# **ASSET MANAGEMENT PLAN**

# **PUBLIC LIGHTING**

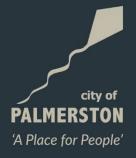














#### A Place for People

# **PUBLIC LIGHTING**

Document Control		Asset Management Plan  IPWEA INSTITUTE OF PUBLIC WORKS ENGINEERING AUSTRALASIA			
Rev No	Date	Revision Details	Author	Reviewer	Approver
1	August 2021	First Version - RMAC	CAM	DCGO, PM	DCGO

This AM Plan shall be reviewed and updated upon completion of the cyclic Condition Audit and Revaluation of Public Lighting Asset Class every 3 years or amended when required including when the following occurs:

- Annual budget changes result in a material impact to the plan, including the Long-Term Financial Plan.
- Finalisation of the 10-year capital works program.
- Changes to service levels.
- Figures and graphs used in this plan are derived from inputs entered in to NAMS+.

#### Abbreviations:

CAM – City Assets Manager

DCGO - Director City Growth and Operations

PM - Project Manager

© Copyright 2017 – All rights reserved. The Institute of Public Works Engineering Australasia. <a href="https://www.ipwea.org/namsplus">www.ipwea.org/namsplus</a>



# **PUBLIC LIGHTING**

A Place for People

### EXECUTIVE SUMMARY

## 1.1 The Purpose of the Plan

As the second largest and fastest growing city in the Northern Territory, the City of Palmerston (Council) has \$751 million in assets under its management as of 30 June 2021.

Asset Management Plans aim to:

- Mitigate Council's Strategic Risk relating to long term sustainability.
- Ensure consistent asset management across Council.
- Identify asset management issues and scenarios that may impact upon Council's financial position.
- Detail information about infrastructure assets including actions required to provide an agreed level of service in the most cost-effective manner while outlining associated risks.
- Define the services to be provided, how the services are provided and what funds are required to provide the services over a 10-year planning period.
- Ensure infrastructure is safe for use and the community receive value for money for their investment in community assets.
- Provide detailed asset data and data analysis to inform Council's Long-Term Financial Plan (LTFP).

#### **Summary Findings**

As of 30 June 2021, asset sustainability ratio for public lighting was 8% which indicates that City of Palmerston is replacing 8% of its existing asset base with capital renewals as the assets reach the end of their useful life. Council has asset sustainability benchmark of 100%.

City of Palmerston's Assets Consumptions Ratios rate is 89%. A measure between 60% and 75% indicates that the assets are being maintained, renewed and replaced at a responsible rate.

## 1.2 Asset Description

This Asset Management Plan (Plan) covers the assets that combine to make up the public lighting infrastructure network across City of Palmerston. The public lighting asset class provides the community with a safe, secure and attractive visual environment for pedestrian and vehicular traffic at times of low natural light. In line with its Community Plan outcomes, City of Palmerston takes into consideration energy, economic, environmental, technical and fit for purpose asset components when planning its network.

This AM Plan covers City of Palmerston's public lighting network which includes street and open space lighting comprising of the following:

- Luminaires 5,092
- Columns (including outreach) 4,731
- Wiring (including overhead) 158km
- Footings 4,930

Assets omitted from this plan include Open Space electrical cabling and equipment enclosures not powering public lighting assets. These assets are covered by the AM Plan for Land Improvements (Open Space).



# **PUBLIC LIGHTING**

A Place for People

## 1.3 Levels of Service

It is an objective of City of Palmerston Community Plan that our infrastructure is fit for purpose. This requires that our infrastructure is maintained and managed through adaptive innovative approaches to meet multiple community uses and needs. Levels of service to achieve this include:

- Providing public lighting in quality condition.
- Providing safe and compliant public lighting.
- Provide regular upkeep and of the public lighting network.
- Deliver, maintain, and manage infrastructure to current or higher standards to meet changing community needs.
- Manage the operational resources public lighting infrastructure consume in environmentally sustainable way.

Council is working towards improving service levels through the implementation of cyclic condition assessments in lieu of the current age-based methodology for intervention activities which will enable service levels to be better defined.

### 1.4 Future Demand

The main demands for new services are created by:

- Community expectations on appropriate infrastructure, safety, sustainability, and service levels.
- Economic demand due to increasing asset portfolio, economic pressures, asset age and CPI increases.
- Increase in environmental awareness and considerations.
- Population growth and new subdivisional activity, development of existing land and planning strategies.

Changing demands will be managed through a combination of existing assets, upgrading existing assets and providing new assets supported by non-asset solutions, such as insuring against risks and managing failures. Demand management planning activities occur on an ongoing basis and include:

- Continue to monitor and provide input into development controls and guidelines for the requirements of effective public lighting.
- Monitor, assess and implement measures to meet increased demand for environmentally sustainable asset management.
- Monitoring community feedback, trends and assess expectations against existing levels of service and available resources with consideration to budget.

## 1.5 Managing Risk

Present funding levels based on current data are seen to be adequate to control risks relating to these assets. To gain confidence in the risk management position of the assets, cyclic condition audits and inspection practices have been identified as requiring improvement.

The management of risk is facilitated by:



# **PUBLIC LIGHTING**

#### A Place for People

- Improving condition data of existing infrastructure to develop renewal and upgrade programs.
- Continual improvements in asset data capture, maintenance, and management.
- Identify efficiencies in using available funding.
- Taking opportunities to progressively increase funding levels over a period of 5 to 10 years with a view to establishing adequate cash backed reserves to meet future requirements.

## 1.6 Financial Summary

Gross Replacement Cost: \$30,669,465

Depreciable Amount: \$30,669,465

Depreciated Replacement Cost:<sup>1</sup> \$27,423,429

Annual Average Asset Consumption: \$806,194

The combined annualised depreciation for the assets included in the AMP is \$806,194. Based on current useful life models, the annual depreciation for luminaires is \$163,906 per annum.

The current combined allocation for Operating and Maintenance activities is \$1,028,316 per annum.

The LTFP anticipates expenditure totalling \$625,000 over the 10-year period for renewals.

Additional grant funding within the LTFP has been allocated for darks spot program. The total grant allocation for the project is \$600,000 in the current planned period.

Total projected funding for the 10-year planning period is \$15,832,689 or \$1,583,269 on average per year which is estimated to meet the realistic cost to operate, maintain and renew public lighting at the present service levels.

## 1.7 Monitoring and Improvement Program

The next steps resulting from this asset management plan to improve asset management practices are:

- Increase data confidence through cyclic condition audits, inspections and consistent and effective record management to ensure asset data is current and accurate.
- Continue to develop and refine levels of service with clearly accepted levels identified in the organisation and monitor these against community expectation.
- Provide greater detail for 10-year capital works budget in terms of defining proposed projects such as renewal or upgrade works based on accurate condition data.
- Future budget level decisions (operations, maintenance, renewal and upgrade/new) should be driven by condition assessment data and resulting forecasted remaining useful lives balanced with customer expectations / levels of service rather than estimates and assumptions.
- Cyclic reviews of the AM Plan will follow the asset revaluation and condition audit (2024/2025) of the
  asset to ensure the latest financial and condition data can be utilised.

<sup>&</sup>lt;sup>1</sup> Also reported as Written Down Value, Carrying or Net Book Value.