				-
- Stormwater Drainage	\$ 6,646,414	\$ 2,390,035	\$ 4,256,379	\$ 96,260
- Roads	\$ 22,502,687	\$ 8,370,201	\$ 14,132,486	\$ 438,659
- Footpaths	\$ 16,307,648	\$ 6,756,383	\$ 9,551,265	\$ 295,452
- Kerb & Guttering	\$ 11,005,619	\$ 3,571,791	\$ 7,433,829	\$ 146,818
- Car Parks	\$ 702,417	\$ 329,324	\$ 373,093	\$ 17,948
- Parks & Gardens	\$ 6,760,453	\$ 3,002,543	\$ 3,757,910	\$ 240,932
- Power Infrastructure	\$ 41,743,254	\$ 20,513,827	\$ 21,229,427	\$ 803,450
- Water Infrastructure	\$ 18,973,968	\$ 7,282,190	\$ 11,691,778	\$ 266,942
- Sewerage Infrastructure	\$ 22,342,847	\$ 6,249,925	\$ 16,092,922	\$ 342,428
Plant & Equipment	\$ 1,468,239	\$ 714,354	\$ 753,885	\$ 201,466
Furniture & Fittings	\$ 459,956	\$ 294,007	\$ 165,948	\$ 30,913
All Assets	\$ 174,487,068	\$ 68,199,650	\$ 106,287,418	\$ 3,020,742

Maintenance

At the present time it has been determined that the current level of maintenance expenditure of approximately \$1.8M per annum is considered to be sufficient to adequately maintain the existing infrastructure. This equates to approximately 1.1% of the Council 's current asset base (excluding land).

Council anticipates additional cost associated with the operational budget in the future being:

- Increased use of telemetric devices to monitor the operation of water assets.
- Increased maintenance expenditure as result of new infrastructure assets. The impact of this will slowly rise to a level in direct proportion of the replacement cost of existing assets.

Budgeting for on-going maintenance is challenging, however, applying a formula of 1.1% of asset value across all assets, specifically for maintenance, provides a solid foundation for the future.

Non land asset value = \$166M x 1.1% = \$1.8M in the first year

The below table shows the last five years of historical Maintenance Expenditure.

Table 1: Historical Maintenance Expenditure

	2020	2021	2022	2023 BUDGET	AVERAGE
MAINTENANCE EXPENDITURE	\$1.3 M	\$1.6 M	\$1.6 M	\$2.032 M	\$1.65 M

Source: MCRD General Ledger

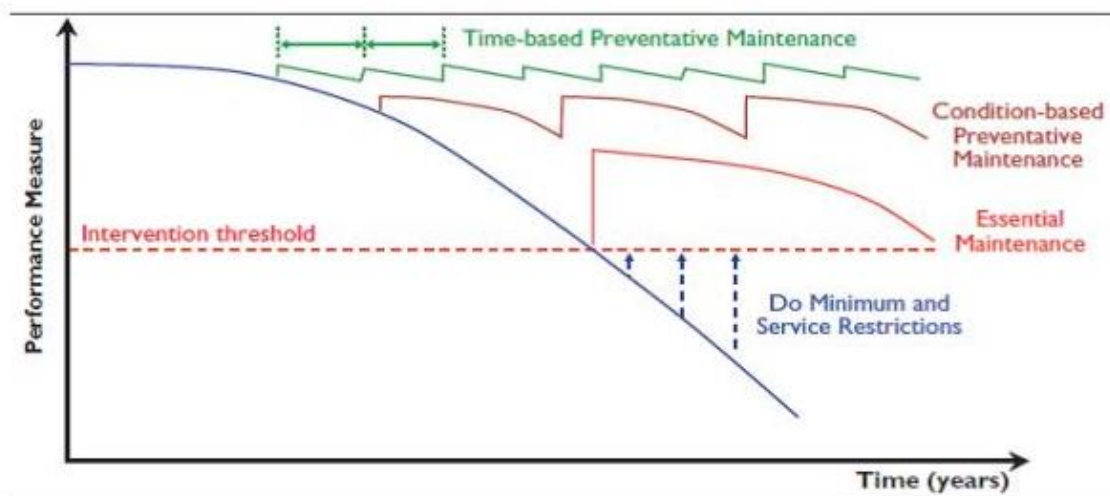
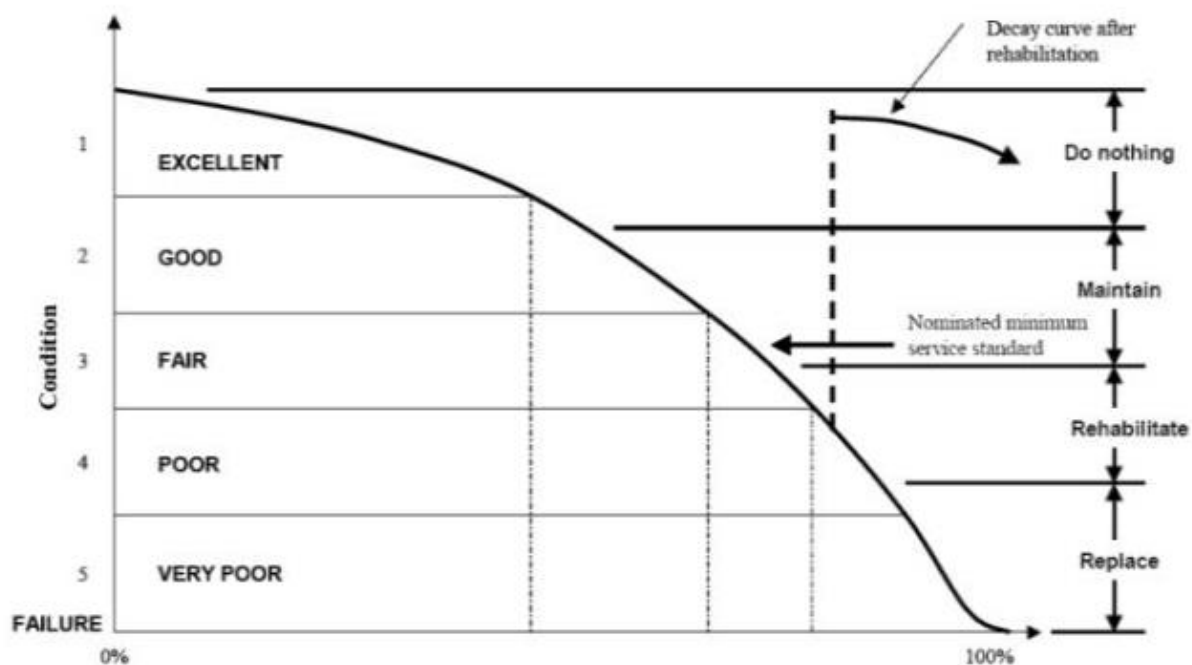
Renewal

Council reviews the remaining useful life of each asset as provided within the Assetic database and in discussion with the responsible manager determine forward estimates for replacement.

It is expected that the Assetic Predictor modelling (per Sewer later in this AMP) will validate this calculation in the future.

It must therefore be expected that as asset volumes and subsequent values increase so shall both the above calculations.

Council manages the asset life cycle of all assets across all categories using the below life-cycle management model



OUR FUTURE

To support Council’s endeavour to provide best practice and continuous improvement, Council has invested in the Assetic Software-as-a-Service (SaaS) platform, which delivers Asset Data Management, Powerful Predictor Modelling and Maintenance Scheduling which enables collaboration and benchmarking and is accessible anywhere, anytime.

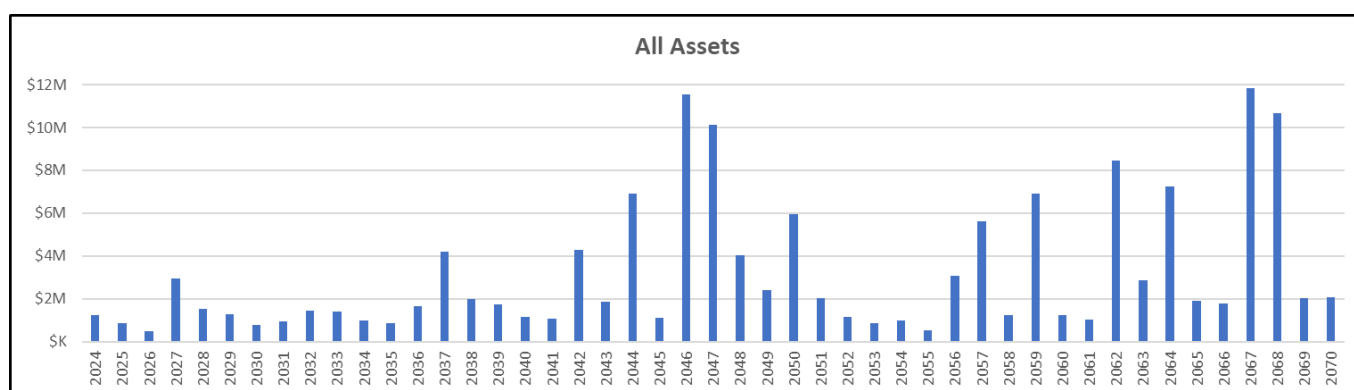
As Predictor Modelling is a new product to Council, we have only been able to apply its functionality to Sewer Assets. Assetic has however allowed us to consider useful life across all asset classes, this functionality has not previously been available to Council. We are now able to determine when each asset’s remaining useful life expires thereby reviewing and planning early to avoid shock-costs in the future.

Table 2: Forecast Renewal Costs for all asset classes 10 year

Class	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Land	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Council Buildings	\$ 142,600	\$ 190,476	\$ -	\$ 18,426	\$ -	\$ -	\$ 188,366	\$ 43,790	\$ 309,241	\$ 66,405
Other Buildings	\$ 333,991	\$ 90,476	\$ 14,949	\$ -	\$ -	\$ 19,788	\$ -	\$ -	\$ -	\$ 1,004,422
Infrastructure	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
- Stormwater Drainage	\$ 40,000	\$ -	\$ -	\$ 4,724	\$ 4,724	\$ 734	\$ -	\$ -	\$ -	\$ -
- Roads	\$ -	\$ 35,321	\$ 42,987	\$ 467,063	\$ 255,780	\$ 110,654	\$ 90,678	\$ 203,728	\$ 437,982	\$ 115,040
- Footpaths	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
- Kerb & Guttering	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
- Car Parks	\$ -	\$ -	\$ 5,922	\$ 50,470	\$ -	\$ 6,223	\$ -	\$ -	\$ -	\$ -
- Parks & Gardens	\$ 78,068	\$ -	\$ 8,924	\$ 1,254,052	\$ 109,965	\$ 321,632	\$ 24,765	\$ 48,372	\$ 12,729	\$ -
- Power Infrastructure	\$ 100,000	\$ 100,000	\$ 100,139	\$ 627,195	\$ 1,032,668	\$ 227,699	\$ 101,437	\$ 277,053	\$ 166,823	\$ 103,109
- Water Infrastructure	\$ 180,000	\$ 62,233	\$ 6,698	\$ 65,549	\$ 6,156	\$ 255,446	\$ 3,914	\$ 10,922	\$ 33,637	\$ -
- Sewerage Infrastructure	\$ 141,224	\$ 8,500	\$ 17,000	\$ 112,878	\$ 39,666	\$ -	\$ 17,167	\$ 110,895	\$ 139,508	\$ 5,077
Plant & Equipment	\$ 168,400	\$ 328,910	\$ 281,063	\$ 328,984	\$ 83,975	\$ 144,480	\$ 294,194	\$ 226,587	\$ 292,420	\$ 87,704
Furniture & Fittings	\$ 39,674	\$ 51,238	\$ 19,776	\$ 35,073	\$ -	\$ 170,970	\$ 53,844	\$ 11,437	\$ 37,415	\$ 28,085
Total	\$ 1,223,957	\$ 867,154	\$ 497,458	\$ 2,964,414	\$ 1,532,934	\$ 1,257,626	\$ 774,365	\$ 932,784	\$ 1,429,755	\$ 1,409,842

It is important to appreciate that just because modelling shows expiration of Remaining Useful Life, it does not mean that the asset will stop working on day zero. A building may survive double its predetermined useful life by providing good maintenance and upkeep. Due to the unique environmental factors of living in a desert with low rainfall and associated challenges, it is expected that 90% of our assets may survive well past their predetermined useful life. It is also noted that some assets will deteriorate prematurely as a result of other outside influences including extreme temperatures and sandy/saline soil conditions.

Graph 4 Forecast Renewal Costs 2024-2070



LEVEL OF SERVICE

The level of service has been determined largely by a mixture of historic precedence and financial capacity. These levels are regularly reviewed to ensure they are consistent with the expectations of our stakeholders, including the indenture partners and the community. We determine the service level by reviewing what we have provided in the past and what our community can afford.

Some assets are subject to external regulation. These regulations often specify a minimum standard of service (e.g. building codes determine a minimum standard for buildings). In the case of power and electricity assets, their operation is subject to significant regulation with considerable checks and measures put in place. Council is also required to document the compliance to these regulations.

The following table outlines standard Levels of Service for all Council assets. Each of the relevant asset class AMP's provide information on class specific exceptions, how well the assets are performing and how performance levels will be determined.

Table 3 Standard Levels of Service for Council Assets

COMMUNITY UTILITY			
Legislative Compliance	To ensure compliance with relevant acts and legislative requirements.	Audit and review of compliance requirements.	Full compliance.
Safety	To provide safe access and amenity.	Audit and review of compliance requirements.	Full compliance.
Customer Satisfaction	To provide assets that meet customer requirements and expectations in relation to accessibility, form, and function.	Conduct customer survey in relation to asset provision.	Customers to provide an average satisfaction level of good to excellent (greater than 7 on scale of 0-10).
OPERATING OR TECHNICAL			
Condition	To provide the asset base in a condition that is safe, aesthetic, fit for purpose and meets customer expectations.	To complete town-wide progressive condition audit and risk assessment audit every 10 years.	90% of assets to have a condition rating of fair to excellent.
Responsiveness	To respond to customer requests consistent with corporate standards and service agreements.	Periodic reports on customer request turnaround times and customer satisfaction feedback forms and level of overall customer requests monitored.	90% of customer requests to be processed within the agreed timeframes and 10% reduction in reactive customer requests per annum.

KEY PERFORMANCE INDICATOR	LEVEL OF SERVICE	PERFORMANCE MEASUREMENT PROCESS	TARGET PERFORMANCE
Performance	To ensure the assets perform cost effectively and provide adequate service to the community.	Performance analysis level of service reviews and audits.	Individual asset groups to meet identified needs (note: water resources in particular has a number of set targets).
Design And Capacity	Level to provide assets that meet required service levels and standards, design standards and specifications.	Endorsed service standards and specifications for the building and maintenance of assets.	100% Compliance.
Cost Effectiveness	To provide and maintain the assets according to best value over the lifecycle while meeting Council objectives.	Lifecycle cost in conjunction with intervention and deterioration modelling.	Reduction of lifecycle costs to equivalent of benchmarked best practice.

During the development of the class Infrastructure and Asset Management plans, a number of improvement opportunities were identified. Improvements we plan to make in future management of infrastructure assets are listed below.

Table 4 Planned Future Improvements

IMPROVEMENT PROJECT / ACTIVITY	OBJECTIVE	CURRENT STATUS	PRIORITY
Risk Management	Develop and draft risk management section for class AMP.	In progress.	M
Information Technology	Migration of corporate datasets into the Open Office Business Management Solution/Magiq Document Management Solution. Develop a state-of-the-art cloud-based Infrastructure and Asset Management Solution incorporating all functionality to support Predictor Modelling and Maintenance functionality.	Assetic implemented to phase 1 – cleansing of data and migration to cloud-based platform. (Now completed) Phase 2 – (Predictor Modelling) has now been commenced and in dialogue with Assetic to achieve implementation across all asset classes. Maintenance Functionality implemented during the 22/23 FY.	C
Financial Information	Adjust Chart of Accounts to ensure appropriate accounts maintained to reflect asset lifecycle.	In progress	M
Life Cycle Maintenance	Document asset maintenance regime.	In progress	M
Levels Of Service	Fully document and record levels of service.	In progress	L
Maintenance Expenditure	Ensure maintenance expenditure estimates are reflected in Council 's LTFP.		H

Priority key:

- H** High Priority – to be completed within the next 6 months.
- M** Medium Priority – to be completed prior to the next review of the Class AMP.
- L** Low Priority –
- C** Commenced – in progress.

Demand Management Strategies (whole of business)

The construction of infrastructure assets is well planned, and Council is cognisant of the future demand for the assets. The use of all assets is constantly reviewed.

New Infrastructure Demand

Council acknowledges that all new subdivisions have been provided by BHP and then handed over to Council for ongoing management. The same applies to other ‘gifted’ infrastructure from BHP and the South Australian Government. Consequently, our AMPs remain predicated on these current relationships; namely that the costs of new subdivisions to meet the needs of any future ‘mine related’ expansion will in the main be met by BHP and, in certain circumstances, the South Australian Government. Accordingly, and in line with the current Indenture Act as amended in 1987, the cost of current and future maintenance and eventual replacement of this infrastructure will be borne by Council.

An underlying assumption of our AMPs is that an increased population will lead to not only a demand for more infrastructure, but also increased use of currently existing assets. The combined effect will result in Council increasing its financial allocation to repairs and maintenance.

Any expansion of the town will be funded or provided for by the developer of the expansion. This applies to infill development or new subdivisions. The provision of new infrastructure would be a condition of the Development Approval and is also (in the case of new subdivisions) a requirement of the *Roxby Downs (Indenture Ratification) Act 1982*.

Growth Trends

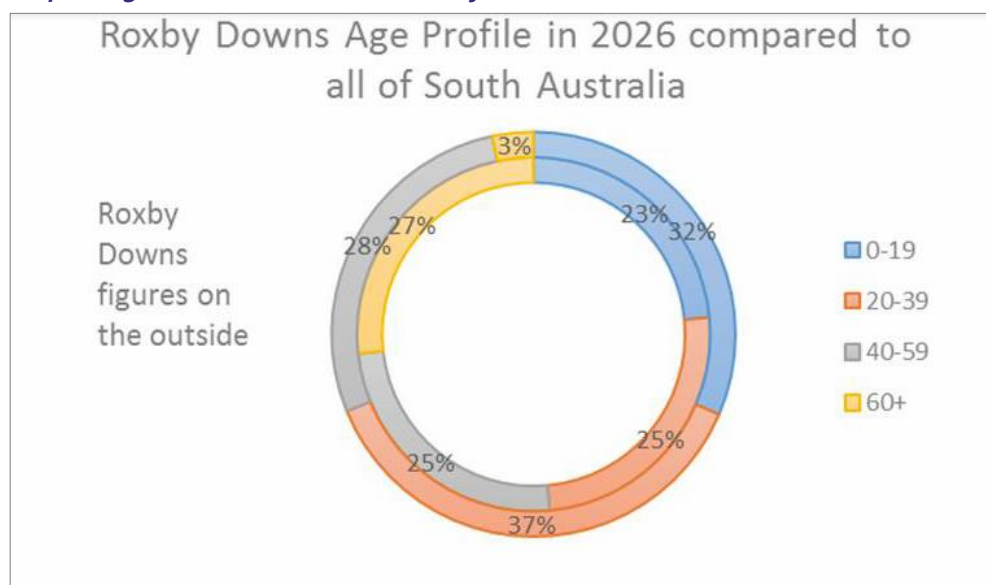
This plan is conservatively based on a notional township population of 3,950 in 2021 with steady growth to 4,900 in 2036, or an annual increase of about 1.25% or 50 new residents a year (*Age-Sex Population Projections by Local Government Area, 2006-2026, Department of Planning and Local Government*).

Council will need to monitor population levels to ensure that it doesn't exceed its current service provision and asset capacity. Forecasting will help future estimates and allow Council to define strategies for the next 10 - 15 years, including exploring ways to 'manage' the demand for a service by reducing or redirecting demand. Forecasting future demand also impacts on planning for assets. As new areas are built, more assets (including any gifted assets) will come under Council's care and control, and the cost of maintaining the increasing asset base will also go up. As population grows, it's likely the capacity of some assets will need to be increased.

Demographic changes

The predictions by Planning SA indicate that the age profile of Roxby Downs is not expected to alter significantly in the future, with a third of the population under 20 years of age and another third over 40 years of age. This is a young population profile, especially when compared to South Australian averages, indicating that future services should continue to focus on the younger age group. Since people over 60 only make up 3% of the local population, the demand for services specific to that age category is likely to be very limited. Changing demographics, such as an aging population or a marked increase in young children, may also require adjustment to some assets or asset groups.

Graph 5 Age Profile Prediction for Roxby Downs to 2006 to 2026



Source: *Age-Sex Population Projections by Local Government Area, 2006-2026, Department of Planning and Local Government*.

The current population level to support BHP operations can be accommodated within the existing residential area. With the introduction of "safe travel" and "FIFO" preferred by BHP, no new housing areas will be required. There may be a requirement in the future to provide suitable housing to assist in attracting non-BHP operations staff to the LGA.

Supervisory Control and Data Acquisition (SCADA) System

Council has purchased a Supervisory Control and Data Acquisition (SCADA) system to monitor and control our remote Wastewater and Potable Water networks. SCADA systems are critical as it helps maintain efficiency by collecting and processing real-time data. This system operates 24/7 and notifies employees of any irregularities and where necessary notifies employees by way of alarms where physical inspections are warranted.

Council will transition Roxby Power infrastructure across to SCADA monitoring.

Revaluations

All buildings, parks and gardens and power assets infrastructure were revalued on 30 June 2020 by Gayler Professional Services.

Transportation infrastructure was revalued as at 30 June 2022 by Gayler Professional Services.

Water and Sewerage infrastructure was partially assessed in 2012 and is scheduled to be subjected to a full revaluation by the 30 June 2023.

A full Condition Audit and Sinking Fund Report for the Recreation Centre and Auditorium (LINKS) was undertaken in November 2016 by Rider Levett Bucknall. This report resulted in a reasonable annual capital works profile over the 15-year period forecast duration, specific to the Roxby Link asset profiles.

Revaluations Schedule

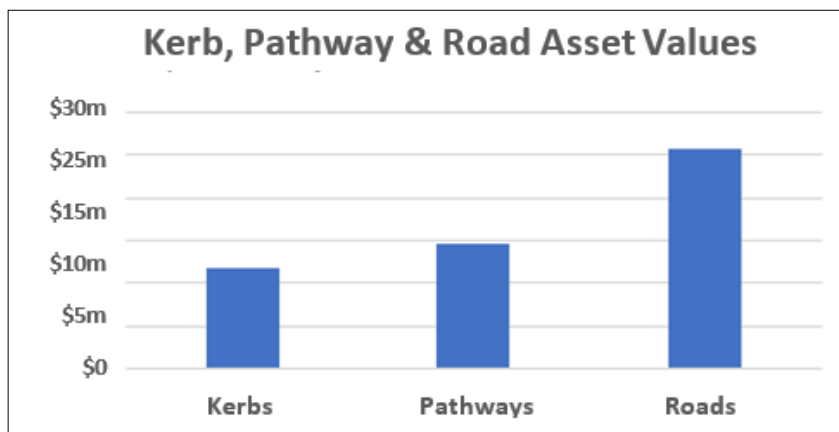
ASSET CATEGORY	REVALUATION DATE	NEXT SCHEDULED	INTERNAL / EXTERNAL
Buildings & Structures	30/06/2020	30/06/2025	External
Parks and Gardens	30/06/2020	30/06/2025	External
Power	30/06/2020	30/06/2025	External
Roads	30/06/2022	30/06/2027	External
Footpaths	30/06/2022	30/06/2027	External
Kerbs	30/06/2022	30/06/2027	External
Carparks	30/06/2022	30/06/2027	External
Water	30/06/2023	30/06/2028	External
Sewerage	30/06/2023	30/06/2028	External
Stormwater	30/06/2023	30/06/2028	Internal

TRANSPORT

Asset Description

Council manages a road network of 75.5km of kerbing and 25.4km of footpaths, 78 roads, streets, courts, and highways with a total length of 40.6km. This includes 4km of unsealed asset at Opal Road with a combined replacement value of \$50.5M.

Graph 6: Kerb, Pathway and Road asset values



Unlike most other assets within Council’s substantial portfolio, kerbs, pathways, and roads are able to be repaired, renewed or replaced in relatively small sections rather than replacing an entire length.

Map 2: Shows the volume and disposition of Kerb, Pathway and Road Assets across Roxby Downs



Levels of Service

Technical Service Levels

Supporting the customer service levels are operational or technical measures of performance. These technical measures relate to the allocation of resources to best achieve the desired customer outcomes and demonstrate effective performance. Technical service measures are linked to the activities and annual budgets covering:

- **Operations** – the regular activities to provide services (e.g. street sweeping, pavement marking, etc.).
- **Maintenance** – the activities necessary to retain an asset as near as practicable to an appropriate service condition. Maintenance activities enable an asset to provide service for its planned life (e.g. road patching, unsealed road grading, footpath repair).
- **Renewal** – the activities that return the service capability of an asset up to that which it had originally (e.g. road resurfacing and pavement reconstruction).
- **Upgrade/New** – the activities to provide a higher level of service (e.g. sealing an unsealed car park) or a new service that did not exist previously (e.g. a new footpath). Service and asset managers plan, implement and control technical service levels to influence the customer service levels.

Future Demand

Demand Drivers

Demand upon our local roads is managed by regulating access to all roadways to normal passenger transport vehicles (average large car with a large caravan or trailer). Any heavy vehicles requiring access over that limit are restricted by a permit system and approved on an individual basis. There are of course local requirements outside of those limits such as waste collection vehicles, removalists, emergency vehicles (fire appliances), the BHP local bus service, service delivery vehicles (Woolworths, Service Station – with restricted routes) to name a few. All other heavy vehicles are regulated via the National Heavy Vehicle Regulator, or the local heavy vehicle permits officer.

Other local demand will be affected by population change, changes to road laws and regulations, seasonal factors (extreme weather) and or technological changes.

As at the writing of this plan no adverse changes are anticipated in the foreseeable future.

Demand Management Plan

In the event of unforeseen announcements by BHP or other significant event Council will assess and respond appropriately to sustain the high standard of our kerbs, footpaths, and roads. It is for this reason that Council needs to invest annually in our future. Other demand drivers include:

- Population change
- Demographic change
- Customer preferences and expectations
- Economic factors
- Seasonal factors
- Vehicle ownership rates
- Technological change
- Environmental awareness

Lifecycle Management

Council manages the transport assets lifecycle; we are fortunate to participate in the Federal Governments Roads to Recovery Program which contributes to renewal or replacement costs.

Over the last five years, Council has invested on average \$150,000 per annum into roadway renewal or replacement projects.

It is expected that the Roads to Recovery scheme will continue but regardless, Council remains capable of meeting its financial requirements specific to roads, footpaths, and kerbs.

Current Capacity and performance

The current level of capacity and performance meets community expectations.

Asset condition

All local kerbs, footpaths and roads are maintained to a good condition.

Asset Valuation

The value of the transport assets recorded in the asset register and disclosed in Council's financial statements were reviewed as at 30 June 2022.

Table 5: Replacement Cost and Depreciation FY22

FS CLASS	ACCOUNTING REPLACEMENT COST	ACCOUNTING ACCUMULATED DEPRECIATION	ACCOUNTING DEPRECIATED REPLACEMENT COST	ANNUAL DEPRECIATION
Roads	\$ 22,502,687	\$ 8,370,201	\$ 14,132,486	\$ 438,659
Footpaths	\$ 16,307,648	\$ 6,756,383	\$ 9,551,265	\$ 295,452
Kerb & Guttering	\$ 11,005,619	\$ 3,571,791	\$ 7,433,829	\$ 146,818
Car Parks	\$ 702,417	\$ 329,324	\$ 373,093	\$ 17,948
Total	\$ 50,518,371	\$ 19,027,699	\$ 31,490,673	\$ 898,877

The current rate of consumption (annual depreciation/depreciable amount) for transports assets is 1.8%. This indicates that on average, over the life of an asset, 1.8% of the depreciable amount is consumed annually. The translation of this consumption rate into renewal is subject to a decision on funding, service level determination and asset condition.

Operations and Maintenance Plan

With due consideration to the resources presently available to Council, regular local validation is undertaken, and recommendations are provided to Senior Management for any necessary maintenance of these assets at or above the current levels of service provision.

Table 6: Historical Maintenance Expenditure - Transport

	2020	2021	2022	2023 BUDGET
Roads	\$0.040 M	\$0.090 M	\$0.057 M	\$0.089 M
Footpaths	\$0.021 M	\$0.016 M	\$0.007 M	\$0.024 M
Kerb & Guttering	\$0.062 M	\$0.046 M	\$0.047 M	\$0.050 M
Car Parks	\$0.000 M	\$0.000 M	\$0.000 M	\$0.000 M
Total	\$0.123 M	\$0.152M	\$0.111 M	\$0.163 M

Source: MCRD General Ledger

Council does not have adequate records of the cost of maintenance compared to the cost of renewal, however due to the majority of its transports assets not being near the end of their lives an assumption has been made that the expenditure is maintenance. This plan assumes that the Council will continue with its 2023 budget amount into the future.

Further iterations of this plan will incorporate new modelling of transport asset maintenance.

Due to the nature of this asset class, any underspends can be set aside for unexpected and overly high expenditure years or for unforeseen events and replacements.

This total remains an overall part of the total inventory maintenance calculations and represents an overall investment to this asset class of \$1.63M over ten years.

Renewal Plan

Renewal is the process of restoring an existing asset to its original service potential. This does not usually increase the functionality or usability of the asset. Assets requiring renewal or replacement are identified using the following methods:

- **Aged-based approach:** Using acquisition year and useful life to determine the renewal year.
- **Condition based approach:** Using condition predictive modelling systems.
- **Manual based approach:** Using a combination of visual inspections and maintenance history to determine the remaining useful life of the asset.

Table 7: Renewal plan methods by asset type

TYPE OF ASSET	RENEWAL/REPLACEMENT METHOD
Roads (surface and pavement)	Condition-based
Kerbs and gutter	Condition-based
Car parks	Age-based and manual-based
Footpaths	Condition-based and aged-based
Traffic control devices	Age-based and manual-based

It is not anticipated that any significant renewal of kerb, footpath and road networks will be required in the foreseeable future over and above maintenance of the roads, footpath, and kerb per above calculations.

Council seeks to increase the provision of access carparking where appropriate.


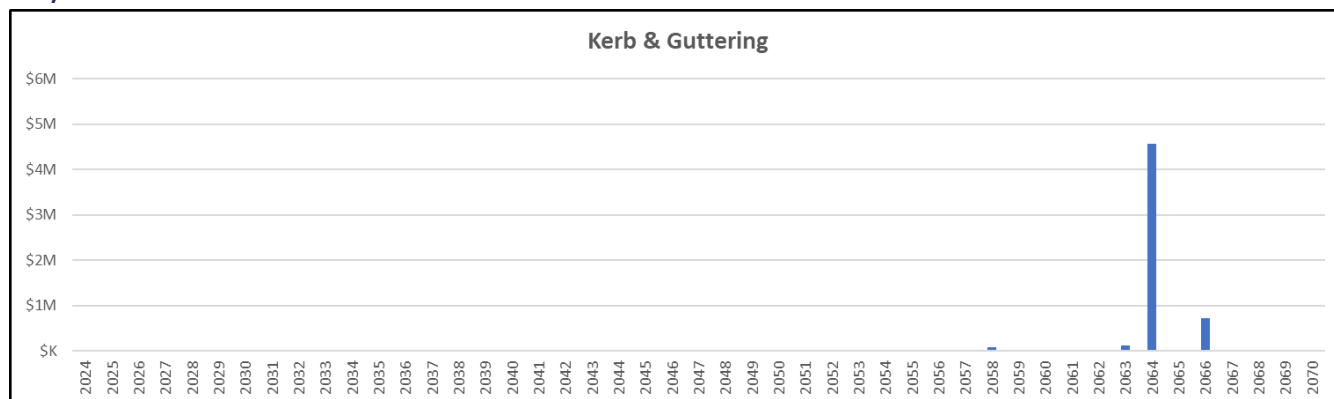


Table 8: Forecast Renewal Costs Kerbs & Gutters, Footpaths, Roads & Carparks (10-year)

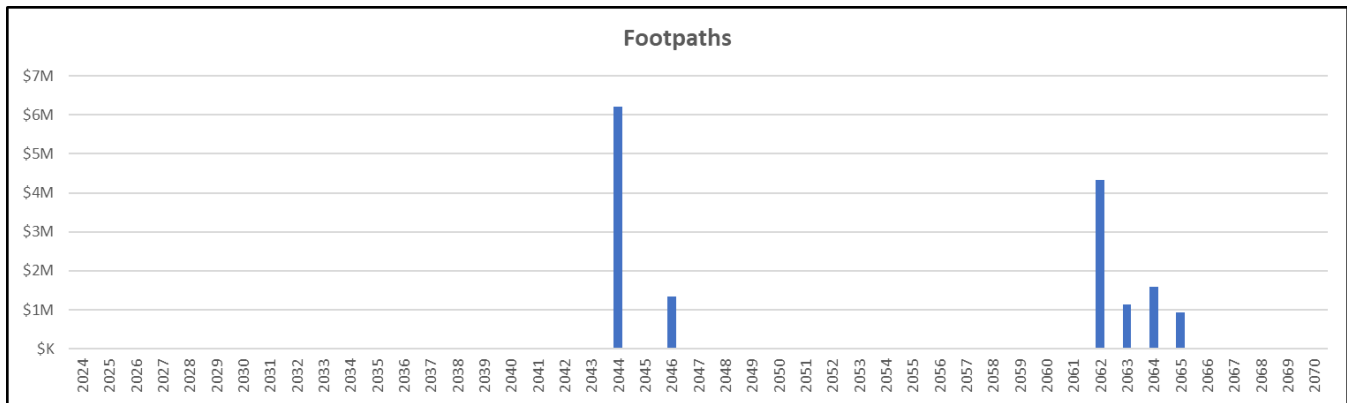
Class	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Roads	\$ -	\$ 35,321	\$ 42,987	\$ 467,063	\$ 255,780	\$ 110,654	\$ 90,678	\$ 203,728	\$ 437,982	\$ 115,040
Footpaths	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Kerb & Guttering	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Car Parks	\$ -	\$ -	\$ 5,922	\$ 50,470	\$ -	\$ 6,223	\$ -	\$ -	\$ -	\$ -

It is important to appreciate that just because modelling shows expiration of Remaining Useful Life, it does not mean that the asset will just stop working on day zero, a roadway, footpath or kerb may survive double or triple its predetermined useful life by providing good maintenance and upkeep. Due to the unique environmental factors of living in a remote location with low rainfall and associated challenges, it is expected that 90% of our assets will survive well past their predetermined useful life. It is also noted that some assets will deteriorate prematurely as a result of other outside influences including extreme temperatures and sandy/saline soil conditions.

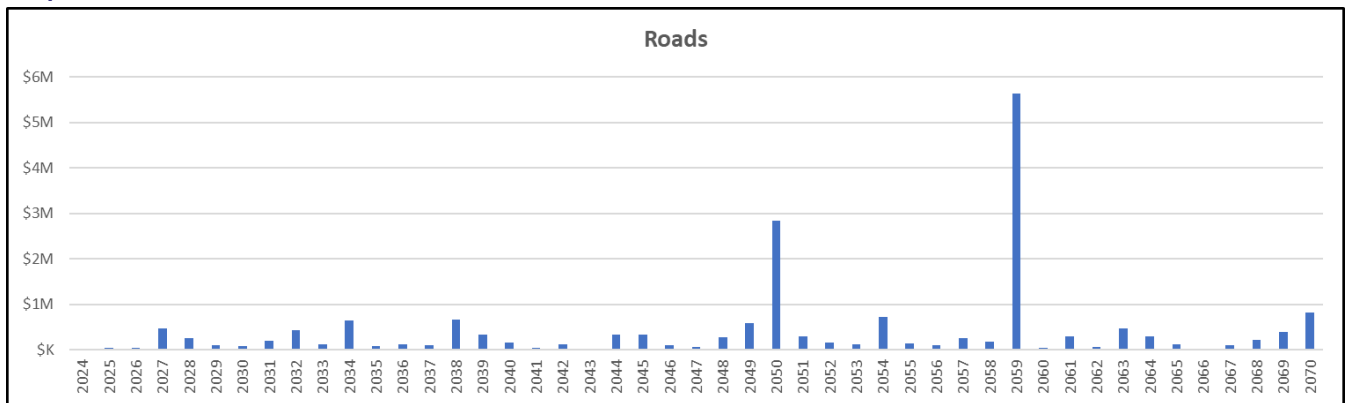
Graph 7: Forecast Renewal Costs Kerbs and Gutters 2024-2070



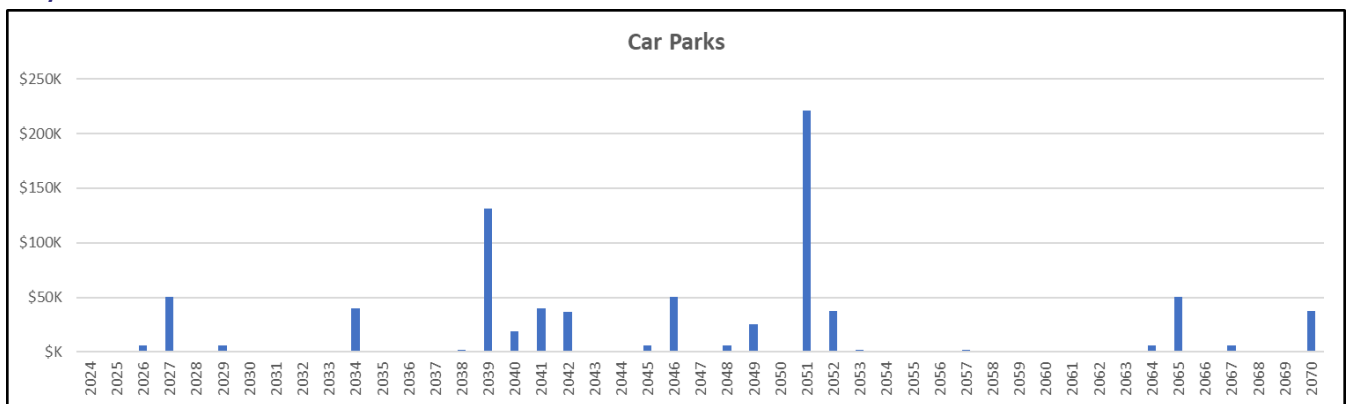
Graph 8: Forecast Renewal Costs Footpaths 2024-2070



Graph 9: Forecast Renewal Costs Roads 2024-2070



Graph 10: Forecast Renewal Costs Car Parks 2024-2070



New and Upgrade

It is not expected that legislation will adversely affect this plan in the foreseeable future. Where technology and or safety influences our kerbs, footpaths, and roads, it shall be assessed on its merit and a suitable resolution decided with Senior Management.

Financial Summary

Table 9: Transport Expenditure

FINANCIAL YEAR	MAINTENANCE / OPERATING	RENEWAL / REPLACEMENT	TOTAL
2023/24	\$ 163,000	\$ -	\$ 163,000
2024/25	\$ 163,000	\$ 35,321	\$ 198,321
2025/26	\$ 163,000	\$ 48,909	\$ 211,909
2026/27	\$ 163,000	\$ 517,533	\$ 680,533
2027/28	\$ 163,000	\$ 255,780	\$ 418,780
2028/29	\$ 163,000	\$ 116,877	\$ 279,877
2029/30	\$ 163,000	\$ 90,678	\$ 253,678
2030/31	\$ 163,000	\$ 203,728	\$ 366,728
2031/32	\$ 163,000	\$ 437,982	\$ 600,982
2032/33	\$ 163,000	\$ 115,040	\$ 278,040

Key Assumptions made in financial forecast

Like all forecasting models, much of the work can be considered hypothetical. All costs are based upon 2023 pricing.

Forecast reliability and confidence

The forecast costs, proposed budgets, and valuation projections in this AMP are based on the best available data. For effective asset and financial management, it is critical that the information is current and accurate. Data confidence is classified on an A–E level scale in accordance with **Error! Reference source not found. Error! Reference source not found.**

Table 10: Data Confidence Grading System

CONFIDENCE GRADE	DESCRIPTION
A. Highly reliable	Data based on sound records, procedures, investigations, and analysis, documented properly and agreed as the best method of assessment. Dataset is complete and estimated to be accurate within 2%.
B. Reliable	Data based on sound records procedures, investigations, and analysis, documented properly but has minor shortcomings. For example, some of the data is old, some documentation is missing and/or reliance is placed on unconfirmed reports or some extrapolation. Dataset is complete and estimated to be accurate within 10%.
C. Uncertain	Data based on sound records, procedures, investigations, and analysis which is incomplete or unsupported, or extrapolated from a limited sample for which grade A or B data are available. Dataset is substantially complete but up to 50% is extrapolated data and accuracy estimated within 25%.
D. Very uncertain	Data is based on unconfirmed verbal reports and/or cursory inspections and analysis. Dataset may not be fully complete, and most data is estimated or extrapolated. Accuracy within 40%.
E. Unknown	None or very little data held.

The initial calculations contained within this Plan are based on the existing data sets, with minimal forecasting information. Current confidence levels overall are reasonable. This is largely due to the nature of the long lives of most infrastructure assets and the inherent challenges in predicting the exact timing of their renewal.

This is the first formal draft of an Infrastructure and Asset Management Plan, and it has identified a number of areas where more data would be helpful. Future drafts of the Infrastructure and Asset Management Plans incorporating outputs from the Assetic predictor tools (Phase 2) will provide an improved standard and quality of information not locally experienced previously.

As the class AMPs are developed, the data quality will increase as will the confidence levels.

Improvement Plan

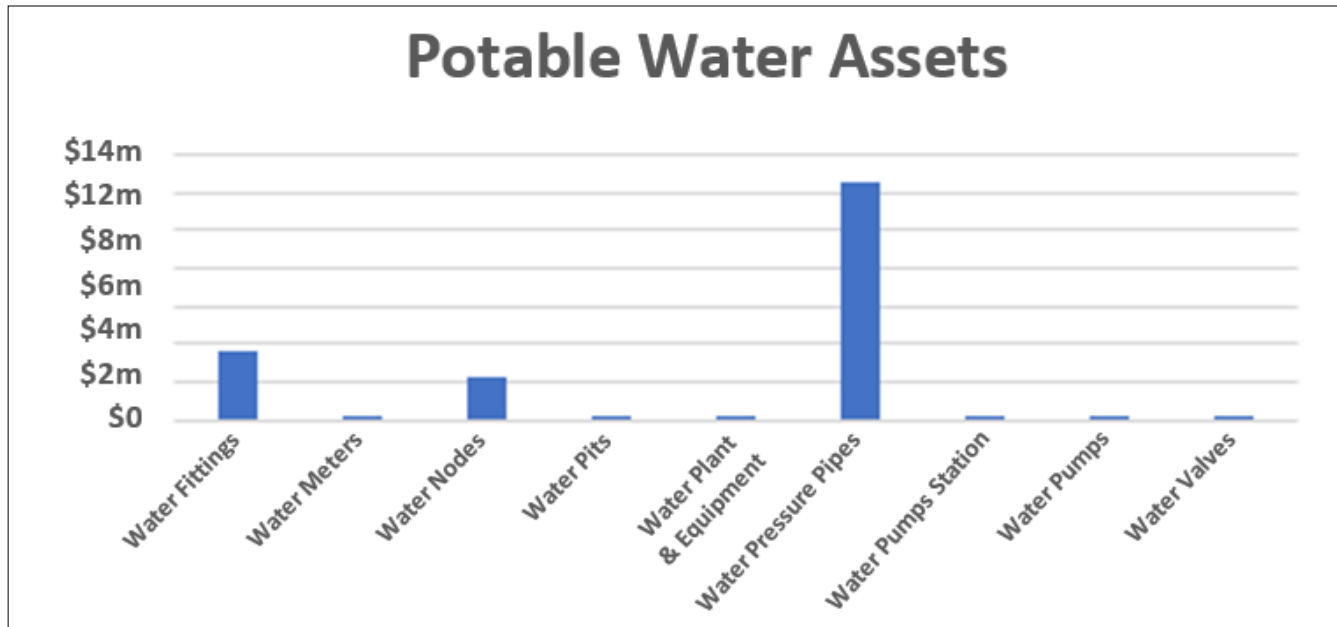
TASK	TASK	RESPONSIBILITY	RESOURCE REQUIRED	TIMELINE
Predictor Modelling	Subject Transport Infrastructure to Predictor modelling within Assetic	Asset Manager	Assetic Platform	2023/24
General Ledger	Revise structure to separate renewal, maintenance and operating expenditure	Senior Accountant	Nil	2023/24

POTABLE WATER

Asset Description

Council manages a water network of 37.84 km, 678 nodes and 1715 water meters to both residential and commercial customers with a combined assets value of \$19.0M.

Graph 11 Potable Water Costs



Water for the Roxby Downs township is extracted from the Great Artesian Basin and piped to the Olympic Dam mine site by BHP where it is treated (desalinated and chlorinated). BHP is responsible for the treatment process which is documented in their 'Safe Drinking Water Risk Management Plan' (as overseen by the Department of Health and Wellbeing (DHW)).

The treated potable water is pumped by BHP to a 10 ML Town Dam where Council takes responsibility at an isolation valve located midway between the Town Dam and the Town Water Supply (TWS) Pump Station located alongside the Dam.

BHP are currently (2022) replacing the Town Dam with water storage tanks. This upgrade is expected to provide improved quality assurance and reliability for the town water supply.

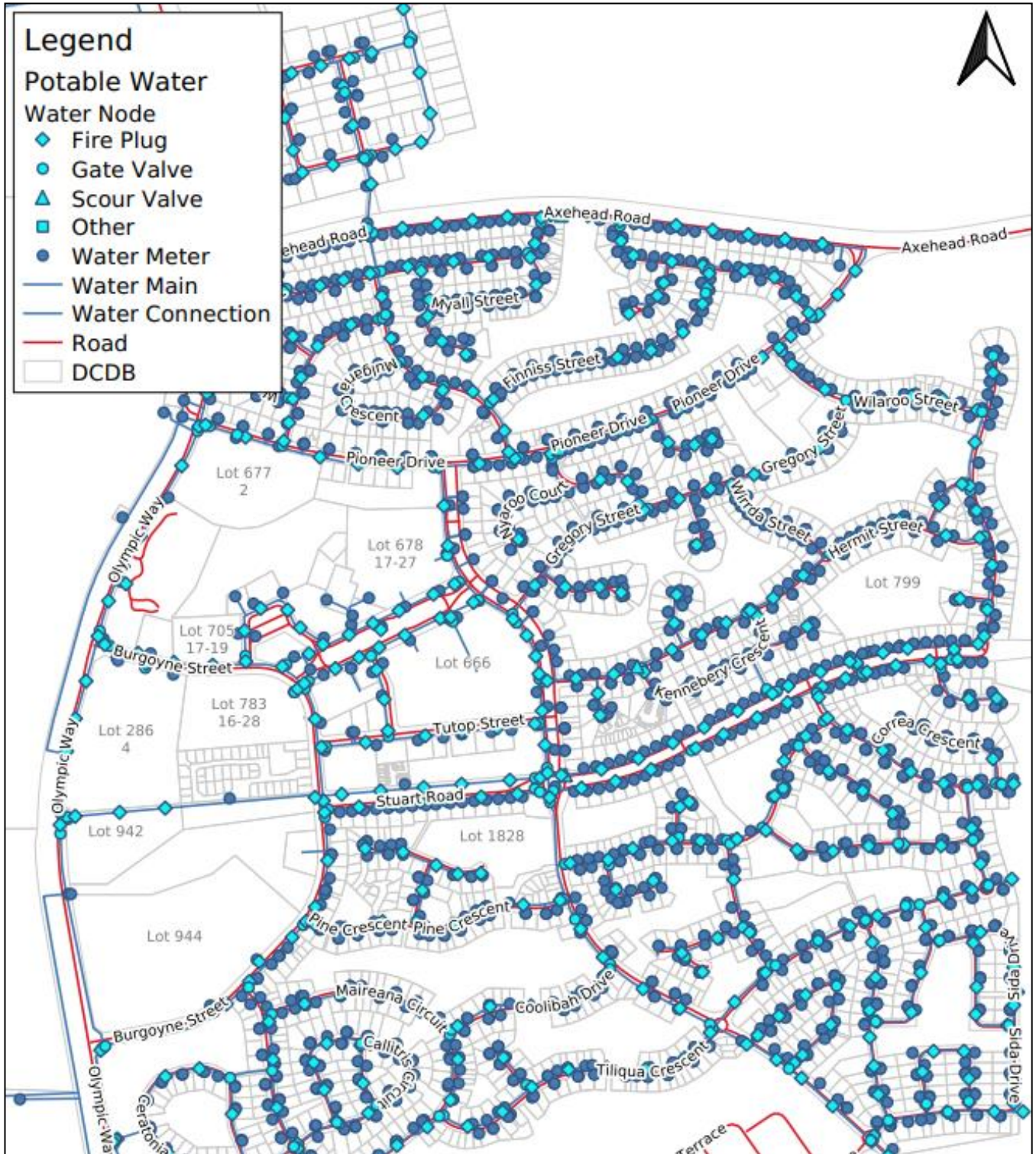
The main elements of the water distribution network are a Town Water Supply (TWS) Pump Station located on Olympic Way, and 37.8km of potable water mains, a staging tank and a pumping station used for watering the public ovals.

The key elements of the Town Water Supply Pump Station are:

- A pump skid consisting of six pumps delivering 0-200 l/s at 45m head.
- A diesel-driven emergency backup pump capable of delivering a constant 52 l/s.
- Two hydro-pneumatic tanks for buffering TWS pressure.
- A chlorine monitoring and injection system.
- SCADA system for monitoring pump performance and chlorine levels.

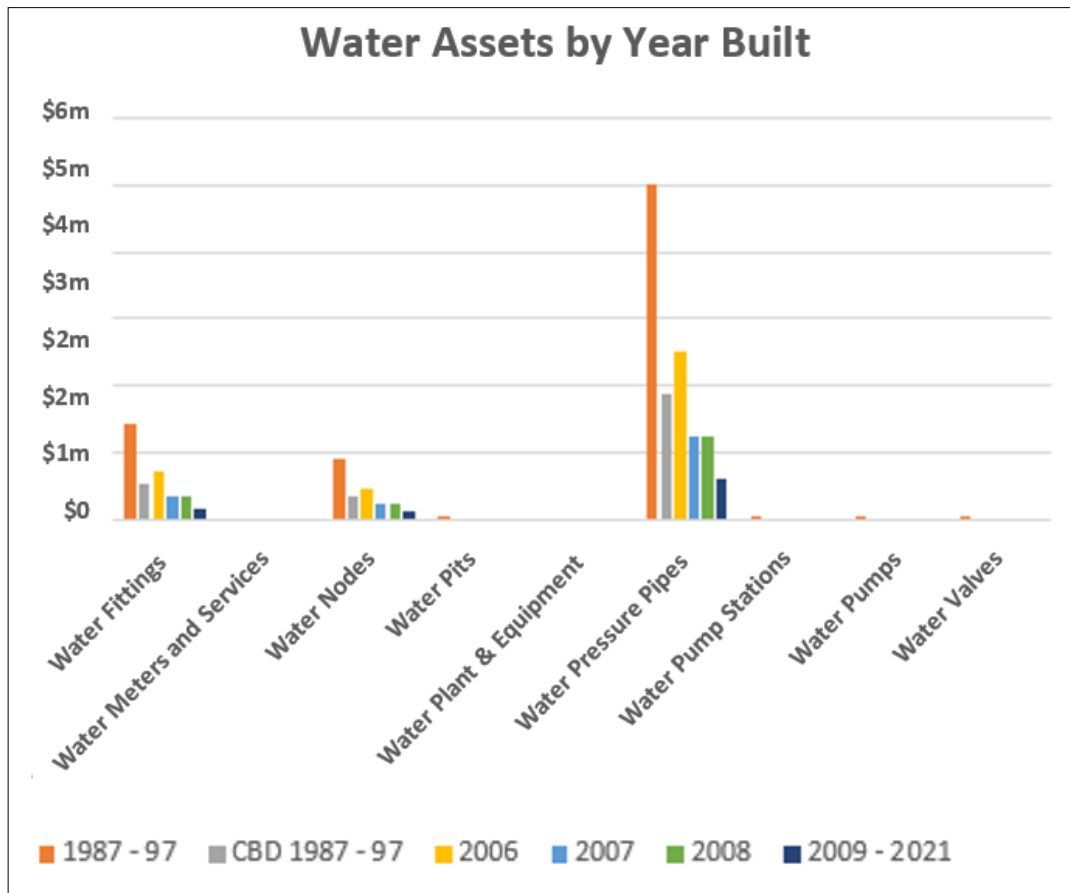
Once potable water leaves the Town Water Supply pump house it enters the considerable network of assets that make up much of the Water Assets portfolio.

Map 3: Shows the volume and disposition of Potable Water Assets across Roxby Downs



The below table shows all Potable Water Asset Value with Year Built.

Graph 12: Water assets by year built



Levels of Service

Council is committed to the safe and efficient operation of its systems to supply the highest quality of potable water in compliance with all legislative requirements.

Because supplying potable water is a critical infrastructure Council are governed by the following regulatory bodies:

- Essential Services Commission of South Australia (ESCOSA)
- Office of the Technical Regulator, Department of State Development (OTR)
- Department for Health and Wellbeing (DHW)
- Development Assessment Commission (DAC)
- Environment Protection Authority (EPA)

Roxby Water strives to maintain a line of communication with all stakeholders in relation to those aspects of its operations that may affect both the customer but also each stakeholder.

Future Demand

Demand Drivers

It is not anticipated that demand on our potable water network will vary significantly over the forward estimates within this plan.

Demand Management Plan

Existing performance management provides adequately for the maintenance of the water network to the required standards.

Lifecycle Management

Council has committed to undertake lifecycle management initiatives to ensure that, where possible, significant unplanned expenditure may be avoided. This includes undertaking a schedule of random condition audits. Commencing at the oldest section of the town, and over ten years continuing through to the newer developments, Council will invest in periodic inspections of major subterranean infrastructure to confirm the overall condition against this plan.

Current Capacity and performance

The current level of capacity and performance meets community and regulatory requirements and expectations.

Asset condition

Due to the critical nature of providing potable water to the community and the strict regulation of performing this service on a day-to-day basis, we have not identified any actual or perceived deficiencies within the service or infrastructure provided.

Asset Valuation

The value of the water assets recorded in the asset register and disclosed in Council 's financial statements were in 2022.

Table 11: Replacement Cost and Depreciation FY22

FS Class	Accounting Replacement Cost	Accounting Accumulated Depreciation	Accounting Depreciated Replacement Cost	Annual Depreciation
Water Infrastructure	\$ 18,973,968	\$ 7,282,190	\$ 11,691,778	\$ 266,942
Total	\$ 18,973,968	\$ 7,282,190	\$ 11,691,778	\$ 266,942

Operations and Maintenance

With due consideration to the resources presently available to Council, the local auditing and inspection regime is sufficient to maintain these assets at or above the current levels of service provision.

Table 12: Historical Maintenance Expenditure – Potable Water

	2020	2021	2022	2023 BUDGET
WATER	\$0.091 M	\$0.128 M	\$0.114 M	\$0.159 M

Source: MCRD General Ledger

Council does not have adequate records of the cost of maintenance compared to the cost of renewal, however due to the majority of its water assets not being near the end of their lives an assumption has been made that the expenditure is maintenance. This plan assumes that the Council will continue with its 2023 budget amount into the future.

Further iterations of this plan will incorporate new modelling of Potable water asset maintenance.

This total remains an overall part of the total inventory maintenance calculations and represents an overall investment to this asset class of \$1.59M over ten years.

Renewal

It is not anticipated that any major renewal or replacements to the potable water networks will be required in the foreseeable future. Constant maintenance of town pumps are scheduled in, and periodic pump replacements are scheduled into the forward estimates.

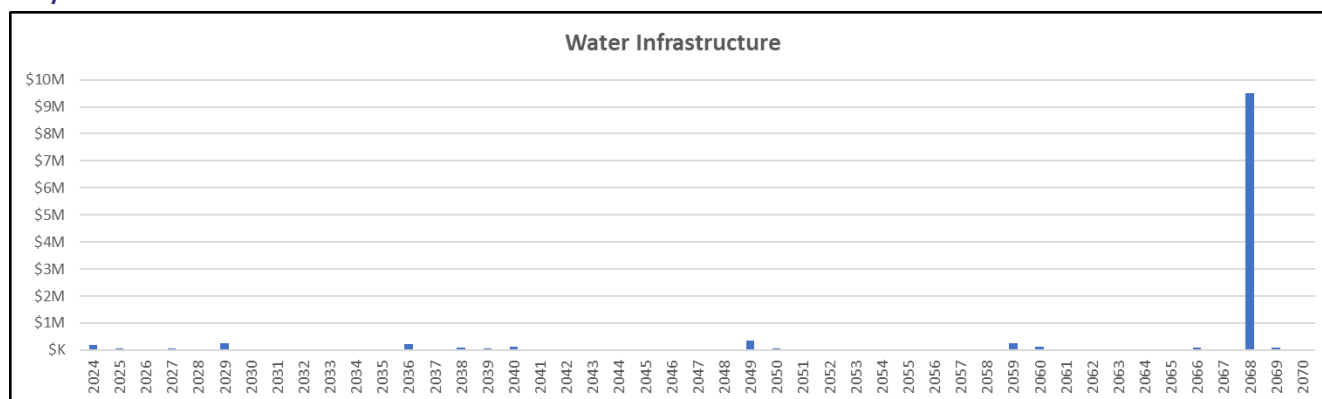
Due to the nature of this asset class, any underspends can be set aside for unexpected and overly high expenditure years or for unforeseen events and replacements.

Table 13: Forecast Renewal Costs Water Infrastructure (10-years)

Class	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Water Infrastructure	\$ 180,000	\$ 62,233	\$ 6,698	\$ 65,549	\$ 6,156	\$ 255,446	\$ 3,914	\$ 10,922	\$ 33,637	\$ -

It is important to appreciate that just because modelling shows expiration of Remaining Useful Life, it does not mean that the asset will just stop working on day zero, water assets may survive double or triple its predetermined useful life by providing good maintenance and upkeep. Due to the unique environmental factors of living in a remote location with low rainfall and associated challenges, it is expected that 90% of our assets will survive well past their predetermined useful life. It also just as important the acknowledge that some assets will expire early or as a result of other outside influences.

Graph 13: Forecast Renewal Costs Water Infrastructure 2024-2070



New and Upgrade

Based on forecasting and no anticipated change in legislation there will be no upgrades or additions to the water assets.

Financial Summary

Table 14: Potable Water Expenditure

FINANCIAL YEAR	MAINTENANCE / OPERATING	RENEWAL / REPLACEMENT	TOTAL
2023/24	\$ 159,000	\$ 180,000	\$ 339,000
2024/25	\$ 159,000	\$ 62,233	\$ 221,233
2025/26	\$ 159,000	\$ 6,698	\$ 165,698
2026/27	\$ 159,000	\$ 65,549	\$ 224,549
2027/28	\$ 159,000	\$ 6,156	\$ 165,156
2028/29	\$ 159,000	\$ 255,446	\$ 414,446
2029/30	\$ 159,000	\$ 3,914	\$ 162,914
2030/31	\$ 159,000	\$ 10,922	\$ 169,922
2031/32	\$ 159,000	\$ 33,637	\$ 192,637
2032/33	\$ 159,000	\$ 0	\$ 159,000

Key Assumptions Made in Financial Forecast

Like all forecasting models, much of the work can be considered hypothetical. All costs are based upon 2023 pricing.

Forecast Reliability and Confidence

The initial calculations contained within this Plan are based on the existing data sets, with minimal forecasting information. Current confidence levels overall are reasonable. This is largely due to the nature of the long lives of most infrastructure assets and the inherent challenges in predicting the exact timing of their renewal.

This is the first formal draft of an Infrastructure and Asset Management Plan, and it has identified a number of areas where more data would be helpful. Future drafts of the Infrastructure and Asset Management Plans incorporating outputs from the Assetic predictor tools (Phase 2) will provide an improved standard and quality of information not experienced previously locally.

As the class AMPs are developed, the data quality will increase and as will the confidence levels.

Improvement Plan

TASK	TASK	RESPONSIBILITY	RESOURCE REQUIRED	TIMELINE
Condition audits	Undertake random condition audits	Manager Water	External resource	2023/24
Predictor Modelling	Subject water assets to predictor modelling	Asset Manager	Assetic	2023/24
Revaluation	Full revaluation to be undertaken 2023/24 FY	Asset Manager	Assetic + external resource	EOFY 2023/24
General Ledger	Revise structure to separate renewal, maintenance and operating expenditure	Senior Accountant	Nil	2022/23

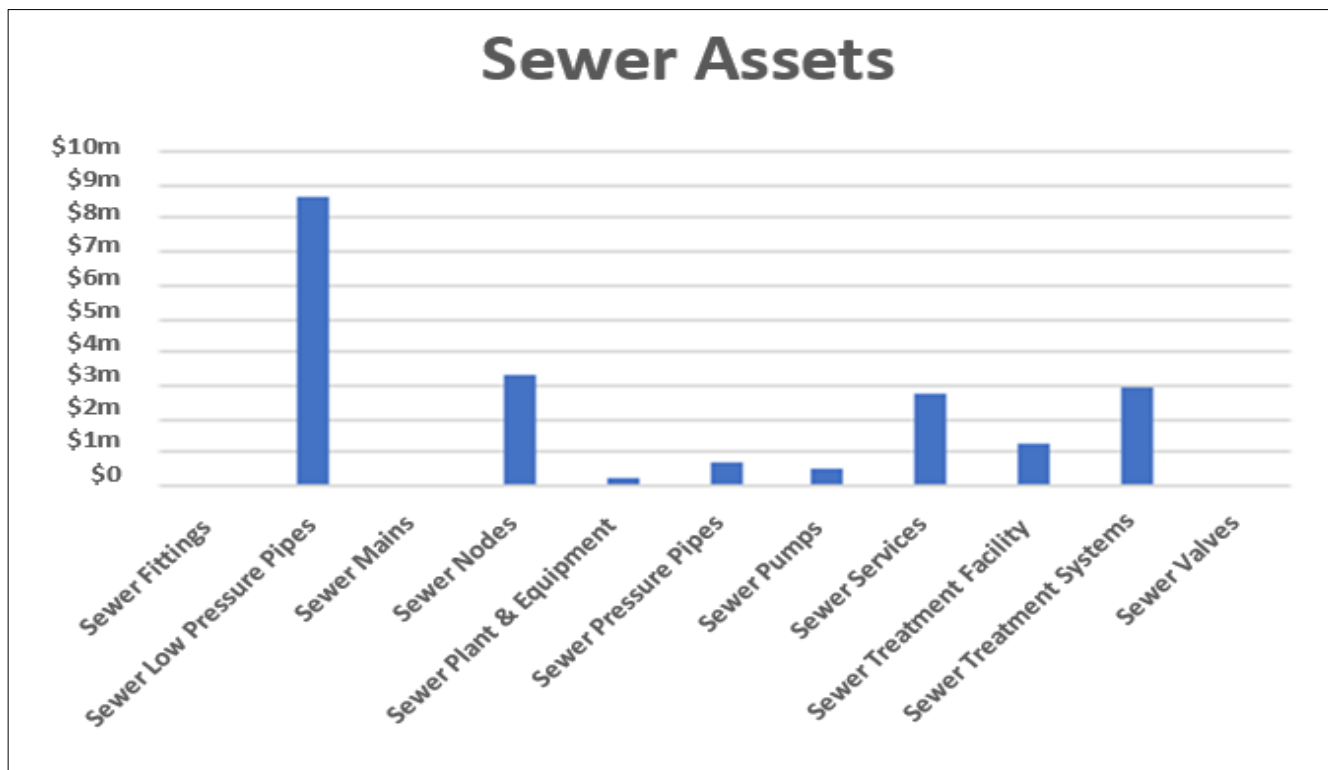
WASTEWATER

Asset Description

Council manages a sewer network of 49km, 2,150 sewer nodes, 9 pump stations and approximately 75 hectares of effluent ponds with a combined asset value of \$22.3m.

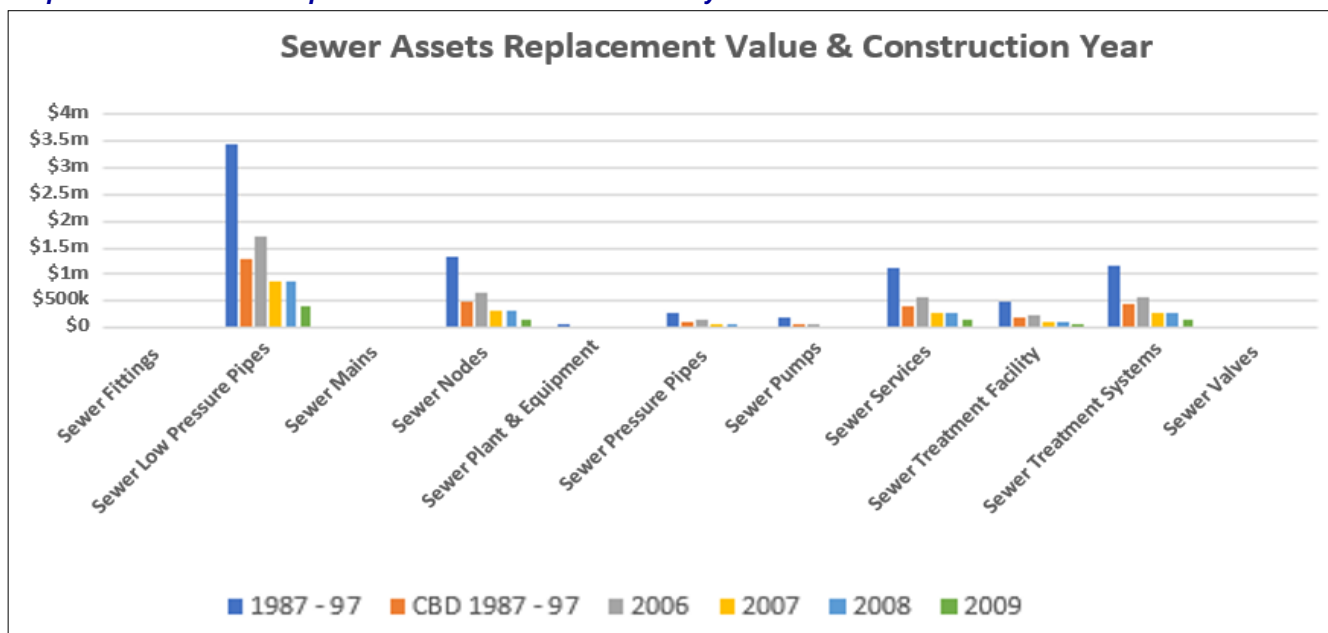
The below table shows asset value determined by asset class.

Graph 14: Sewer Assets

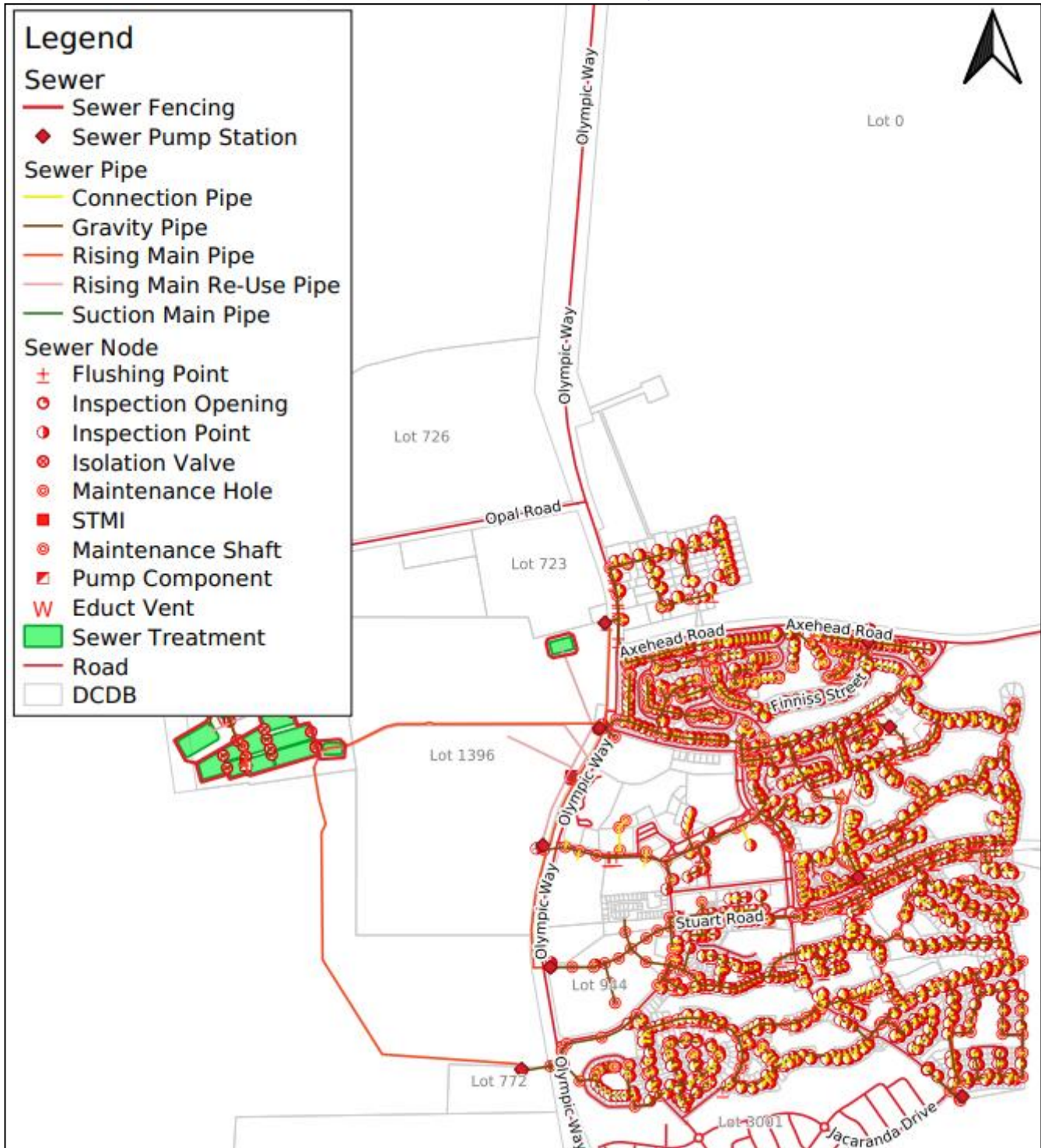


The below graph identifies the Replacement Value of Assets by Construction Year.

Graph 15: Sewer Assets replacement value and construction year



Map 4: Shows the volume and disposition of Sewer Assets across Roxby Downs



Levels of Service

Wastewater is collected and transported through some 49km of pipes via nine pump stations to a Wastewater Treatment Facility.

The wastewater collection network consists of:

- 43km of gravity sewer main, and 6km of raising mains, and
- Nine pumping stations.

Wastewater transfer pumps are situated in concrete walled wells that collect effluent from the gravity piping network connected to customer properties.

Pumps are automatic operation (start – stop), and have operator alarms for high level, thermal overload, seal probe, power failure and cyclic start. These assets supply wastewater to the Wastewater Treatment Plant.

The Roxby Downs Wastewater Treatment Plant (WWTP) utilises Waste Stabilisation Ponds (WSP) type treatment. It consists of the following elements in the treatment pond:

- 5.0ML HDPE lined anaerobic pond (receives output from rising mains),
- Three parallel earthen facultative ponds,
- Two parallel earthen maturation ponds,
- An earthen polishing pond,
- Earthen final dams,
- Winter storage dams (HDPE lined), and
- Chlorine disinfection to treated effluent pumped out from 'Final Dam 01'.

The WWTP dams are designed to operate at a depth of 1.0 to 1.5m. The overall volume of the system at 1.5m is 110ML and provides a retention time of a minimum of 50 days.

Once treated within, the Wastewater Treatment Plant recycled water is purposefully used.

Currently all recycled water is used for irrigation of the Roxby Golf Course and is pumped via an irrigation pump skid located adjacent to the storage dams. The supply of recycled water to the Golf Course is covered by an agreement, whereby Roxby Water provides water when available.

Investigations into how the use of treated wastewater can be deployed to replace the use of potable water for amenity irrigation of parks and gardens are being conducted (2022).

The Roxby Downs Wastewater Facility receives partially treated wastewater from BHP's wastewater treatment facility.

Table 15: Current State of Assets (sourced from Assetic Predictor Modelling)

4,248 <small>Asset Quantity</small>	\$117.53K <small>Initial Backlog</small>	72% <small>Average Service Potential</small>	0.99 <small>Average Condition</small>
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Future Demand

Demand Drivers

It is not anticipated that demand on our wastewater network will vary significantly over the forward estimates within this plan. Council acknowledges that there may be an opportunity to use more of our treated water in other areas within the Council area. Drivers that may affect demand include population change, changes to regulations, changes in demographics, seasonal factors, consumer preferences and expectations, technological changes, economic factors, agricultural practices, environmental awareness.

Demand Management Plan

Existing performance management provides adequately for the maintenance of the wastewater network.

Asset Valuation

The value of the Sewer assets recorded in the asset register and disclosed in Council's financial statements were reviewed as at 30 June 2019 and are due to be revalued in 2025.

Table 16: Replacement Cost and Depreciation FY22

FS CLASS	ACCOUNTING REPLACEMENT COST	ACCOUNTING ACCUMULATED DEPRECIATION	ACCOUNTING DEPRECIATED REPLACEMENT COST	ANNUAL DEPRECIATION
Sewerage Infrastructure	\$ 22,333,199	\$ 6,249,925	\$ 16,092,922	\$ 266,942
Total	\$ 22,333,199	\$ 6,249,925	\$ 16,092,922	\$ 266,942

Lifecycle Management

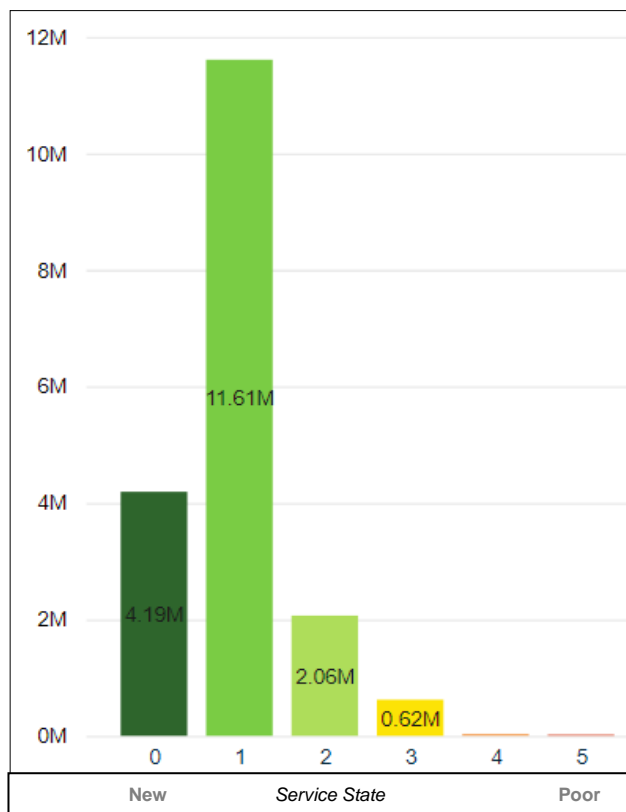
Council has committed to undertake lifecycle management initiatives to ensure that, where possible, significant shock expenditure may be avoided. This includes undertaking a logical schedule of random condition audits commencing at the oldest section of the town and, over time, (the full 10 years) continuing through to the newer developments. Council will invest in periodic inspections of major subterranean infrastructure to confirm the overall condition index against this plan.

Current Capacity and performance

The below table shows the Overall Condition Index for Sewer assets.

As a reference 0 = New condition and includes land which does not age, 1 = New Condition, 2 = Good Condition, 3 = Fair Condition, 4 = Useable condition, and 5 = Poor Condition.

Graph 16: Overall Condition Index for Sewer Assets



Operations and Maintenance Plan

Table 17: Historical Maintenance Expenditure – Sewer Assets

	2020	2021	2022	2023 BUDGET
SEWER ASSETS	\$0.265 M	\$0.251 M	\$0.323 M	\$0.568 M

Source: MCRD General Ledger

Council does not have adequate records of the cost of maintenance compared to the cost of renewal; however, due to the majority of its water assets not being near the end of their lives an assumption has been made that the expenditure is maintenance. This plan assumes that the Council will continue with the average spend amount from the last four years of \$352k.

Further iterations of this plan will incorporate new modelling of Potable water asset maintenance.

This total remains an overall part of the total inventory maintenance calculations and represents an overall investment to this asset class of \$3.52M over ten years.

Renewal Plan

It is not anticipated that any significant replacement wastewater treatment network assets will be required in the near future, however, due to almost 50% of the infrastructure approaching fifty percent of its useful life, this plan recommends preparing for potential increased demand towards the second half of this Infrastructure and Asset Management Plan.

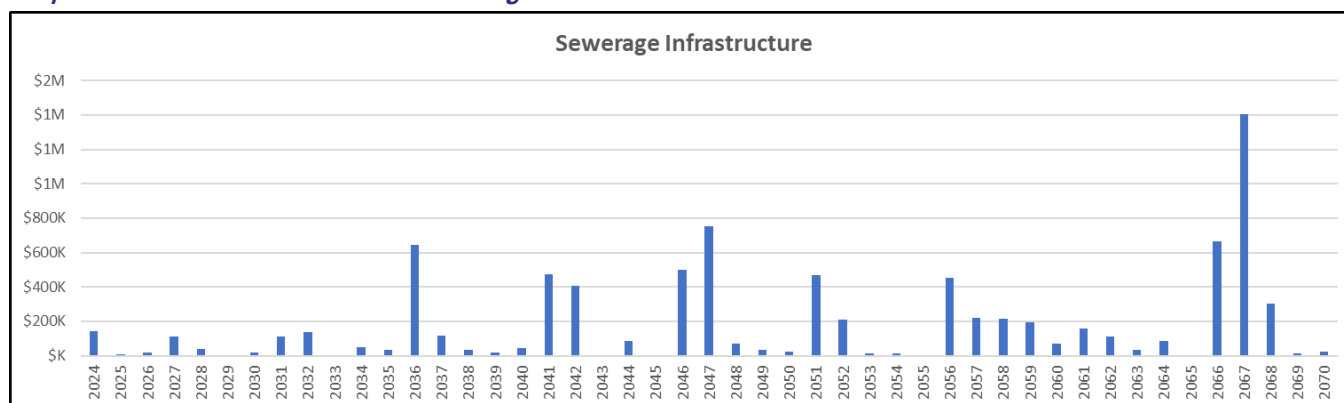
Due to the nature of this asset class, any underspends can be set aside for unexpected and overly high expenditure years or for unforeseen events and replacements.

Table 18: Forecast Renewal Costs Sewerage 10 years

Class	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Sewerage Infrastructure	\$ 141,224	\$ 8,500	\$ 17,000	\$ 112,878	\$ 39,666	\$ -	\$ 17,167	\$ 110,895	\$ 139,508	\$ 5,077

It is important to appreciate that just because modelling shows expiration of Remaining Useful Life, it does not mean that the asset will just stop working on day zero, Water infrastructure may survive double or triple its predetermined useful life by providing good maintenance and upkeep. Due to the unique environmental factors of living in a remote location with low rainfall and associated challenges, it is expected that 90% of our assets will survive well past their predetermined useful life. It is also noted that some assets will deteriorate prematurely as a result of other outside influences including extreme temperatures and sandy/saline soil conditions.

Graph 17: Forecast Renewal Costs Sewerage 2024-2070



New and Upgrade

It is not expected that legislation will adversely affect this plan in the foreseeable future. Where technology and/or safety influences our wastewater treatment, it shall be assessed on its merit and a suitable resolution decided with Senior Management.

It is prudent for Council to start to invest in renewals as we approach the 50% of useful life of the Sewer assets commencing at the early builds.

Financial Summary

Table 19: Wastewater Expenditure

FINANCIAL YEAR	MAINTENANCE / OPERATING	RENEWAL / REPLACEMENT	TOTAL
2023/24	\$ 352,000	\$ 141,224	\$ 493,224
2024/25	\$ 352,000	\$ 8,500	\$ 360,500
2025/26	\$ 352,000	\$ 17,000	\$ 369,000
2026/27	\$ 352,000	\$ 112,878	\$ 464,878
2027/28	\$ 352,000	\$ 39,666	\$ 391,666
2028/29	\$ 352,000	\$ -	\$ 352,000
2029/30	\$ 352,000	\$ 17,167	\$ 369,167
2030/31	\$ 352,000	\$ 110,895	\$ 462,895
2031/32	\$ 352,000	\$ 139,508	\$ 491,508
2032/33	\$ 352,000	\$ 5,077	\$ 357,077

Key Assumptions Made in Financial Forecast

Like all forecasting models, much of the work can be considered hypothetical. All costs are based upon 2023 pricing.

Forecast Reliability and Confidence

The initial calculations contained within this Plan are based on the existing data sets, with minimal forecasting information. Current confidence levels overall are reasonable. This is largely due to the nature of the long lives of most infrastructure assets and the inherent challenges in predicting the exact timing of their renewal. Ongoing evaluation and validation of actual condition rating will be undertaken to confirm the asset replacement and renewal program.

This is the first formal draft of Council’s Infrastructure and Asset Management Plan. It has identified a number of areas where more data would be helpful. Future drafts of the Infrastructure and Asset Management Plans will incorporate outputs from the Assetic predictor tools (Phase 2) will provide an improved standard and quality of information not experienced previously locally.

As the class AMPs are developed, the data quality will increase and as will the confidence levels.

Improvement Plan

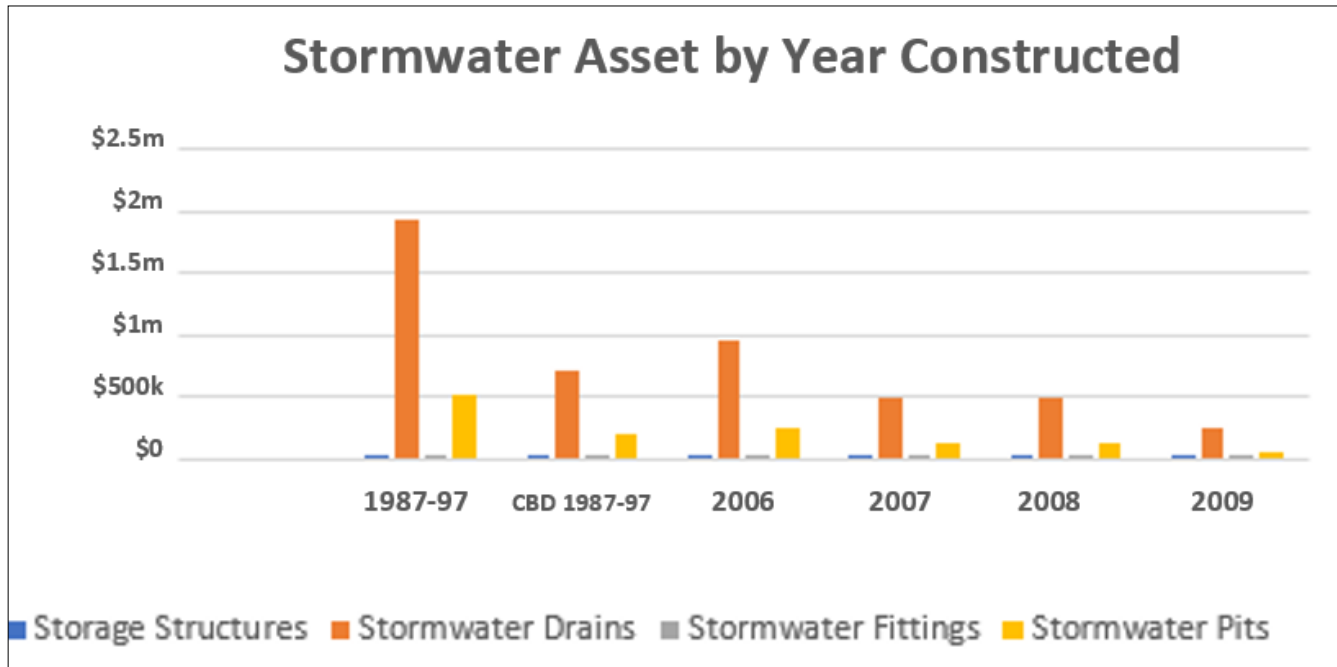
TASK	TASK	RESPONSIBILITY	RESOURCE REQUIRED	TIMELINE
Random condition audit	Undertake random condition audit on higher risk asset class	Manager Water	External resource	2023/24
Revaluation	Full revaluation to be undertaken 2023/24 FY	Asset Manager	Assetic + external resource	EOFY 2023/24
General Ledger	Revise structure to separate renewal, maintenance and operating expenditure	Senior Accountant	Nil	2023/24

STORMWATER

Asset Description

Council manages a stormwater network of 17.4km, 38,730sqm of catchment ponds and two pump stations with a combined asset value of \$6.5m.

Graph 18: Stormwater Assets by Year Constructed

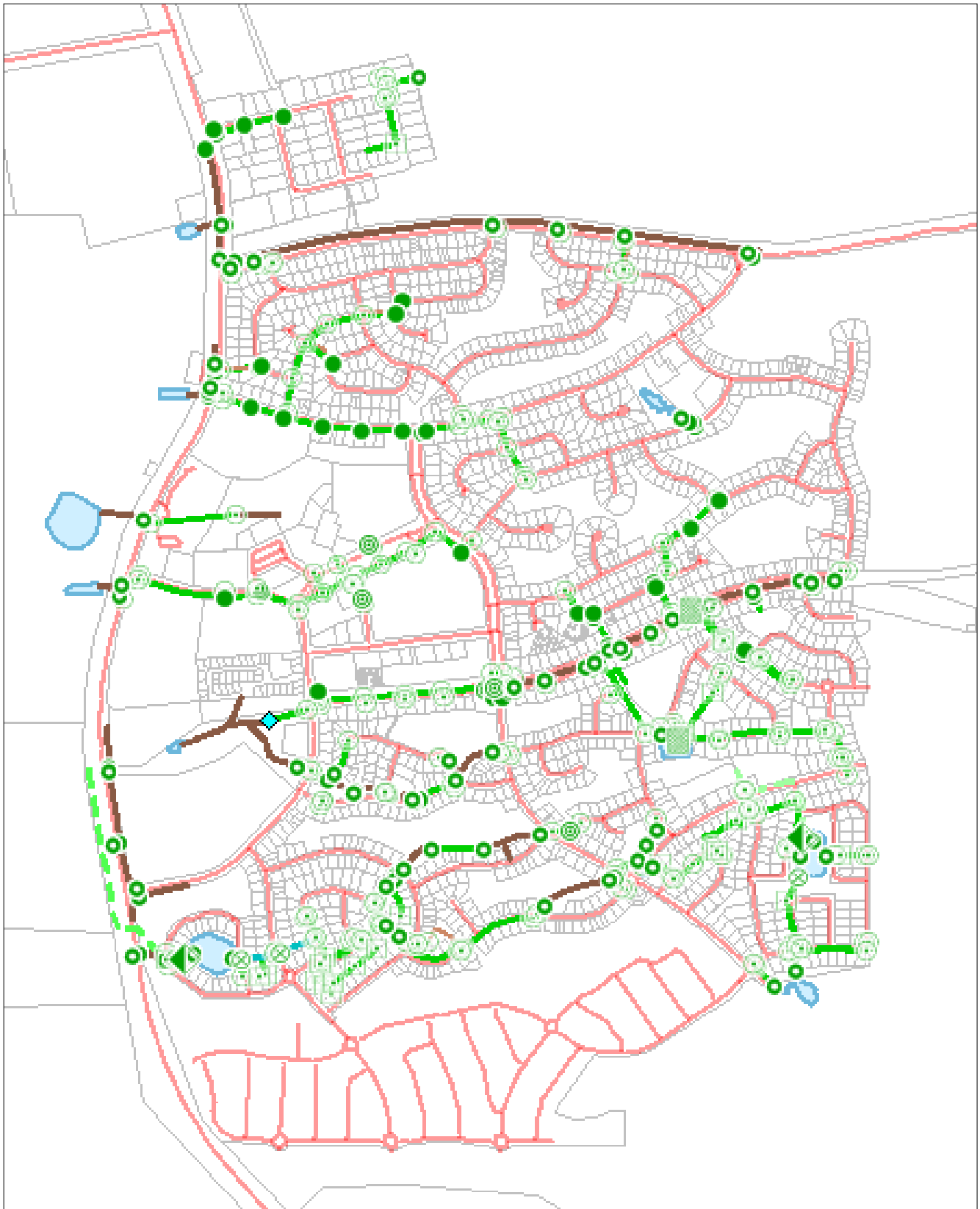


Unlike most other assets within Council's substantial portfolio, a large portion of the stormwater assets are open land flood mitigation and storage ponds which can be maintained in relatively small sections rather than replacing an entire pond, or street open drain.

The local district has experienced significant weather events over the last several years to which the flood mitigation and stormwater infrastructure has been tested. Stormwater collection, runoff and management has performed very well during each of these events.

Council staff undertake a regular inspection routine to ensure that any damage or general wear and tear issues are identified and corrected in a minimal timeframe. Council is also committed to responding within one working day to any notification of hazards around either of the ponds or exclusion fencing by evaluating and, if necessary, making the hazard safe.

Map 5: Shows the volume and disposition of Stormwater Assets across Roxby Downs



Levels of Service

The stormwater infrastructure provides a very good level of service to the local community.

Table 20: Determined Levels of Service

KEY PERFORMANCE MEASURE	LEVELS OF SERVICE OBJECTIVE	PERFORMANCE MEASURE PROCESS	CURRENT SERVICE	TARGET
PERFORMANCE	Rainfall and runoff are managed within Council 's existing stormwater infrastructure with negligible impact on the public and property for a five-year Average Recurrence Interval (ARI) on Arterial and Collector Roads and a two-year ARI for local roads in town and a ten-year ARI for open drains.	Stormwater management plans (SMPs) prepared and upgrade plans in place.	Planned projects funded in annual budgets. SMP developed for Roxby Downs. No long-term upgrade plan in place.	High priority projects to be scoped, designed and budgeted over 10 years.
RELIABILITY	Drainage system operation without blockage.	Report or identify blockages.	Reactive.	20 complaints per year.
RESPONSIVENESS	Response to request within set timeframe.	Response to complaints assessed and recommendation made.	Assess and create works request and record outcome, varied timeframe.	5 working days
AMENITY	Maintain visual amenity of stormwater infrastructure.	Maintain, clear debris and weeds from pit entry points.	Weed spraying and debris clearing to suit seasonal conditions.	Weed spraying and debris clearing as programmed.

Future Demand

Demand Drivers

It is not anticipated that demand on our stormwater network will vary significantly over the forward estimates within this plan. Drivers that may affect demand include seasonal factors, consumer preferences and expectations, technological changes, economic factors, and environmental awareness.

Demand Management Plan

Existing performance management provides adequately for the maintenance of the stormwater network.

Lifecycle Management

Council has committed to undertake lifecycle management initiatives to ensure that, where possible, significant shock expenditure may be avoided. This includes regular condition audits. Council will invest in periodic inspections of major subterranean infrastructure to confirm the overall condition index against this plan. This will include remote camera access and inspection of drain networks.

Current Capacity and performance

There are no identified, actual, or perceived deficiencies within the service or infrastructure provided.

Asset Valuation

The value of the Stormwater assets recorded in the asset register and disclosed in the Council 's financial statements were reviewed as of 30 June 2017 they are due to be revalued in 2023.

Table 21: Stormwater Asset Valuation

FS CLASS	ACCOUNTING REPLACEMENT COST	ACCOUNTING ACCUMULATED DEPRECIATION	ACCOUNTING DEPRECIATED REPLACEMENT COST	ANNUAL DEPRECIATION
Stormwater Drainage	\$ 6,646,414	\$ 2,390,035	\$ 4,256,379	\$ 96,260
Total	\$ 6,646,414	\$ 2,390,035	\$ 4,256,379	\$ 96,260

The current rate of consumption (annual depreciation/depreciable amount) for stormwater assets is 1.4%. This indicates that on average, over the life of an asset, 1.4 % of the depreciable amount is consumed annually. The translation of this consumption rate into renewal is subject to a decision on funding, service level determination and asset condition.

Asset Condition

The entire Stormwater Asset inventory has an Overall Condition Index of 2 which is consistent with the age and disposition of the asset class portfolio.

Operations and Maintenance Plan

With due consideration to the resources presently available to Council, the local auditing and inspection regime is sufficient to maintain these assets at or above the current levels of service provision.

Table 22: Historical Maintenance Expenditure – Stormwater

	2020	2021	2022	2023 BUDGET
STORMWATER	\$0.038 M	\$0.065 M	\$0.030 M	\$0.064 M

Source: MCRD General Ledger

Council does not have adequate records of the cost of maintenance compared to the cost of renewal, however due to the majority of its stormwater assets not being near the end of their lives an assumption has been made that the expenditure is maintenance. This plan assumes that the Council will continue with its 2023 budget amount into the future.

Further iterations of this plan will incorporate new modelling of stormwater asset maintenance.

This total remains an overall part of the total inventory maintenance calculations and represents an overall investment to this asset class of \$0.064 M over ten years.

Renewal Plan

It is not anticipated that any significant new stormwater network assets will be required in the near future. Due to best practice principals, investment toward flood mitigation ponds maintenance is encouraged every five years. This will require heavy earthmoving equipment to clear and remove silt from building up significantly and reducing the overall capacity of the ponds over time.

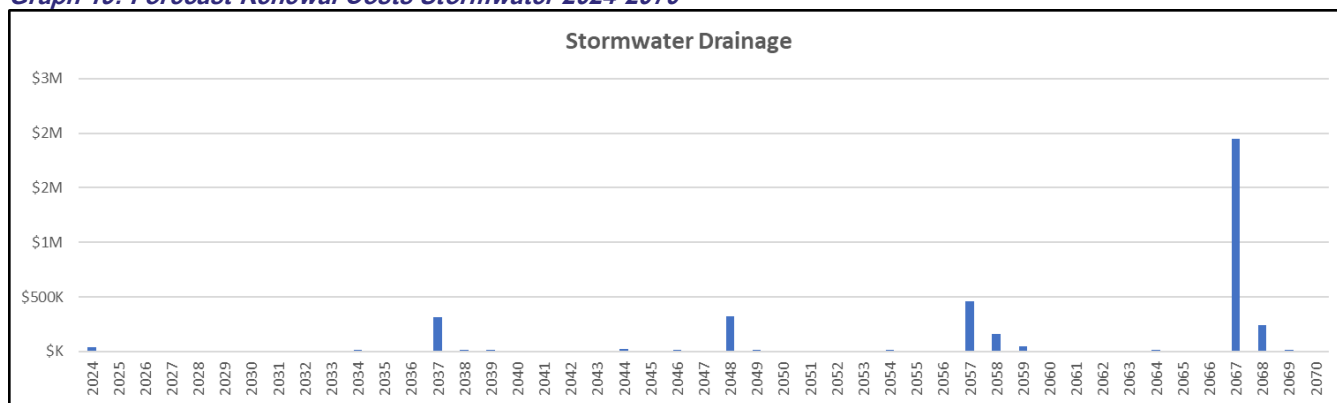
Due to the nature of this asset class, any underspends can be set aside for anticipated high expenditure years or for unforeseen events and maintenance.

Table 23: Forecast Renewal Costs Stormwater 10 years

Class	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Stormwater Drainage	\$ 40,000	\$ -	\$ -	\$ 4,724	\$ 4,724	\$ 734	\$ -	\$ -	\$ -	\$ -

It is important to appreciate that just because modelling shows expiration of Remaining Useful Life, it does not mean that the asset will just stop working on day zero, Councils Stormwater infrastructure may survive double or triple its predetermined useful life by providing good maintenance and upkeep. Due to the unique environmental factors of living in a remote location with low rainfall and associated challenges, it is expected that 90% of our assets will survive well past their predetermined useful life. It is also noted that some assets will deteriorate prematurely as a result of other outside influences including extreme temperatures and sandy/saline soil conditions.

Graph 19: Forecast Renewal Costs Stormwater 2024-2070



New and Upgrade

Legislation is not expected to adversely affect this plan in the foreseeable future. Where technology and or safety influence our storm water treatment, it shall be assessed on its merit and a suitable resolution decided with Senior Management.

Financial Summary

Table 24: Stormwater Expenditure

	MAINTENANCE / OPERATING	RENEWAL / REPLACEMENT	TOTAL
2023/24	\$ 64,000	\$ 40,000	\$ 104,000
2024/25	\$ 64,000	\$ -	\$ 64,000
2025/26	\$ 64,000	\$ -	\$ 64,000
2026/27	\$ 64,000	\$ -	\$ 64,000
2027/28	\$ 64,000	\$ 4,724	\$ 68,724
2028/29	\$ 64,000	\$ 4,724	\$ 68,724
2029/30	\$ 64,000	\$ 734	\$ 64,734
2030/31	\$ 64,000	\$ -	\$ 64,000
2031/32	\$ 64,000	\$ -	\$ 64,000
2032/33	\$ 64,000	\$ -	\$ 64,000

Key Assumptions made in financial forecast

Like all forecasting models, much of the work can be considered hypothetical. All costs are based upon 2023 pricing.

Forecast reliability and confidence

The initial calculations contained within this Plan are based on the existing data sets, with minimal forecasting information. Current confidence levels overall are reasonable. This is largely due to the nature of the long lives of most infrastructure assets and the inherent challenges in predicting the exact timing of their renewal.

Future drafts of the Infrastructure and Asset Management Plans incorporating outputs from the Assetic predictor tools (Phase 2) will provide an improved standard and quality of information not experienced previously locally.

As the class AMPs are developed, the data quality will increase and as will the confidence levels.

Improvement Plan

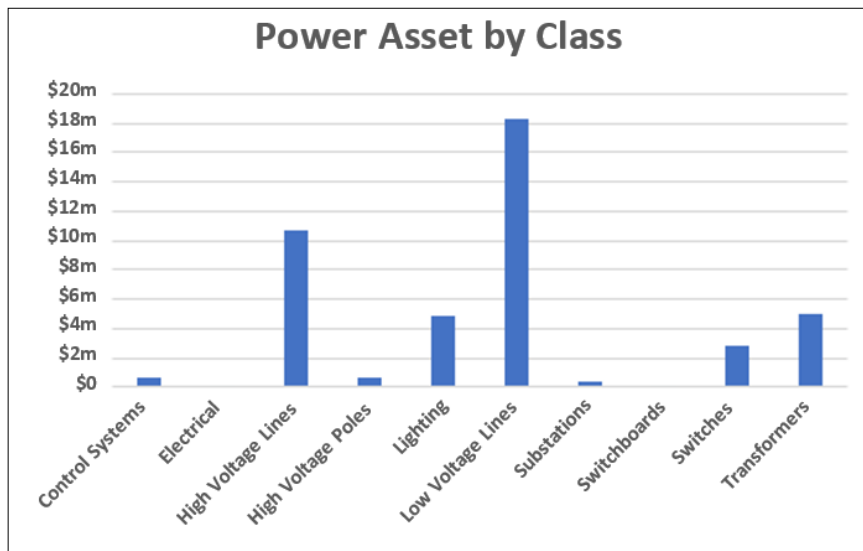
TASK	TASK	RESPONSIBILITY	RESOURCE REQUIRED	TIMELINE
Condition audit	Undertake random condition audit of stormwater flood mitigation dams	Manager	External resource	2023/24
Predictor Modelling	Subject Stormwater assets to predictor modelling	Asset Manager	Assetic	2023/24
General Ledger	Revise structure to separate renewal, maintenance and operating expenditure	Senior Accountant	Nil	2023/24

POWER

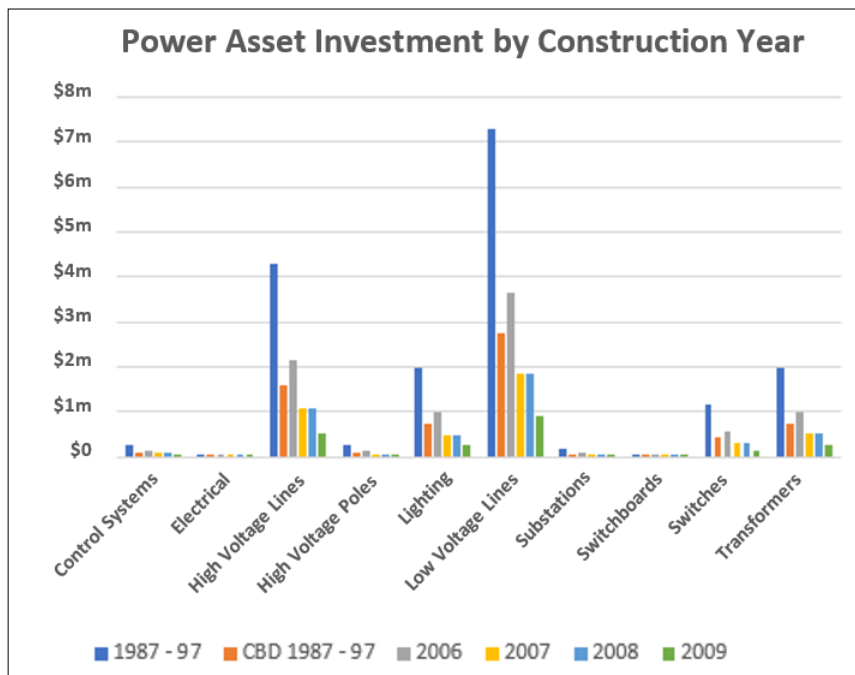
Asset Description

Council manages a Power network of 75.2km of low/high voltage cables, 38 transformers, three generators, 2,331 commercial and private meters, 776 street & path lights, 205 section pillars, 715 service pillars with a combined asset value of \$41.7M.

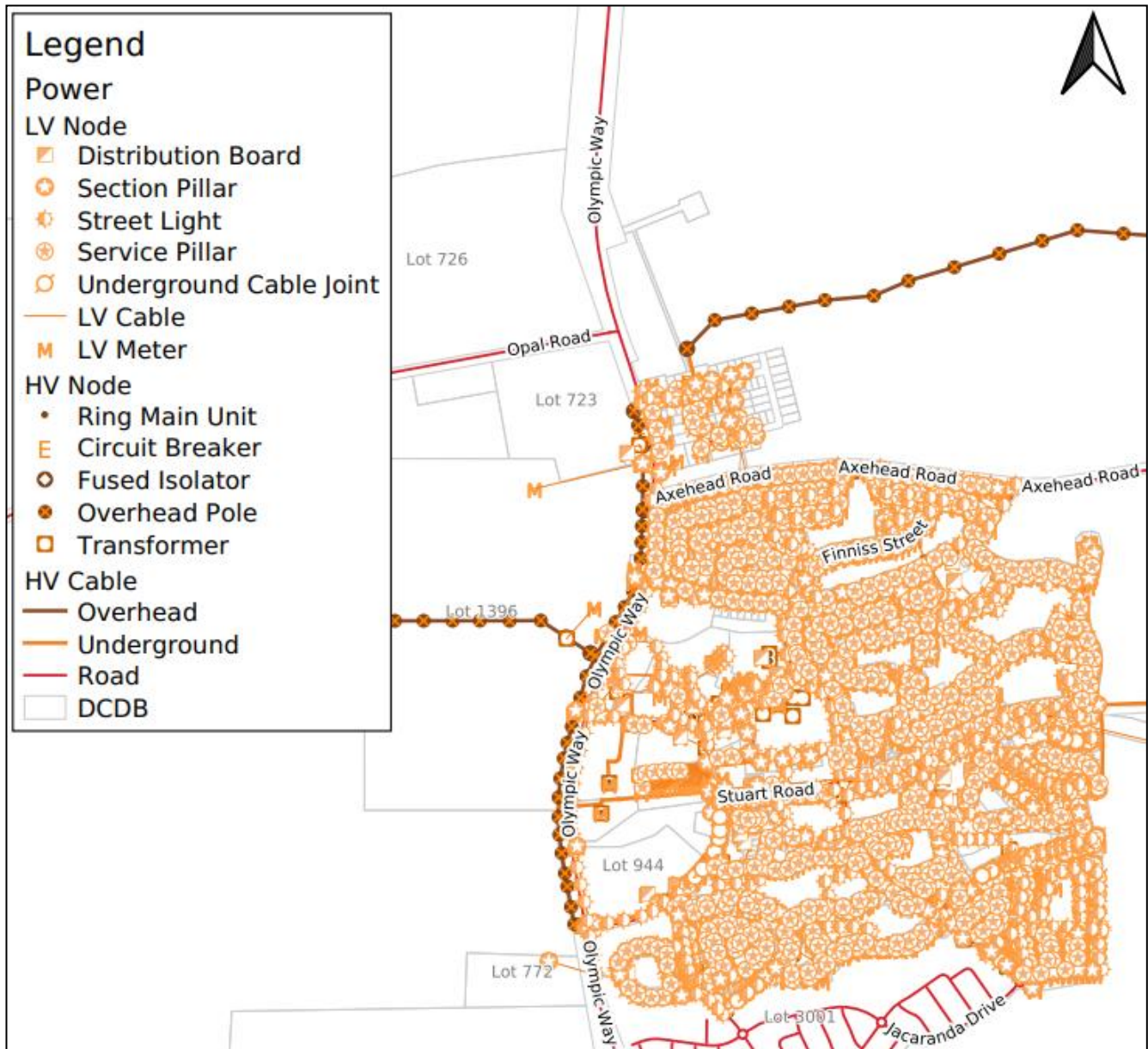
Graph 20: Roxby Power Asset by Class



Graph 21: Roxby Power Asset investment by Year of Construction



Map 6: Shows the volume and disposition of Power Assets across Roxby Downs



High Voltage (HV) Network

Roxby Power receives supply from two 5MVA 33kv/11kv transformers located in a BHP sub-station at 11 Callana Road.

Roxby Power owns a section of the main distribution board in the sub-station – a meter panel, two 600A circuit breakers and a 200A fused isolator.

There are 3 distribution lines exiting the sub-station.

An 11kv feeder cable (RD-01) that travels 120m underground to an overhead line that traverses the western side of the township alongside Olympic Way.

There are seven over-to-under tee-offs from the overhead line. These are protected by fused switches or circuit breakers with the supply travelling eastwards into the township, mainly as underground lead armoured cable.

There is one overhead tee-off (RD-02) that supplies the Roxby Downs Golf Club and Roxby Downs Wastewater Treatment Ponds via a pad mount transformers.

An 11kV feeder cable that travels 30m underground to a 4km long overhead line that runs east along the Rabbit Fence then south along a constructed access road to a distribution cubicle. Power is metered at the cubicle and is fed via a circuit breaker to RM13 on the end of Stuart Road. RM13 is a 4-way unit and supplies 3 ring mains.

An 11kV feeder that runs underground along Callana Road and supplies S21 in Frome Street. This feeder is fed from the 200A Fused Isolator in the sub-station.

The 11kV system is sectioned into 10 circuits. Some circuits are radial and have no ring main capacity. Distribution through the township is all underground. The system utilises 'free standing' Ring Main Units (RMU's) and pad mount transformers with integrated RMU's for system control switching. Four (4) pad mount transformers are not on the Ring Main system. Connection through LV Ring Mains is possible.

Low-Voltage (LV) Network

Underground LV circuits originate from pad mount transformers. Each transformer, depending on output rating, can provide 1 - 6 LV distribution circuits.

Each transformer has an LV Isolator in either a BBC Inline Pull Load Break Switch or a Merlin Guerin Load Break Switch configuration.

Each outgoing circuit is protected by either BBC Fused Switches, fuses ratings from 120A, 315A or 500A or Merlin Guerin 250A, 400A or 600A Circuit Breakers.

LV Circuits are primarily 4 core 185mm copper cables PVC/PVC/Nylon/PVC.

Circuits travel via common trench and are terminated at strategically located Rimco switching pillars. Switching is by insertable 400A solid links. All dead-end cables terminate in a switching type pillar. Circuits from adjacent transformer areas may be joined in a switching pillar to create a ring main. Loads between adjacent transformer areas may also be adjusted by relocating the normal open link points to appropriate places.

Consumer installations are fed from either the LV Switching Pillar or a smaller Service Connection Pillar. All pillars are able to provide 1, 2 or 3 phase supplies. All consumer mains are supplied through 60A, 80A or 100A fuses in the pillars.

Service Connection pillars are hot taped by GEC Poly Filled Ring Connection Kits using 25mm or 35mm copper 4 core PVC/PVC/Nylon/PVC cables.

Nominal domestic consumer mains are 16mm.

Commercial/industrial supplies are 16mm, 25mm or 35mm.

Normal meter installations consist of a Council circuit breaker with lock off facility and the Council owned meter.

Levels of Service

Council commits to the following levels of service specific to power:

- Deliver commercial and domestic power supply to all premises in Roxby Downs.
- Promote the efficient use of electricity.
- Provide feed-in tariff for domestic users.
- Streetlights operational on all streets during non-daylight hours.
- Streetlights to provide illumination for pedestrians walking streets and using parks. Prompt repair of malfunctioning streetlights.

Future Demand

Demand Drivers

It is not anticipated that demand on our Power network will vary significantly over the forward estimates within this plan. Drivers that may affect demand include population change, changes to regulations, changes in demographics, seasonal factors, consumer preferences and expectations, technological changes, economic factors, agricultural practices and environmental awareness.

Demand Management Plan

Existing performance management provides adequately for the maintenance of the Power Infrastructure.

Lifecycle Management

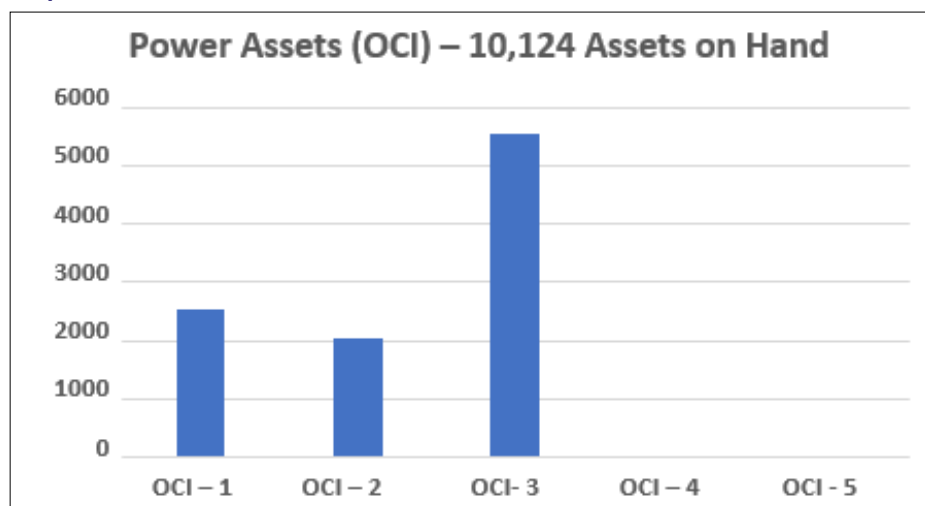
Current Capacity and performance

There are no identified, actual, or perceived deficiencies within the power service or infrastructure provided.

Asset Condition

As a reference 0 = New condition and includes land which does not age, 1 = New Condition, 2 = Good Condition, 3 = Fair Condition, 4 = Useable condition, and 5 = Poor Condition.

Graph 22: Power Assets Overall Condition index



Asset Valuation

The value of the Power assets recorded in the asset register and disclosed in the Council’s financial statements were reviewed as of 30 June 2017 they are due to be revalued in 2023.

Table 25: Power Infrastructure

FS CLASS	ACCOUNTING REPLACEMENT COST	ACCOUNTING ACCUMULATED DEPRECIATION	ACCOUNTING DEPRECIATED REPLACEMENT COST	ANNUAL DEPRECIATION
Power Infrastructure	\$ 41,743,254	\$ 20,513,827	\$ 21,229,427	\$ 803,450
Total	\$ 41,743,254	\$ 20,513,827	\$ 21,229,427	\$ 803,450

Operations and Maintenance Plan

With due consideration to the resources presently available to Council, the local auditing and inspection regime is sufficient to maintain these assets at or above the current levels of service provision.

Table 26: Historical Maintenance Expenditure – Power

	2020 \$M	2021 \$M	2022 \$M	2023 BUDGET \$M
POWER	\$0.226 M	\$0.334 M	\$0.442 M	\$0.408 M

Source: MCRD General Ledger

Council does not have adequate records of the cost of maintenance compared to the cost of renewal, however due to the majority of its power assets not being near the end of their lives an assumption has been made that the expenditure is maintenance. This plan assumes that the Council will continue with its 2023 budget amount into the future.

Further iterations of this plan will incorporate new modelling of stormwater asset maintenance.

This total remains an overall part of the total inventory maintenance calculations and represents an overall investment to this asset class of \$4.1 M over ten years.

Renewal Plan

Power assets represent some of the oldest assets within our asset register. Whilst our total register shows that 90% of our assets are below 50% of their remaining useful life, the remaining 10% outside of that threshold is shared by both water and power assets, which is logical when considering the town construction as expressed at the introduction section of this plan. Transformers represent significant early investment and as such 50% of our transformers are at or above 80% of their remaining useful life. (see below table)

It is council’s plan to commence a replacement schedule of 1 x transformer per year, determined by age.

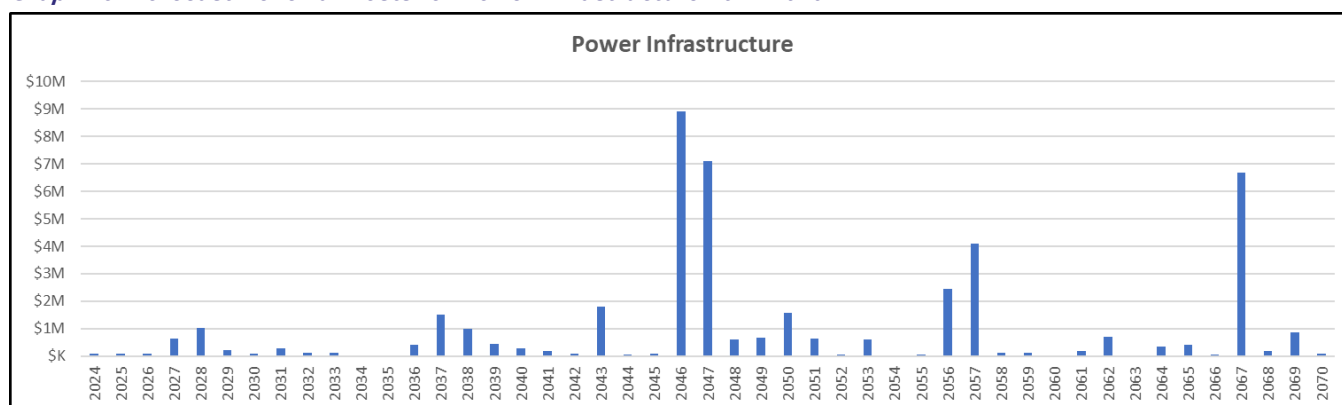
Due to the nature of this asset class, any underspends can be set aside for anticipated high expenditure years or for unforeseen events and maintenance.

Table 27: Forecast Renewal Costs for Power Infrastructure 10 years

Class	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Power Infrastructure	\$ 100,000	\$ 100,000	\$ 100,139	\$ 627,195	\$1,032,668	\$ 227,699	\$ 101,437	\$ 277,053	\$ 166,823	\$ 103,109

It is important to appreciate that just because modelling shows expiration of Remaining Useful Life, it does not mean that the asset will just stop working on day zero, power infrastructure may survive double or triple its predetermined useful life by providing good maintenance and upkeep. Due to the unique environmental factors of living in a remote location with low rainfall and associated challenges, it is expected that 90% of our assets will survive well past their predetermined useful life. It also just as important the acknowledge that some assets will expire early or as a result of other outside influences.

Graph 23: Forecast Renewal Costs for Power Infrastructure 2024-2070



New and Upgrade

It is not expected that legislation will adversely affect this plan in the foreseeable future. Where technology and or safety influence our power network, it shall be assessed on its merit and a suitable resolution decided with Senior Management.

We have committed to a program of replacing the current streetlights with LED lights (50% completed). This will reduce future operating and maintenance costs. At this stage the Infrastructure and Infrastructure and Asset Management Plan does not include any new allowances as it is expected that the installation of these lights will be incorporated into future maintenance programs where the savings in electricity fund the installation over the life of the plan.

The installation of solar power panels will have an impact on the operations of Roxby Power. Financially the use of solar power has a financial impact in two ways. Firstly, it reduces the demand and therefore the revenue Council makes on reselling electricity and secondly Council pays customers more for the electricity they input into the system than the amount Council pays for electricity from BHP. Council is able to adjust the feed-in tariffs as required.

The current pricing policy limits the electricity buy back price to units of less than 10kW, which caps the potential adverse financial impact of private solar power generation.

Transformers are regularly monitored and are nearing the time in their lifecycle where they will require repair and/or replacement. This is expected to be funded through the existing maintenance budget.

Financial Summary

Table 28: Power Expenditure

FINANCIAL YEAR	MAINTENANCE / OPERATING	RENEWAL / REPLACEMENT	TOTAL
2023/24	\$ 410,000	\$ 100,000	\$ 510,000
2024/25	\$ 410,000	\$ 100,000	\$ 510,000
2025/26	\$ 410,000	\$ 100,139	\$ 510,139
2026/27	\$ 410,000	\$ 627,195	\$ 1,037,195
2027/28	\$ 410,000	\$ 1,032,668	\$ 1,442,668
2028/29	\$ 410,000	\$ 227,699	\$ 637,699
2029/30	\$ 410,000	\$ 101,437	\$ 511,437
2030/31	\$ 410,000	\$ 277,053	\$ 687,053
2031/32	\$ 410,000	\$ 166,823	\$ 576,823
2032/32	\$ 410,000	\$ 103,109	\$ 513,109

Key Assumptions made in financial forecast

All costs are based upon 2023 pricing.

Forecast reliability and confidence

The initial calculations contained within this Plan are based on the existing data sets, with minimal forecasting information. Current confidence levels overall are reasonable. This is largely due to the nature of the long lives of most infrastructure assets and the inherent challenges in predicting the exact timing of their renewal.

Future drafts of the Infrastructure and Asset Management Plans incorporating outputs from the Assetic predictor tools (Phase 2) will provide an improved standard and quality of information not experienced previously locally.

Improvement Plan

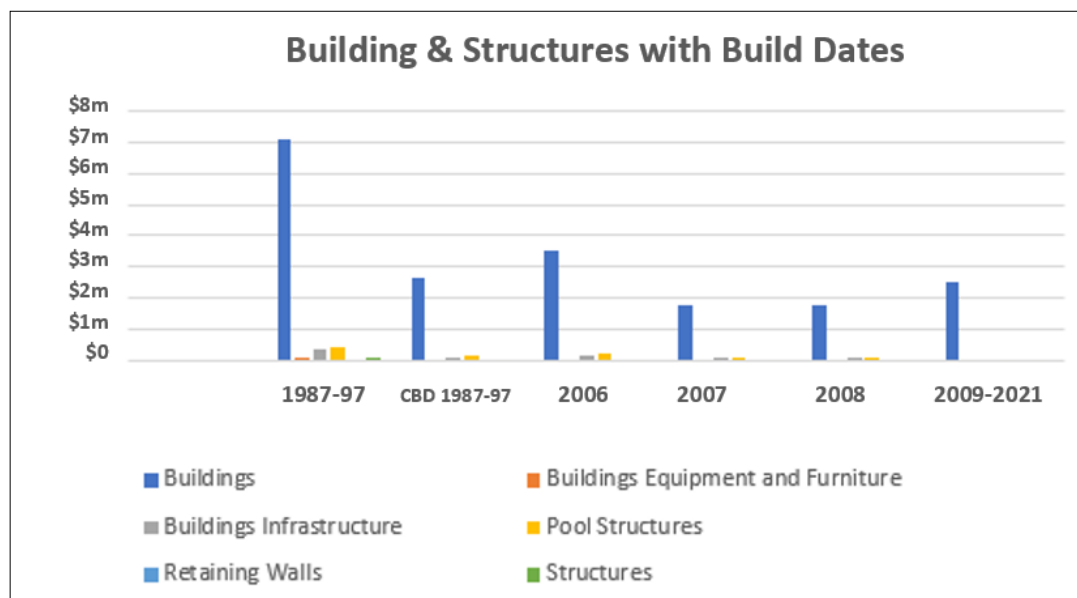
TASK	TASK	RESPONSIBILITY	RESOURCE REQUIRED	TIMELINE
Condition Audit	Undertake random condition audits of electrical subterranean infrastructure	Manager Power	External resource	2023/24
Predictor Modelling	Subject Power assets to predictor modelling	Asset Manager	Assetic	2023/24
General Ledger	Revise structure to separate renewal, maintenance and operating expenditure	Senior Accountant	Nil	2023/24

BUILDINGS AND STRUCTURES

Asset Description

Council manages 46 buildings including Houses, Office Buildings, the Recreation Centre, Cinema, Library, Youth Centre, Pool Complex, Café and other community structures including tennis courts, netball courts and off leash dog park with a combined value of \$16.95 M.

Graph 24: Building & Structures with Build Dates



Levels of Service

Council commits to:

- Maintaining buildings and facilities to a high standard.
- Providing clean and operational public conveniences at Richardson Place, Lions Park, Township Oval, Hermit Street and Rotary Park from 6.00am to 9:00pm (Township Oval facilities are opened only when there are events on at the oval).
- Ensuring that public conveniences are well maintained.

Table 29: Buildings and Structures Levels of Service

INSPECTION TYPE	BUILDING HIERARCHY	INSPECTION REGIME	ACTIVITY UNDERTAKEN	RESOURCES
Fire Services	All	6 monthly	Yes	External
Pest Inspections	All	Annual	Yes	External
Contract Cleaning Inspections	All	Random Audit	Yes	Internal
Electrical Inspections	Premium	3 Month Test & Tag	Yes	External
	Moderate	3 Month Test & Tag	Yes	External
	Standard	6 Month Test & Tag	Yes	External
Plumbing & Gas Services	Premium	Annual	No	External
	Moderate	6 monthly	No	External
	Standard	6 monthly	No	External
Air-Conditioning	All	Quarterly	No	External
Whs/Risk Audit	Premium	6 Monthly	No	Internal
	Moderate	Annual	No	Internal
	Standard	6 monthly	No	Internal
Maintenance Inspections	Premium	Annual	As needed	Internal
	Moderate	Annual	As needed	Internal
	Standard	Bi-Annual	As needed	Internal

In addition, there are specific standards regarding the operation of the Leisure & Cultural Centre. These are:

- High quality indoor stadium facilities,
- A centre primarily for the conduct of recreation, youth and community activities, and
- High quality outdoor netball and tennis courts.

Future Demand

Demand Drivers

It is not anticipated that demand on our buildings and structures will vary significantly over the forward estimates within this plan. Drivers that may affect demand include population change, changes to regulations, changes in demographics, seasonal factors, consumer preferences and expectations.

Demand Management Plan

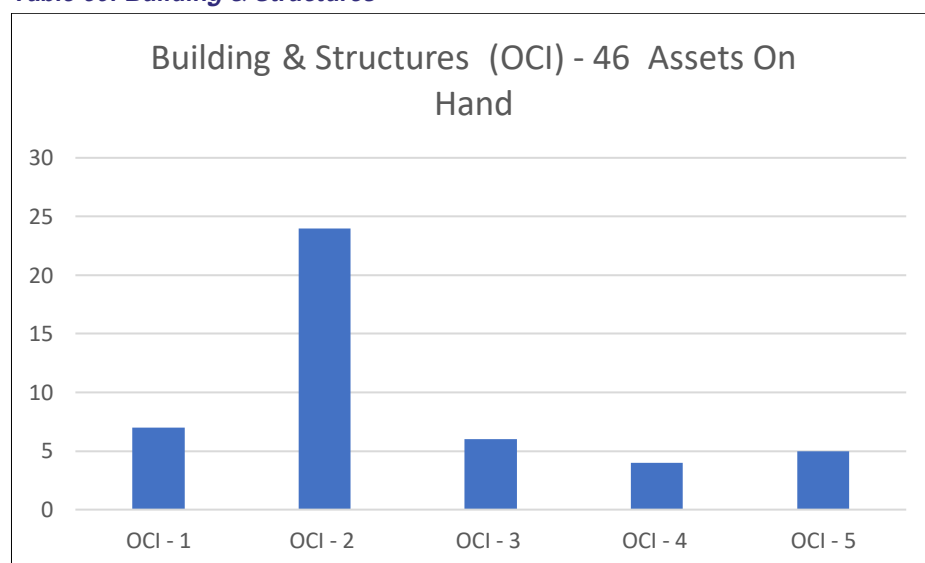
Existing performance management provides adequately for the maintenance of the building and structure infrastructure.

Lifecycle Management

Current Capacity and performance

As a reference 0 = New condition and includes land which does not age, 1 = New Condition, 2 = Good Condition, 3 = Fair Condition, 4 = Useable condition, and 5 = Poor Condition.

Table 30: Building & Structures



Asset Valuation

The value of the Buildings and Structures assets recorded in the asset register and disclosed in the Council's financial statements were revalued as at 30 June 2020 they are due to be revalued in 2026.

Table 31: Buildings and Structures Asset Valuation

FS CLASS	ACCOUNTING REPLACEMENT COST	ACCOUNTING ACCUMULATED DEPRECIATION	ACCOUNTING DEPRECIATED REPLACEMENT COST	ANNUAL DEPRECIATION
Council Building	\$ 14,934,979	\$ 7,993,381	\$ 6,941,598	\$ 114,165
Other Buildings	\$ 2,007,087	\$ 731,689	\$ 1,275,398	\$ 25,309
Total	\$ 16,942,066	\$ 8,725,070	\$ 8,216,996	\$ 139,474

Operations and Maintenance Plan

With due consideration to the resources presently available to Council, the local auditing and inspection regime is sufficient to maintain these assets at or above the current levels of service provision.

Table 32: Historical Maintenance Expenditure – Buildings

	2020 \$M	2021 \$M	2022 \$M	2023 BUDGET \$M
BUILDINGS	\$0.555 M	\$0.611 M	\$0.583 M	\$0.621 M

Source: MCRD General Ledger

Council does not have adequate records of the cost of maintenance compared to the cost of renewal and operating. This plan assumes that the Council will continue with its 2023 budget amount into the future.

Further iterations of this plan will incorporate new modelling of building asset maintenance.

This total remains an overall part of the total inventory maintenance calculations and represents an overall investment to this asset class of \$6.21 M over ten years.

Renewal Plan

Plans are being developed to replace a significant air-conditioning system within the Roxby Link complex.

The town netball courts are no longer serviceable due to unplanned/unscheduled dilapidation caused by soil movement. The replacement of the two outdoor netball courts forms part of the Roxby Downs Sports Precinct upgrade that commenced in February 2023. The two outdoor netball courts together with the three outdoor tennis courts will be replaced by 4 multi-purpose courts (netball/tennis). This project will be completed by September 2023.

The town's only sports change-rooms located at the main town oval have been in service since 1987. Their condition has deteriorated significantly over the past several years due to high volume usage and age. A recent condition audit determined that the change-rooms are no longer fit for purpose. The replacement of the change-rooms forms part of the Roxby Downs Sports Precinct upgrade that commenced in February 2023. this will see the replacement of these change rooms with new family friendly change-rooms that meet AFL Standards. The replacement of the change-rooms will be completed by December 2023.

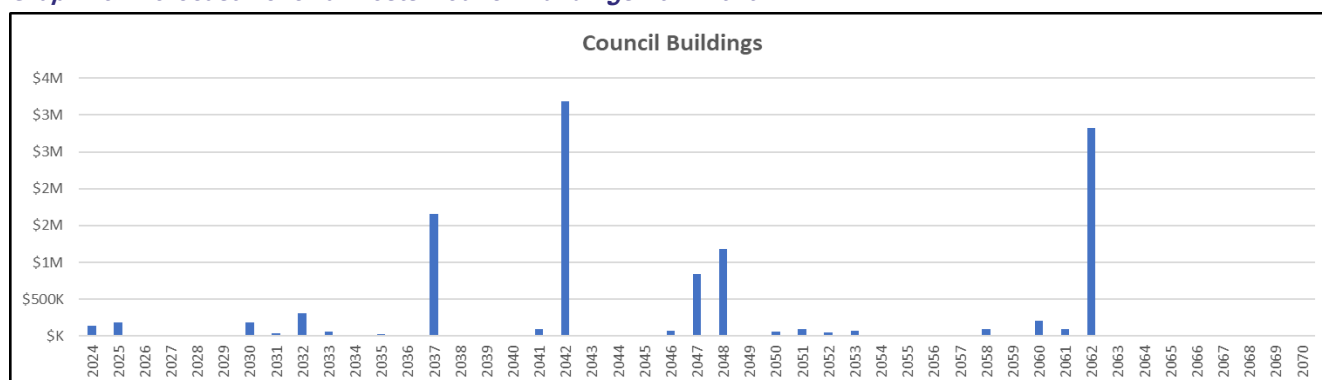
Due to the nature of this asset class, any underspends can be set aside for anticipated high expenditure years or for unforeseen events and maintenance.

Table 33: Forecast Renewal Costs Council and Other Buildings 10 years

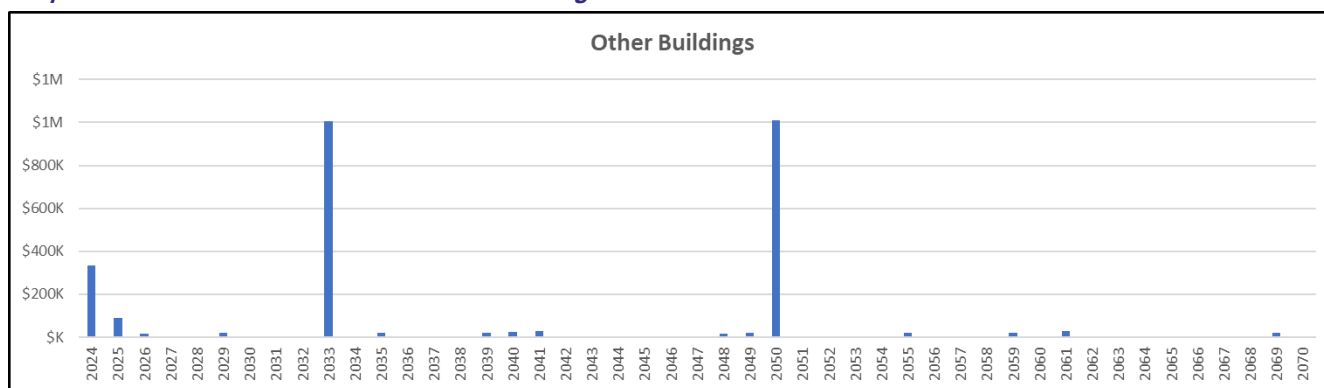
Class	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Council Building	\$ 142,600	\$ 190,476	\$ -	\$ 18,426	\$ -	\$ -	\$ 188,366	\$ 43,790	\$ 309,241	\$ 66,405
Other Buildings	\$ 333,991	\$ 90,476	\$ 14,949	\$ -	\$ -	\$ 19,788	\$ -	\$ -	\$ -	\$ 1,004,422

It is important to appreciate that just because modelling shows expiration of Remaining Useful Life, it does not mean that the asset will just stop working on day zero, Building infrastructure may survive double or triple its predetermined useful life by providing good maintenance and upkeep. Due to the unique environmental factors of living in a remote location with low rainfall and associated challenges, it is expected that 90% of our assets will survive well past their predetermined useful life. It also just as important the acknowledge that some assets will expire early or as a result of other outside influences.

Graph 25: Forecast Renewal Costs Council Buildings 2024-2070



Graph 26: Forecast Renewal Costs Other Buildings 2024-2070



New and Upgrade

It is not expected that legislation will adversely affect this plan in the foreseeable future. Where technology and or safety influence our buildings and structures, it shall be assessed on its merit and a suitable resolution decided with Senior Management.

Financial Summary

Table 34: Buildings Expenditure

FINANCIAL YEAR	MAINTENANCE / OPERATING	RENEWAL / REPLACEMENT	TOTAL
2023/24	\$ 621,000	\$ 476,591	\$ 1,097,591
2024/25	\$ 621,000	\$ 580,952	\$ 1,201,952
2025/26	\$ 621,000	\$ 14,949	\$ 635,949
2026/27	\$ 621,000	\$ 18,426	\$ 639,426
2027/28	\$ 621,000	\$ -	\$ 621,000
2028/29	\$ 621,000	\$ 19,788	\$ 640,788
2029/30	\$ 621,000	\$ 188,366	\$ 809,366
2030/31	\$ 621,000	\$ 43,790	\$ 664,790
2031/32	\$ 621,000	\$ 309,241	\$ 930,241
2032/33	\$ 621,000	\$ 1,070,827	\$ 1,691,827

Key Assumptions made in financial forecast

Like all forecasting models, much of the work can be considered hypothetical. All costs are based upon 2023 pricing.

Forecast reliability and confidence

The initial calculations contained within this Plan are based on the existing data sets, with minimal forecasting information. Current confidence levels overall are reasonable, however confidence in some specific asset classes is only 'fair'. This is largely due to the nature of the long lives of most infrastructure assets and the inherent challenges in predicting the exact timing of their renewal. Added to this is the uncertainty regarding the mine's operating plans.

This is the first formal draft of an Infrastructure and Asset Management Plan, and it has identified a number of areas where more data would be helpful. Future drafts of the Infrastructure and Asset Management Plans incorporating outputs from the Assetic predictor tools (Phase 2) will provide an improved standard and quality of information not experienced previously locally.

As the class AMPs are developed, the data quality will increase and as will the confidence levels.

Improvement Plan

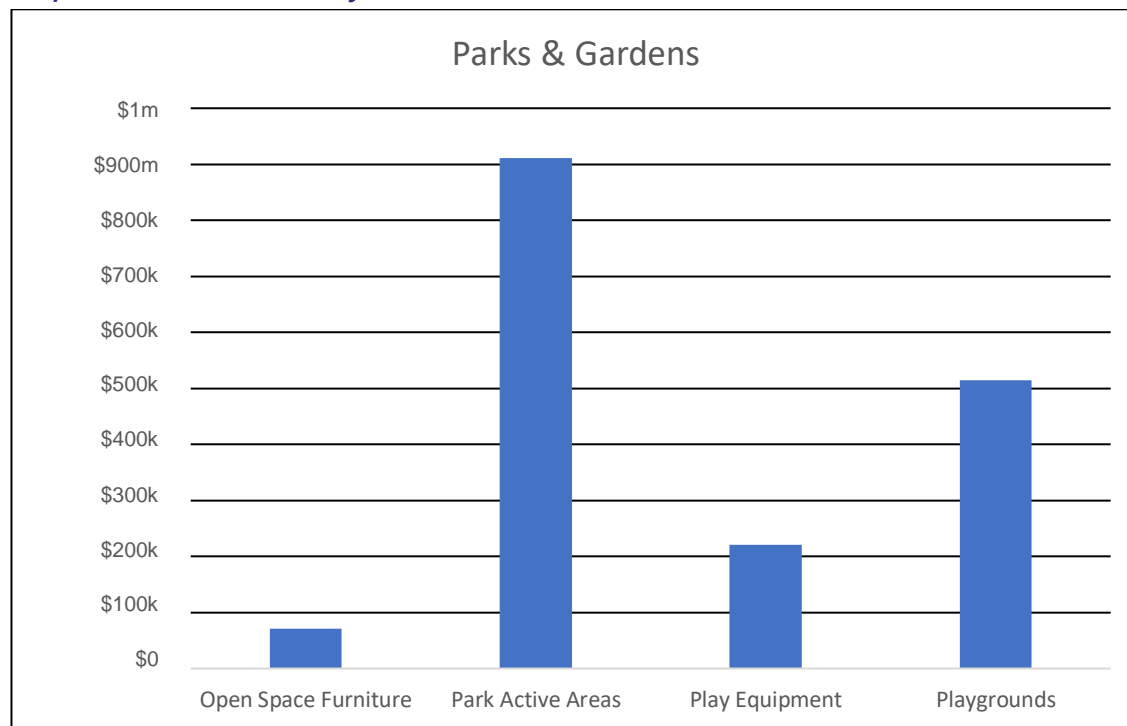
TASK	TASK	RESPONSIBILITY	RESOURCE REQUIRED	TIMELINE
Predictor Modelling	Subject Building infrastructure to predictor modelling	Asset Manager	Assetic	2023/24
Condition Auditing	Undertake annual inspection of all buildings checking condition audits against OCI records	Asset Manager	Internal resources	2023/24
General Ledger	Revise structure to separate renewal, maintenance and operating expenditure	Senior Accountant	Nil	2023/24

PARKS & GARDENS

Asset Description

Council manages a comprehensive portfolio of community parks, gardens, reserves, a skate park, ovals, emu walk track with a combined asset value of \$6.8 M.

Graph 27: Total investment by asset class



Levels of Service

Council is committed to:

- Providing parks and playgrounds at accessible locations within the town.
- Providing high quality facilities and landscaping at the Lions Park, including two ovals, BBQ facilities and seating, playgrounds, and an adjacent carpark.
- All streets having irrigated native trees, with at least one tree per residential property.
- The Richardson Place median strip and its surrounds to be maintained to a high quality.
- Providing mulch for residential verges upon request.
- Providing high quality turf ovals for sporting and community events.

Future Demand

Demand Drivers

It is not anticipated that demand on our Parks & Gardens will vary significantly over the forward estimates within this plan, however Council is investigating the opportunity to invest in a new playground in the 2006 build area and upgrade the existing playgrounds within the 2009 build area. Drivers that may affect demand include population change, changes to regulations, changes in demographics, seasonal factors, consumer preferences and expectations.

Demand Management Plan

Existing performance management provides adequately for the maintenance of the parks and gardens infrastructure.

Lifecycle Management

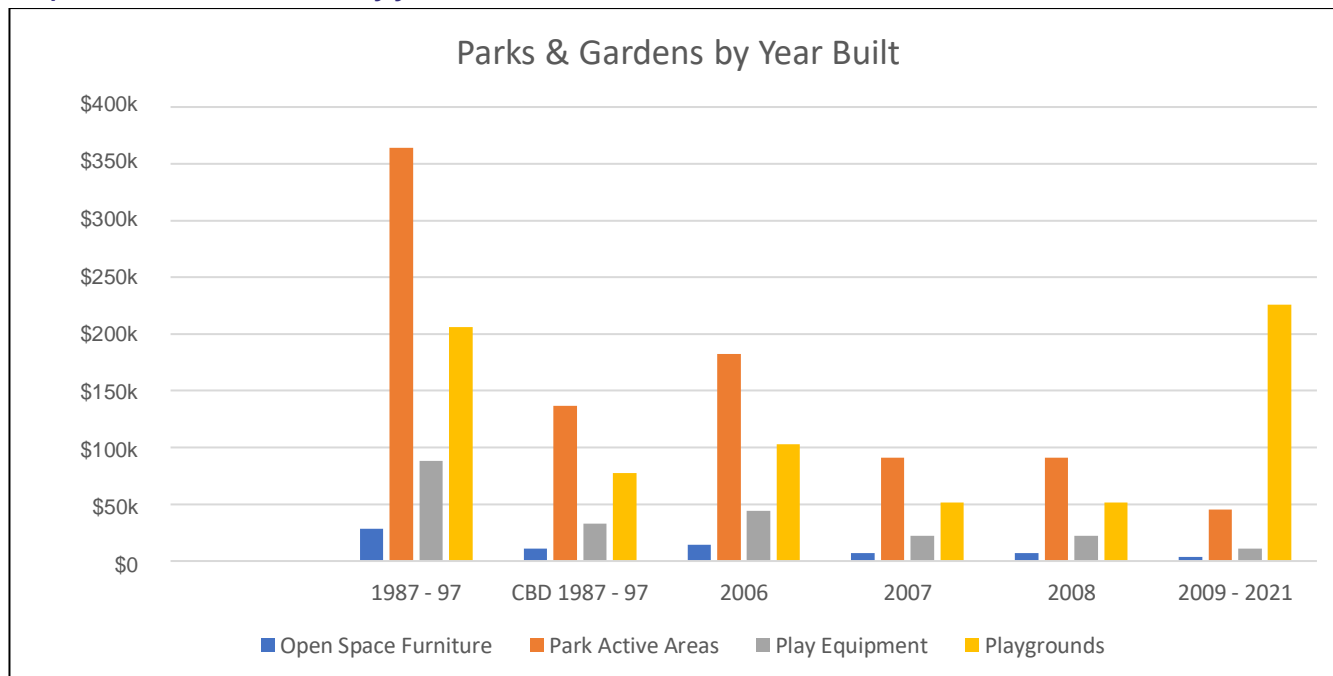
Council maintains the Playgrounds to a very high standard.

Current Capacity and Performance

The playgrounds located within the 2006 build year are now in poor condition and consideration is presently being given to renewal.

It has also been identified that the 2009 build area still does not have a community playground. Consideration is presently being given to providing this sub-division its own playground.

Graph 28: Parks and Gardens by year built



Asset Valuation

The value of the park and garden assets recorded in the asset register and disclosed in the Council’s financial statements were revalued as at 30 June 2020 they are due to be revalued in 2026.

Table 35: Parks & Gardens Asset Valuation

FS CLASS	ACCOUNTING REPLACEMENT COST	ACCOUNTING ACCUMULATED DEPRECIATION	ACCOUNTING DEPRECIATED REPLACEMENT COST	ANNUAL DEPRECIATION
Parks and Gardens	\$ 6,760,453	\$ 3,002,543	\$ 3,757,910	\$ 240,932
Total	\$ 6,760,453	\$ 3,002,543	\$ 3,757,910	\$ 240,932

Operations and Maintenance Plan

With due consideration to the resources presently available to Council, the local auditing and inspection regime is sufficient to maintain these assets at or above the current levels of service provision.

Table 36: Historical Maintenance Expenditure –Parks & Gardens

	2020 \$M	2021 \$M	2022 \$M	2023 BUDGET \$M
BUILDINGS	\$0.029 M	\$0.044 M	\$0.046 M	\$0.049 M

Source: MCRD General Ledger

Council does not have adequate records of the cost of maintenance compared to the cost of renewal and operating for parks and garden assets. This plan assumes that the Council will continue with its 2023 budget amount into the future.

Further iterations of this plan will incorporate new modelling of building asset maintenance.

This total remains an overall part of the total inventory maintenance calculations and represents an overall investment to this asset class of \$0.49 M over ten years.

Renewal Plan

It is Council’s intention to provide the community with a new playground in the newer area of town built in 2009 and upgrade the playground in the area built in 2008.

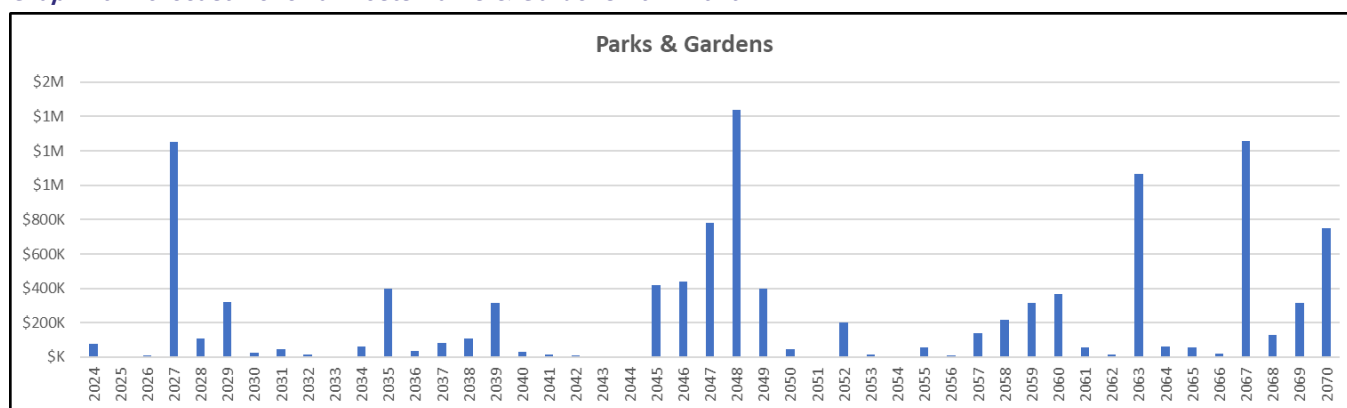
Due to the nature of this asset class, any underspends can be set aside for anticipated high expenditure years or for unforeseen events and maintenance.

Table 37: Forecast Renewal Costs Parks & Gardens 10 year

Class	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Parks & Gardens	\$ 78,068	\$ -	\$ 8,924	\$1,254,052	\$ 109,965	\$ 321,632	\$ 24,765	\$ 48,372	\$ 12,729	\$ -

It is important to appreciate that just because modelling shows expiration of Remaining Useful Life, it does not mean that the asset will just stop working on day zero, Park and Garden infrastructure may survive double or triple its predetermined useful life by providing good maintenance and upkeep. Due to the unique environmental factors of living in a remote location with low rainfall and associated challenges, it is expected that 90% of our assets will survive well past their predetermined useful life. It is also noted that some assets will deteriorate prematurely as a result of other outside influences including extreme temperatures and sandy/saline soil conditions.

Graph 29: Forecast Renewal Costs Parks & Gardens 2024-2070



New and Upgrade

Council does not expect legislation to adversely affect this plan in the foreseeable future. Where technology and or safety influence our Parks and Gardens network, it shall be assessed on its merit and a suitable resolution decided with Senior Management.

Financial Summary

Table 38: Parks & Gardens Expenditure

FINANCIAL YEAR	MAINTENANCE / OPERATING	RENEWAL / REPLACEMENT	TOTAL
2023/24	\$ 49,000	\$ 78,068	\$ 127,068
2024/25	\$ 49,000	\$ -	\$ 49,000
2025/26	\$ 49,000	\$ 8,924	\$ 57,924
2026/27	\$ 49,000	\$ 1,254,052	\$ 1,303,052
2027/28	\$ 49,000	\$ 109,965	\$ 158,965
2028/29	\$ 49,000	\$ 321,632	\$ 370,632
2029/30	\$ 49,000	\$ 24,765	\$ 73,765
2030/31	\$ 49,000	\$ 48,372	\$ 97,372
2031/32	\$ 49,000	\$ 12,729	\$ 61,729
2032/33	\$ 49,000	\$ -	\$ 49,000

Key Assumptions made in financial forecast

Like all forecasting models, much of the work can be considered hypothetical. All costs are based upon 2023 pricing.

Forecast reliability and confidence

The initial calculations contained within this Plan are based on the existing data sets, with minimal forecasting information. Current confidence levels overall are reasonable. This is largely due to the nature of the long lives of most infrastructure assets and the inherent challenges in predicting the exact timing of their renewal.

Future drafts of the Infrastructure and Asset Management Plans incorporating outputs from the Assetic predictor tools (Phase 2) will provide an improved standard and quality of information not experienced previously locally.

Improvement Plan

TASK	TASK	RESPONSIBILITY	RESOURCE REQUIRED	TIMELINE
Predictor Modelling	Subject Parks and Gardens infrastructure to predictor modelling	Asset Manager	Assetic	2023/24
Condition audits	Annual condition audits to be carried out by Department head	Municipal Services Supervisor	Internal resources	2023/24
General Ledger	Revise structure to separate renewal, maintenance and operating expenditure	Senior Accountant	Nil	2023/24

PLANT AND EQUIPMENT

Asset Description

Council manages a small but diverse portfolio of plant and equipment with a combined asset value of \$1.0M.

Levels of Service

Council is committed to:

- Providing plant and equipment suitable to local conditions and requirements.
- Providing high quality plant and equipment to compliment and secure all services to our community.

Future Demand

Demand Drivers

Council employs best practice when scheduling maintenance, operations and renewal of all plant and equipment. This ensures that maximum returns by way of trade-in value can be realised. Local influences that may affect demand include population change, changes to regulations, changes in demographics, seasonal factors, consumer preferences and expectations.

Demand Management Plan

Existing maintenance and servicing schedules provide adequately for the maintenance of all plant and equipment infrastructure.

Lifecycle Management

Council maintains each of our plant and equipment assets to a very high standard.

Current Capacity and Performance

The present portfolio of plant and equipment are fit for purpose and support business operations.

Asset Valuation

The value of the plant and equipment assets recorded in the asset register and disclosed in the Council's financial statements were valued as at 30 June 2020 they are due to be revalued in 2026.

Table 39: Plant & Equipment Asset Valuation with Depreciation

FS CLASS	ACCOUNTING REPLACEMENT COST	ACCOUNTING ACCUMULATED DEPRECIATION	ACCOUNTING DEPRECIATED REPLACEMENT COST	ANNUAL DEPRECIATION
Plant & Equipment	\$ 1,468,239	\$ 714,354	\$ 753,885	\$ 201,466
Total	\$ 1,468,239	\$ 714,354	\$ 753,885	\$ 201,466

Operations and Maintenance Plan

With due consideration to the resources presently available to Council, the local auditing and inspection regime is sufficient to maintain these assets at or above the current levels of service provision.

Table 40: Historical Maintenance Expenditure –Plant & equipment

	2020	2021	2022	2023 BUDGET
BUILDINGS	\$0.009 M	\$0.030 M	\$0.009 M	\$0.030 M

Source: MCRD General Ledger

Council does not have adequate records of the cost of maintenance compared to the cost of renewal and operating for parks and garden assets. This plan assumes that the Council will continue with its 2023 budget amount into the future.

Further iterations of this plan will incorporate new modelling of plant and equipment maintenance.

This total remains an overall part of the total inventory maintenance calculations and represents an overall investment to this asset class of \$0.3 M over ten years.

Renewal Plan

Plant and Equipment assets are critical to the efficient operation of local Council business. These assets support the daily operation of all critical infrastructure and incorporate back-up networks and systems in the event of system failures or breakdowns. Ensuring that all emergency and back-up plant and equipment is maintained to very high standard.

With the above statement clearly at the forefront of maintenance and renewal considerations, plant and equipment is updated more regularly than other asset classes.

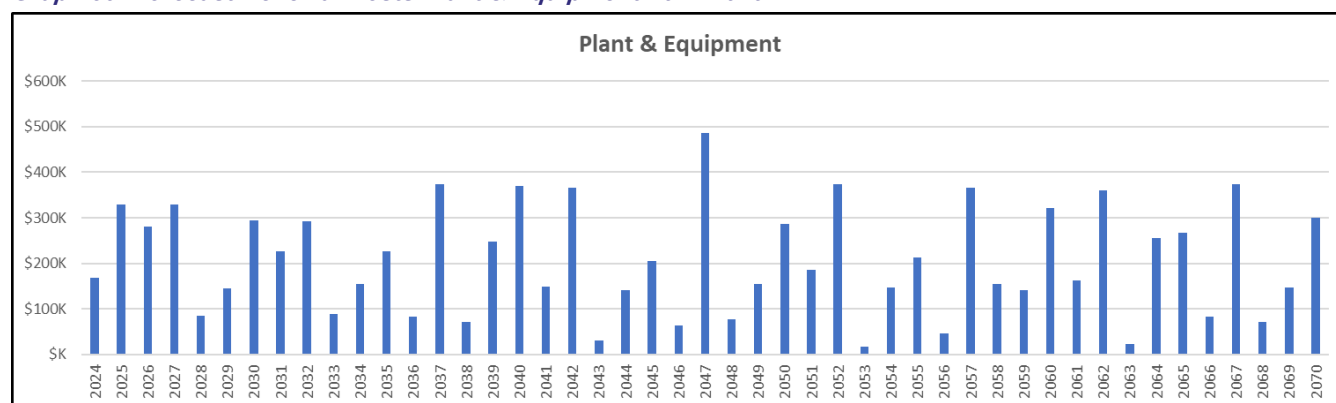
Due to the nature of this asset class, any underspends can be set aside for anticipated high expenditure years or for unforeseen events and maintenance.

Table 41: Forecast Renewal Costs plant and equipment 10 year

Class	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Plant & Equipment	\$ 168,400	\$ 328,910	\$ 281,063	\$ 328,984	\$ 83,975	\$ 144,480	\$ 294,194	\$ 226,587	\$ 292,420	\$ 87,704

It is important to appreciate that just because modelling shows expiration of Remaining Useful Life, it does not mean that the asset will just stop working on day zero, Plant and equipment infrastructure may survive double or triple its predetermined useful life by providing good maintenance and upkeep. It is also noted that some assets will deteriorate prematurely as a result of other outside influences including extreme temperatures and sandy/saline soil conditions.

Graph 30: Forecast Renewal Costs Plant & Equipment 2024-2070



New and Upgrade

Council does not expect legislation to adversely affect this plan in the foreseeable future. Where technology and or safety influence our plant and equipment assets, it shall be assessed on its merit and a suitable resolution decided with Senior Management.

Financial Summary

Table 42: Plant & Equipment Expenditure

FINANCIAL YEAR	MAINTENANCE / OPERATING	RENEWAL / REPLACEMENT	TOTAL
2023/24	\$ 30,000	\$ 168,400	\$ 198,400
2024/25	\$ 30,000	\$ 328,910	\$ 358,910
2025/26	\$ 30,000	\$ 281,063	\$ 311,063
2026/27	\$ 30,000	\$ 328,984	\$ 358,984
2027/28	\$ 30,000	\$ 83,975	\$ 113,975
2028/29	\$ 30,000	\$ 144,480	\$ 174,480
2029/30	\$ 30,000	\$ 294,194	\$ 324,194
2030/31	\$ 30,000	\$ 226,587	\$ 256,587
2031/32	\$ 30,000	\$ 292,420	\$ 322,420
2032/33	\$ 30,000	\$ 87,704	\$ 117,704

Key Assumptions made in financial forecast

All costs are based upon 2023 pricing.

Forecast reliability and confidence

The initial calculations contained within this Plan are based on the existing data sets. Current confidence levels overall are reasonable. This is largely due to the nature of the long lives of most infrastructure assets and the inherent challenges in predicting the exact timing of their renewal.

This is the first formal draft of an Infrastructure and Asset Management Plan, and it has identified a number of areas where more data would be helpful. Future drafts of the Infrastructure and Asset Management Plans incorporating outputs from the Assetic predictor tools (Phase 2) will provide an improved standard and quality of information not experienced previously locally.

Improvement Plan

TASK	TASK	RESPONSIBILITY	RESOURCE REQUIRED	TIMELINE
Predictor modelling	Apply predictor modelling to plant and equipment assets	Asset Manager	Internal + External Assetic	2023/24
Prepare new servicing and maintenance schedule	Introduce new servicing schedule to all plant and equipment assets	Department Managers	Internal	2023/24
Full and complete audit of all plant and equipment	Undertake a full audit of all plant and equipment asset class items	Asset Manager	Internal	2023/24
General Ledger	Revise structure to separate renewal, maintenance and operating expenditure	Senior Accountant	Nil	2023/24

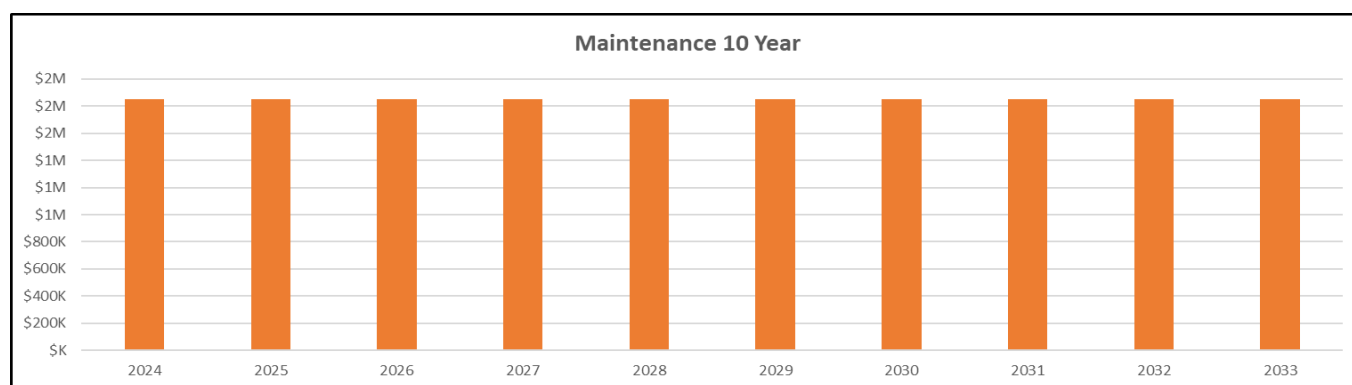
FINANCIAL SUMMARY OF FORWARD ESTIMATES

Table 43: All Infrastructure Property Plant & Equipment Expenditure

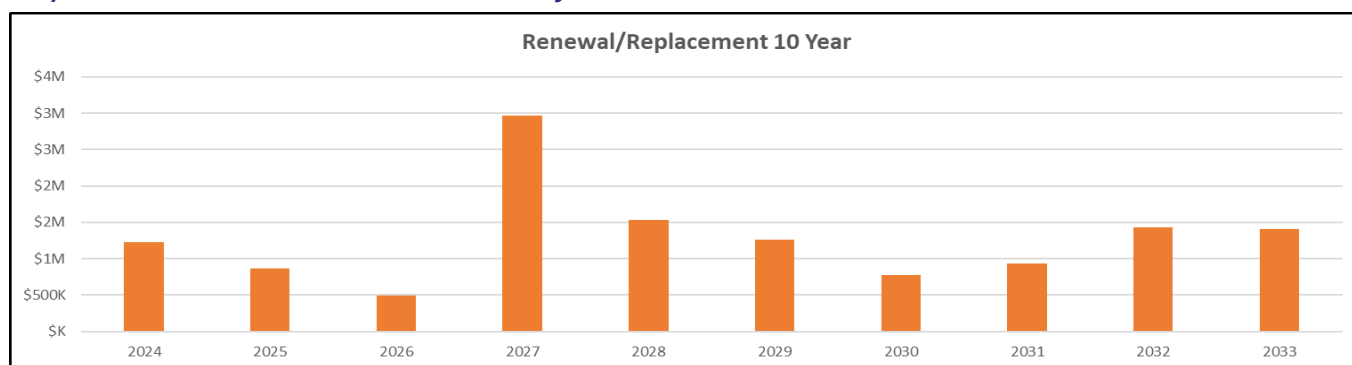
FINANCIAL YEAR	MAINTENANCE / OPERATING	RENEWAL / REPLACEMENT	TOTAL
2023/24	\$ 1,848,000	\$ 1,223,957	\$ 3,071,957
2024/25	\$ 1,848,000	\$ 867,154	\$ 2,715,154
2025/26	\$ 1,848,000	\$ 497,458	\$ 2,345,458
2026/27	\$ 1,848,000	\$ 2,964,414	\$ 4,812,414
2027/28	\$ 1,848,000	\$ 1,532,934	\$ 3,380,934
2028/29	\$ 1,848,000	\$ 1,257,626	\$ 3,105,626
2029/30	\$ 1,848,000	\$ 774,365	\$ 2,622,365
2030/31	\$ 1,848,000	\$ 932,784	\$ 2,780,784
2031/32	\$ 1,848,000	\$ 1,429,755	\$ 3,277,755
2032/33	\$ 1,848,000	\$ 1,409,842	\$ 3,257,842

The following graphs provides a summary of the spending required by the Council over the next ten-years.

Graph 31: Maintenance forward estimates over ten years – total investment of \$18.5 M



Graph 32: Renewal forward estimates over ten years – total investment of \$12.9M



Graph 33: Total investment by Council to sustain all assets over ten years for a total investment of \$31.4M

