ASSET MANAGEMENT PLAN

Kerb & Gutter 2025-2035

June 2025

Randwick City Council
a sense of community

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Contents

1. EXECUTIVE SUMMARY

Our community relies on a diverse portfolio of infrastructure assets, including Roads, Footpaths, Kerb & Gutter, Drainage, Buildings, Retaining Walls, and Open Space assets, valued at approximately $1,967,042,000.

The Asset Management Plan (AM Plan) provides a strategic framework for managing our community's infrastructure assets, ensuring they remain safe, reliable, and capable of meeting current and future demands.

1.1. Purpose of the Plan

The AM Plan aims to:

- Provide a systematic approach to asset management.
- Address critical risks associated with aging infrastructure and limited funding.
- Ensure infrastructure supports the community's social, economic, and environmental goals.

This AM Plan details information about kerb and gutter with key actions required to maintain service levels, optimise lifecycle costs, and support long-term financial sustainability.

The plan defines the services, how they are provided and what funds are required to provide the services over the 10 year planning period. The AM Plan expenditure forecasts inform the Long-Term Financial Plan which typically considers a 10-year planning period.

1.2. Asset Description

The kerb and gutter network comprises:

Asset Category	Length (m)	Replacement Value
Integral kerb and gutter	528,740	$127,740,472
Separated Kerb and Gutter (e.g. Sandstone K&G)	79,778	$27,199,829
Roll kerb	12,851	$3,251,133
Dish drain	11,491	$2,384,565
Edge restraints	13,558	$3,229,725
Other	-	$1,106,161
TOTAL	**646,418**	**$163,805,724**

The above infrastructure assets have replacement value estimated at $163,805,724.

1.3. Levels of Service

The allocation in the planned funding model for kerb and gutter assets is sufficient to maintain these assets at agreed levels of service for the planning period.

The main service consequences of the planned budget are:

- There is sufficient budget allocated for renewal of assets as they reach the end of life.
- There is sufficient budget in maintenance and operations with minor increase in the future years.
- There is sufficient budget to acquire new assets to meet community needs.

1.4. Future Demand

The factors influencing future demand and the impacts they have on service delivery are created by:

- Desire to construct kerb and gutter to complete missing links along roads and new kerb and gutter along laneways to improve drainage and streetscape

- New private development to accommodate a projected increase in population of 13.5% between 2024 and 2035 as estimated in the 2024 Population Statement by the Federal Government Centre for Population.

These demands will be met by managing existing assets, upgrading existing assets and constructing new assets. Demand management practices may also include a combination of non-asset solutions including insuring against risks and managing failures. To manage demand effectively, consideration must be given to:

- Balancing priorities for infrastructure with what the community is prepared to pay
- Assessing capacity to fund current and improved levels of service
- Timing of renewal projects with acquisition projects through effective project management

1.5. Lifecycle Management Plan

How we plan to manage and operate the assets at the agreed levels of service throughout their lifecycle is contingent on 10-year Long-Term Financial Plan (LTFP).

Furthermore, the commitment to the upgrade of existing and acquisition of new assets, future operations, maintenance and renewal costs including depreciation will increase.

1.5.1. What does it Cost?

The lifecycle costs necessary to provide the services covered by this AM Plan include operations, maintenance, renewal and upgrade of existing assets, and the acquisition of new assets to meet demand. Disposal of assets is also considered.

When lifecycle costs are prepared for a minimum 10-year planning period, they can be used to inform the 10-year LTFP. The first 10-year lifecycle forecast is estimated to cost $8,141,580 or $814,158 on average per year.

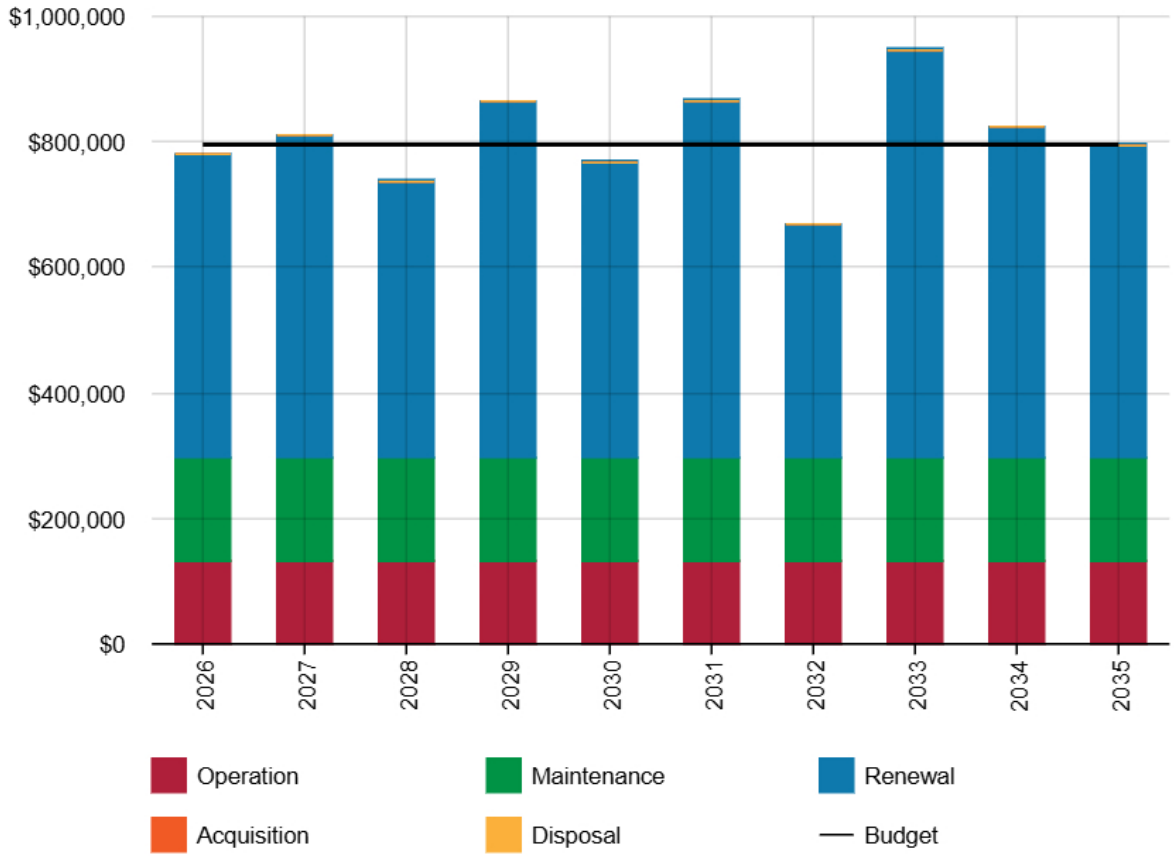
Depreciation is excluded from these cost estimates.

1.5.2. What we will do

The funding made available in the first 10-years' of the LTFP is $8,207,190 or $820,719 on average per year which is approximately 100.81% of the cost to undertake the lifecycle activities.

The reality is, only what is funded in the LTFP can be provided. Informed decision making depends on the AM Plan emphasising the consequences of planned budgets on the service levels provided and communicating the residual risks. It is important to ensure the organisation is delivering the services in a financially sustainable manner.

The LTFP, on average, for the first 10-years is sufficient to provide services. This is shown in the figure below.



Forecast Lifecycle Costs and Planned Budgets

Amounts are shown in real values (i.e., current values, net of inflation).

We plan to provide funding for kerb and gutter assets to undertake:

- Operation, maintenance, renewal and acquisition of kerb and gutter assets to meet service levels set by Council in annual budgets.

1.5.3. What we cannot do

We currently allocate enough budget to sustain services at the proposed standard including the provision of new assets. Works and services that cannot be provided under present funding levels are:

- Expansion of the kerb and gutter network within the 10-year planning period.
- Betterment of existing kerb and gutter prior to the forecast renewal date.

1.6. Risk Management

The planned budget is sufficient to continue to manage risks in the medium term.

The main risk consequences are:

- Council staff unable to meet service levels due to inadequate funding
- Dilapidated kerb and gutter assets due to lack of planning
- Public safety risks arising from lack of maintenance

We will endeavour to manage these risks within available funding by:

- Ensuring asset management practices are followed as set-out by this AMP
- Funding requirements are appropriately allocated, and programs developed

- Continual focus on asset condition assessment and validation
- Ongoing dialogue and consultation with the community

1.7. Financial Summary

Providing financially sustainable and affordable services from infrastructure requires the careful management of service levels, costs and risks.

The 10-year LTFP is $820,719 on average per year giving a 10 year funding surplus of $6,561 per year. This indicates that 100.81% of the forecast costs needed to provide the services documented in this AM Plan are accommodated in the LTFP.

1.8. Monitoring and Improvement Program

Key assumptions made in this AM Plan are:

- Asset values and dimensions are correct
- 100% of Council's kerb and gutter assets have been inspected
- The estimates used for current rates of renewal will remain constant
- Assets requiring renewal are identified from the asset register method.

The Asset Register was used to forecast the renewal lifecycle costs for this AM Plan.

This AM Plan is based on a reliable level of confidence information.

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

- Continue to improve asset register data confidence
- Review resilience of service delivery
- Include priority weighting methodology in maintenance and operation of assets. The four categories include: Condition, Functionality, Usage and Criticality
- Improve proactive maintenance planning and reporting mechanisms
- Establish a Strategic Asset Management system
- Improve council staff awareness of asset management principles

2. INTRODUCTION

2.1. Background

This AM Plan communicates the actions and necessary funds required to sustainably deliver services through the careful management of assets for the foreseeable future.

The AM Plan is to be read with the Kerb & Gutter planning documents. This should include the Asset Management Policy and Strategy, along with the following planning documents:

- Randwick Community Strategic Plan (CSP)
- Randwick Local Strategic Planning Statement (LSPS)
- Informing Strategies – Arts and Culture, Economic Development, Environment, Housing, Inclusive Randwick, Integrated Transport and Open Space and Recreation
- Randwick Local Environmental Plan
- Randwick Council Resourcing Strategy including the Asset Management Strategy, Long Term Financial Plan, Workforce Management Plan and Digital Strategy
- Delivery Plan and Annual Operational Plans
- Asset Management Plans
- Randwick City Council Community Engagement Strategy

The infrastructure assets covered by this AM Plan include kerb and gutter constructed using various materials and methods including but not limited to concrete, sandstone, brick, asphalt and timber. The kerb and gutter also comprises dish drain.

These assets are used to provide an interface and edge between the carriageway and the footway. However, more importantly, kerb and gutter allows the collection and conveyance of stormwater along a road to a drainage inlet

The infrastructure assets included in this plan have a total replacement value of $164,911,885.

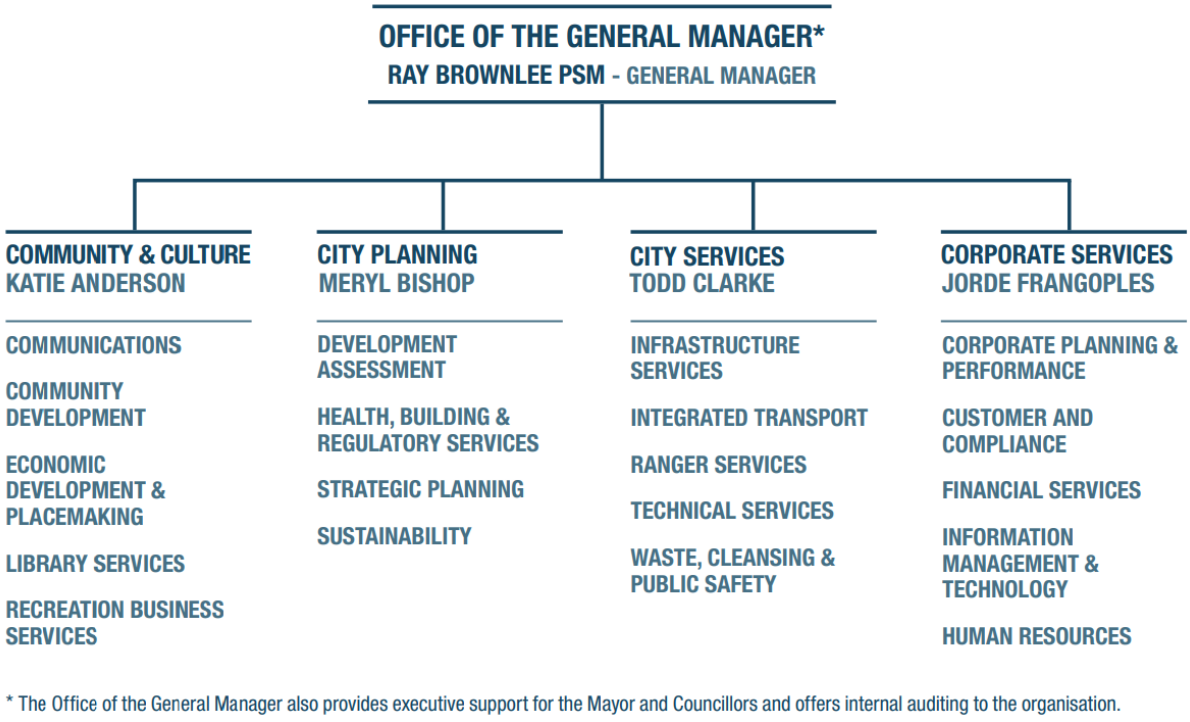
Key stakeholders in the preparation and implementation of this AM Plan are shown in Table 2.1.

Table 2.1: Key Stakeholders in the AM Plan

Key Stakeholder	Role in Asset Management Plan
Council Representatives	Represent needs of community/shareholders, Allocate resources to meet planning objectives in providing services while managing risks, Ensure service sustainable.
Council Officers	Manage kerb and gutter assets over their lifecycle. Ensure level of service provided meets needs of residents and visitors. Implement the components identified in the kerb and gutter AMP.
Residents	Core users of infrastructure assets. Their needs, wants and expectations are conveyed to the Council and should be reflected in desired levels of service.
Visitors	Second largest users of infrastructure assets. Their needs, wants and expectations drive the replacement in areas of the highest visitor usage and commercial areas.

Key Stakeholder	Role in Asset Management Plan
Insurers	Insurers have interest in implementation of systems which allow Council to gain better knowledge of the condition of their assets. Systems should be reflected in the number of claims made against each asset group.

Our organisational structure for service delivery from infrastructure assets is detailed below,



* The Office of the General Manager also provides executive support for the Mayor and Councillors and offers internal auditing to the organisation.

2.2. Principles, Goals and Objectives of Asset Management

The principles of asset management as per the International Standards for asset management are:

- **Value**: asset management focuses on the value assets provide to the organization over time.
- **Alignment**: asset management aligns financial, technical and operational decisions with the organizational objectives, promoting vertical and horizontal coordination.
- **Leadership**: leadership and sustained commitment at all levels are crucial for successful asset management.[1]

Our goal for managing infrastructure assets is to deliver the defined level of service (as amended from time to time) in the most cost effective manner for present and future consumers.

The key objectives of infrastructure asset management as defined by the International Infrastructure Management Manual are:

- Defining levels of service and monitoring performance,
- Managing the impact of growth through demand management and infrastructure investment,
- Taking a lifecycle approach to developing cost-effective management strategies for the long-term that meet the defined level of service,
- Identifying, assessing and appropriately controlling risks, and

[1] ISO 55000:2024 Asset Management – Vocabulary, overview, and principles

- Linking to a Long-Term Financial Plan which accommodates the required expenditure and how it will be funded.[2]

3. LEVELS OF SERVICE

Levels of service define the standards and performance targets that infrastructure assets are expected to meet to ensure they provide reliable, safe, and efficient services to the community.

3.1. Customer Research and Expectations

This AM Plan is prepared to facilitate consultation prior to adoption of levels of service by the Councillors. Future revisions of the AM Plan will incorporate customer consultation on service levels and costs of providing the service. This will assist the Councillors and stakeholders in matching the level of service required, service risks and consequences with the customer's ability and willingness to pay for the service.

We currently have historic understanding of customer expectations. Community satisfaction information has been used in developing the 10-year Randwick Community Strategic Plan and in the allocation of resources in the budget.

3.2. Strategic and Corporate Goals

This AMP is prepared under the direction of the 10-year Randwick Community Strategic Plan and Informing Strategies within the Integrated Planning and Reporting (IPR) framework. This AMP forms part of the Resourcing Strategy.

Strategic goals have been set in the Local Strategic Planning Statement (LSPS). The relevant goals and objectives and how these are addressed in this AM Plan are summarised in Table 3.2.

Table 3.2: Goals and how these are addressed in this Plan

Local Strategic Planning Statement Outcome	Direction	Objective	How Goal and Objectives are addressed in the AM Plan
A city for people	Celebrating diversity and putting people at the heart of planning	Support the delivery of social infrastructure to meet the needs of our diverse community Provide greater access and opportunities for walking and cycling	The Kerb and Gutter Asset Management Plan aligns with Council's Resourcing Strategy, including the Asset Management Strategy, Workforce Plan and Long-Term Financial Plan.
A collaborative city	Working together to grow a greater Sydney	A collaborative approach to guide and manage future growth in Randwick City	Conduct regular condition assessment to plan maintenance Respond to customer requests within service level agreements. Respond to customer requests within service level agreements Develop an operational and maintenance plan and allocate funding to carry out remediation work as required

[2] IPWEA International Infrastructure Management Manual (IIMM), Sec 1.2.1

A city in its landscape	Valuing green spaces and landscape	Provide high quality open space and recreational facilities	The kerb and gutter Asset Management Plan includes funding for renewal including provisions for performance monitoring against adopted service level.

3.3. Legislative Requirements

There are many legislative requirements relating to the management of assets. Legislative requirements that impact the delivery of the kerb and gutter service are outlined in Table 3.3.

Table 3.3: Legislative Requirements

Legislation	*Requirement*
NSW Local Government Act 1993	***Sets out role, purpose, responsibilities, and powers of local government including the preparation of a long-term financial plan supported by asset management plans for sustainable service delivery.***
Roads Act 1993	***To provide public access to roads, to classify roads, to act as the local road authority, to carry out certain functions e.g. road works and to regulate activities on public roads.***
Civil Liability Act 2002 and Civil Liability Amendment (Personal Responsibility) Act 2002	***Protects the Council from civil action by requiring the court to consider the financial resources, the general responsibilities of the authority and the compliance with general practices and applicable standards.***
Workplace Health and Safety Act 2011	***Protecting Works and other persons against harm to their health, safety and welfare through the elimination or minimisation of risks arising from work.***
Australian Accounting Standard AASB116	***Reporting on asset condition and consumption to Councillors, management, and the community.***
Native Vegetation Act	***To manage native vegetation, to prevent broad scale clearing, to protect native vegetation, to improve native vegetation and to encourage revegetation of land.***
Protection of the Environment Operations Act 1997	***A state legislation to protect, restore and enhance the environment in NSW. They provide both the framework for Council decisions that affect the environment and the means of adopting Australia-wide environment protection measures set by the National Environment Protection Council.***
Disability Discrimination Act 1992	***Provides protection for everyone in Australia against discrimination based on disability, in the areas of provision of goods, facilities, services and land.***
Australian Road Rules	***To ensure compliance and uniformity with road rules in the state and elsewhere in Australia.***

3.4. Customer Values

Service levels are defined in three ways, customer values, customer levels of service and technical levels of service.

Customer Values indicate:

- what aspects of the service is important to the customer,
- whether they see value in what is currently provided and
- the likely trend over time based on the current budget provision

Table 3.4: Customer Values

Service Objective:		
Customer Values	**Customer Satisfaction Measure**	**Expected Trend Based on Planned Budget**
Kerb and gutter that is safe to walk on	Customer satisfaction rating (for maintaining local roads).	Satisfaction score is maintained
A well-performing Kerb and gutter network	Satisfaction survey results	Reduced flood incidents due to kerb and gutter design and upgrades
A well-maintained Kerb and gutter	Customer satisfaction rating (for maintaining local roads).	Satisfaction score is maintained

3.5. Customer Levels of Service

The Customer Levels of Service are considered in terms of:

Condition How good is the service … what is the condition or quality of the service?

Function Is it suitable for its intended purpose …. Is it the right service?

Capacity/Use Is the service over or under used … do we need more or less of these assets?

In Table 3.5 under each of the service measures types (Condition, Function, Capacity/Use) there is a summary of the performance measure being used, the current performance, and the expected performance based on the current budget allocation.

These are measures of fact related to the service delivery outcome (e.g. number of occasions when service is not available or proportion of replacement value by condition %'s) to provide a balance in comparison to the customer perception that may be more subjective.

Table 3.5: Customer Level of Service Measures

Type of Measure	Level of Service	Performance Measure	Current Performance	Expected Trend Based on Planned Budget
Condition	Provide quality kerb and gutter assets free from obvious defects	Customer satisfaction survey results	76% satisfied in 2023, down from 81% in 2021	Maintain customer satisfaction survey results
	Routinely inspect kerb and gutter network	20% of the network to be inspected annually	Achieved	Maintain current approach
	Confidence levels		High	Low
Function	Kerb and gutter in town centres is swept mechanically daily with litter pick up in the afternoon	Town Centre kerb and gutter is maintained free of litter and weeds	85% satisfied in 2023, up from 81% in 2021	Increase in customer satisfaction survey results
	Continue to improve the kerb and gutter network to meet community needs	Design and construct kerb and gutter assets to Council and Australian Standards	Kerb and Gutter construction works are designed and funded under the capital works program	Maintain current approach
	Confidence levels		Medium	High

3.6. Technical Levels of Service

Technical Levels of Service – To deliver on the customer values, and impact they have on Customer Levels of Service, are operational or technical measures of performance. These technical measures relate to the lifecycle activities (see Section 5) and allocation of resources to best achieve the desired customer outcomes and demonstrate effective performance.

Service and asset managers plan, implement and control technical service levels to influence the service outcomes.[3]

Table 3.6 shows the lifecycle activities related to the current 10 year planned budget, and the forecast costs recommended in this AM Plan.

Table 3.6: Technical Levels of Service

Lifecycle Activity	Purpose of Activity	Activity Measure	Current Performance*	Recommended Performance **
TECHNICAL LEVELS OF SERVICE				
Operations	Routine Street Sweeping. Make sure kerbs are	Frequency of cleaning	Scheduled street sweeping cleaning program	Maintain current approach

[3] IPWEA, 2015, IIMM, p 2|28.

Lifecycle Activity	Purpose of Activity	Activity Measure	Current Performance*	Recommended Performance **
	cleaned and free from debris.			
	Apply a risk management approach to kerb and gutter inspections	20% to be inspected annually.	20% inspected annually.	Maintain current performance.
		Budget	$131738	$131738
Maintenance	Replacement of segments of kerb and gutter as required	Respond to CRMs within SLA timeframe	>90% of Service Requests actioned within allocated time frames.	Proactive repairs achieved
		Budget	$163981	$163981
Renewal	Renew existing kerb and gutter that is in poor condition	Condition assessment	Kerb and gutter assets renewed as required as part of capital works projects	Satisfied with Current performance
		Budget	$500000	$500000

Note: * Current activities related to planned budget.

** Expected performance related to forecast lifecycle costs.

It is important to monitor the service levels regularly as circumstances can and do change. Current performance is based on existing resource provision and work efficiencies. It is acknowledged that circumstances such as technology and customer priorities will change over time.

4. FUTURE DEMAND

Future demand refers to the anticipated need for infrastructure services driven by factors such as population movement, economic development, technological advancements, and changing environmental or community expectations.

4.1. Demand Drivers

A demand driver refers to the factors or trends that influence the need for infrastructure services and capacity. The factors influencing future demand are created by: population growth/decline, economic development, changes in technology, regulatory requirements, and shifts in community expectations or environmental conditions, etc.

Demand drivers help predict future infrastructure needs and guide planning and investment decisions.

4.2. Demand Forecasts

The current position and projections for demand drivers that may impact future service delivery and use of assets have been identified and documented in Table 4.3.

4.3. Impacts and Demand Management Plan

The impact of demand drivers that may affect future service delivery and use of assets are shown in Table 4.3.

The impact on service delivery will be managed through a combination of managing and upgrading existing assets and the provision of new assets to meet demand. Demand management practices can include non-asset solutions, insuring against risks and managing failures.

Opportunities identified to manage demand are shown in Table 4.3. Further opportunities will be developed in future revisions of this AM Plan.

Table 4.3: Demand Management Plan

Demand driver	Current position	Projection	Impact on services	Demand Management Plan
Population	154,265 (As per Randwick Housing Strategy 2021	A 13.5% increase between 2024-2035 as estimated in the 2024 Population Statement by the Federal Government Centre for Population	An increase in population will require an increase in community and infrastructure services. Existing services may require amendment to cater for changes in use or increased patronage	As new developments are completed, there will also be donated assets to help meet the demand created
Demographics	Randwick City Council has: 20.5%% over 60 YO 33.4% in the 20-44 YO group (As of 1 August 2021, ABS)	Greater proportion of 10-20 YO Greater proportion of over 60 YO Decreased proportion of 25-44 YO	Greater need for aged and disability access. Increase in population will require improvements to public transport infrastructure and accessible recreational infrastructure including beaches.	This AMP allows Council to budget for various connectivity improvement projects. Renewal priority criteria has built-in mechanisms to ensure that Council's kerb and gutter network is built to appropriate standards where practicable
Technology Changes	Material used for the kerb and gutter network is typically concrete	Seek to reduce environmental impact, improve constructability, relatively affordable and longer asset life with reduced maintenance requirements	Potential to reduce maintenance and resource requirements	New and emerging technologies should be assessed for both performance, abilities to improve service and whole of life costs

4.4. Asset Programs to meet Demand

The new assets required to meet demand may be acquired, donated or constructed. Additional assets are discussed in Section 5.4.

Acquiring new assets will commit the Kerb & Gutter to ongoing operations, maintenance and renewal costs, and depreciation expenses for the period that the service provided from the assets is required. These future costs and expenses are identified and considered in developing the long-term financial plan.

4.5. Climate Change Adaptation

The impacts of climate change may have a significant impact on the assets we manage and the services they provide. In the context of the Asset Management Planning process climate change can be considered as both a future demand and a risk that needs to be managed.

How climate change impacts on assets will vary depending on the location and the type of services provided, as will the way in which we respond and manage those impacts.[4]

As a minimum we consider how to manage our existing assets given potential climate change impacts for our region.

Risk and opportunities identified to date are shown in Table 4.5.1

Table 4.5.1 Managing the Impact of Climate Change on Assets and Services

Climate change risk	Projection	Impact on services	Climate Change Management Plan
Increased Rainfall Intensity	Higher chances of flash flooding. Increase in rain intensity, longer drought period	Higher rainfall intensity will likely result in more overland flow and more ground water, increasing the number of instances that loading behind the retaining wall is maximised	Construction of retaining wall assets with better drainage and capacity to cater for increased infiltration.
Need to be carbon neutral	Civil works are high carbon emitting activities. Seek to reduce carbon emission from civil works	Maintain or reduce the energy required to undertake road construction activities.	Use of warm mix instead of hot mix to reduce energy consumption. Use of recycled asphalt, recycled glass and recycled rubber in the asphalt mix to help create a circular economy.
Provide more green space in the urban settings	Increase in native tree planting	Longer drought period may make it harder for plants to survive. Available space for kerb and gutter is reduced due to the need for green spaces Greening of Randwick will help reduce the temperature along road reserves.	Choose to plant native and drought tolerant trees in the nature strip of a road reserve. Consider root uplifting impacts to kerb and gutter when choosing tree species

Additionally, the way in which we construct new and upgrade existing assets should recognise that there is opportunity to build in resilience to climate change impacts. Building resilience can have the following benefits:

- Assets will withstand the impacts of climate change;

[4] IPWEA Practice Note 12.1 Climate Change Impacts on the Useful Life of Infrastructure

- Services can be sustained; and
- Assets that can endure may potentially lower the lifecycle cost and reduce their carbon footprint.

Table 4.5.2 summarises opportunities to build climate change resilience into new and existing assets.

Table 4.5.2 Building Climate Change Resilience into New and Existing Assets

Asset Description	Climate change risk	Resilience Plan for New Assets	Resilience Plan for Existing Assets
Concrete Kerb and Gutter	Salt attack from sea breeze	Inspect every 5 years from construction, assess if applying concrete sealant may extend asset life	Inspect every 5 years from construction, assess if applying concrete sealant may extend asset life
Asphaltic Concrete Kerb and Gutter	Hot days can melt asphaltic binder	Utilise concrete for kerb and gutter assets wherever possible. Only use asphalt where there is no other choice	Inspect every 5 years from construction.

The impact of climate change on new and existing assets is evolving and new opportunities will be developed in future revisions of this AM Plan.

5. LIFECYCLE MANAGEMENT PLAN

The lifecycle management plan details how the Kerb & Gutter plans to manage and operate the assets at the agreed levels of service (Refer to Section 3) throughout their entire lifecycle, from acquisition or creation to disposal. The goal is to maximise the value of the assets while minimising costs and risks, ensuring they continue to meet performance requirements over time.

From a financial perspective, infrastructure activities tend to be classified as being either Operating or Capital. The lifecycle activities used in the asset management and financial planning and reporting process cover:

- **Capital**
    - **Acquisition** – the activities to provide a higher level of service (e.g., widening a road, sealing an unsealed road, replacing a pipeline with a larger size) or a new service that did not exist previously (e.g. a new library).
    - **Renewal** – the activities that replace or restore assets to the standard it had originally provided (e.g., road resurfacing and pavement reconstruction, pipeline replacement and building component replacement).
- **Operating**
    - **Operations** - the routine activities that keep services accessible and effective, balancing efficiency with user expectations (e.g. opening hours, cleansing, mowing grass, energy, inspections, etc.)
    - **Maintenance** – the preventative and corrective actions to sustain asset functionality and minimise unexpected failures. Maintenance activities enable an asset to provide service for its planned life (e.g., road patching, unsealed road grading, building and structure repairs).
    - **Disposal** – the decommissioning, removing, or repurposing of assets that are no longer cost-effective, safe, or necessary (e.g. shutting down an old water treatment plant, demolishing unsafe buildings, dismantling old bridges, etc.).

A pictorial representation of the asset lifecycle activities is shown below in Figure 5.0.

Figure 5.0: Asset Lifecycle Activities

5.1. Background Data

5.1.1. Physical parameters

The assets covered by this AM Plan are shown in Table 5.1.1.

Table 5.1.1: Assets covered by this Plan

Asset Category	Length (m)	Replacement Value
Integral kerb and gutter	528,740	$127,740,472
Separated Kerb and Gutter (e.g. Sandstone K&G)	79,778	$27,199,829
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The age profile of the assets included in this AM Plan are shown in Figure 5.1.1.

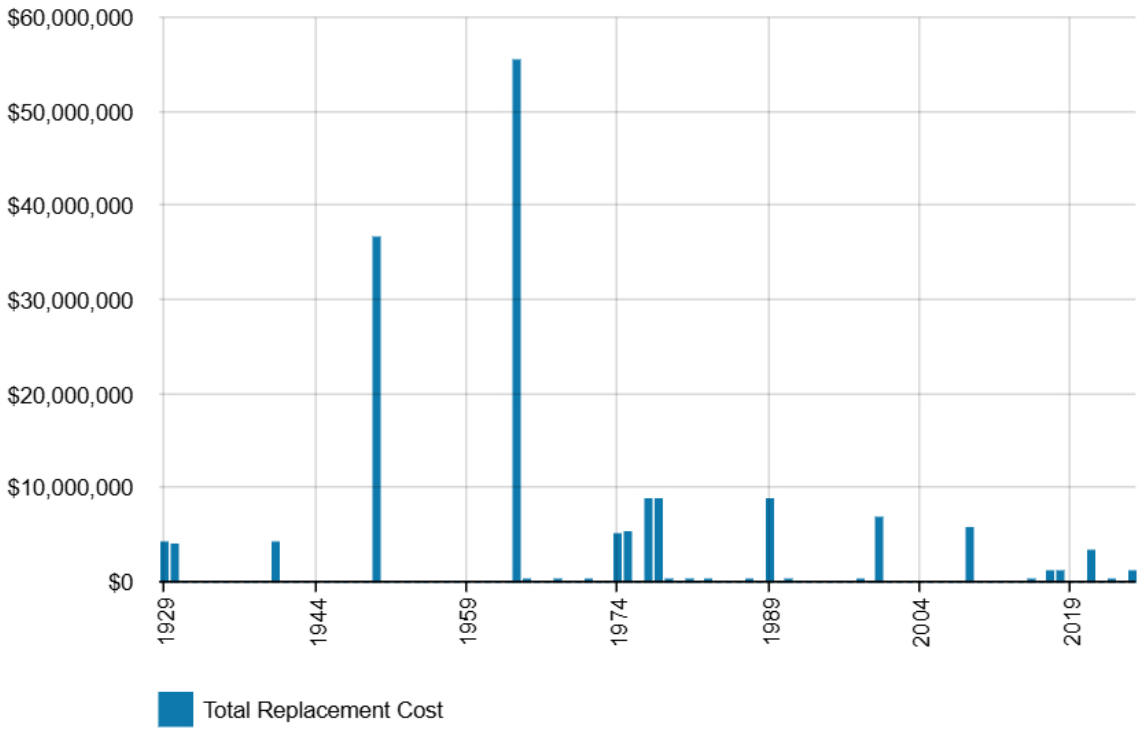

Figure 5.1.1: Asset Age Profile

Amounts are shown in real values (i.e., current values, net of inflation).

Asset actual ages are unknown and so are calculated from assessed condition and Useful life. As such there are natural spikes which represent the condition of various kerb & gutter assets.

Given the majority of kerb and gutter assets were constructed between 1948 and 1980 it is anticipated major renewals will fall between 2068-2100.

5.1.2. Asset capacity and performance

Assets are generally provided to meet design standards where these are available.

There are no deficiencies identified in the kerb and gutter asset class.

5.1.3. Asset condition

Condition is currently monitored by inspection of 20 percent of the network every year. The condition assessment of kerb and gutter assets is encompassed within this plan.

Condition is measured using a 1 – 5 grading system[5] as detailed in Table 5.1.3. It is important that a consistent approach is used in reporting asset performance enabling effective decision support. A finer grading system may be used at a more specific level, however, for reporting in the AM plan results are translated to a 1 – 5 grading scale for ease of communication.

Table 5.1.3: Condition Grading System

Condition Grading	Description of Condition
1	**Very Good**: free of defects, only planned and/or routine maintenance required

[5] IPWEA, 2015, IIMM, Sec 2.5.4, p 2|80.

2	**Good**: minor defects, increasing maintenance required plus planned maintenance
3	**Fair**: defects requiring regular and/or significant maintenance to reinstate service
4	**Poor**: significant defects, higher order cost intervention likely
5	**Very Poor**: physically unsound and/or beyond rehabilitation, immediate action required

The condition profile of our assets is shown in Figure 5.1.3.

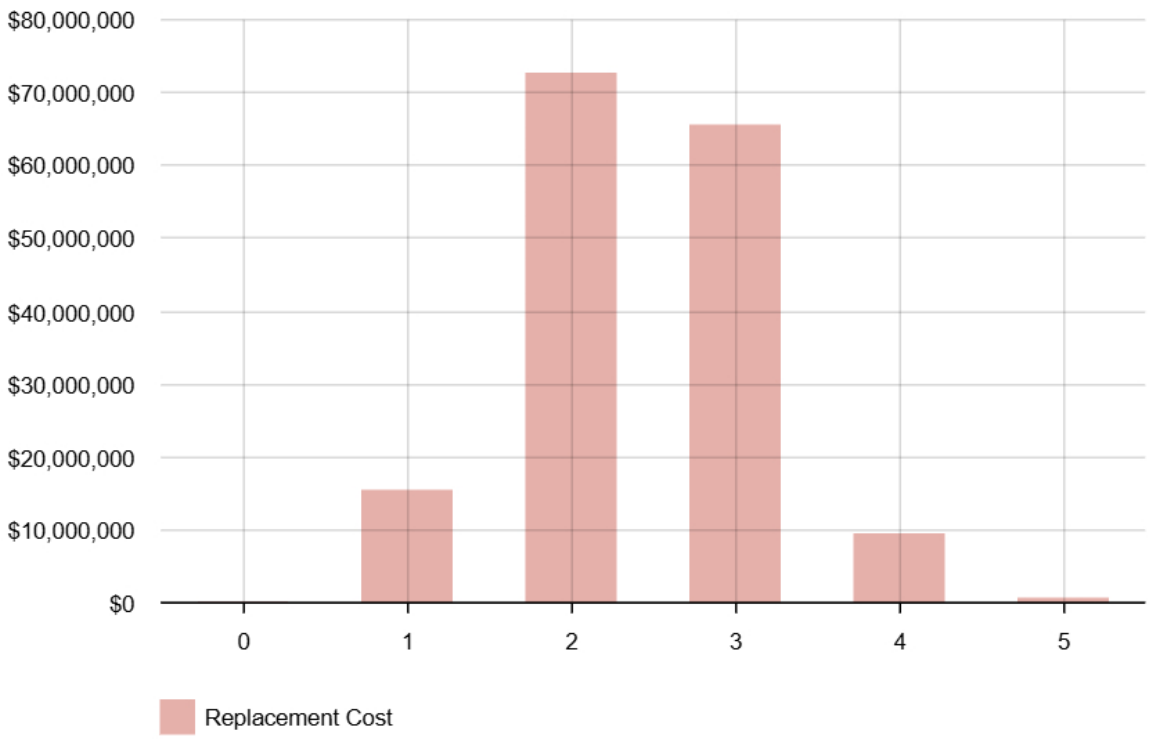

Figure 5.1.3: Asset Condition Profile

The current asset conditions are assessed as average to good condition. The distribution is well balanced with limited assets in poor to very poor condition. The current asset condition is considered to be good as the poor condition assets are manageable under this AMP. This signifies a transition from very old assets to new asset has occurred through past capital works programs.

5.2. Operations and Maintenance Plan

Operations include regular activities to provide services. Examples of typical operational activities include cleaning, street sweeping, asset inspection, and utility costs.

Maintenance includes all actions necessary for retaining an asset as near as practicable to an appropriate service condition including regular ongoing day-to-day work necessary to keep assets operating. Examples of typical maintenance activities include pipe repairs, asphalt patching, and equipment repairs.

The trend in maintenance budgets are shown in Table 5.2.1.

Table 5.2.1: Maintenance Budget Trends

Year	Maintenance Budget $
[Enter previous year in current year terms]	$163,981
[Enter current year]	$163,981
[Enter next year estimate]	$163,981

Maintenance budget levels are considered to be adequate to meet projected service levels, which may be less than or equal to current service levels. Where maintenance budget allocations are such that they will result in a lesser level of service, the service consequences and service risks have been identified and are highlighted in this AM Plan and service risks considered in the Infrastructure Risk Management Plan.

Assessment and priority of reactive maintenance is currently undertaken by staff using experience and sound professional judgement. There is an inherent risk in depending on staff to use experience. The risk is identified in the Section 6 under Risk Management. The improvement plan in Section 8.4 also indicates an improvement on the prioritisation methodology.

Asset hierarchy

An asset hierarchy provides a framework for structuring data in an information system to assist in collection of data, reporting information and making decisions. The hierarchy includes the asset class and component used for asset planning and financial reporting and service level hierarchy used for service planning and delivery.

The service hierarchy is shown is Table 5.2.2.

Table 5.2.2: Asset Service Hierarchy

Service Hierarchy	Service Level Objective
Dish Drains	To inspect, assess and make safe the asset within 24 hours of reporting, rectified within the Service Level Agreement timeframe
Kerb and gutter	To inspect, assess and make safe the asset within 24 hours of reporting, rectified within the Service Level Agreement timeframe
Private Driveway Layback	To inspect and assess within the Service Level Agreement timeframe and reference appropriately to the corresponding property owner as per Roads Act 1993

Summary of forecast operations and maintenance costs

Forecast operations and maintenance costs are expected to vary in relation to the total value of the asset stock. If additional assets are acquired, the future operations and maintenance costs are forecast to increase. If assets are disposed of the forecast operation and maintenance costs are expected to decrease. Figure 5.2 shows the forecast operations and maintenance costs relative to the proposed operations and maintenance Planned Budget.

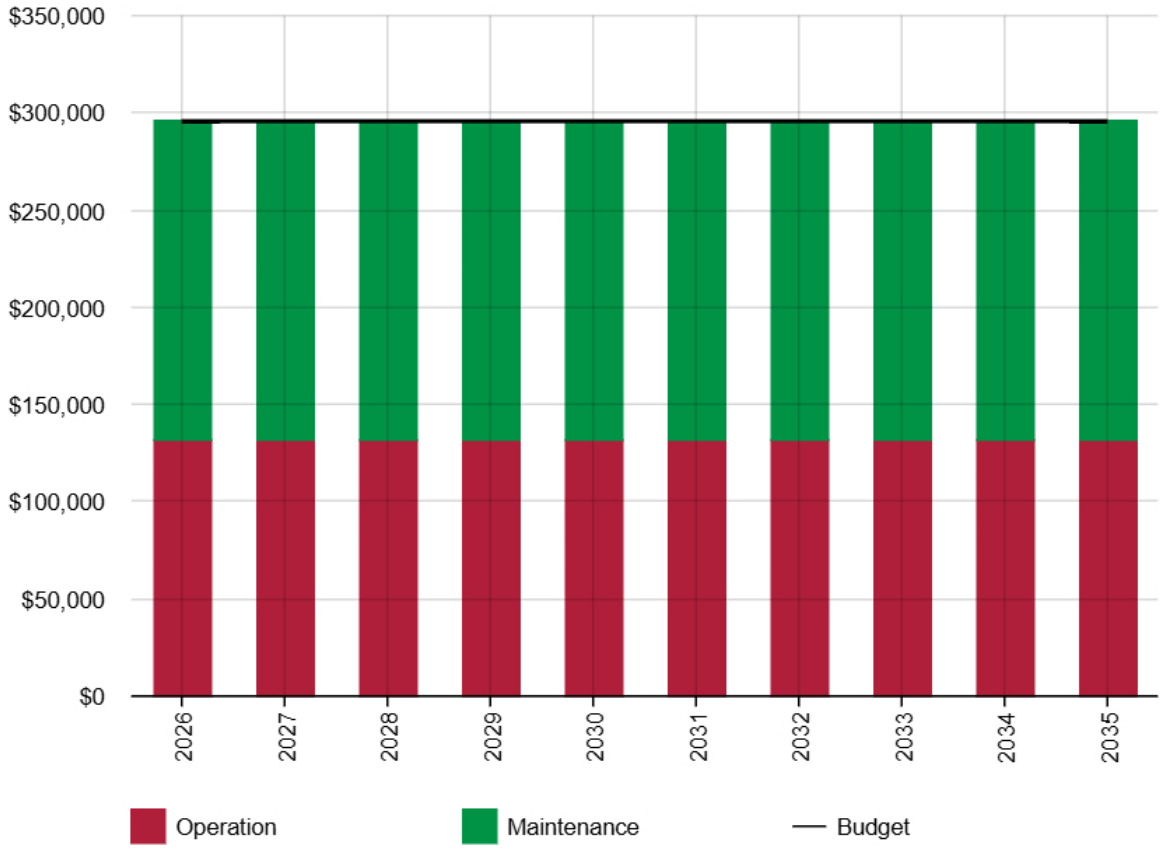

Figure 5.2: Operations and Maintenance Summary

Amounts are shown in real values (i.e., current values, net of inflation).

The forecast operations and renewal costs are in line with the proposed operations budget. However, with the growing cost of material, labour, and new acquisitions, it is likely that the budget for future operations and maintenance will require review every 5 years to keep up with the growing cost. The increase in maintenance cost while insignificant, will create deferred maintenance items causing increased deterioration rate and a shorter lifespan of assets.

5.3. Renewal Plan

Renewal is major capital work which does not significantly alter the original service provided by the asset, but restores, rehabilitates, replaces or renews an existing asset to its original service potential. Work over and above restoring an asset to original service potential is considered to be an acquisition resulting in additional future operations and maintenance costs.

Assets requiring renewal are identified from one of two approaches in the Lifecycle Model.

- The first method uses Asset Register data to project the renewal costs (replacement cost) and renewal timing (acquisition year plus updated useful life to determine the renewal year), or
- The second method uses an alternative approach to estimate the timing and cost of forecast renewal work (i.e. condition modelling system, staff judgement, average network renewals, or other).

The typical useful lives of assets used to develop projected asset renewal forecasts are shown in Table 5.3. Asset useful lives were last reviewed on 30 June 2023.[6]

[6] Enter Reference to Report documenting Review of Useful Life of Assets

Table 5.3: Useful Lives of Assets

Asset material	Useful life
Asphalt	45
Brick	100
Concrete	120
Sandstone	120

The estimates for renewals in this AM Plan were based on the asset register method.

5.3.1. Renewal ranking criteria

Asset renewal is typically undertaken to either:

- Ensure the reliability of the existing infrastructure to deliver the service it was constructed to facilitate (e.g. replacing a bridge that has a 5 t load limit), or
- To ensure the infrastructure is of sufficient quality to meet the service requirements (e.g. condition of a playground).[7]

It is possible to prioritise renewals by identifying assets or asset groups that:

- Have a high consequence of failure,
- Have high use and subsequent impact on users would be significant,
- Have higher than expected operational or maintenance costs, and
- Have potential to reduce life cycle costs by replacement with a modern equivalent asset that would provide the equivalent service.[8]

The ranking criteria used to determine priority of identified renewal proposals is detailed in Table 5.3.1.

Table 5.3.1: Renewal Priority Ranking Criteria

Criteria	Weighting
Community – Function	30%
Community – Quality	5%
Technical – Condition	15%
Technical – Risk of Failure	40%
Technical – Operating/Maintenance and lifecycle costs	10%
Total	**100%**

5.3.2. Summary of future renewal costs

Forecast renewal costs are projected to increase over time if the asset stock increases. The forecast costs associated with renewals are shown relative to the proposed renewal budget in Figure 5.3.2. A detailed summary of the forecast renewal costs is shown in Appendix D.

[7] IPWEA, 2015, IIMM, Sec 3.4.4, p 3|91.
[8] Based on IPWEA, 2015, IIMM, Sec 3.4.5, p 3|97.

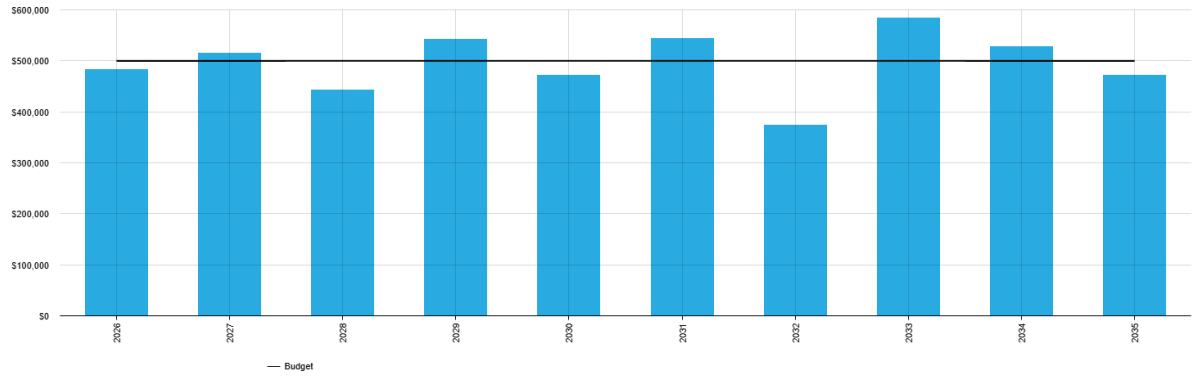

Figure 5.3.2: Forecast Renewal Costs

Amounts are shown in real values (i.e., current values, net of inflation).

The forecast renewal costs are generally below the proposed renewal budget. As an average, this is an indicator that there is sufficient funding for renewal of assets in the next 10 years. The surplus captured under renewal is sufficient to cater for renewal projects in the next 10 years.

5.4. Acquisition Plan

Acquisition reflects are new assets that did not previously exist or works which will upgrade or improve an existing asset beyond its original service level. They may result from growth, demand, social or environmental needs. Assets may also be donated to the Council.

5.4.1. Selection criteria

Proposed acquisition of new assets, and upgrade of existing assets, are identified from various sources such as community requests, proposals identified by strategic plans or partnerships with others. Potential upgrade and new works should be reviewed to verify that they are essential to the Entities needs. Proposed upgrade and new work analysis should also include the development of a preliminary renewal estimate to ensure that the services are sustainable over the longer term. Verified proposals can then be ranked by priority and available funds and scheduled in future works programmes. The priority ranking criteria is detailed in Table 5.4.1.

Table 5.4.1: Acquired Assets Priority Ranking Criteria

Criteria	Weighting
Requirement to manage stormwater flow	50%
Community Expectation	15%
Lifecycle Cost	25%
Community Benefits (Usage, population, future development)	25%
Total	**100%**

5.4.2. Summary of future asset acquisition costs

Currently Council has no plans to acquire new kerb and gutter. Therefore, there is no planned budget allocated to the acquisition of gutter and gutter.

When Council commits to new assets, we must be prepared to fund future operations, maintenance and renewal costs. We must also account for future depreciation when reviewing long term sustainability. When reviewing the long-term impacts of asset acquisition, it is useful to consider the cumulative value of the acquired assets being taken on by Council.

There is no foreseeable major retaining wall acquisition by capital investment. However, there is the potential to have assets donated to Council as part of private development. The urban setting of Randwick City Council would mean that these donated assets will be dedicated at no capital cost to Council.

5.5. Disposal Plan

Disposal includes any activity associated with the disposal of a decommissioned asset including sale, demolition, or relocation. There are currently no assets being identified for possible decommissioning and disposal. Costs incurred from early disposal of assets were not included in this asset management plan. The cost incurred will be the residual values of the assets being renewed prior to the end of life. Depending on the performance of such assets, their values can be fully actualised prior to the end of life.

5.6. Summary of asset forecast costs

The financial projections from this asset plan are shown in Figure 5.6. These projections include forecast costs for acquisition, operation, maintenance, renewal, and disposal. These forecast costs are shown relative to the proposed budget.

The bars in the graphs represent the forecast costs needed to minimise the life cycle costs associated with the service provision. The proposed budget line indicates the estimate of available funding. The gap between the forecast work and the proposed budget is the basis of the discussion on achieving balance between costs, levels of service and risk to achieve the best value outcome.

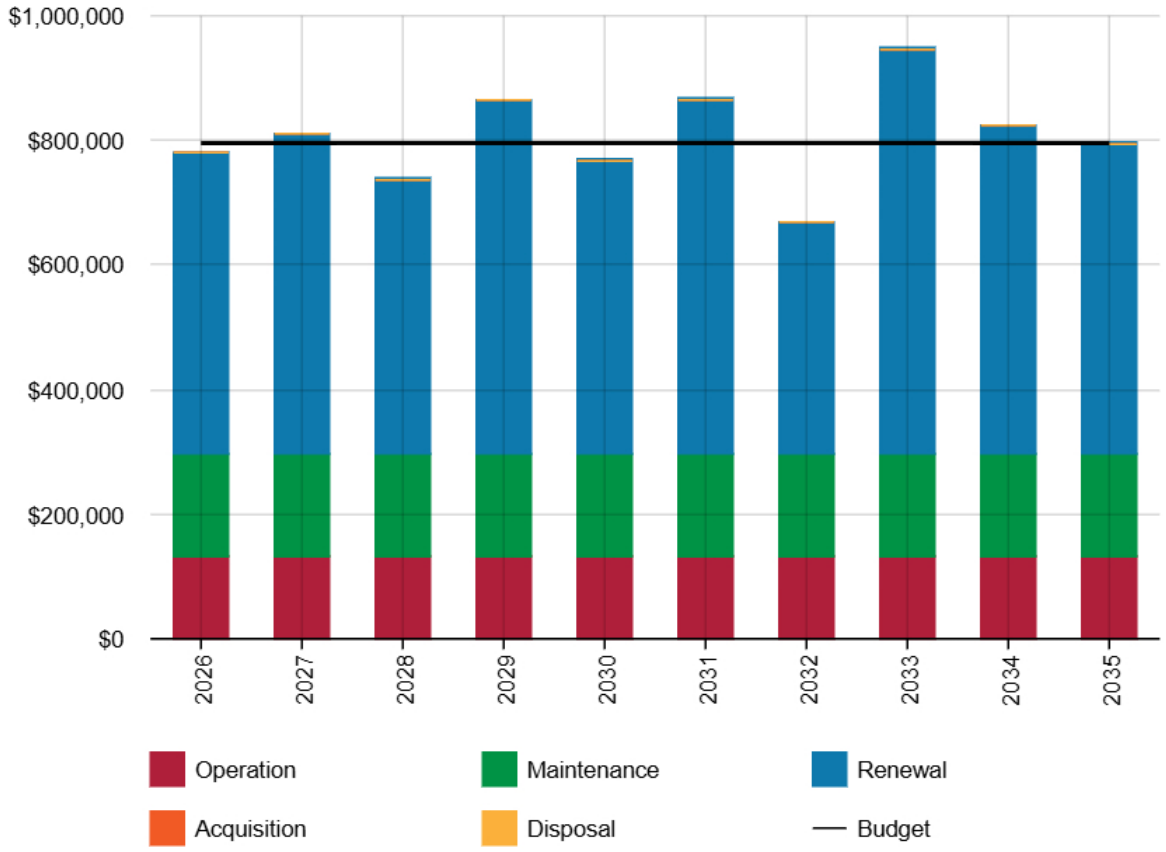

Figure 5.6: Lifecycle Summary

Amounts are shown in real values (i.e., current values, net of inflation).

The forecast costs of the asset are generally in line or below the proposed budget which caters for fluctuations in yearly cost variations. The model shows that the budget is currently sustainable. The yearly surplus can be placed in infrastructure reserves in preparation for Town Centre Upgrades in the near future.

6. RISK MANAGEMENT PLANNING

The purpose of infrastructure risk management is to document the findings and recommendations resulting from the periodic identification, assessment and treatment of risks associated with providing services from infrastructure, using the fundamentals of International Standard ISO 31000:2018 Risk management – Principles and guidelines.

Risk Management is defined in ISO 31000:2018 as: 'coordinated activities to direct and control with regard to risk'[9].

An assessment of risks[10] associated with service delivery will identify risks that will result in loss or reduction in service, personal injury, environmental impacts, a 'financial shock', reputational impacts, or other consequences. The risk assessment process identifies credible risks, the likelihood of the risk event occurring, and the consequences should the event occur. The risk assessment should also include the development of a risk rating, evaluation of the risks and development of a risk treatment plan for those risks that are deemed to be non-acceptable.

6.1. Critical Assets

Critical assets are defined as those which have a high consequence of failure causing significant loss or reduction of service. Critical assets have been identified and along with their typical failure mode, and the impact on service delivery, are summarised in Table 6.1. Failure modes may include physical failure, collapse or essential service interruption.

Table 6.1 Critical Assets

Critical Asset(s)	Failure Mode	Impact
Kerb and gutter	Displacement, damage, or distresses	Loss or reduction of service, restricted access, injuries to users or property damage
Dish Drain	Displacement, damage, or distresses	Loss or reduction of service, restricted access, injuries to users or property damage
Driveway Layback	Displacement, damage, or distresses	Loss or reduction of service, restricted access, injuries to users or property damage

By identifying critical assets and failure modes an organisation can ensure that investigative activities, condition inspection programs, maintenance and capital expenditure plans are targeted at critical assets.

6.2. Risk Assessment

The risk management process used is shown in Figure 6.2 below.

[9] ISO 31000:2009, p 2
[10] REPLACE with Reference to the Corporate or Infrastructure Risk Management Plan as the footnote

It is an analysis and problem-solving technique designed to provide a logical process for the selection of treatment plans and management actions to protect the community against unacceptable risks.

The process is based on the fundamentals of International Standard ISO 31000:2018.

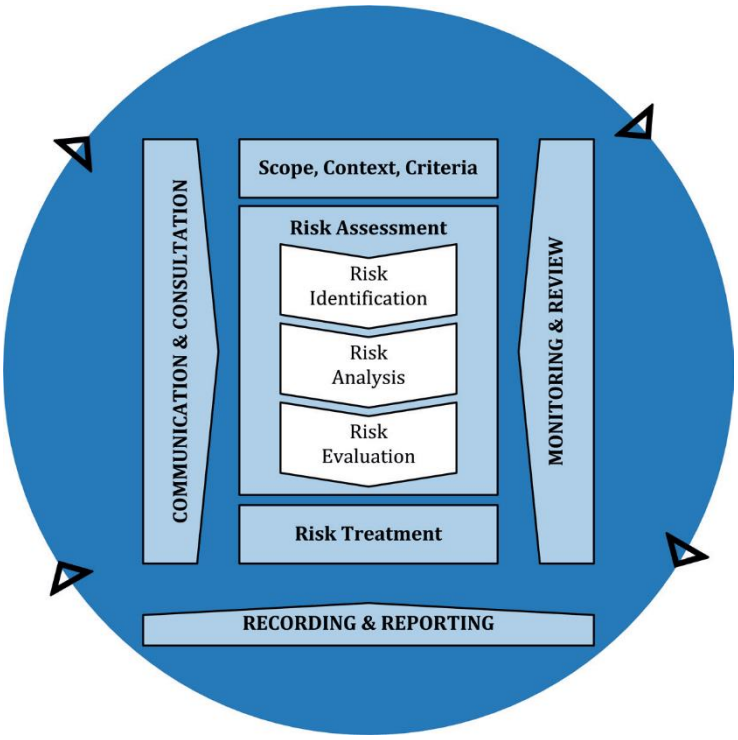

Fig 6.2 Risk Management Process – Abridged
Source: ISO 31000:2018, Figure 1, p9

The risk assessment process identifies credible risks, the likelihood of the risk event occurring, the consequences should the event occur, development of a risk rating, evaluation of the risk and development of a risk treatment plan for non-acceptable risks.

An assessment of risks[11] associated with service delivery will identify risks that will result in loss or reduction in service, personal injury, environmental impacts, a 'financial shock', reputational impacts, or other consequences.

Critical risks are those assessed with 'Very High' (requiring immediate corrective action) and 'High' (requiring corrective action) risk ratings identified in the Infrastructure Risk Management Plan. The residual risk and treatment costs of implementing the selected treatment plan is shown in Table 6.2. It is essential that these critical risks and costs are reported to management and the Council.

Table 6.2: Risks and Treatment Plans

Risk Factors	Consequence	Likelihood
Personal Injury		Please note likelihood is based on condition assessment
Financial Implications		
Environmental		
Political		

[11] REPLACE with Reference to the Corporate or Infrastructure Risk Management Plan as the footnote

Consequence	Risk Descriptions
Catastrophic	Death, toxic release off site with detrimental effect, huge financial loss (>$100,000), sustained comprehensive negative national media coverage with major loss in community trust
Major	Extensive injuries, loss of production capability, off site release with no detrimental effects, major financial loss (>$50,000 & <$100,000), Ongoing negative media coverage in local and metro press with minimal community trust
Moderate	Medical treatment required, on-site release contained with outside assistance, high financial loss (>$10,000 & <$50,000), Short period negative media coverage with rigorous community discussion
Minor	First aid treatment, on-site release immediately contained, medium financial loss (>$1000 & <$10,000), little or no impact on community's perception of Council
Insignificant	No injuries, low financial loss (<$1000), no effect to normal operations

Note * The residual risk is the risk remaining after the selected risk treatment plan is implemented.

	CONSEQUENCE				
LIKELIHOOD	Insignificant (2)	Minor (3)	Moderate (7)	Major (13)	Catastrophic (20) Major (13)
Almost Certain (5)	Medium (10)	High (15)	High (35)	Extreme (65)	Extreme (100)
Likely (4)	Medium (8)	Medium (12)	High (28)	High (52)	Extreme (80)
Possible (3)	Low (6)	Medium (9)	High (21)	High (39)	Extreme (60)
Unlikely (2)	Low (4)	Low (6)	Medium (14)	High (26)	High (40)
Rare (1)	Low (2)	Low (3)	Medium (7)	Medium (13)	High (20)

6.3. Infrastructure Resilience Approach

The resilience of our critical infrastructure is vital to the ongoing provision of services to customers. To adapt to changing conditions we need to understand our capacity to 'withstand a given level of stress or demand', and to respond to possible disruptions to ensure continuity of service.

Resilience recovery planning, financial capacity, climate change risk assessment and crisis leadership.

We do not currently measure our resilience in service delivery. This will be included in future iterations of the AM Plan.

6.4. Service and Risk Trade-Offs

The decisions made in adopting this AM Plan are based on the objective to achieve the optimum benefits from the available resources.

6.4.1. What we cannot do

There are some operations and maintenance activities and capital projects that are unable to be undertaken within the next 10 years. These include:

- We cannot continually undertake reactive maintenance only
- We cannot expand the current kerb and gutter network beyond the proposed rate of increase

6.4.2. Service trade-off

If there is forecast work (operations, maintenance, renewal, acquisition or disposal) that cannot be undertaken due to available resources, then this will result in service consequences for users. These service consequences include:

- Council staff unable to meet service level agreements
- Dilapidated kerb and gutter assets
- Reduced public safety to users of the kerb and gutters

6.4.3. Risk trade-off

The operations and maintenance activities and capital projects that cannot be undertaken may sustain or create risk consequences. These risk consequences include:

- Risk of causing harm to pedestrians from dilapidated kerb and gutter assets e.g. trip and fall, low slip resistant kerb and gutters and inaccessible kerb ramps for wheelchairs
- Extended time that kerb and gutter assets are 'not in use', causing impact to passengers alighting from vehicles which could lead to an accident with travelling motor vehicles or cyclists

These actions and expenditures are considered and included in the forecast costs, and where developed, the Risk Management Plan.

7. FINANCIAL SUMMARY

This section contains the financial and valuation forecasts resulting from the information presented in the previous sections of this plan. Forecasts will be improved as the discussion on sustainable levels of service, risk and cost matures in line with the financial strategy.

7.1. Financial Sustainability and Projections

7.1.1. Sustainability of service delivery

There are two key indicators of sustainable service delivery that are considered in the AM Plan for this service area. The two indicators are the:

- Asset Renewal Funding Ratio (planned renewal budget for the next 10 years / forecast renewal outlays for the next 10 years identified as warranted in the AM Plan), and
- Lifecycle Funding Ratio (planned lifecycle budget for the next 10 years / forecast lifecycle outlays for the next 10 years identified as warranted in the AM Plan).

Asset Renewal Funding Ratio

Asset Renewal Funding Ratio[12] 101.36%

The Asset Renewal Funding Ratio illustrates that over the next 10 years we expect to have 101.36% of the funds required for the optimal renewal of assets.

The forecast renewal works along with the planned renewal budget, and the cumulative shortfall where one exists, is illustrated in Appendix D.

Lifecycle Funding Ratio – 10-year financial planning period

This AM Plan identifies the forecast operations, maintenance and renewal costs required to provide the levels of service to the community over a 10 year period. This provides input into 10 year long-term financial plan (LTFP) aimed at providing the required services in a sustainable manner.

This forecast work can be compared to the planned budget over the first 10 years of the planning period to identify any funding shortfall.

[12] AIFMM, 2015, Version 1.0, Financial Sustainability Indicator 3, Sec 2.6, p 9.

The forecast operations, maintenance and renewal costs over the 10 year planning period is $814,158 average per year.

The 10-year LTFP is $820,719 on average per year giving a 10 year funding surplus of $6,561 per year. This indicates that 100.81% of the forecast costs needed to provide the services documented in this AM Plan are accommodated in the proposed budget. Note, these calculations exclude depreciation and the acquisition of new and upgrade of existing assets.

Providing sustainable and affordable services from infrastructure requires the management of service levels, risks, forecast outlays and financing to achieve a financial indicator of approximately 1.0 for the first years of the AM Plan and ideally over the 10 year life of the Long-Term Financial Plan.

7.1.2. Forecast Costs (outlays) for the long-term financial plan

Table 7.1.2 shows the forecast costs (outlays) required for consideration in the 10 year long-term financial plan.

Providing services in a financially sustainable manner requires a balance between the forecast outlays required to deliver the agreed service levels with the planned budget allocations in the long-term financial plan.

Forecast costs are shown in 2025 dollar values.

Table 7.1.2: Forecast Costs (Outlays) for the Long-Term Financial Plan

Year	Acquisition	Operation	Maintenance	Renewal	Disposal
2026	$0	$131,738	$163,981	$483,318	$0
2027	$0	$131,738	$163,981	$515,052	$0
2028	$0	$131,738	$163,981	$442,150	$0
2029	$0	$131,738	$163,981	$568,041	$0
2030	$0	$131,738	$163,981	$471,630	$0
2031	$0	$131,738	$163,981	$570,365	$0
2032	$0	$131,738	$163,981	$373,160	$0
2033	$0	$131,738	$163,981	$650,581	$0
2034	$0	$131,738	$163,981	$527,738	$0
2035	$0	$131,738	$163,981	$498,384	$0

7.2. Valuation Forecasts

The best available estimate of the value of assets included in this AM Plan are shown below. The assets are valued at fair value at cost to replace service capacity:

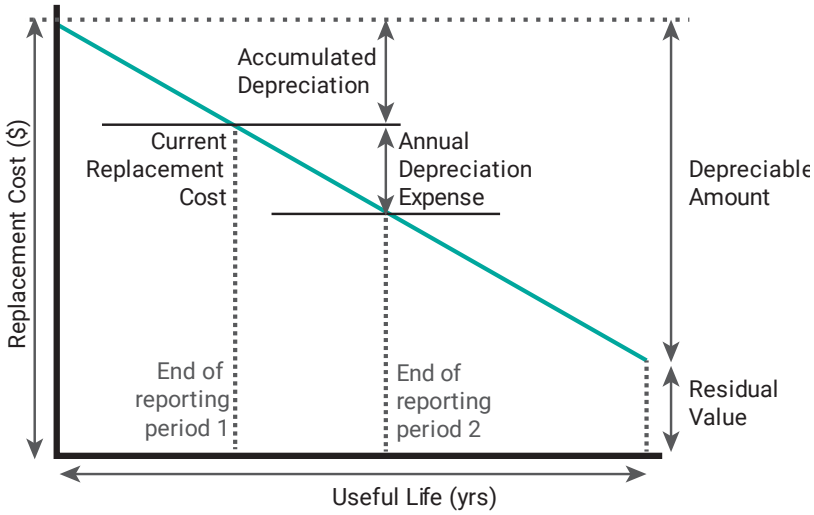

Figure 7.2.1: Valuation Terminology

Replacement Cost (Gross) $164911885

Depreciable Amount	$164911885
Current Replacement Cost[13]	$70095029
Annual Depreciation Expense	$1026372.

Under the AASB requirements, Council is required to revalue assets at a rate of minimum once every 4 years. This will help align the values of the existing assets with the addition of the acquired assets to a current day value

8. ASSUMPTIONS AND IMPROVEMENT PLANNING

8.1. Data and Information Sources

8.1.1. Accounting and financial data sources

This AM Plan utilises accounting and financial data sourced from Randwick City Councils IPPE Fair Value Assessment 2023-24 as at 30 June 2024.

8.1.2. Asset management data sources

This AM Plan also utilises asset management data sourced from Randwick City Councils asset register.

8.2. Key Assumptions

In compiling this AM Plan, it was necessary to make some assumptions. This section details the key assumptions made in the development of this AM plan and should provide readers with an understanding of the level of confidence in the data behind the forecasts.

Key assumptions made in this AM Plan are:

- Asset values and dimensions are correct; Changes to asset values and dimensions will have an effect on resources required to operate, maintain and renew kerb and gutter assets.
- 100% of Council's kerb and gutter assets have been inspected and the kerb and gutter asset conditions have been updated accordingly. Monitoring of change of condition may show change in the asset's useful life which may have a subsequent impact on funding required to maintain level of service.
- The estimates used for current rates of renewal will remain constant at the current 2023 values for the next 10 years. Any increase to the renewal costs may reduce the amount of work budgeted with possible reduction in the kerb and gutter service level.

Assets requiring renewal are identified from either the asset register or an alternative method.

- The timing of capital renewals based on the asset register is applied by adding the useful life to the year of acquisition or year of last renewal,
- Alternatively, an estimate of renewal lifecycle costs is projected from external condition modelling systems and may be supplemented with, or based on, expert knowledge. When doing so, the forecast remaining useful life in the asset register should be adjusted where necessary.

The Asset Register method was used to forecast the renewal lifecycle costs for this AM Plan.

[13] Also reported as Written Down Value, Carrying or Net Book Value.

8.3. Forecast Reliability and Confidence

The forecast demands, costs, planned budgets, and valuation projections in this AM Plan are based on the best available data. For effective asset management and financial planning and reporting, it is critical that the information is reliable and up to date. Data confidence is classified on an A to E level scale in accordance with the guidance provided in the International Infrastructure Management Manual. [14]

Table 8.3.1: Data Confidence Grading System

Confidence Grade	Description
A. Very High	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 ± 2%
B. High	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 ± 10%
C. Medium	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 ± 25%
D. Low	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 ± 40%
E. Very Low	None or very little data held.

The estimated confidence level for and reliability of data used in this AM Plan is shown in Table 8.3.2.

Table 8.3.2: Data Confidence Assessment for Data used in AM Plan

Data	Confidence Assessment	Comment
Demand drivers	High	The demand drivers are based on NSW Department of Planning requirements.
Growth projections	High	The demand drivers are based on customer requests, condition assessment and ongoing development requirements.
Acquisition forecast	High	This data has been a trend for Randwick City Council for the past 5 years
Operation forecast	High	This data has been a trend for Randwick City Council for the past 5 years
Maintenance forecast	Medium	This data has been a trend for Randwick City Council for the past 5 years
Renewal forecast - Asset values	Medium	The data is based on a recent revaluation of assets after a Council wide audit.
- Asset useful lives	High	The data is based on a recent revaluation of assets after a Council wide audit.
- Condition modelling	Medium	The data is based on a recent revaluation of assets after a Council wide audit.
Disposal forecast	High	This data has been a trend for Randwick City Council for the past 5 years

[14] IPWEA, 2015, IIMM, Table 2.4.6, p 2|71.

The estimated confidence level for and reliability of data used in this AM Plan is considered to be medium.

8.4. Improvement Plan

It is important that we recognise gaps in the planning process that require improvement to ensure effective asset management and informed decision making. The improvement plan generated from this AM Plan is shown in Table 8.4.

Table 8.4: Improvement Plan

Task	Task	Responsibility	Resources Required	Timeline
1	Improve asset register data confidence.	Asset Management Services	Asset Team	Ongoing
2	Review resilience of service delivery	Asset Management Services	Asset Team	2028
3	Include priority weighting methodology in maintenance and operation of assets. The four categories include: Condition, Functionality, Usage and Criticality	Infrastructure Services	Asset Team	2028
4	Improve proactive maintenance planning and reporting mechanism	Infrastructure Services	Asset Team	Ongoing
5	Improve asset management principles awareness within Council staff	Asset Management Services	Asset Team	Ongoing

8.5. Monitoring and Review Procedures

This AM Plan will be reviewed during the annual budget planning process and revised to show any material changes in service levels, risks, forecast costs and proposed budgets as a result of budget decisions.

The AM Plan will be reviewed and updated annually to ensure it represents the current service level, asset values, forecast operations, maintenance, renewals, acquisition and asset disposal costs and planned budgets. These forecast costs and proposed budget are incorporated into the Long-Term Financial Plan or will be incorporated into the Long-Term Financial Plan once completed.

The AM Plan has a maximum life of 4 years and is due for complete revision and updating within nine (9) months of each Council election.

8.6. Performance Measures

The effectiveness of this AM Plan can be measured in the following ways:

- The degree to which the required forecast costs identified in this AM Plan are incorporated into the long-term financial plan,
- The degree to which the 1 to 5-year detailed works programs, budgets, business plans and corporate structures consider the 'global' works program trends provided by the AM Plan,
- The degree to which the existing and projected service levels and service consequences, risks and residual risks are incorporated into the Strategic Planning documents and associated plans,

- The Asset Renewal Funding Ratio achieving the Organisational target (this target is often 90 – 110%).

9. REFERENCES

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- ISO, 2018, ISO 31000:2018 Risk management – Guidelines
- 'Strategic Plan 20XX – 20XX',
- 'Annual Plan and Budget'.

10. APPENDICES

Appendix A Acquisition Forecast

A.1 – Acquisition Forecast Assumptions and Source

The key assumption is that no private developments will donate kerb and gutter assets to Council. Should this prove incorrect it will be accounted for in future asset management plans.

A.3 – Acquisition Forecast Summary

Table A3 - Acquisition Forecast Summary

Year	Constructed	Donated	Growth
2026	$0	$0	$0
2027	$0	$0	$0
2028	$0	$0	$0
2029	$0	$0	$0
2030	$0	$0	$0
2031	$0	$0	$0
2032	$0	$0	$0
2033	$0	$0	$0
2034	$0	$0	$0
2035	$0	$0	$0

Appendix B Operation Forecast

B.1 – Operation Forecast Assumptions and Source

- No new assets are assumed to be acquired.
- Amounts are shown in real values (i.e., current values, net of inflation).

B.2 – Operation Forecast Summary

Table B2 - Operation Forecast Summary

Year	Operation Forecast	Additional Operation Forecast	Total Operation Forecast
2026	$131,738	$0	$131,738
2027	$131,738	$0	$131,738
2028	$131,738	$0	$131,738
2029	$131,738	$0	$131,738
2030	$131,738	$0	$131,738
2031	$131,738	$0	$131,738
2032	$131,738	$0	$131,738
2033	$131,738	$0	$131,738
2034	$131,738	$0	$131,738
2035	$131,738	$0	$131,738

Appendix C Maintenance Forecast

C.1 – Maintenance Forecast Assumptions and Source

- No new assets are assumed to be acquired.
- Amounts are shown in real values (i.e., current values, net of inflation).

C.2 – Maintenance Forecast Summary

Table C2 - Maintenance Forecast Summary

Year	Maintenance Forecast	Additional Maintenance Forecast	Total Maintenance Forecast
2026	$163,981	$0	$163,981
2027	$163,981	$0	$163,981
2028	$163,981	$0	$163,981
2029	$163,981	$0	$163,981
2030	$163,981	$0	$163,981
2031	$163,981	$0	$163,981
2032	$163,981	$0	$163,981
2033	$163,981	$0	$163,981
2034	$163,981	$0	$163,981
2035	$163,981	$0	$163,981

Appendix D Renewal Forecast Summary

D.1 – Renewal Forecast Assumptions and Source

- Renewal forecast is based on the asset register. The general assumption of the asset register is that the condition of the assets are assessed appropriately and that the physical data of the asset are correct.
- No new assets are assumed to be acquired.
- Amounts are shown in real values (i.e., current values, net of inflation).

D.3 – Renewal Forecast Summary

Table D3 - Renewal Forecast Summary

Year	Renewal Forecast	Renewal Budget
2026	$483,318	$500,000
2027	$515,052	$500,000
2028	$442,150	$500,000
2029	$542,093	$500,000
2030	$471,628	$500,000
2031	$544,418	$500,000
2032	$373,161	$500,000
2033	$584,699	$500,000
2034	$527,739	$500,000
2035	$472,435	$500,000

D.4 – Renewal Plan

Asset ID	Street Name	Renewal Year
FR006689	Carrington Rd (Ravenswood Ln to Ravenswood Ln) , Randwick	2026
FR007314	Boyce Rd (Boyce Rd to Boyce Rd) , Maroubra	2026
FR007609	Maroubra Rd (Maroubra Rd to Garden St) , Maroubra	2026
FR007649	Runic Ln (Un Named Lane to Anzac Pde), Maroubra	2026
FR007879	Maroubra Rd (Hinkler St to Bunnerong Rd), Maroubra	2026
FR007894	Charman Ave (Width Change to Percival St), Maroubra	2026
FR008625	Anzac Pde (Anzac Pde to Pozieres Ave), Matraville	2026
RD008458	Keating St (Garden St to Cooper St), Maroubra	2026
RD009038	Lexington Pl (Minneapolis Cres to New Orleans Cres), Maroubra	2026
RD017378	Rainbow St (Forsyth St to 53 Rainbow St), Kingsford	2026
RD010587	Moverly Rd (Garrett St to Garden St), Kingsford	2026
RD014365	Darling Ln (Darling St to 159 Darling Ln), Kensington	2026

RD008459	Keating St (Garden St to Cooper St), Maroubra	2026
RD000670	Anzac Pde (Storey St to Shepherd St), Maroubra	2026
FR008037	Mermaid Ave (Malabar Rd to Lurline St)	2026
FR006346	Mount St (15 Mount St to Marcel Ave), Coogee	2027
FR007990	Russell Ct (Russell Ct (105) to Russell Ct (105)), Maroubra	2027
RD017395	Pauling Ave (Ritchard Ave to Alison Rd), Coogee	2027
RD017402	Frances St (Prince St to Church St), Randwick	2027
RD017555	Hooper Ln (Darley Rd to Pine St), Randwick	2027
RD012812	Ash Pl (Cedar Pl to The End), South Coogee	2027
RD017449	Curie St (Pine Avenue to Fleming St), Little Bay	2027
RD017656	Rainbow St (Hendy Ave to Mount St), Coogee	2027
FR007505	Mcnair Ave (Byrd Ave to Byrd Ave), Kingsford	2027
FR007924	Hannan St (Runic Ln to Runic Ln), Maroubra	2027
FR006227	Gardeners Rd (Anzac Pde to Gardeners Rd), Kingsford	2027
FR005676	Brook St (Kidman St to Coogee Bay Rd), Coogee	2027
FR006091	Bradley St (21 Bradley St to The End), Randwick	2027
FR006133	Prince St (Prince Ln to Burton St), Randwick	2027
FR006215	Virginia St (Ingram St to Myrtle St), Kensington	2027
FR006713	Leeton Ave (The End to Alison Rd), Coogee	2027
FR006840	Inglethorpe Ave (Tedwin Ave to The End), Kensington	2027
FR006857	Alison Rd (The Avenue to The Avenue), Randwick	2027
FR006917	Kensington Rd (53 Kensington Rd to Balfour Ln), Kensington	2027
FR006920	Boronia St (63 Boronia St to 47 Boronia St), Kensington	2027
FR006999	Pauling Ave (Ritchard Ave to Alison Rd), Coogee	2027
FR007113	King St (21 King St to William St), Randwick	2027
FR007115	Prince St (King St to Cowper St), Randwick	2027
FR007156	Borrodale Rd (Bruce St to Bruce Ln), Kingsford	2027
FR007159	Todman Ave (Todman Ave to Todman Ave), Kensington	2027
FR007192	Arden St (Clovelly Rd to Quail St), Coogee	2027
FR007215	Maroubra Rd (Bona Vista Ave to Duncan St), Maroubra	2027
FR007266	Cooper St (Keating St to Storey St), Maroubra	2027
FR007280	Irvine St (Un Named Lane to Walenore Ave), Kingsford	2027
FR007342	Runic Ln (Runic Ln Parking Area to Runic Ln Parking Area) Maroubra	2027

FR007352	Anzac Pde (Runic Ln to Runic Ln), Maroubra	2027
FR007499	Paton St (Mcnair Ave to Sturt St), Kingsford	2028
FR007504	Botany St (Hincks St to Isis Ln), Kingsford	2028
FR007507	Anzac Pde (Burbong St to Burbong St), Kingsford	2028
FR007601	Maroubra Rd (Walsh Ave to Hannan St), Maroubra	2028
FR007644	Snape St (Percival St to 46 Snape St-To Dish Drain), Maroubra	2028
FR007658	Anzac Pde (Runic Ln to Storey St), Maroubra	2028
FR007681	Nicol Ave (Malabar Rd to Nicol Ln), Maroubra	2028
FR007684	Nicol Ave (Nicol Ln to French St), Maroubra	2028
FR007716	Botany St (Walenore Ave to Beulah St), Kingsford	2028
FR007755	Cooper St (Green St to Maroubra Rd), Maroubra	2028
FR007854	Hannan St (Weller Ln to Gale Rd), Maroubra	2028
FR008008	Lexington Pl (Lexington Pl (34) to Lexington Pl (3)), Maroubra	2028
FR008039	Seaside Pde (Liguria St to The End), Clovelly	2028
FR008040	Marine Pde (The Corso to Sackville St), Maroubra	2028
FR008191	Dundas St (Oberon St to Rainbow St), Coogee	2028
FR008238	Kain Ave (Oxley St to Oxley St), Matraville	2028
FR008260	Franklin St (The End to Lawson St), Matraville	2028
FR008289	Minneapolis Cres (Sims Ln to Midway Dr), Maroubra	2028
FR008301	Portland Cres (Russell Ct to Yorktown Pde), Maroubra	2028
FR008514	Baird Ave (Baird Ln to Perry St), Matraville	2028
FR008519	Paterson St (Namoi Rd to Windsor St), Matraville	2028
FR008803	Australia Ave (Bunnerong Rd to Australia Ave), Matraville	2029
RD000581	Anzac Pde (Doncaster Ave to 176 Anzac Pde), Kensington	2029
RD000648	Anzac Pde (Botany St to Jacques St), Kingsford	2029
RD000714	Anzac Pde (Maroubra Rd to Wise St), Maroubra	2029
RD001233	Avoca St (Bundock St to Sturt St), Kingsford	2029
RD001998	Bond St (Marine Pde to Bona Vista Ave), Maroubra	2029
RD002519	Boyce Rd (Cooper St to Flower St), Maroubra	2029
RD002558	Boyce Rd (Hannan St to Royal St), Maroubra	2029
RD002559	Boyce Rd (Hannan St to Royal St), Maroubra	2029
RD002568	Boyce Rd (Royal St to Bunnerong Rd), Maroubra	2029
RD003914	Charman Ave (Width Change to Percival St), Maroubra	2029
RD004658	Cuzco St (Denning St to The End)	2029

RD004887	Day Ave (Eastern Ave to Cottenham Ave), Kensington	2030
RD005381	Dudley St (Byron St to Carr St), Randwick	2030
RD005462	Duncan St (Maxwell Ave to Mickeon St), Maroubra	2030
RD006431	Frances St (The Avenue to Avoca St), Randwick	2030
RD006633	Gale Rd (Anzac Pde to Loch Maree St), Maroubra	2030
RD006664	Gale Rd (Flower St to Bell St), Maroubra	2030
RD006706	Garden St (Storey St to Gale Rd), Maroubra	2030
RD007210	Hannan St (Snape St to Storey St), Maroubra	2030
RD009167	Loch Maree St (Gale Rd to Storey St), Maroubra	2030
RD009522	Malabar Rd (Fitzgerald Ave to Yorktown Pde), Maroubra	2030
RD009561	Marcel Ave (Carrington Rd to Mount St), Randwick	2030
RD009702	Maroubra Rd (Cooper St to Maroubra Rd), Maroubra	2030
RD010125	Midway Dr (Minneapolis Cres to Chester Ave), Maroubra	2031
RD010984	Norton St (Botany St to Norton Ln), Kingsford	2031
RD011543	Pauling Ave (Ritchard Ave to Alison Rd), Coogee	2031
RD011623	Perry St (Bunnerong Rd to Mccauley St), Matraville	2031
RD011633	Perry St (Mccauley St to Beauchamp Rd), Matraville	2031
RD012612	Snape St (Bunnerong Rd to Irvine St), Kingsford	2031
RD012832	Sturt St (Anzac Pde to 26 Sturt St), Kingsford	2031
RD014326	Mason St (Hannan St to Anzac Pde), Maroubra	2031
RD014979	Clift Ln (Knox St to Fewings St)	2031
RD017241	Mitchell Street (Mitchell Street to Burke Street)	2032
RD017271	Anzac Parade (Anzac Parade to The End)	2032
RD017318	Bumborah Point Road (Bumborah Point Road to Friendship Road)	2032
RD017375	Carrington Rd (Carey Ln To Douglas St), Randwick	2032
RD017383	Cottenham Ave (Day Ave To Koorinda Ave), Kensington	2032
RD017385	Greville St (Fern St to Barry St), Clovelly	2032
RD017505	Botany Road (Mccauley St to Bunnerong Road), Port Botany	2032
RD017264	Anzac Parade (Anzac Parade to The End)	2032
RD017361	Botany Road (Botany Road to Bunnerong Road)	2032
RD017437	Ewing Avenue (Pine Avenue to Mcmaster Pl), Little Bay	2032
RD017470	Botany Road (Mccauley St to Bunnerong Road), Matraville	2032
RD017504	Botany Road (Mccauley St to Bunnerong Road), Port Botany	2032
RD017550	Govett Ln (Govett St to Dangar St), Randwick	2032

RD009983	Menin Rd (Combles Pde to Pozieres Ave), Matraville	2032
RD010893	Nicol Ave (Malabar Rd to Nicol Ln), Maroubra	2032
RD011524	Paton St (Rainbow St to Mcnair Ave), Kingsford	2032
RD012201	Robey St (Fitzgerald Ave to Jersey Rd), Maroubra	2032
RD012763	Storey St (Garrett St to Garden St), Maroubra	2032
RD012782	Storey St (Cooper St to Amour Ave), Maroubra	2033
RD013173	Todman Ave (Balfour Rd to Kensington Rd), Kensington	2033
RD013457	Wade St (Robey St to Ferguson St), Maroubra	2033
RD013496	Wallace St (Width Change to 7 Wallace St), Kingsford	2033
RD013924	Wilson St (Marine Pde to Torrington Rd)	2033
RD014054	Wride St (Duncan St to Malabar Rd), Maroubra	2033
RD014115	Young St (Barker St to Middle St), Randwick	2033
RD014325	Mason St (Hannan St to Anzac Pde), Maroubra	2033
RD014729	Dowling Ln (Ingram St to The End), Kensington	2033
RD014730	Dowling Ln (Ingram St to The End), Kensington	2033
RD004907	Day Ave (Mooramie Ave to Doncaster Ave), Kensington	2033
RD006624	Gale Rd (Hannan St to Anzac Pde), Maroubra	2034
RD006745	Garden St (Green St to Maroubra Rd), Maroubra	2034
RD006746	Garden St (Green St to Maroubra Rd), Maroubra	2034
RD006756	Garden St (Maroubra Rd to Garden Ln), Maroubra	2034
RD007229	Hannan St (Gale Rd to Mason St), Maroubra	2034
RD008218	Jacques St (Botany St to Anzac Pde), Kingsford	2034
RD008520	Kennedy St (Oval Ln to Norton St), Kingsford	2034
RD008613	Kensington Rd (Duke St to Todman Ave), Kensington	2034
RD009249	Mccauley St (Perry St to Harold St), Matraville	2034
RD009482	Malabar Rd (Torrington Rd to Storey St), Maroubra	2034
RD009732	Maroubra Rd (Hannan St to Royal St), Maroubra	2034
FR008827	Franklin St (Clarence St to Larose Ave), Matraville	2034
RD000702	Anzac Pde (Boyce Rd to Green St), Maroubra	2034
RD001222	Avoca St (Rainbow St to Rigney Ave), Randwick	2034
RD001294	Baker St (Dowling St to Propnum 35), Kensington	2034
RD001594	Beach St (Arcadia St to Alison Rd), Coogee	2034
RD002038	Borrodale Rd (Cottenham Ave to Leonard Ave), Kingsford	2034
RD002039	Borrodale Rd (Cottenham Ave to Houston Rd), Kingsford	2034

RD002539	Boyce Rd (Anzac Pde to Garden St), Maroubra	2034
RD003552	Kelso Ln (Cowper St to The End), Randwick	2035
RD004457	Cooper St (Alma Rd to Boyce Rd), Maroubra	2035
FR007197	Varna St (Fern St to Douglas St)	2035
FR007270	Botany St (Walenore Ave to Walenore Ave), Kingsford	2035
FR007346	Maroubra Rd (Maroubra Rd to Maroubra Rd), Maroubra	2035
FR007482	Cooper St (Metcalfe St to Metcalfe St), Maroubra	2035
FR007487	Irvine St (Broadbent St to Fischer St), Kingsford	2035
FR007538	Rainbow St (Ellen St to Hendy Ave), South Coogee	2035
FR007599	Maroubra Rd (Ferguson St to Robey St), Maroubra	2035
FR007631	Fitzgerald Ave (Paine St to Wild St), Maroubra	2035
FR007636	Maroubra Rd (Hinkler St to Bunnerong Rd), Maroubra	2035
FR007729	Gregory St (Macleay St to Harrison Ave)	2035
FR007789	Snape St (Hannan St to Anzac Pde), Kingsford	2035
FR007807	Avoca St (Rigney Ln to Bundock St), Kingsford	2035
FR007998	Bougainville Ct (Bougainville Ct (2) to Bougainville Ct (2)), Maroubra	2035
FR008050	Malabar Rd (Mermaid Ave to Torrington Rd)	2035
FR008173	Maroubra Rd (Bruce Bennetts Pl to Maroubra Rd), Maroubra	2035

Appendix F Budget Summary by Lifecycle Activity

The planned budget for the relevant lifecycle activities is sufficient. There is no disposal cost considered as the assets will be renewed.

Table F1 – Budget Summary by Lifecycle Activity

Year	Acquisition	Operation	Maintenance	Renewal	Disposal	Total
2026	$0	$131,738	$163,981	$500,000	$0	$795,719
2027	$0	$131,738	$163,981	$500,000	$0	$795,719
2028	$0	$131,738	$163,981	$500,000	$0	$795,719
2029	$0	$131,738	$163,981	$500,000	$0	$795,719
2030	$0	$131,738	$163,981	$500,000	$0	$795,719
2031	$0	$131,738	$163,981	$500,000	$0	$795,719
2032	$0	$131,738	$163,981	$500,000	$0	$795,719
2033	$0	$131,738	$163,981	$500,000	$0	$795,719
2034	$0	$131,738	$163,981	$500,000	$0	$795,719
2035	$0	$131,738	$163,981	$500,000	$0	$795,719

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