



District Council of Cooper Pedy

Asset Management Plan

Utility Assets

2013/14 – 2022/23

March 2013

1. EXECUTIVE SUMMARY

This Asset Management plan deals specifically with assets that are used by the District Council of Coober Pedy in supplying electricity, water and sewage services to the Community. There are very few South Australian Councils that provide electricity & water to their communities; accordingly it makes strategic sense to separate utility activities from regular local government activities.

The work program in this plan is categorised into the following subcategories:

- Electricity – Buildings & Structures
- Electricity – Plant, Equipment & Other
- Water – Buildings & Structures
- Water – Plant Equipment & Other
- Community Wastewater Management System

With regard to buildings & structures and plant & equipment only those assets used in utility activities have been included in this plan. The remaining assets in these categories are included in Councils' other asset management plan for Local Government assets.

1.1 Asset Values

The current replacement costs of the entire stock of each classification of asset listed above are as follows:

• Electricity – Buildings & Structures	\$0.912M
• Electricity – Plant, Equipment & Other	\$9.294M
• Water – Buildings & Structures	\$0.999M
• Water – Plant Equipment & Other	\$16.10M
• Community Wastewater Management System	\$1.527M
Total	\$28.83M

1.2 Forecast Capital Expenditure on Utility Activity Assets for the Next 10 Years

The forecast cost total cost per asset category for the next 10 years in relation to replacing existing assets is:

• Electricity – Buildings & Structures	\$0.084M
• Electricity – Plant, Equipment & Other	\$2.536M
• Water – Buildings & Structures	\$0.078M
• Water – Plant Equipment & Other	\$3.397M
• Community Wastewater Management System	\$0.020M

The forecast total cost per asset category for the next 10 years in relation to building new or upgraded assets is:

- | | |
|--|----------|
| • Electricity – Plant, Equipment & Other | \$2.909M |
| • Water – Plant Equipment & Other | \$0.160M |
| • Community Wastewater Management System | \$0.113M |

Reference is made in Councils Long Term Financial Plan in relation to projects and new asset construction that may or may not go ahead in the future. Please refer to section 5 of the LTFP for further information on potential new assets that may be agreed to at some stage in the future. Should this occur then this AMP and the LTFP should be amended to reflect this.

2. INTRODUCTION

2.1 Background

This asset management plan is to demonstrate responsive management of assets (and services provided from assets), compliance with regulatory requirements, and to communicate funding needed to provide the required levels of service.

The asset management plan is to be read with council's asset management policy, asset management strategy and the following associated planning documents:

- District Council of Coober Pedy Strategic Plan (currently under review)
- District Council of Coober Pedy Long Term Financial Plan 2013-2022
- District Council of Coober Pedy Asset Management Plans 2013-2022

2.2 Goals and Objectives of Asset Management

The Council exists to provide services to its community. Some of these services are provided by infrastructure assets. Council has acquired infrastructure assets by 'purchase', by contract, construction by council staff and by donation of assets constructed by developers and others to meet increased levels of service.

Council's goal in managing infrastructure assets is to meet the required level of service in the most cost effective manner for present and future consumers.

The key elements of infrastructure asset management are:

- Taking a life cycle approach,
- Developing cost-effective management strategies for the long term,
- Providing a defined level of service and monitoring performance,
- Managing risks associated with asset failures,
- Sustainable use of physical resources,
- Continuous improvement in asset management practices.

2.2.1 Vision

The following vision statement is contained in the ***Coober Pedy Strategic Plan 2014-2018***.

“Our ambition for Coober Pedy

In 2020—

- With our heart in a strong mining industry ... we will be a pivotal provider of services to the mining community.
- As the most prolific opal region in the world ... we will have nurtured the opal mining industry to meet demand from national and international markets.
- As a globally unique tourist destination ... we will offer a satisfying outback experience with transport links to other Australian icon destinations.
- As a home town to our local community ... we will have created an environment where our residents have a sense of personal safety and social wellbeing, and are able to access health, housing, education, child care, policing, sporting facilities and recreation services that meet the expectations of young people, young families and an ageing population, ensuring a high standard of living in a prosperous local economy.
- As a remote township ... we will have a culture of proud independence, freedom and autonomy, while working together across the community for the common good.
- As one of Australia’s most ethnically diverse populations ... our inclusive attitude, seen in our social programs and community governance, will be a model to all.”

2.2.2. Goals

- Enhance the economic prosperity of Coober Pedy
- Improve the social wellbeing of Coober Pedy
- Upgrade the visual amenity of Coober Pedy without compromising its character
- Increase community participation in the leadership of Coober Pedy
- Sustain local government services

2.3 Plan Framework

Key elements of the plan are

- Levels of service
- Future demand – how this will impact on future service delivery and how this is to be met.
- Life cycle management – how the organisation will manage its existing and future assets to provide the required services
- Financial summary – what funds are required to provide the required services.
- Monitoring – how the plan will be monitored to ensure it is meeting the organisation's objectives.
- Asset management improvement plan

3. LEVELS OF SERVICE

This plan has been prepared on the assumption that current service standards are adequate to meet the expectations of the community. Further to this the LTFP indicates that Council is in a strong financially sustainable position. Accordingly scenario analysis has not been undertaken at this stage to determine the relative increases or decreases in costs associated with providing increased or decreased service ranges and levels.

Council is about to commence participation in the LGA's Business Partnering Program which is focused on developing a mechanism to comprehensively record the range and levels of both operating services as well as asset services. Once the range and level of services are identified then the associated cost of providing these services is quantified. This then provides Council with solid decision making data to analyse the impact of various scenarios on Councils long term financial position where services are increased or decreased.

Service levels will be defined in two terms:

3.1 Community Levels of Service

Relate to the service outcomes that the community wants in terms of safety, quality, quantity, reliability, responsiveness, cost effectiveness and legislative compliance. Community levels of service measures used in the asset management plan are:

Quality	How good is the service?
Function	Does it meet users' needs?
Safety	Is the service safe?

3.2 Technical Levels of Service

Supporting the community service levels are also technical measures of performance. These technical measures relate to the allocation of resources to service activities that the council undertakes to best achieve the desired community outcomes.

Technical service measures are linked to annual budgets covering:

- Operations – the regular activities to provide services such as opening hours, cleansing frequency, mowing frequency, etc.
- Maintenance – the activities necessary to retain an assets as near as practicable to its original condition (eg road patching, unsealed road grading, building and structure repairs),
- Renewal – the activities that return the service capability of an asset up to that which it had originally (eg frequency and cost of road resurfacing and pavement reconstruction, pipeline replacement and building component replacement),
- Upgrade – the activities to provide an higher level of service (eg widening a road, sealing an unsealed road, replacing a pipeline with a larger size) or a new service that did not exist previously (eg a new library).

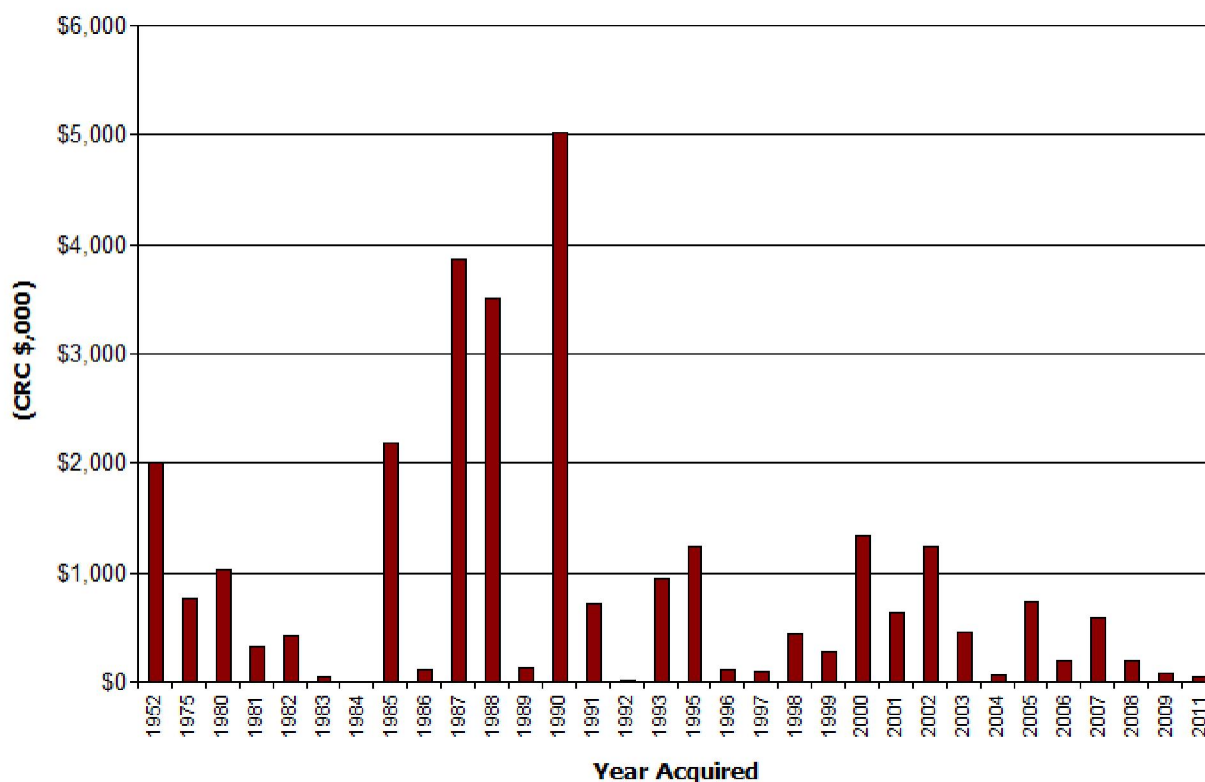
4. Future Demand Forecast

Factors affecting demand include population change, changes in demographics, seasonal factors, vehicle ownership, consumer preferences and expectations, economic factors, agricultural practices, environmental awareness, etc.

The view taken in the preparation of this plan as well as the LTFP is that there will be minimal shifts either upwards or downwards in current population levels. Should this change over time then both the AMP & LTFP will need to be updated.

5. Age Profile of Councils Utility Activity Assets

Coober Pedy DC - Age Profile (Utilities)



Key Asset Construction Dates:

- 1952 Original water pipeline
- 1985 PLEC system – Town Power Supply
- 1987 Construction of electricity delivery infrastructure. Power lines, transformers
- 1988 Construction of Sewer (\$1M), extension of water supply infrastructure (\$2.4M)
- 1990 Construction of bore water pipe, further supply extensions as well as 2.2ML holding tanks

6. Capital Expenditure Required on Local Government Assets for the Next 10 Years.

6.1 Construction of New or Upgraded Assets as distinguished from the Renewal or Replacement of Existing Assets

The following definitions have been obtained from the South Australian Local Government Model Financial Statements.

A *new asset* is additional to Council's previous asset complement.

E.g. Roads constructed as part of a Council owned subdivision are new assets.

Similarly laying footpaths in areas where they did not previously exist are also new assets.

An *upgraded asset* replaces a previously existing asset with enhanced capability or functionality.

Renewal or replacement of an asset occurs where a previously existing asset is replaced without enhancement of the service capability except where this is incidental and unavoidable.

It is possible for capital expenditure to be a *combination of renewal as well as upgrade*.

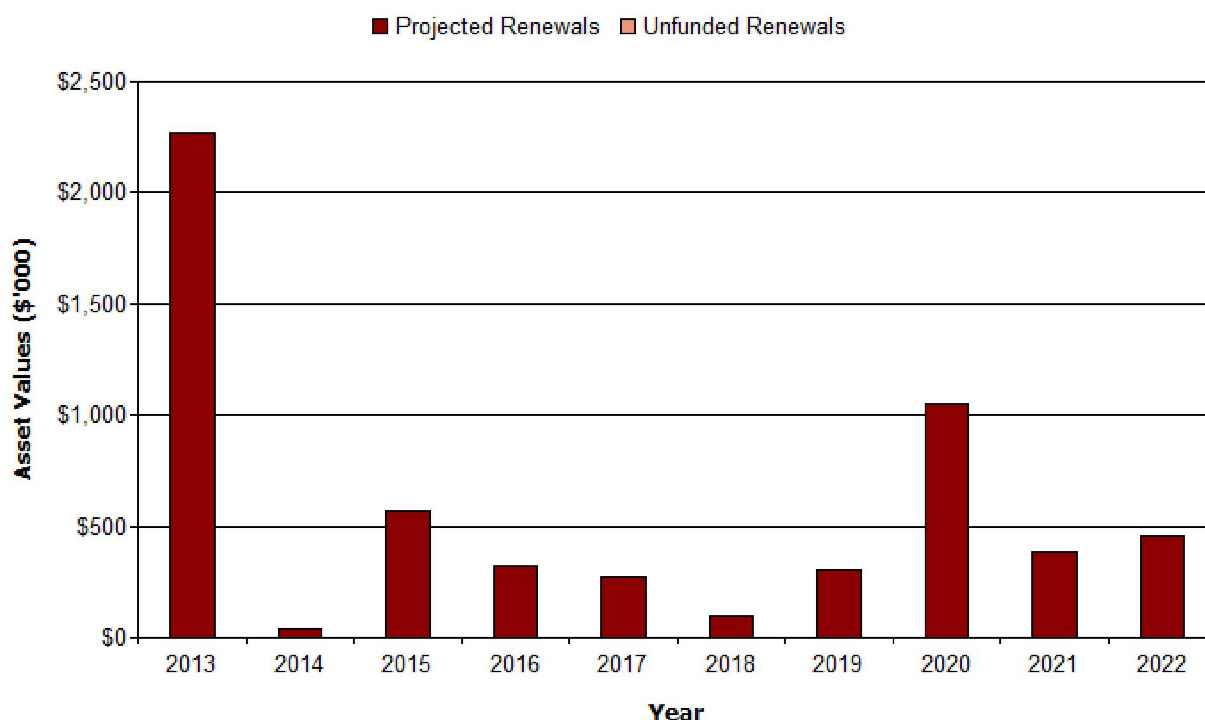
E.g. the replacement of a road that was initially was a 6 metre wide sheeted surface with an 8 metre width sheeted surface can be considered part replacement and part upgrade.

The important point to understand is that if Council is not able to replace its existing assets in a timely manner then new assets should not be built unless less essential. By building new assets Council is effectively building new liabilities as the assets usually don't generate revenue (e.g. roads) cannot be sold and will need to be maintained and eventually replaced. Fortunately the Coober Pedy Council is not in this situation at present.

The graph in the following section highlights the peaks and troughs of expenditure requirements required to maintain Councils existing utility asset portfolio. The asset renewal dates have been determined from Councils' asset registers by comparing each assets construction date with its total useful life.

6.2 Projected Capital Renewal Expenditure on Utilities

Coober Pedy DC - Projected Capital Renewal Expenditure (Utilities)



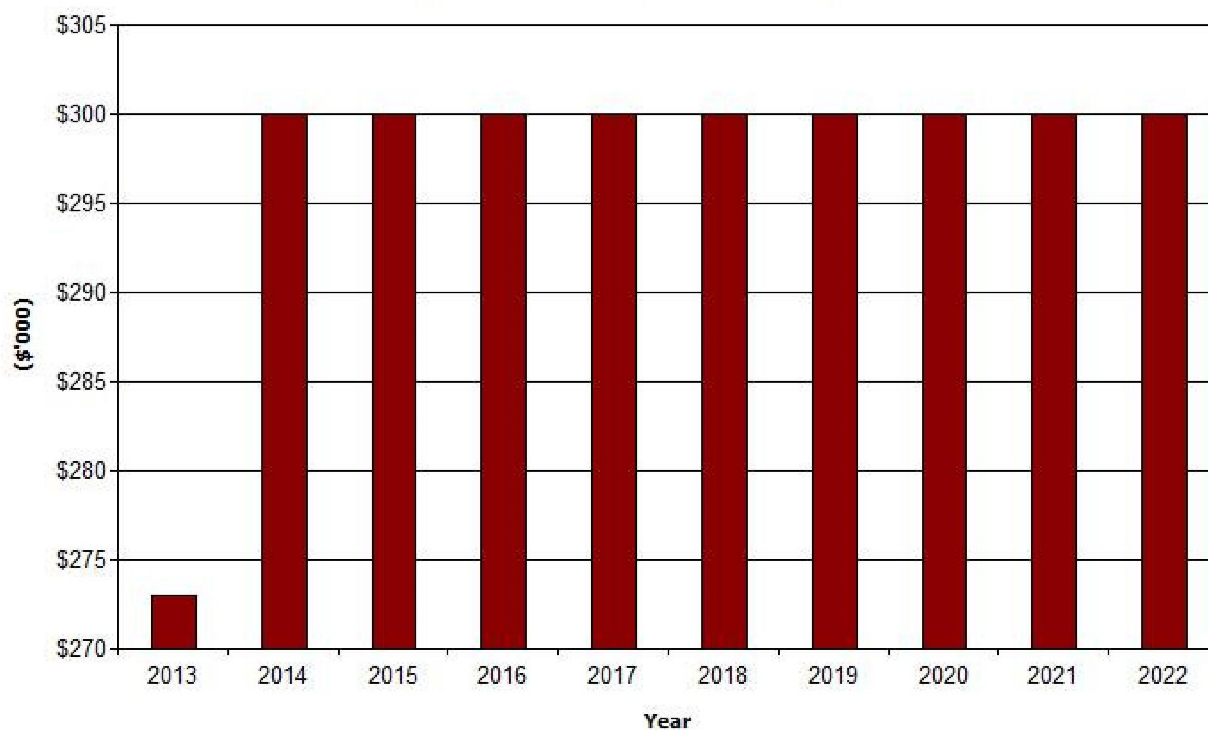
Council will be replacing a large water pipeline in 2013 as well as spending a significant amount on its pre-treatment plant. Funding of \$1.5M has been obtained by Council to subsidise this project.

With regard to electrical assets \$450k has been budgeted in 2013 to replace some of the transformers.

Please refer to the year by year Utilities work program that follows in section 7 for further detail.

6.2 Projected Capital Renewal Expenditure on Utilities

Coober Pedy DC - Projected Capital Upgrade/New Expenditure (Utilities)



Much of Councils' electricity distribution assets (Poles and wiring) are currently situated on private land. Accordingly an allowance of \$300k per annum has been made to relocate these assets in a staged manner over time.

Other than the capital expenditure budgeted for in 2013 there are no other new utility assets planned for construction at present.

7. Utilities Capital Renewal Program

	Asset ID	Sub Category	Asset Name	From	To	Rem Life (Years)	Planned Renewal Year	Renewal Cost (\$)	Useful Life (Years)
		Electrical Plant Equipment Other	4WD Utility S/Bac	Ford Courier 4WD Utility S/Bac		1	2014	\$15,000	10
		Electrical Plant Equipment Other	COMPRESSOR			1	2014	\$10,500	14
		Electrical Plant Equipment Other	MTR Reader Utility-Dual Cab	Ford MTR Reader Utility-Dual Cab		1	2014	\$14,000	14
Subtotal 2014								\$39,500	

	Asset ID	Sub Category	Asset Name	From	To	Rem Life (Years)	Planned Renewal Year	Renewal Cost (\$)	Useful Life (Years)
	99	CWMS	Chlorination Pump	-		2	2015	\$4,162	15
	2.07	Electrical Buildings Structures	Works/ Water/ Electricity Depot	Transportable Office	Hutchison Street	2	2015	\$30,976	32
	31.1	Electrical Plant Equipment Other	High voltage power line	Town Power Supply		2	2015	\$46,569	28
	27.1	Electrical Plant Equipment Other	Low voltage cabling	Town Power Supply		2	2015	\$185,850	28
	32.1	Electrical Plant Equipment Other	SWER transformers	Town Power Supply		2	2015	\$89,592	28
	150	Water Supply Plant Equipment Other	Bore Water Supply	Stamford Generator with 6 cylinder Hino Diesel		2	2015	\$46,818	20
	165	Water Supply Plant Equipment Other	Main Filtration Plant	Pipe Locator		2	2015	\$3,641	10
	128.1	Water Supply Plant Equipment Other	Town Water Supply	40mm poly, Water Pipe		2	2015	\$63,500	40
	126	Water Supply Plant Equipment Other	Town Water Supply	63mm poly, Water Pipe		2	2015	\$56,180	30
	132	Water Supply Plant Equipment Other	Town Water Supply	80mm, Pipe Valve		2	2015	\$7,491	15
	143.1	Water Supply Plant Equipment Other	Town Water Supply	Individual property water meters		2	2015	\$37,805	12
Subtotal 2015								\$572,584	

	Asset ID	Sub Category	Asset Name	From	To	Rem Life (Years)	Planned Renewal Year	Renewal Cost (\$)	Useful Life (Years)
	2.06	Electrical Buildings Structures	Works/ Water/ Electricity Depot	Oil Store	Hutchison Street	3	2016	\$53,265	30
	34.2	Electrical Plant Equipment Other	High voltage transformers	Town Power Supply		3	2016	\$208,105	29
	55.01	Water Buildings Structures	Town Bore Pump house	Pump house	Oodnadatta Road	3	2016	\$57,531	30
		Water Supply Plant Equipment Other		Truck		3	2016	\$0	12
Subtotal 2016								\$318,901	

	Asset ID	Sub Category	Asset Name	From	To	Rem Life (Years)	Planned Renewal Year	Renewal Cost (\$)	Useful Life (Years)
	31.2	Electrical Plant Equipment Other	High voltage power line	Town Power Supply		4	2017	\$46,569	30
	27.2	Electrical Plant Equipment Other	Low voltage cabling	Town Power Supply		4	2017	\$185,850	30
	36.1	Electrical Plant Equipment Other	Street lights	Town Power Supply		4	2017	\$29,438	22
	166	Water Supply Plant Equipment Other	Main Filtration Plant	Mag Flow meters		4	2017	\$6,242	15
	142	Water Supply Plant Equipment Other	Town Water Supply	32mm, Pipe Valve		4	2017	\$291	20
	141	Water Supply Plant Equipment Other	Town Water Supply	40mm, Pipe Valve		4	2017	\$2,996	20
	140	Water Supply Plant Equipment Other	Town Water Supply	50mm, Pipe Valve		4	2017	\$2,060	20
	139	Water Supply Plant Equipment Other	Town Water Supply	63mm, Pipe Valve		4	2017	\$1,248	20
Subtotal 2017								\$274,694	

	Asset ID	Sub Category	Asset Name	From	To	Rem Life (Years)	Planned Renewal Year	Renewal Cost (\$)	Useful Life (Years)
	36.2	Electrical Plant Equipment Other	Street lights	Town Power Supply		5	2018	\$29,438	23
		Water Supply Plant Equipment Other	Genset	Trailer		5	2018	\$2,750	11
	174	Water Supply Plant Equipment Other	Main Filtration Plant	Valve Turning Gear		5	2018	\$15,606	15
	134	Water Supply Plant Equipment Other	Town Water Supply	100mm, Pipe Valve		5	2018	\$3,652	20
	136	Water Supply Plant Equipment Other	Town Water Supply	150mm, Pipe Valve		5	2018	\$4,952	20
	143.2	Water Supply Plant Equipment Other	Town Water Supply	Individual property water meters		5	2018	\$37,805	15
Subtotal 2018								\$94,203	

	Asset ID	Sub Category	Asset Name	From	To	Rem Life (Years)	Planned Renewal Year	Renewal Cost (\$)	Useful Life (Years)
	27.3	Electrical Plant Equipment Other	Low voltage cabling	Town Power Supply		6	2019	\$185,850	32
	32.2	Electrical Plant Equipment Other	SWER transformers	Town Power Supply		6	2019	\$89,592	32
	133	Water Supply Plant Equipment Other	Town Water Supply	100mm, Pipe Valve		6	2019	\$5,275	15
	135	Water Supply Plant Equipment Other	Town Water Supply	150mm, Pipe Valve		6	2019	\$4,245	15
	131	Water Supply Plant Equipment Other	Town Water Supply	80mm, Pipe Valve		6	2019	\$22,473	15
Subtotal 2019								\$307,435	

Asset ID	Sub Category	Asset Name	From	To	Rem Life (Years)	Planned Renewal Year	Renewal Cost (\$)	Useful Life (Years)
98	CWMS	Aeration Pumps pipe work for Treatment Plans	-		7	2020	\$15,606	31
25	Electrical Plant Equipment Other	12,000L Diesel Tank	Power Plant		7	2020	\$13,005	23
	Electrical Plant Equipment Other	Ford Ranger	Ele - Supervisor		7	2020	\$41,600	13
	Electrical Plant Equipment Other	Ford Ranger	Electrician		7	2020	\$41,600	13
31.3	Electrical Plant Equipment Other	High voltage power line	Town Power Supply		7	2020	\$46,569	33
34.3	Electrical Plant Equipment Other	High voltage transformers	Town Power Supply		7	2020	\$208,105	33
29.1	Electrical Plant Equipment Other	Power poles	Town Power Supply		7	2020	\$170,071	40
36.3	Electrical Plant Equipment Other	Street lights	Town Power Supply		7	2020	\$29,438	25
	Electrical Plant Equipment Other	Trailer	Bedford Trailer		7	2020	\$950	19
152	Water Supply Plant Equipment Other	Bore Water Supply	VF Drives		7	2020	\$17,687	15
153	Water Supply Plant Equipment Other	Bore Water Supply	VF Drives		7	2020	\$17,687	15
	Water Supply Plant Equipment Other	Ditchwitch Trencher	- Ditchwitch Trencher		7	2020	\$25,600	32
	Water Supply Plant Equipment Other	Ford Ranger	On Call - water		7	2020	\$41,600	13
	Water Supply Plant Equipment Other	Ford Ranger	Water Manager		7	2020	\$41,600	13
128.2	Water Supply Plant Equipment Other	Town Water Supply	40mm poly, Water Pipe		7	2020	\$63,500	45
117.1	Water Supply Plant Equipment Other	Town Water Supply	80mm, Water pipe		7	2020	\$276,249	30
Subtotal 2020							\$1,050,867	

Asset	Sub	Asset Name	From	To	Rem Life	Planned Renewal	Renewal Cost	Useful Life
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ID	Category				(Years)	Year	(\$)	(Years)
42	Electrical Plant Equipment Other	Power Quality Meter - Fluke	Town Power Supply		8	2021	\$10,435	15
41	Electrical Plant Equipment Other	Thermal image -Fluke	Town Power Supply		8	2021	\$9,728	15
127	Water Supply Plant Equipment Other	Town Water Supply	50mm poly, Water Pipe		8	2021	\$327,668	40
143.3	Water Supply Plant Equipment Other	Town Water Supply	Individual property water meters		8	2021	\$37,805	18
Subtotal 2021							\$385,636	
31.4	Electrical Plant Equipment Other	High voltage power line	Town Power Supply		9	2022	\$46,569	35
27.4	Electrical Plant Equipment Other	Low voltage cabling	Town Power Supply		9	2022	\$185,850	35
36.4	Electrical Plant Equipment Other	Street lights	Town Power Supply		9	2022	\$29,438	27
32.3	Electrical Plant Equipment Other	SWER transformers	Town Power Supply		9	2022	\$89,592	35
2.03	Water Buildings Structures	Works/ Water/ Electricity Depot	Pump/ Iron Removal Filtration Shed	Hutchison Street	9	2022	\$20,537	30
151	Water Supply Plant Equipment Other	Bore Water Supply	Stamford Generator with Hino Diesel.		9	2022	\$46,818	20
143.4	Water Supply Plant Equipment Other	Town Water Supply	Individual property water meters		9	2022	\$37,805	19
Subtotal 2022							\$456,609	