



2022-2031

Asset Management Plan Footpaths



Randwick City Council
a sense of community

June 2022

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1.0 EXECUTIVE SUMMARY

1.1 The Purpose of the Plan

Asset Management planning is a comprehensive process to ensure infrastructure benefits are optimised to meet community needs in a financially sustainable manner.

The Footpath Asset Management Plan (Footpath AMP) details information about footpath assets with actions required to provide an agreed level of service in the most cost-effective manner while outlining associated risks. The plan defines the services to be provided, how the services are provided and funding requirements over the 10-year planning period. The Footpath AMP funding model supports the development of the Long-Term Financial Plan and overall Resourcing Strategy of the Integrated Planning and Reporting Framework.

1.2 Asset Description

This plan covers Randwick City Council's footpath network which comprise of various components including:

- Footpaths
- Shared paths (pedestrian / cycleways)
- Public stairs
- Kerb ramps
- Footway bridge
- Other footpath assets

The above footpath assets have a replacement value estimated at \$155,099,079.

1.3 Levels of Service

This plan aims to deliver a footpath network with a smooth, safe surface with few localised defects.

The main objectives of the planned funding budget are:

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

The funding allocation in the plan is adequate to maintaining this service level over the 10-year period.

1.4 Future Demand

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

- Constructing footpaths on unformed roadside land
- New footpaths to support new subdivisions and development

Randwick City Council has achieved the objective of having a formalised footpath on at least one side of the road. The footpath network has adequate capacity to cater for transport.

Randwick City Council aims to continue to construct new footpath to connect missing links in the footpath network.

Developments within Randwick City Council will be required to support the objective of the NSW Department of Planning, Industry and Environment (DPIE) to increase the population by 23% by 2036. Major developments will deliver new footpaths that Council will manage in the future.

These demands will be approached using a combination of managing existing assets, upgrading existing assets, accepting footpath dedications and providing new assets to meet demand. Demand management practices may also include a combination of non-asset solutions to ensure against risks and avoid failures by:

- Balancing priorities for infrastructure with community needs
- Assess capacity to fund alternate levels of service

1.5 Lifecycle Management Plan

1.5.1 What does it Cost?

The forecast lifecycle costs necessary to provide the services covered by this Footpath AMP includes operation, maintenance, renewal, acquisition, upgrade of existing assets and construction of new assets. This AMP has been developed to inform a Long-Term Financial Plan over a period of 10 years. The 10-year forecast total funding required for footpath assets is estimated as \$37,959,468 or on average \$3,795,947 per year.

Footpaths generally have a long asset life. The age profile of this asset class results in the requirement for only a small amount of renewal work during the planning period.

Overall, our footpath assets are depreciating at \$1,974,989 annually.

Budget allocation over and above the projected renewals covered by this Asset Management Plan is required to ensure the future sustainability of this asset class beyond the 10-year planning period.

1.6 Financial Summary

1.6.1 What we will do

The forecast funding budget for the 10-year period is \$39,342,920 or \$3,934,292 on average per year as per the Planned Budget. This is 103.6% of the cost to sustain the current level of service at the lowest lifecycle cost.

To manage infrastructure, we can only manage assets based on what is funded in the long-term financial plan. The Informed decision making depends on the Footpath AMP emphasising the consequences of planned funding on the service levels provided and risks.

The planned funding budget for footpath assets is \$138,345 more, on average, per year of the forecast lifecycle costs required to provide services in the AMP. This is shown in the figure below.

It is proposed that the forecast budget amount be included in the Long-Term Financial Plan for the footpath asset class.

Forecast Lifecycle Costs and Planned Budgets

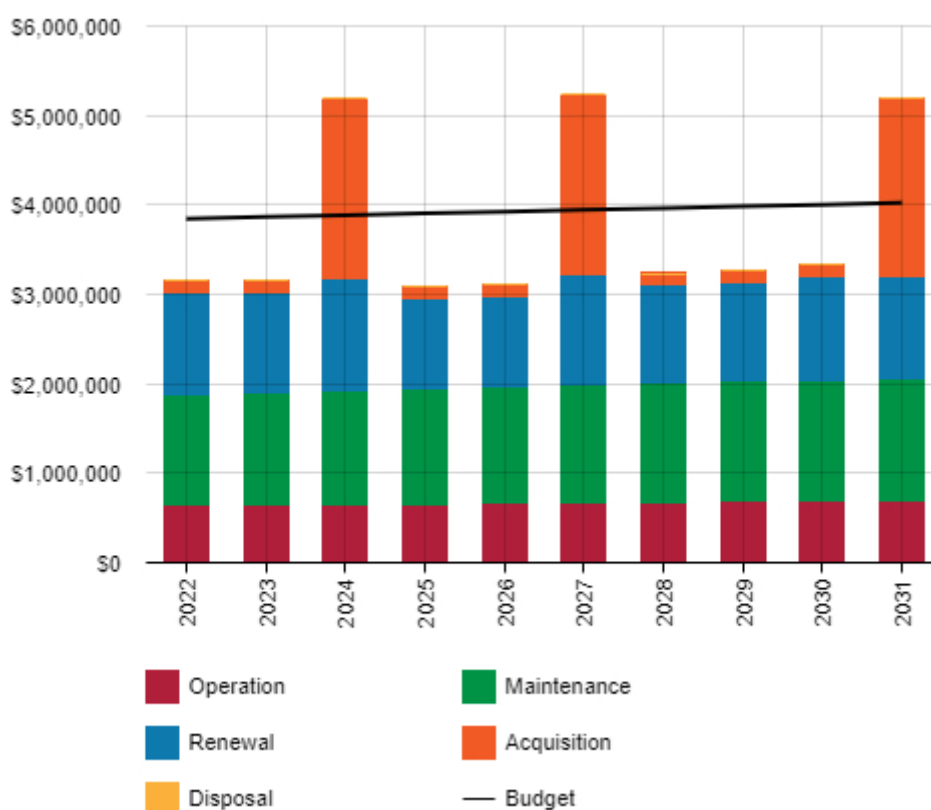


Figure values are in current dollars.

We plan to provide funding for footpath assets to undertake:

- Operation, maintenance, renewal and acquisition of footpath assets to meet service levels.
- 3 major town centre upgrades within the 10-year planning period.
- Construct missing links to the current footpath network.

1.6.2 What we cannot do

We currently do **not** allocate enough budget to sustain these services at the proposed standard or to provide all new services being sought. Works and services that cannot be provided under present funding levels are:

- Expansion of footpath network faster than the currently planned rate
- Continually undertake reactive maintenance only

1.6.3 Managing the Risks

Our present budget levels are sufficient to continue to manage risks in the medium term. The main risks associated with this asset class are:

- Council staff unable to meet service levels due to inadequate funding
- Dilapidated footpath assets due to lack of planning
- Reduced safety to users of the footpath

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

- Ensuring asset management practice as set-out by this AMP

- Funding requirements are appropriately allocated, and programs developed
- Continual focus on asset data collection and validation.
- Ongoing dialogue and consultation with the community.

1.7 Asset Management Planning Practices

Key assumptions made in this AMP are:

- Asset values and dimensions are correct
- 100% of Council's footpath 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 AMP.

This Footpath AMP is based on a highly reliable confidence level of information.

1.8 Monitoring and Improvement Program

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

- 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 asset management principles awareness within Council staff

2.0 Introduction

2.1 Background

This Footpath AMP details the requirements for the sustainable delivery of services through management of assets, including lifecycle management, risk management, statutory compliance and relevant funding to provide the appropriate levels of service over the 10-year planning period.

The AMP is to be read in conjunction with the Randwick City Council planning documents. This should include the Asset Management Policy and Asset Management Strategy, along with other key planning documents including:

- Randwick City Plan - Community Strategic Plan (CSP)
- 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 Consultation Principles and Consultation Planning Guide.

The infrastructure assets covered by this AMP include footpaths constructed using various materials and specifications including but not limited to concrete, asphalt, and segmental pavers. The footpath assets also comprise kerb ramps, shared paths (pedestrian / cycle), pedestrian bridges and stairways. For a detailed summary of the assets covered in this AMP, refer to Section 5.

These assets allow Randwick Council to meet pedestrian and cyclist needs by connecting local roads to town centres, public transport nodes, recreational spaces, and to assist pedestrians to traverse difficult terrains.

The footpath assets included in this plan have a total replacement value of \$155,099,079.

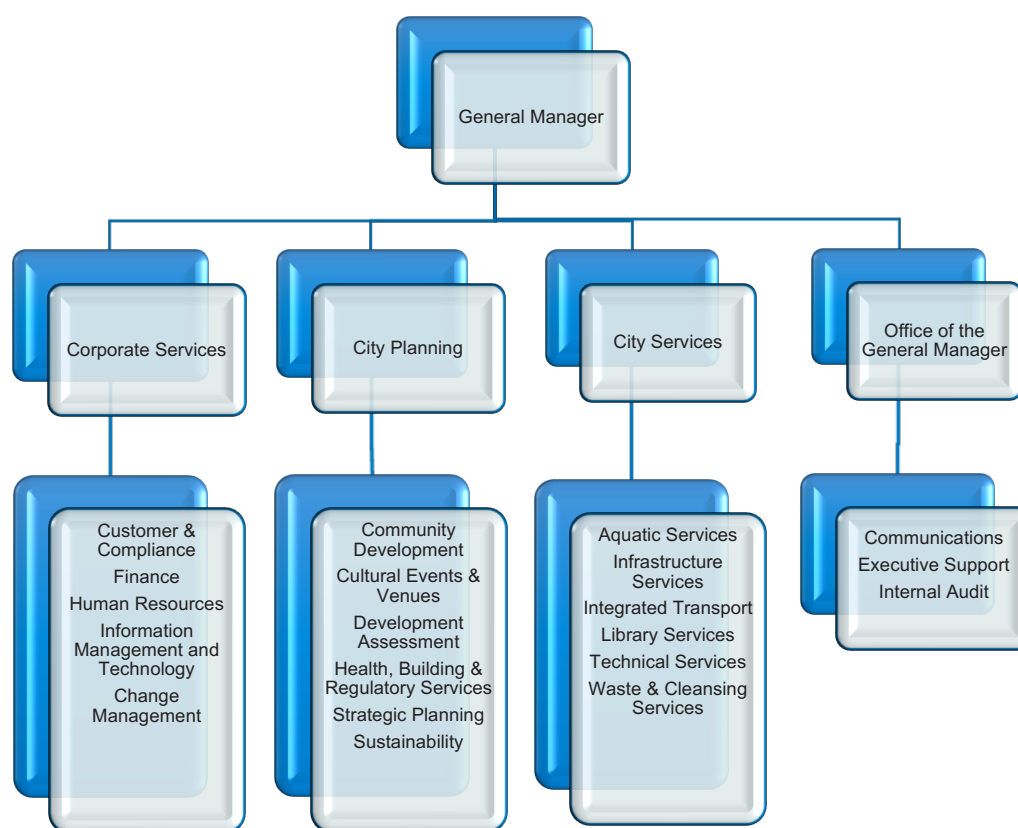
Key stakeholders in the preparation and implementation of this AMP are shown in Table 2.1.

Table 2.1: Key Stakeholders in the AMP

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 is sustainable.
Council Officers	Manage footpath assets throughout the lifecycle. Ensure level of service provided meets needs of residents and visitors. Implement the components identified in the Footpath AMP.
Residents	Core users of footpath assets.

Key Stakeholder	Role in Asset Management Plan
	Their needs, wants and expectations are conveyed to the Council and should be reflected in desired levels of service.
Visitors	Second largest users of footpath assets. Their needs, wants and expectations drive the replacement in areas of the highest visitor usage and commercial areas.
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.



2.2 Goals and Objectives of Asset Ownership

Our goal for managing infrastructure assets is to meet the defined level of service (as amended from time to time) in the most cost-effective manner for present and future consumers. The key elements of infrastructure asset management are:

- Providing a defined level 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

- Linking to a Long-Term Financial Plan which identifies required, affordable forecast costs and how it will be allocated.

Key elements of the planning framework are:

- Levels of service – specifies the services and levels of service to be provided,
- Risk Management – utilise Council's Risk Management Framework to effectively mitigate risks arise,
- Future demand – how this will impact on future service delivery and how this is to be met,
- Lifecycle management – how to manage its existing and future assets to provide defined levels of service,
- Financial summary – what funds are required to provide the defined services,
- Asset management practices – how we manage provision of the services,
- Monitoring – how the plan will be monitored to ensure objectives are met,
- Asset management improvement plan – how we increase asset management maturity.

Other references to the benefits, fundamentals principles and objectives of asset management are:

- International Infrastructure Management Manual 2015 ¹
- ISO 55000 ²

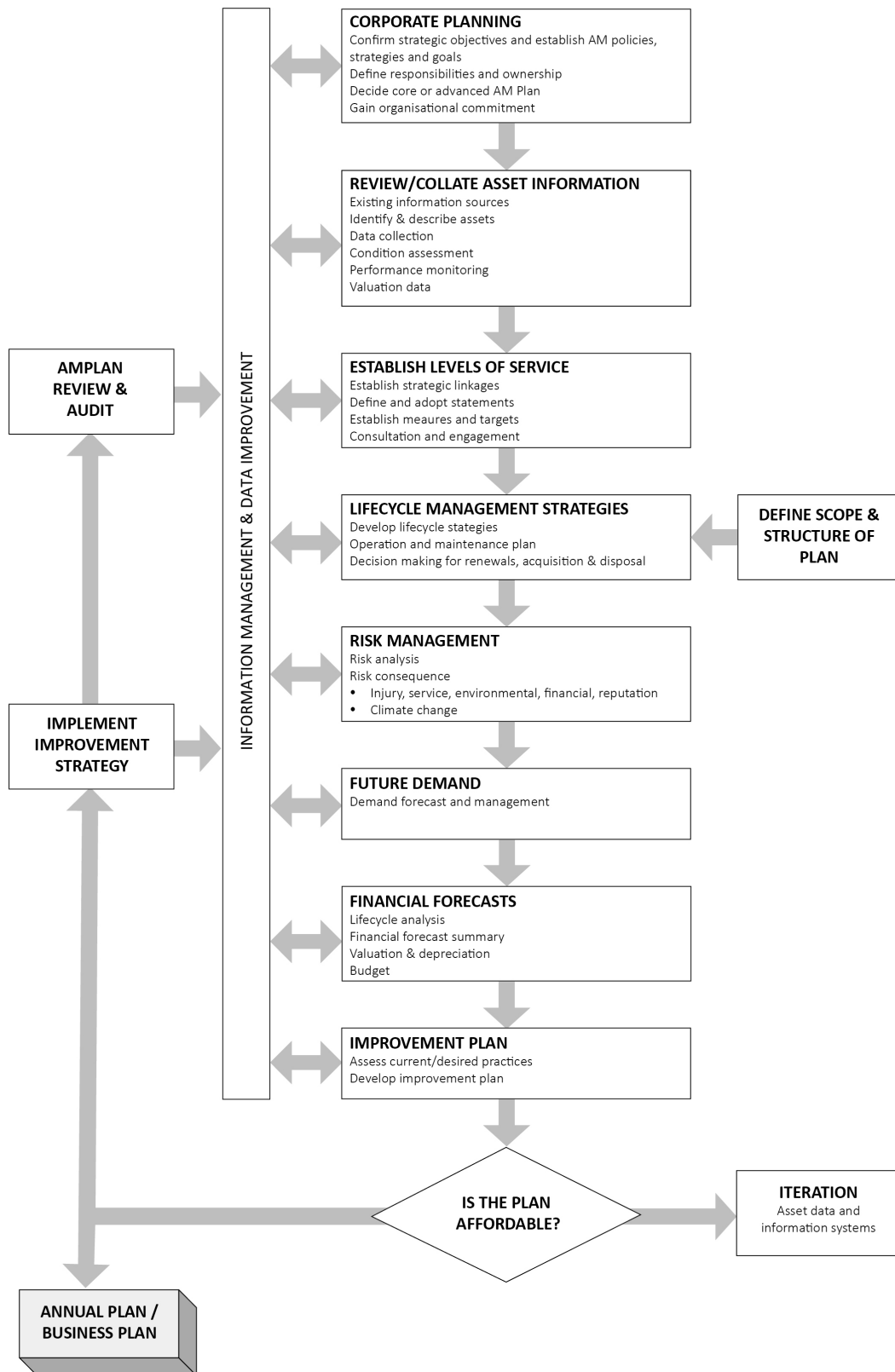
¹ Based on IPWEA 2015 IIMM, Sec 2.1.3, p 2| 13

² ISO 55000 Overview, principles and terminology

A road map for preparing an AMP is shown below.

Road Map for preparing an Asset Management Plan

Source: IPWEA, 2006, IIMM, Fig 1.5.1, p 1.11



3.0 LEVELS OF SERVICE

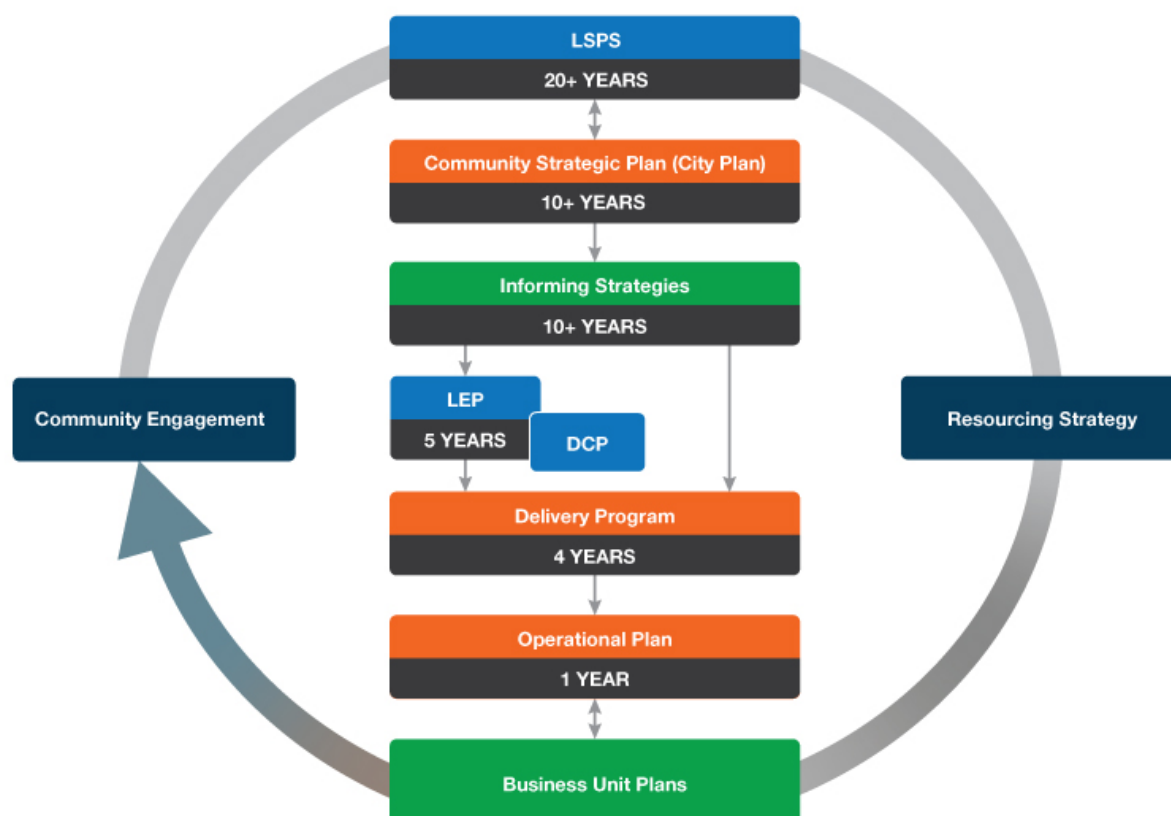
3.1 Customer Research and Expectations

Levels of service should be developed in consultation with the community. Future revisions of the AMP 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 City 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 Community Strategic Plan and Informing Strategies within the Integrated Planning and Reporting (IPR) framework. This AMP forms a part of the Resourcing Strategy.



Strategic goals have been set by the Randwick City Plan (CSP). The relevant goals and objectives and how these are addressed in this AMP are summarised in Table 3.2.

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

Randwick City Plan Outcome	Direction	Objective	How Goal and Objectives are addressed in the AMP
Outcome 1. Leadership in Sustainability	Direction 1a: Council has a long-term vision based on sustainability.	Ensure financial strategies underpin Council's asset management policies and strategic vision.	The Footpath Asset Management Plan aligns with Council's Resourcing Strategy, including the Asset Management Strategy, Workforce Plan and Long-Term Financial Plan.
Outcome 6: A Liveable City	Direction 6a: Our public infrastructure and assets are planned, managed, and funded to meet the community expectations and defined levels of service.	Plan asset renewals and construct or accept dedication of new assets in accordance with adopted service levels.	The Footpath Asset Management Plan includes funding for renewal and new assets including provisions for performance monitoring against adopted service levels.
		Implement the strategic asset management system to deliver intergenerational equity and meet the Council's obligations as the custodian of our community's assets.	The implementation of a Strategic Asset Management System is a part of the monitoring and improvement program within this Asset Management Plan.
Outcome 6: A Liveable City	Direction 6c: The safety of our community is paramount and is acknowledged and supported through proactive policies, programs, and strategies.	Conduct programmed and reactive asset maintenance management in accordance with adopted service levels.	Respond to customer requests within service level agreements. Identify High and Extreme risk roads. Planned Inspections for High and Extreme risk roads. Develop an operational and maintenance plan and allocate funding to carry out remediation work as required.

3.3 Legislative Requirements

There are many legislative requirements relating to the management of assets. Legislative requirements that impact the delivery of the footpath 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.
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.
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 workers 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.

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: Footpath network that is fit for purpose, maintained in a safe and accessible manner.			
Customer Values	Customer Satisfaction Measure	Current Feedback	Expected Trend Based on Planned Budget
A footpath that is safe to walk on	Number of claims received	Average 16 claims per annum over past 5 years	Number of claims is reducing.
A well-connected footpath network	Satisfaction survey results	Satisfaction for coastal open space and walkways 86% in 2021 improved from 76% in 2014	Increase in satisfaction score.

Service Objective:**Footpath network that is fit for purpose, maintained in a safe and accessible manner.****A well-maintained footpath**

Satisfaction survey results

Satisfaction for maintaining footpaths 47% in 2021 improved from 44% in 2014.

Increase in satisfaction score.

3.5 Customer Levels of Service

The Customer Levels of Service are considered in terms of:

Condition A condition 3 (scale 1-5) footpath is the minimum acceptable service level;

Function The footpath must be fit for purpose and the intention of footpath asset shall be well defined;

Safety The footpath network is built to appropriate safety standards;

Capacity/Use Footpath should be able to cater for pedestrian volumes and for shared paths to cycleway standards;

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 footpath assets free from obvious defects.	Customer satisfaction survey results. Low number of Service Requests.	Satisfaction for coastal open space and walkways 78% Satisfaction for maintaining footpaths 44% Satisfaction for town centre cleaning 78%	Increase in customer satisfaction survey results.
	Routinely inspect footpath network	20% of the network to be inspected annually	Achieved	80% of the accessible portion of network every 2 nd year. 20% of Stairs inspected annually.
	Confidence levels		Medium	High

Type of Measure	Level of Service	Performance Measure	Current Performance	Expected Trend Based on Planned Budget
Function	Footpath are swept mechanically daily in town centres, with litter pick up in the afternoon.	Town Centre footpaths are maintained free of litter and weeds.	Footpaths swept daily.	Satisfied with current performance.
	Continue to improve the footpath network to meet community needs	Design and construction of footpath assets to Council and Australian Standards	Footpath 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 the customer values, and impact the achieved Customer Levels of Service, are operational or technical measures of performance. These technical measures relate to the activities and allocation of resources to best achieve the desired customer outcomes and demonstrate effective performance.

Technical service measures are linked to the activities and annual budgets covering:

- **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).
- **Operation** – the regular activities to provide services (e.g. opening hours, cleansing, mowing grass, energy, inspections, etc).
- **Maintenance** – the activities necessary to retain an asset as near as practicable to an appropriate service condition. Maintenance activities enable an asset to provide service for its planned life (e.g. road patching, unsealed road grading, building and structure repairs)
- **Renewal** – the activities that return the service capability of an asset up to that which it had originally provided (e.g. road resurfacing and pavement reconstruction, pipeline replacement and building component replacement)

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

Table 3.6 shows the activities expected to be provided under the current 10 year Planned Budget allocation, and the forecast activity requirements being recommended in this AMP.

³ IPWEA, 2015, IIMM, p 2|28.

Table 3.6: Technical Levels of Service

Lifecycle Activity	Purpose of Activity	Activity Measure	Current Performance*	Recommended Performance **
TECHNICAL LEVELS OF SERVICE				
Acquisition	Provide footpath on both sides of the street	Ongoing construction of footpath as part of Capital Works Program	Funded by budget	Maintain current approach.
	Replace Asphalt footpath with concrete footpath	Ongoing replacement of asphalt footpath.	Funded by budget	Maintain current approach.
		Budget	\$606,934	\$691,000
Operation	Routine cleaning of footpaths in town centres.	Frequency of cleaning.	Scheduled Street cleaning program.	Maintain Current performance.
	Apply a risk management approach to footpath inspections.	20% to be inspected annually.	20% inspected annually.	80% of the network inspected every 2 nd year. 20% of Stairs inspected annually.
		Budget	\$669,582	\$669,582
Maintenance	Trip hazards >10mm.	Repair/remove trips>10mm	Trips identified and prioritised for their repair within budget limitations.	Current performance is satisfactory.
	Footpath Repairs.	Respond to CRMs within SLA timeframe.	95.8% of Service Requests actioned within allocated time frames.	Maintain Current performance.
		Budget	\$1,307,777	\$1,307,777
Renewal	Renew existing footpath that is in poor condition.	Condition assessment.	Footpath assets in poor condition added to the capital works program.	Satisfied with Current performance.
	Maintain CBD condition and allow CBD to meet modern design criteria	Functional assessment, community feedback.	Selected CBD within the Council LGA are planned for upgrade within this AMP.	Lifecycle forecast provided Council with \$422,411 surplus to be set aside for town centre upgrades.
		Budget	\$1,350,000	\$1,127,589

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 changing circumstances such as technology and customer priorities will change over time.

4.0 FUTURE DEMAND

4.1 Demand Drivers

Drivers affecting demand include things such as population change, regulations, changes in demographics, seasonal factors, vehicle ownership rates, consumer preferences and expectations, technological changes, economic factors, agricultural practices, environmental awareness, etc.

4.2 Demand Forecasts

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

4.3 Demand Impact 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.

Demand for new services will be managed through a combination of managing existing assets, upgrading of existing assets and providing new assets to meet demand and demand management. Demand management practices can include non-asset solutions, insuring against risks and managing failures.

Opportunities identified to date for demand management are shown in Table 4.3. Further opportunities will be developed in future revisions of this AMP.

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)	NSW DPIE projects a 23% increase in population by 2036 within the Randwick Local Government Area.	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.	This AMP allows Council to construct 1km of new footpath per year to help meet future demand. As new developments are completed, there will also be donated assets to help meet the demand created.

Demand driver	Current position	Projection	Impact on services	Demand Management Plan
Demographics	<p>Randwick City Council has:</p> <p>18% over 60 YO</p> <p>43% in the 20-45 YO group</p> <p>(As of 30 June 2016, ABS)</p>	<p>Greater proportion of 10-20 YO (>35% growth)</p> <p>Greater proportion of over 60 YO (>45% growth)</p> <p>Low proportion of 25-45 YO (<10% growth)</p>	<p>Greater need for aged and disability access. Increase in population will require improvements to public transport infrastructure and accessible recreational infrastructure including beaches.</p>	<p>This AMP allows Council to budget for various connectivity improvement projects.</p> <p>Renewal Priority criteria has built-in mechanisms to ensure that Council's footpath network is built to Accessibility Standard where practicable.</p>
Technology Changes	<p>Materials used for the footpath network are typically concrete</p>	<p>Use of more environmentally friendly materials, cheaper to construct, and components that provide longer asset life and reduce maintenance requirements.</p>	<p>Potential to reduce maintenance and resource requirements.</p>	<p>New and emerging technologies should be assessed for both performance, abilities to improve service and whole of life costs.</p>

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 Randwick City Council to ongoing operations, maintenance, and renewal costs for the period that the service provided from the assets is required. These future costs are identified and considered in developing forecasts of future operations, maintenance, and renewal costs for inclusion in the long-term financial plan (Refer to Section 5).

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.

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

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

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

Climate Change Description	Projected Change	Potential Impact on Assets and Services	Management
Increased Rainfall Frequency / Intensity	Higher chance of flash flooding.	Inundated low level footpath, lead to footpath inaccessible to pedestrians and direction of flows into properties.	Construction of footpath assets with better drainage, appropriate level & grading to cater for increased overland flow.
More extreme weather events	Increase in temperatures	More extreme heat on footpath, concrete expands leading to displaced slabs. Asphalt will start to melt and become sticky at temperatures > 30°C.	Transition the use of asphalt on footpath to concrete where possible. Construct concrete footpath with adequate expansion joints.
Need to be carbon neutral	Civil works are a high carbon emitting activity. Seek to reduce carbon emission from civil works.	The need to reduce occurrence in footpath asset construction activities.	Utilise low carbon concrete, recycled materials, and other new technologies to assist in reduction of maintenance activities. Extend asset life span, thus reducing the occurrence of asset renewal.
Heat island effect	Increase in native tree planting. Keep footpath dimensions to lowest area possible.	Longer drought period may make it harder for plants to survive. 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. Choose less invasive tree species to help ensure asset integrity.

Additionally, the way in which we construct new 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.
- Services can be sustained; and
- Assets that can endure may potentially lower the lifecycle cost and reduce their carbon footprint

Table 4.5 summarises some asset climate change resilience opportunities.

Table 4.5 Building Asset Resilience to Climate Change

New Asset Description	Climate Change impact These assets?	Build Resilience in New Works
Concrete footpath	Salt attack from sea breeze	Inspect every 5 years from construction, assess if applying slip resisting concrete sealant is required.
Asphalt footpath	Hot days can melt asphaltic binder	Utilise concrete for footpath assets wherever possible. Only use asphalt where there is no other choice.
Fibre Reinforced footpath	Increase in heat in-take during summer	Consider building along coast to use the corrosion resistant property.

The impact of climate change on assets is a new and complex discussion and further opportunities will be developed in future revisions of this asset management plan.

5.0 LIFECYCLE MANAGEMENT PLAN

The lifecycle management plan details how the Randwick City Council plans to manage and operate the assets at the agreed levels of service (Refer to Section 3) while managing life cycle costs.

5.1 Background Data

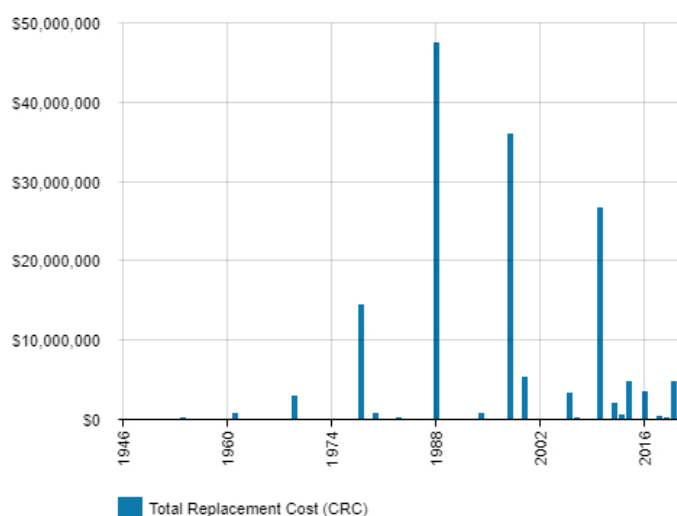
5.1.1 Physical parameters

The assets covered by this AMP are shown in Table 5.1.1. The age profile of the assets included in this AMP are shown in Figure 5.1.1.

Table 5.1.1: Assets covered by this Plan

Asset Components	Dimension (m ²)	Replacement Value
Concrete Footpath	796,102	\$125,183,920
Asphalt Footpath	26,842	\$4,466,853
Segmental pavers - Footpath	56,163	\$14,033,288
Shared path (Pedestrian /cycle)	7,122	\$1,264,727
Pedestrian Bridge	290	\$4,322,549
Stairways	6,704	\$4,484,263
Other Footpath Components	8,588	\$1,343,479
TOTAL		\$155,099,079

Figure 5.1.1: Asset Age Profile



All figure values are shown in current day dollars.

According to Figure 5.1.1, the majority of footpaths were built between 1988 and 1998 and thus anticipated major renewals would fall between 2068 and 2078.

5.1.2 Asset capacity and performance

Assets are generally provided to meet design standards where these are available. However, there is insufficient resources to address all known deficiencies. Locations where deficiencies in service performance are known are detailed in Table 5.1.2.

Table 5.1.2: Known Service Performance Deficiencies

Location	Service Deficiency
Various	Asphalt footpaths in poor condition. High risk segments are identified during inspections and included in capital works programs.
Various	Old stairways in poor condition. High risk stairways are identified during inspections and included into capital works programs.

The above service deficiencies were identified from the footpath condition assessment program.

5.1.3 Asset condition

Condition is currently monitored by inspection of at least 20 percent of the network every year. With a new technology in footpath condition inspections, Council may undertake up to 95% inspection of the network every second year. The remaining stairs can be monitored in-house with 20% of the stairs being inspected annually. The inspection of footpath assets is encompassed within this program.

Condition is measured using a 1 – 5 grading system⁵ 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 is used at Council's specific level, however, for reporting in the AMP results are translated to a 1 – 5 grading scale for ease of communication.

Table 5.1.3: Condition Grading System

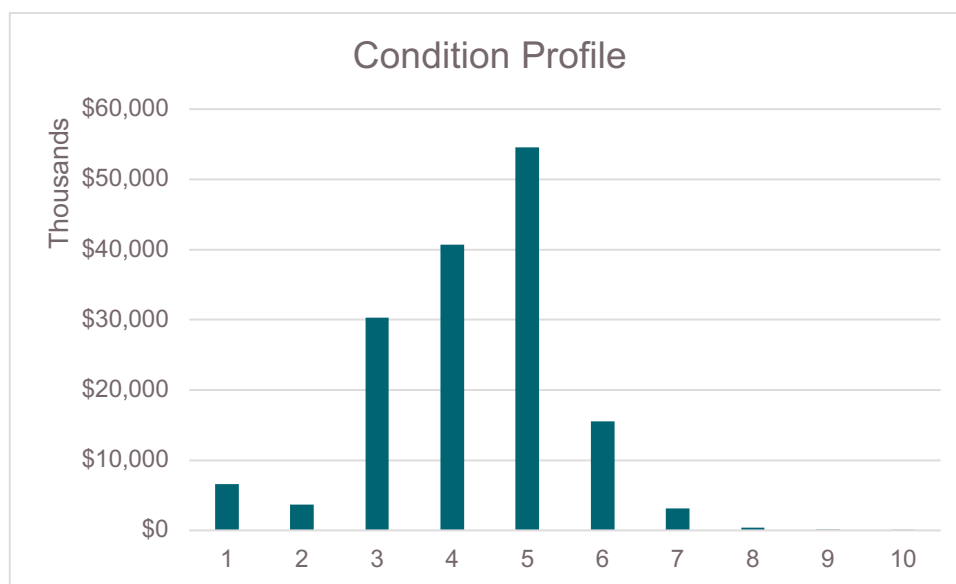
Condition Grading	Condition	Description of Condition
1	New	New, No defects, No wear
2	Excellent	No defects, may show small amounts of wear
3	Very Good	No defects, displays some wear, some hairline cracks
4	Good	May display joint displacements less than 10mm high and show signs of wear and hairline cracking; slight chipping of pavers
5	Average	May display up to 1 trip hazard every 20 metres; show signs of wear and hairline cracking; slight chipping of pavers
6	Satisfactory	May display up to 2 trip hazards every 20 metres; evidence of edge drop offs, slight unevenness, grass rubbing,

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

Condition Grading	Condition	Description of Condition
		cracking, wear and/or settlement of restorations; Minor maintenance is required
7	Unsatisfactory	Defects occur regularly or in clusters; Edge drop exceeds 50mm; several trip hazards visible with signs of wear and ravelling of asphaltic concrete and/or settlement of restorations; cracks in pavers, paver rocking, evidence of grass rubbing; slipperiness problems; less than 20% of Footpath requires replacement.
8	Poor	Same as 7; Between 20-60% of Footpath requires replacement
9	Consider Reconstruction	Evidence of damage (displacement, cracking, ravelling, stability) to 60-80% of the segment. Requires moderate to high maintenance to maintain function and manage risks.
10	Imminent Failure	The footpath is not delivering functional benefits and the maintenance requirements are very high to manage the risks.

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

Figure 5.1.3: Asset Condition Profile



All figure values are shown in current (real) dollars.

The current asset conditions are good with most asset conditions assessed to be 3 to 6. The distribution is skewed towards the new assets side. The current asset condition is considered to be good, however, as assets age, the condition 5 and 6 assets will eventually deteriorate.

Should the footpath assets not be maintained, there will be large spike of renewal requirement in the long term. Management of these assets to spread the lifespan may change the asset renewal timeframe. Other lifecycle methods would be to bring forward or delay some of the renewal times based on a risk assessment approach.

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 \$
2020	\$1,568,630
2021	\$1,568,630
2022	\$1,568,630

Maintenance budget levels are 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 AMP 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 the staff to use experience, the risk is identified in the Section 6 under Risk Management. The improvement plan in Section 8.2 also indicates an improvement on the prioritisation methodology.

5.2.1 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 in Table 5.2.2.

Table 5.2.2: Asset Service Hierarchy

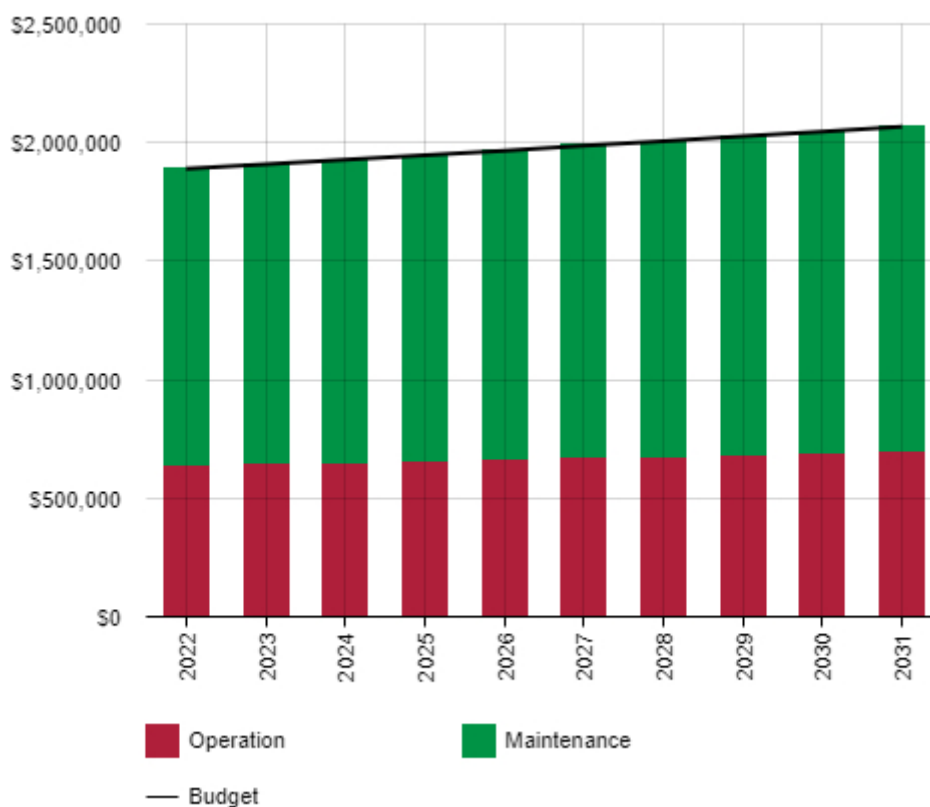
Service Hierarchy	Service Level Objective
Missing concrete slabs	To inspect, assess and make the asset safe within 24 hours of reporting. Plan the rectification to reduce reconstruction costs.
Trip edges	To inspect, assess and make the asset safe within 24 hours of reporting. Plan the rectification to reduce reconstruction costs and to agreed service standard.

Service Hierarchy	Service Level Objective
Uneven pathway	To inspect and assess within the Service Level Agreement timeframe and respond appropriately to the reporting individual.
Cracked pathway	To inspect and assess within the Service Level Agreement timeframe and respond appropriately to the reporting individual.

5.2.2 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



All figure values are shown in current day dollars.

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 (current 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 2021.⁶

Table 5.3: Useful Lives of Assets

Asset (Sub)Category	Useful life
Concrete Footpath	80 years
Asphalt Footpath	20 years
Paved Footpath	50 years
Cycleway	80 years
Stairways	100 years
Pedestrian Bridges	25 years
Unformed	5 years
Turf / Garden	15 years
Concrete Infill	80 years
Handrails	70 years

The estimates for renewals in this AMP 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:

⁶ D03483347

⁷ IPWEA, 2015, IIMM, Sec 3.4.4, p 3|91.

- 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

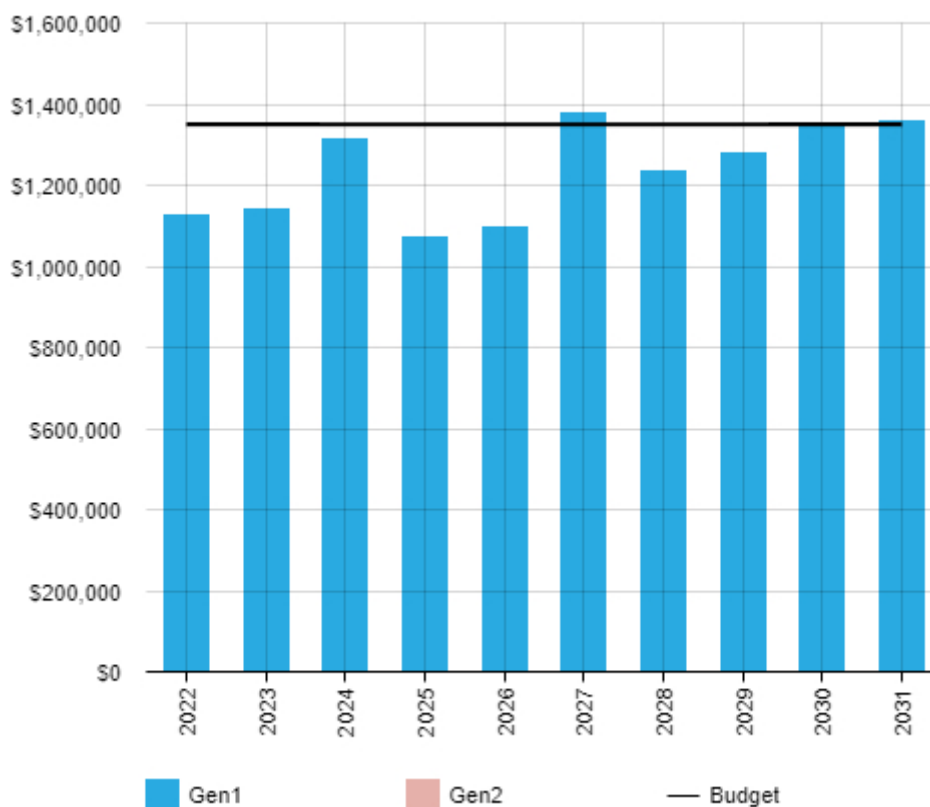
Criteria	Weighting
Community – Function	20%
Community – Quality	5%
Technical – Condition	30%
Technical – Risk of Failure	30%
Technical – Operating/Maintenance and lifecycle costs	15%
Total	100%

⁸ Based on IPWEA, 2015, IIMM, Sec 3.4.5, p 3|97.

5.4 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 5.4.1. A detailed summary of the forecast renewal costs is shown in Appendix D.

Figure 5.4.1: Forecast Renewal Costs



All figure values are shown in current day dollars.

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. However, the surplus captured under renewal is not sufficient to cater for the proposed town centre upgrade projects in the next 10 years. These surpluses should help Council to transition from reactive maintenance works toward proactive renewal works.

5.5 Acquisition Plan

Acquisition is the practice of creating new assets that did not previously exist or works which will upgrade or improve an existing asset beyond its existing capacity. They may result from growth, demand, social or environmental needs. Assets may also be donated / dedicated to the Randwick City Council.

5.5.1 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 5.5.1.

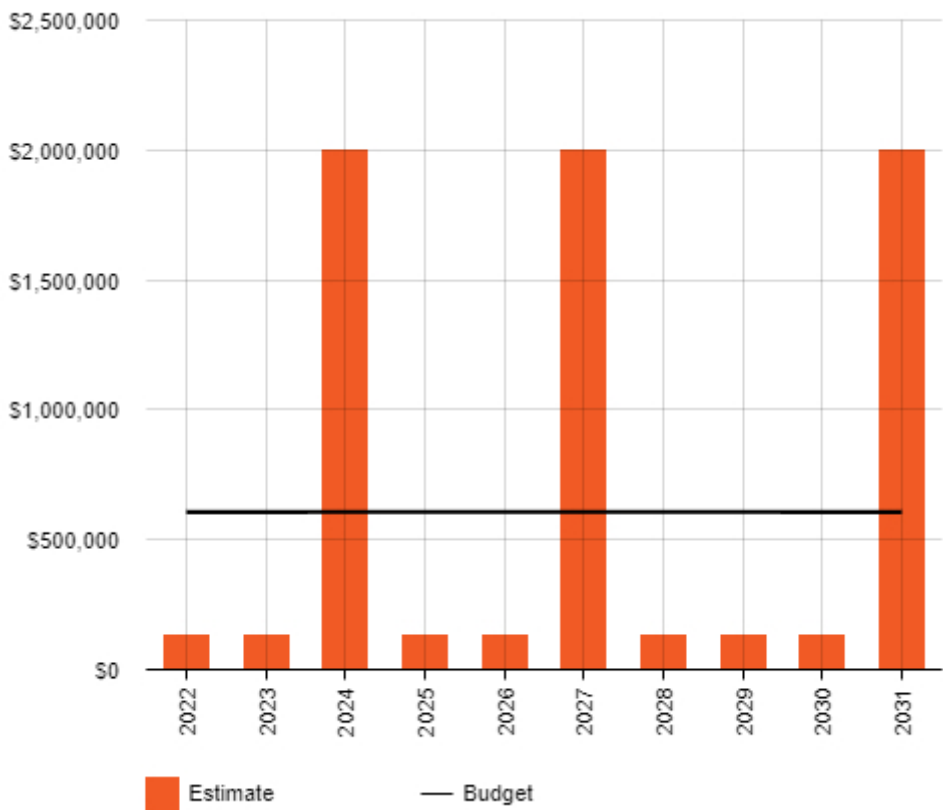
Table 5.5.1: Acquired Assets Priority Ranking Criteria

Criteria	Weighting
Safety	35%
Community Expectation	15%
Lifecycle Cost	25%
Community Benefits (Usage, population, future development)	25%
Total	100%

Summary of future asset acquisition costs

Forecast acquisition asset costs are summarised in Figure 5.5.1 and shown relative to the proposed acquisition budget. The forecast acquisition capital works program is shown in Appendix A.

Figure 5.5.1: Acquisition (Constructed) Summary

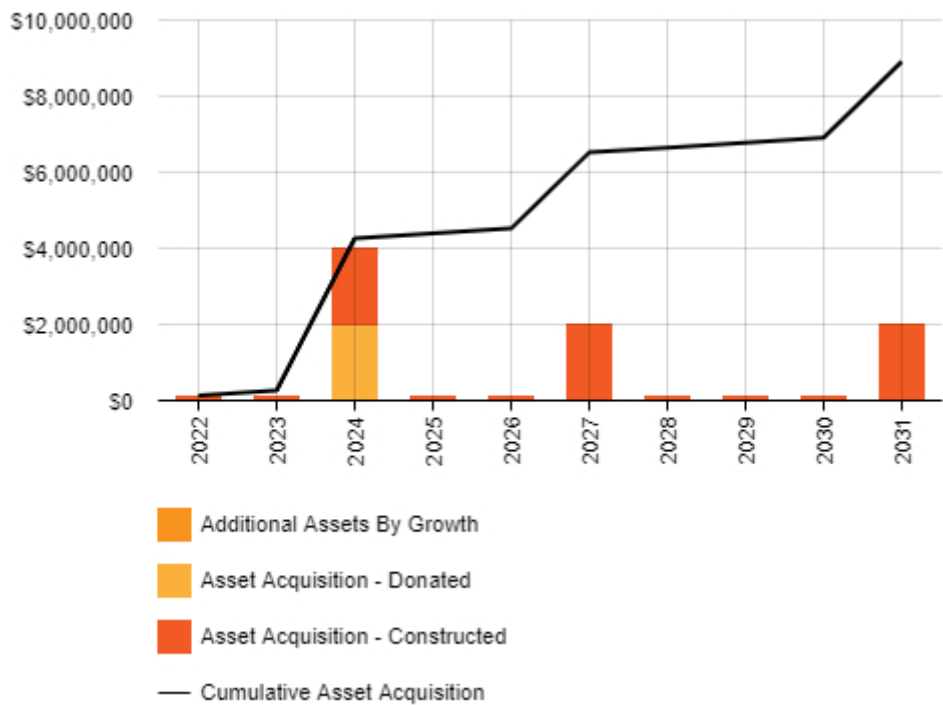


All figure values are shown in current day dollars.

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. The cumulative value of all acquisition work, including assets that are constructed and contributed shown in Figure 5.5.2.

Figure 5.5.2: Acquisition Summary



All figure values are shown in current dollars.

Expenditure on new assets and services in the capital works program will be accommodated in the long-term financial plan, but only to the extent that there is available funding.

The planned acquisition will be constructed footpaths from Council's capital works program. There will be some donated / dedicated assets by means of civil works from developments undertaken in the LGA.

The number of donated assets are estimated from data collected following asset handovers from private works / developments in the past. Other potentially significant projects to be donated could be state funded significant projects. The urban setting of Randwick City Council means that these donated assets are treated as renewals of current asset at no capital cost to Council.

5.6 Disposal Plan

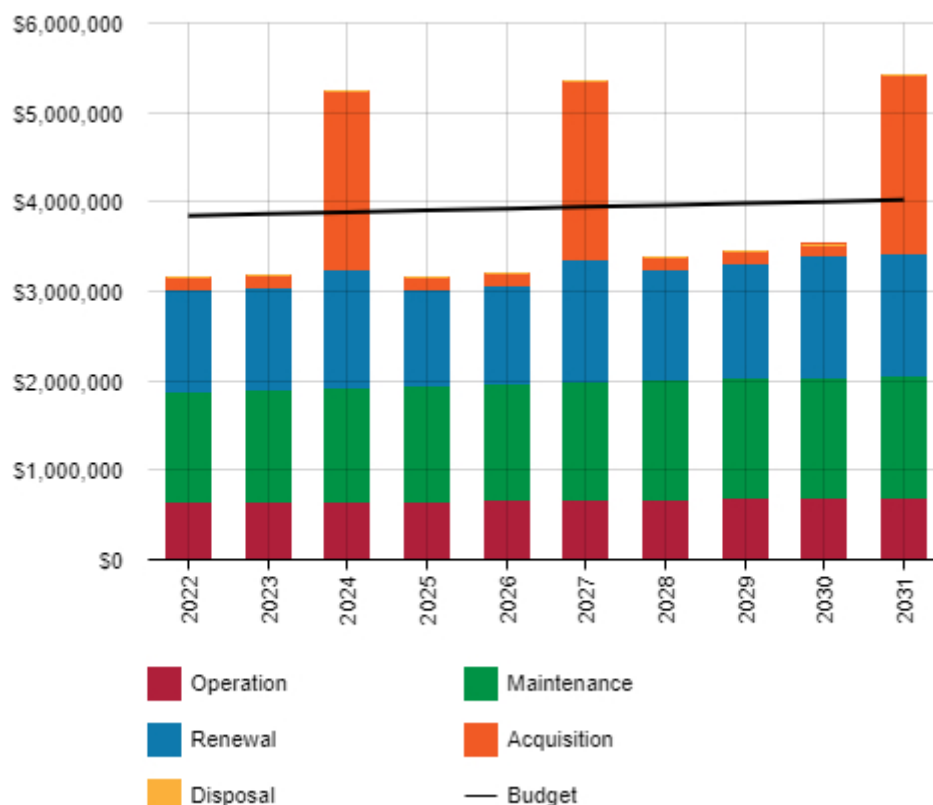
Disposal includes any activity associated with the disposal of a decommissioned asset including sale, demolition, or relocation. There are currently no assets being identified for possible decommissioning and disposal. Costs incurred from early disposal of assets were not included in this asset management 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.

5.7 Summary of asset forecast costs

The financial projections from this asset plan are shown in Figure 5.7.1. 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 5.7.1: Lifecycle Summary



All figure values are shown in current day dollars.

The forecast costs of the asset are generally in line or below the proposed budget. In fact, the proposed budget is currently providing approximately 103.6% of the forecast costs. The budget seems to be very sustainable with a slight surplus. The surplus can be set aside in preparation for Town Centre Upgrades in the near future.

6.0 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 risks¹⁰ 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
Footpaths	Displacement, damage, or distresses	Loss or reduction of service, restricted access, injuries to users or personal property damage
Kerb ramps	Displacement, damage, or distresses	Loss or reduction of service, restricted access, injuries to users or personal property damage
Stairs	Displacement, damage, or distresses	Loss or reduction of service, restricted access, casualties to users or personal property damage
Footway Bridges	Displacement, damage, or distresses	Loss or reduction of service, restricted access, casualties to users or personal 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.

⁹ ISO 31000:2009, p 2

¹⁰ D03410905 RCC Enterprise Risk Management Framework

6.2 Risk Assessment

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

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.

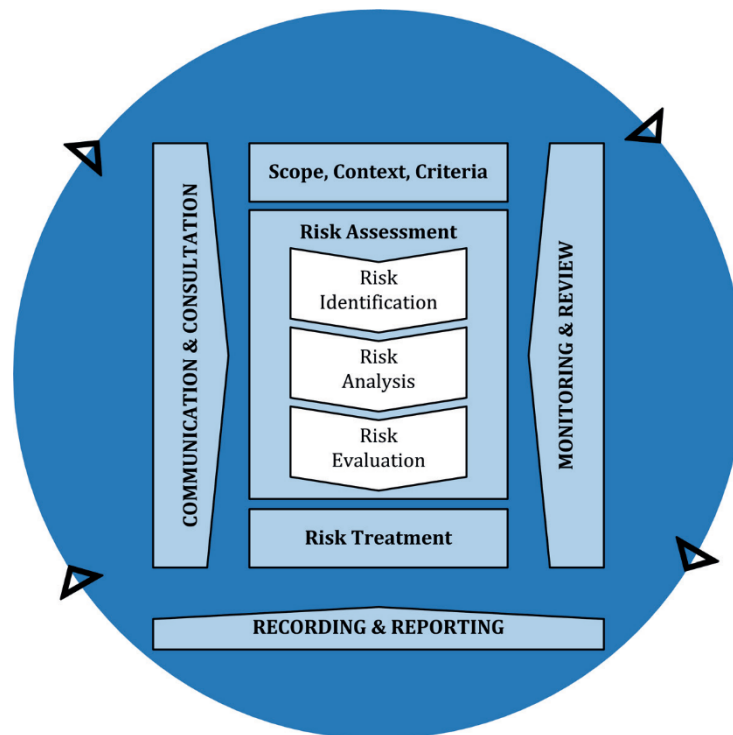


Fig 6.2 Risk Management Process – Abridged
Source: ISO 31000:2018, Figure 1, p9

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 risks¹¹ 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 6.2.1. It is essential that these critical risks and costs are reported to management and the Council.

¹¹ D03410905 RCC Enterprise Risk Management Framework

Table 6.2.1: Risks and Treatment Plans

Risk Assessment

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

Consequence	Risk Descriptions
<i>Catastrophic</i>	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
<i>Major</i>	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
<i>Moderate</i>	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
<i>Minor</i>	First aid treatment, on-site release immediately contained, medium financial loss (>\$1000 & <\$10,000), little or no impact on community's perception of Council
<i>Insignificant</i>	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.

Table 6.2.2: Risks Matrix

	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.

Our current measure of resilience is shown in Table 6.3 which includes the type of threats and hazards and the current measures that the organisation takes to ensure service delivery resilience.

We do not currently measure our resilience in service delivery for footpath assets. This will be included in future iterations of the AMP.

6.4 Service and Risk Trade-Offs

The decisions made in adopting this AMP 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 footpath network without consideration of lifecycle cost and financial sustainability

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 agreement
- Dilapidated footpath assets
- Reduced safety to users of the footpath

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 footpath assets e.g. trip and fall, low slip resistant footpaths and inaccessible kerb ramps for wheelchair users
- Extended time of footpath assets being out of action causing users to use the road instead of footpath which can result in pedestrians accidents motor vehicles

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

7.0 FINANCIAL SUMMARY

This section contains the financial requirements resulting from the information presented in the previous sections of this AMP. The financial projections will be improved as the discussion on desired levels of service and asset performance matures.

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 AMP for this service area. The two indicators are the:

- asset renewal funding ratio (proposed renewal budget for the next 10 years / forecast renewal costs for next 10 years), and
- medium term forecast costs/proposed budget (over 10 years of the planning period).

Asset Renewal Funding Ratio

Asset Renewal Funding Ratio¹² 119.7%

The Asset Renewal Funding Ratio is an important indicator and illustrates that over the next 10 years, we expect to have 119.7% of the funds required for the optimal renewal of assets.

The forecast renewal works along with the proposed renewal budget is illustrated in Appendix D.

Medium term – 10 year financial planning period

This AMP identifies the forecast operations, maintenance and renewal costs required to provide an agreed level of service to the community over a 10-year period. This provides input into 10 year financial and funding plans aimed at providing the required services in a sustainable manner.

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

The forecast operations, maintenance and renewal costs over the 10-year planning period is \$3,104,947 average per year.

The proposed (budget) operations, maintenance and renewal funding is \$3,327,358 on average per year over the 10-year plan. This indicates that 107% of the forecast costs needed to provide the services documented in this AMP are accommodated in the proposed budget. Note, these calculations exclude acquired assets.

Providing sustainable 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 AMP 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 2021 dollar values.

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

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

Year	Acquisition	Operation	Maintenance	Renewal	Disposal
2022	\$130,000	\$640,000	\$1,250,000	\$1,126,507	0
2023	\$130,000	\$646,400	\$1,262,500	\$1,142,254	0
2024	\$2,000,000	\$652,864	\$1,275,125	\$1,312,219	0
2025	\$130,000	\$659,393	\$1,287,876	\$1,069,944	0
2026	\$130,000	\$665,987	\$1,300,755	\$1,098,281	0
2027	\$2,000,000	\$672,646	\$1,313,763	\$1,375,364	0
2028	\$130,000	\$679,373	\$1,326,900	\$1,235,074	0
2029	\$130,000	\$686,167	\$1,340,169	\$1,280,437	0
2030	\$130,000	\$693,028	\$1,353,571	\$1,349,123	0
2031	\$2,000,000	\$699,959	\$1,367,107	\$1,358,991	0

7.2 Funding Strategy

The proposed funding for assets is outlined in the Entity's budget and Long-Term financial plan.

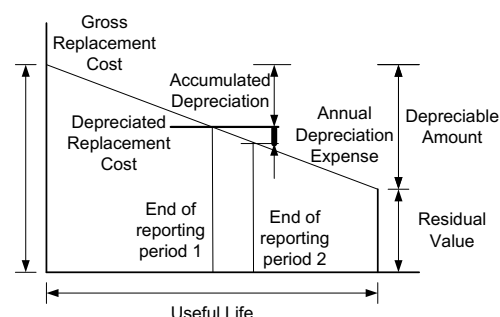
The financial strategy of the entity determines how funding will be provided, whereas the AMP communicates how and when this will be spent, along with the service and risk consequences of various service alternatives.

7.3 Valuation Forecasts

7.3.1 Asset valuations

The best available estimate of the value of assets included in this AMP are shown below. The assets are valued using fair value to determine cost to replace service capacity:

Replacement Cost (Current/Gross)	\$155,099,079
Depreciable Amount	\$658,221,480
Depreciated Replacement Cost ¹³	\$101,233,432
Depreciation	\$1,974,989



7.3.2 Valuation forecast

Asset funding costs and values are forecast to increase as additional assets are added to the asset class.

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

Additional assets will generally add to the operations and maintenance needs in the longer term. Similarly, additional assets will also require additional funding due to future renewals. Any additional assets will also add to future depreciation forecasts.

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.

7.4 Key Assumptions Made in Financial Forecasts

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

Key assumptions made in this AMP 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 the footpath assets.
- 100% of Council's footpath assets are inspected and the footpath asset conditions have been updated accordingly. Monitoring of change of condition may show a change in the asset's useful life which may have an impact on funding required to maintain level of service.
- The estimates used for current rates of renewal will remain constant at the current 2021 values for the next 10 years. Any increase to the renewal costs may reduce the amount of work budgeted with possible reduction in the service level of footpath assets.

7.5 Forecast Reliability and Confidence

The forecast costs, proposed budgets, and valuation projections in this AMP are based on the best available data. For effective asset and financial management, it is critical that the information is current and accurate. Data confidence is classified on a A - E level scale¹⁴ in accordance with Table 7.5.1.

Table 7.5.1: 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 $\pm 2\%$
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 $\pm 10\%$
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 $\pm 25\%$

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

Confidence Grade	Description
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 \pm 40%
E. Very Low	None or very little data held.

The estimated confidence level for and reliability of data used in this AMP is shown in Table 7.5.2.

Table 7.5.2: Data Confidence Assessment for Data used in AMP

Data	Confidence Assessment	Comment
Demand drivers	C. Medium	The demand drivers are based on NSW DPIE forecasts and Council's LSPS.
Growth projections	B. High	Growth from private development.
Acquisition forecast	B. High	Acquisition from private development and state significant development.
Operation forecast	B. High	Based on data over 5 years to establish a trend.
Maintenance forecast	B. High	Based on data over 5 years to establish a trend.
Renewal forecast - Asset values	B. High	The data is based on a recent modelling of asset data after completion of asset condition assessment.
- Asset useful lives	B. High	The data is based on a recent modelling of asset data after completion of asset condition assessment.
- Condition modelling	B. High	The data is based on a recent modelling of asset data after completion of asset condition assessment.

The estimated confidence level for and reliability of data used in this AMP is considered to be High.

8.0 PLAN IMPROVEMENT AND MONITORING

8.1 Status of Asset Management Practices¹⁵

8.1.1 Accounting and financial data sources

In 2010 Council implemented the financial system, Technology One. This system contains a Works and Assets Module in which works orders or tasks can be raised and costings tracked against a particular asset.

Council's finance system is managed by its Finance section. The system is reported on and audited annually. The audited report is present to Council, who then refers the report onto the Department of Local Government.

Council's Asset Management Services team provides input into the asset registers including condition, useful life, unit rates, capitalisation data and physical attributes.

8.1.2 Asset management data sources

Randwick Council's Asset Register is currently located within the Technology One software package. This dataset contains information to physically describe the asset including its makeup, age, condition, useful life, CRC and other financial data. The register is also linked to other systems including GIS.

The Technology One software used for asset management is currently controlled/managed by Council's Finance section.

Data maintenance is undertaken by Council's Asset Management section who review data/assets on an annual program and advise the Finance section of any updates, new or disposed assets as they arise.

Council is currently reviewing options for a Strategic Asset Management System.

8.2 Improvement Plan

It is important that an entity recognise areas of their AMP and planning process that require future improvements to ensure effective asset management and informed decision making. The improvement plan generated from this AMP is shown in Table 8.2.

Table 8.2: Improvement Plan

Task	Task	Responsibility	Resources Required	Timeline
1	Improve asset register data confidence.	Asset Management Services	Asset Team	Ongoing
2	Establish a strategic asset management system for all infrastructure asset	Asset Management Services	Asset Team	The next AMP
3	Review resilience of service delivery	Asset Management Services	Asset Team	The next AMP

¹⁵ ISO 55000 Refers to this as the Asset Management System

Task	Task	Responsibility	Resources Required	Timeline
4	Include priority weighting methodology in maintenance and operation of assets. The four categories include: Condition, Functionality, Usage and Criticality	Infrastructure Services	Asset Team	The next AMP
5	Improve proactive maintenance planning and reporting mechanism	Infrastructure Services	Asset Team	Ongoing
6	Improve asset management principles awareness within Council staff	Asset Management Services	Asset Team	Ongoing

8.3 Monitoring and Review Procedures

This AMP 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 AMP 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 AMP has a maximum life of 4 years and is due for complete revision and updating within 6 months of each Council election.

8.4 Performance Measures

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

- The degree to which the required forecast costs identified in this AMP are incorporated into the long-term financial plan,
- The degree to which the 1-5 year detailed works programs, budgets, business plans and corporate structures consider the 'global' works program trends provided by the AMP,
- 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 – 100%).

9.0 REFERENCES

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- ISO, 2014, ISO 55000:2014, Overview, principles and terminology
- ISO, 2018, ISO 31000:2018, Risk management – Guidelines
- Randwick City Plan 2018 – 2028,
- 'Annual Operational Plan and Budget'.
- Randwick City Council, 2021 Enterprise Risk Management Framework

10.0 APPENDICES

Appendix A Acquisition Forecast

A.1 – Acquisition Forecast Assumptions and Source

- The acquisition forecast includes 1.0km p.a. new footpath to meet increased local demands.
- Three major Town Centre CBD Upgrade projects at Clovelly Road, Maroubra Junction and Matraville Town Centre.
- A new state government administered grant funded cycleway project stretching from Alison Road, Randwick to Kingsford Light Rail Terminal.

A.2 – Acquisition Project Summary

Year	Acquisition Project	Budget	Donated
2024	Clovelly Road Masterplan	\$2,000,000	0
2024	Alison Road to Kingsford Terminal Cycleway		\$2,000,000
2027	Maroubra Junction Oasis Project	\$2,000,000	0
2031	Matraville Town Centre Upgrade	\$2,000,000	0

A.3 – Acquisition Forecast Summary

Table A3 - Acquisition Forecast Summary

Year	Constructed	Donated	Growth
2022	\$130,000	0	0
2023	\$130,000	0	0
2024	\$2,000,000	\$2,000,000	0
2025	\$130,000	0	0
2026	\$130,000	0	0
2027	\$2,000,000	0	0
2028	\$130,000	0	0
2029	\$130,000	0	0
2030	\$130,000	0	0
2031	\$2,000,000	0	0

Appendix B Operation Forecast

B.1 – Operation Forecast Assumptions and Source

Operational forecast is assumed to be increasing yearly due to the increase of material and labour cost. Additional operation forecast increase is due to the increase in acquisition forecast.

B.2 – Operation Forecast Summary

Table B2 - Operation Forecast Summary

Year	Operation Forecast	Additional Operation Forecast	Total Operation Forecast
2022	\$640,000	0	\$640,000
2023	\$646,400	0	\$646,400
2024	\$652,864	0	\$652,864
2025	\$659,393	0	\$659,393
2026	\$665,987	0	\$665,987
2027	\$672,646	0	\$672,646
2028	\$679,373	0	\$679,373
2029	\$686,167	0	\$686,167
2030	\$693,028	0	\$693,028
2031	\$699,959	0	\$699,959

Appendix C Maintenance Forecast

C.1 – Maintenance Forecast Assumptions and Source

Maintenance forecast is assumed to be increasing yearly due to the increase of material and labour cost. Additional maintenance forecast increase is due to the increase in acquisition forecast.

C.2 – Maintenance Forecast Summary

Table C2 - Maintenance Forecast Summary

Year	Maintenance Forecast	Additional Maintenance Forecast	Total Maintenance Forecast
2022	\$1,250,000	\$0	\$1,250,000
2023	\$1,262,500	\$0	\$1,262,500
2024	\$1,275,125	\$0	\$1,275,125
2025	\$1,287,876	\$0	\$1,287,876
2026	\$1,300,755	\$0	\$1,300,755
2027	\$1,313,763	\$0	\$1,313,763
2028	\$1,326,900	\$0	\$1,326,900
2029	\$1,340,169	\$0	\$1,340,169
2030	\$1,353,571	\$0	\$1,353,571
2031	\$1,367,107	\$0	\$1,367,107

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.

D.2 – Renewal Forecast Summary

Table D3 - Renewal Forecast Summary

Year	Renewal Forecast	Renewal Budget
2022	\$1,126,507	\$1,350,000
2023	\$1,142,254	\$1,350,000
2024	\$1,312,219	\$1,350,000
2025	\$1,069,944	\$1,350,000
2026	\$1,098,281	\$1,350,000
2027	\$1,375,364	\$1,350,000
2028	\$1,235,074	\$1,350,000
2029	\$1,280,437	\$1,350,000
2030	\$1,349,123	\$1,350,000
2031	\$1,358,991	\$1,350,000

D.4 –Renewal Plan

Projected 10 Year Capital Renewal and Replacement Works Program

Asset ID	Street Name	From	To	Sub Category	Rem Life (Years)
FPL495CE	MALABAR Road	Bedford Place	Denning Street	Footpath	6.4
FPR112BA	BRANDON Street	Arden Street	Knox Street	Footpath	6.4
FPL063AA	BARRY Street	Clovelly Road	Susan Lane	Footpath	1.6
FPL781AB	WISDOM Street	The End West	Alexandria Parade	Footpath	6.4
FPL423AC	JUDGE Street	The End (South)	Albi Place	Stairs	13.6
FPL031RA	ANZAC Parade	Beauchamp Road	1120 Anzac Parade	Footpath	20.8
FPR790AA	WURLEY Avenue	Court Avenue	The End	Footpath	13.6
FPL522AA	MEYMOTT Street	Higgs Street	Frederick Street	Footpath	13.6
FPR867AA	BRUCE Avenue	Eastbourne Avenue	Shackel Avenue	Footpath	28.8
FPL346BD	GREVILLE Street	Seaview Street	Knox Street	Stairs	20.8
FPR038CA	ARDEN Street	Clovelly Road	Dans Avenue	Footpath	7.2
FPR628AB	PRINCE EDWARD Street	Franklin Street	Ireton Street	Footpath	28.8
FPL010AA	AEOLIA Street	Perouse Road	Aeolia Lane	Footpath	28.8
FPL635HA	RAINBOW Street	Dundas Street	Wolseley Road	Stairs	28.8
FPR612DC	PEROUSE Road	Aeolia Street	Coogee Bay Road	Footpath	28.8
FPR724CC	TODMAN Avenue	149 Todman Avenue	Anzac Parade	Footpath	28.8
FPR294AA	FITZGERALD Avenue	Marine Parade	Malabar Road	Footpath	28.8
FPL694HC	STOREY Street	Harrison Avenue	Malabar Road	Footpath	28.8
FPL468AA	LINGARD Street	Alison Road	Rae Street	Footpath	20.8
FPR500CG	MARINE Parade	Sackville Street	Bond Street	Footpath	28.8
FPL031GA	ANZAC Parade	Rainbow Street	Wallace Street	Footpath	28.8
FPL495EB	MALABAR Road	Boomerang Street	First Avenue	Footpath	28.8
FPR500CB	MARINE Parade	Torrington Road	The Corso	Footpath	28.8
FPL048CB	AVOCA Street	Eulalie Avenue	Rae Street	Footpath	28.8
FPR726AE	TORRINGTON Road	Duncan Street	Marine Parade	Footpath	28.8

Asset ID	Street Name	From	To	Sub Category	Rem Life (Years)
FPL964AA	Clove Lane	Darley Lane	Earl Street	Footpath	5.2
FPL495FA	MALABAR Road	Maroubra Road	Wride Street	Footpath	28.8
FPR635EC	RAINBOW Street	Hendy Avenue	Malabar Road	Footpath	28.8
FPL726AA	TORRINGTON Road	Malabar Road	2 Torrington Road	Footpath	28.8
FPL721AA	THORPE Street	Melrose Parade	The End	Footpath	28.8
FPR413AA	JANE Street	The End	Middle Street	Footpath	28.8
FPL020LC	ALISON Road	Tay Street	Anzac Parade	Footpath	20.8
FPL602AA	PARK Street	Boundary Street	Park Lane	Footpath	20.8
FPR503BE	MAROUBRA Road	The Causeway	Malabar Road	Footpath	20.8
FIR024BA	ALMA Road	Garden Street	Cooper Street	Footpath	20.8
FPL006AB	ADA Street	Don Juan Avenue	The End	Footpath	20.8
FPL248AG	SAMUEL TERRY Avenue	Baker Street	Myrtle Street	Footpath	20.8
FPL248AH	SAMUEL TERRY Avenue	Myrtle Street	Ingham Street Reserve	Footpath	20.8
FPL402AA	ILUKA Place	Elphinstone Road	The End	Footpath	20.8
FPR104CF	Boundary Street	Campbell Street	Northumberland Street	Footpath	20.8
FPR532AA	MINYA Avenue	Court Avenue	The End	Footpath	20.8
FPR581CA	OBERON Street	Arden Street	Alexander Street	Footpath	20.8
FPR754AC	WALTHAM Street	Arden Street	Brook Street	Footpath	20.8
FPR754AD	WALTHAM Street	Arden Street	Brook Street	Footpath	5.2
FPR754AF	WALTHAM Street	Arden Street	Brook Street	Footpath	5.2
FPL011AC	AHEARN Avenue	Alexandria Parade	The End	Stairs	28.8
FPL068DB	BEACH Street	Arcadia Street	Alison Road	Stairs	28.8
FPL214AF	DACRE Street	Ireton Street	Franklin Street	Stairs	28.8
FPL215AE	DAINTREY Crescent	St Pauls Street (West)	St Pauls Street (East)	Stairs	28.8
FPL245BB	DOUGLAS Street	Fern Street	The End	Stairs	28.8
FPL516CC	MELODY Street	Brighton Road	Dolphin Street	Stairs	28.8
FPL647AD	ROBEY Street	Wise Street	Fitzgerald Avenue	Stairs	28.8

Asset ID	Street Name	From	To	Sub Category	Rem Life (Years)
FPL647AF	ROBEY Street	Wise Street	Fitzgerald Avenue	Stairs	28.8
FPL647AH	ROBEY Street	Wise Street	Fitzgerald Avenue	Stairs	28.8
FPL647AJ	ROBEY Street	Wise Street	Fitzgerald Avenue	Stairs	28.8
FPL647AL	ROBEY Street	Wise Street	Fitzgerald Avenue	Stairs	28.8
FPL647AM	ROBEY Street	Wise Street	Fitzgerald Avenue	Stairs	28.8
FPL647AO	ROBEY Street	Wise Street	Fitzgerald Avenue	Stairs	28.8
FPL647AQ	ROBEY Street	Wise Street	Fitzgerald Avenue	Stairs	28.8
FPR046AC	AUSTRAL Street	Ireton Street	Raglan Street	Stairs	28.8
FPR221DJ	DARLEY Road	Market Street	Hooper Lane	Stairs	28.8
FPR309AC	FRASER Street	Clovelly Road	The End	Stairs	28.8
FPR560AB	NAPPER Street	Malabar Road	Denning Street	Stairs	28.8
FPR560AC	NAPPER Street	Malabar Road	Denning Street	Stairs	28.8
FPR575AC	NORTON Street	Norton Lane	Kennedy Street	Stairs	28.8
FPR575AD	NORTON Street	Norton Lane	Kennedy Street	Stairs	28.8
FPR575AE	NORTON Street	Norton Lane	Kennedy Street	Stairs	28.8
FPR635AE	RAINBOW Street	Anzac Parade	Wallace Lane	Stairs	28.8
FPR772CB	WILLIS Street	Middle Street	Meeks Street	Stairs	28.8
FPR772CC	WILLIS Street	Middle Street	Meeks Street	Stairs	28.8
FPR772CD	WILLIS Street	Middle Street	Meeks Street	Stairs	28.8
FPR772CE	WILLIS Street	Middle Street	Meeks Street	Stairs	28.8
FPW031AA	Walkway	53R Anzac Parade	Boronia Street	Stairs	28.8
FPC014AA	COAST WALK SECTION 14	Bottom Ramp South side of Pavillion	Top Ramp South side of Pavillion	Footpath	28.8
FPL048DA	AVOCA Street	Alison Road	Albert Street	Footpath	38.4
FPL048DB	AVOCA Street	Albert Street	Milford Street	Footpath	38.4
FPL048DD	AVOCA Street	Mears Avenue	Belmore Road	Footpath	38.4
FPR550AA	MULWARREE Avenue	Cowper Street	King Street	Footpath	13.6
FPL495HA	MALABAR Road	Mons Avenue	Fitzgerald Avenue	Footpath	38.4
FPR442BH	KING Street	Prince Street	Church Street	Footpath	13
FPL119EA	BROOK Street	Coogee Bay Road	Ormond Gardens	Footpath	38.4

Asset ID	Street Name	From	To	Sub Category	Rem Life (Years)
FPL249BA	DUDLEY Street	Arden Street	Alexander Street	Footpath	38.4
FPL581EA	OBERON Street	Mount Street	Hendy Avenue	Footpath	38.4
FPR546IA	MOUNT Street	1 Division Street	Division Lane	Footpath	38.4
FPR546IB	MOUNT Street	Division Lane	Clovelly Road	Footpath	38.4
FPW051AA	Walkway	Baird Avenuenue	Baird Lane	Footpath	38.4
FPL495AA	MALABAR Road	Rainbow Street	Arden Street	Footpath	28.8
FPL015AA	ALBION Street	Carrington Road	Pine Street	Footpath	28.8
FPL072AB	BEAUMOND Avenue	Sackville Street	Bond Street	Footpath	28.8
FPL198AA	COOGEE Street	Carrington Road	Courland Street	Footpath	28.8
FPL297AA	FLOOD Street	Burnie Street	Clovelly Road	Footpath	28.8
FPL755AB	WANSEY ROAD	1 Wansey Road	Arthur Street	Footpath	28.8
FPR678AD	SILVER Street	Elizabeth Street	Botany Street	Footpath	28.8
FPL102FC	BOTANY Street	Oval Lane	High Street	Footpath	38.4
FPL769CC	WILD Street	Wackett Street	Holden Street	Footpath	38.4
FPL298FA	FLOWER Street	Maroubra Road	Haig Street	Footpath	28.8
FPL722AA	TITANIA Street	Oberon Street	Howard Street	Footpath	28.8
FPL764AA	WELLS Street	Macquarie Street	The End	Footpath	28.8
FPR795AB	ZIONS Avenue	Nix Avenue	Prince Edward Street	Footpath	28.8
FPR581AA	OBERON Street	Wolseley Road	Dundas Street	Stairs	38.4
FPR775AA	WILSON Street	Marine Parade	Banks Street	Stairs	38.4
FPL635CA	RAINBOW Street	Avoca Street	Rainbow Lane	Footpath	38.4
FPL625AA	POZIERES Avenue	Combles Parade	Menin Road	Footpath	38.4
FPR159EA	CARR Street	Byron Street	Melody Street	Footpath	38.4
FPL588AA	ORMOND GDNS	Brook Street	The End	Footpath	28.8
FPL701AA	SULLY Street	Howard Street	The End	Footpath	18
FPL704AA	ST LUKE Street	Coogee Bay Road	Gray Street	Stairs	38.4
FPL724CB	TODMAN Avenue	112 Todman Avenue	Anzac Parade	Footpath	38.4
FPL769DA	WILD Street	Holden Street	Hinkler Street	Footpath	38.4
FPL006AA	ADA Street	Don Juan Avenue	The End	Footpath	38.4

Asset ID	Street Name	From	To	Sub Category	Rem Life (Years)
FPL423AA	JUDGE Street	Coogee Bay Road	The End (South)	Footpath	9.6
FPL490AA	MACLEAY Street	Moverly Road	Tucabia Street	Footpath	38.4
FPL628BA	PRINCE EDWARD Street	Ireton Street	Raglan Street	Footpath	38.4
FPL689AA	STARK Street	Melody Street	Carrington Road	Footpath	38.4
FPR038BA	ARDEN Street	Brandon Street	Vale Street	Footpath	38.4
FPR474AA	NATHAN Street	Carrington Road	Brighton Road	Footpath	28.8
FPL130DJ	BUNNERONG Road	Glanfield Street	Maroubra Road	Footpath	38.4
FPL130EA	BUNNERONG Road	Maroubra Road	Kingsford Street	Footpath	38.4
FPL495DD	MALABAR Road	Mermaid Avenue	Torrington Road	Footpath	38.4
FPL031ID	ANZAC Parade	Paton Street	Burbong Street	Footpath	38.4
FPL191DA	CLOVELLY Road	Frenchmans Road	Kemmis Street	Footpath	20.8
FPR191DA	CLOVELLY Road	Frenchmans Road	Bligh Place	Footpath	28.8
FPR191DB	CLOVELLY Road	Bligh Place	Carrington Road	Footpath	28.8
FPR191FG	CLOVELLY Road	Dans Avenue	Arden Street	Stairs	28.8
FPR191FH	CLOVELLY Road	Dans Avenue	Arden Street	Stairs	28.8
FPR191FI	CLOVELLY Road	Dans Avenue	Arden Street	Stairs	28.8
FPL191BA	CLOVELLY Road	Earl Street	Orange Lane	Footpath	9.6
FPL191FB	CLOVELLY Road	Barry Street	Knox Street	Footpath	38.4
FPL191GA	CLOVELLY Road	Arden Street	Beach Street	Footpath	38.4
FPL191JB	CLOVELLY Road	Donnellan Cct (East)	The End	Footpath	38.4
FPL071BA	BEAUCHAMP Road	Malabar Road	Davidson Crs	Footpath	38.4
FPL130DE	BUNNERONG Road	Storey Street	Eastmore Place	Footpath	38.4
FPL495BE	MALABAR Road	Evelyn Street	Napper Street	Footpath	38.4
FPL495CA	MALABAR Road	Napper Street	Bedford Place	Footpath	38.4
FPL495CC	MALABAR Road	Bedford Place	Denning Street	Footpath	38.4
FPL495CF	MALABAR Road	Denning Street	Edgecliffe Avenue	Footpath	38.4
FPL495DC	MALABAR Road	Mermaid Avenue	Torrington Road	Footpath	38.4

Asset ID	Street Name	From	To	Sub Category	Rem Life (Years)
FPL495EA	MALABAR Road	Torrington Road	Boomerang Street	Footpath	38.4
FPL495EC	MALABAR Road	First Avenue	Second Avenue	Footpath	38.4
FPL495IE	MALABAR Road	Meagher Avenue	Beauchamp Road	Footpath	38.4
FPL503AC	MAROUBRA Road	Hereward Avenue	Duncan Street	Footpath	38.4
FPL683AB	SNAPE Street	Irvine Street	Smith Street	Footpath	38.4
FPR031SG	ANZAC Parade	Forrest Street	Kenny Avenue	Footpath	38.4
FPR071BA	BEAUCHAMP Road	Malabar Road	Chicago Avenue	Footpath	38.4
FPR191CE	CLOVELLY Road	Market Street	St Marks Lane	Footpath	28.8
FPL191DB	CLOVELLY Road	Frenchmans Road	Kemmis Street	Footpath	48
FPL191DE	CLOVELLY Road	Searle Avenue	Carrington Road	Footpath	48
FPR191AA	CLOVELLY Road	Darley Road	Earl Street	Footpath	12
FPR191FA	CLOVELLY Road	Fern Street	Brook Street	Footpath	48
FPL191CB	CLOVELLY Road	Centennial Avenue	Market Street	Footpath	48
FPR191CB	CLOVELLY Road	Avoca Street	Market Street	Footpath	48
FPR191CD	CLOVELLY Road	Market Street	St Marks Lane	Footpath	48
FPR495CA	MALABAR Road	Moverly Road	Nymboida Street	Footpath	38.4
FPR495DA	MALABAR Road	Nymboida Street	Jensen Place	Footpath	38.4
FPR495FF	MALABAR Road	Nicol Avenue	Duncan Street	Footpath	38.4
FPR500CE	MARINE Parade	The Corso	Sackville Street	Footpath	38.4
FPR500CF	MARINE Parade	Sackville Street	Bond Street	Footpath	38.4
FPR503AA	MAROUBRA Road	Marine Parade	Bona Vista Avenue	Footpath	38.4
FPR694AC	STOREY Street	Royal Street	Nevorie Crs	Footpath	38.4
FPL038CA	ARDEN Street	Clovelly Road	Quail Street	Footpath	38.4
FPL038LA	ARDEN Street	Oberon Street	Rainbow Street	Footpath	38.4
FPL038MA	ARDEN Street	Rainbow Street	Malabar Road	Footpath	9.6
FPL048CA	AVOCA Street	Frenchmans Road	Eulalie Avenue	Footpath	38.4
FPL079BA	BELMORE Road	Avoca Street	Coogee Bay Road	Footpath	38.4
FPL214AD	DACRE Street	Raglan Street	Ireton Street	Footpath	38.4

Asset ID	Street Name	From	To	Sub Category	Rem Life (Years)
FPL294BA	FITZGERALD Avenue	Malabar Road	New Orleans Crs	Footpath	38.4
FPL294BD	FITZGERALD Avenue	Chester Avenue	Anzac Parade (South Bound)	Footpath	38.4
FPL581EC	OBERON Street	Hendy Avenue	Canberra Street	Footpath	38.4
FPL726AE	TORRINGTON Road	Wilson Street	Marine Parade	Footpath	38.4
FPR038KA	ARDEN Street	Dudley Street	Oberon Street	Footpath	38.4
FPR038MA	ARDEN Street	Rainbow Street	Malabar Road	Footpath	38.4
FPR294BD	FITZGERALD Avenue	Beatty Street	Anzac Parade (South Bound)	Footpath	38.4
FPR335AG	GARDENERS Road	Doncaster Avenue	Court Avenue	Footpath	38.4
FPR335AO	GARDENERS Road	Maitland Avenue	Tunstall Avenue	Footpath	38.4
FPR726AA	TORRINGTON Road	Malabar Road	The Causeway	Footpath	38.4
FPR783AA	WOLSELEY Road	Neptune Street	Oberon Street	Footpath	38.4
FPL423AB	JUDGE Street	Coogee Bay Road	The End (South)	Footpath	38.4
FPW694HA	Walkway	285R Storey Street	Malabar Road	Stairs	48
FPL532AA	MINYA Avenue	Court Avenue	The End	Footpath	28.8
FPR407BB	IRETON Street	Victoria Lane	Victoria Street	Footpath	38.4
FPL130IE	BUNNERONG Road	Shirley Crs (North)	Jordans Lane	Footpath	38.4
FPL214AC	DACRE Street	Raglan Street	Ireton Street	Footpath	38.4
FPL487AB	MCKEON Street	Fenton Avenue	Duncan Street	Footpath	38.4
FPR495EA	MALABAR Road	262 Malabar Road	Storey Street	Footpath	38.4
FPL249EA	DUDLEY Street	Byron Street	Howard Street	Footpath	38.4
FPL304AA	FOWLER CRS	Macleay Street	Storey Street	Footpath	38.4
FPL407CB	IRETON Street	Dacre Lane	Dacre Street	Footpath	38.4
FPR460BA	LEETON Avenue	Alison Road	The End (South)	Footpath	38.4
FPR508AD	MAWSON Parade	Mawson Lane	Nyan Street	Footpath	38.4
FPR531AB	MIRRABOOKA CRES	Little Bay Road	Woonah Street	Footpath	38.4

Asset ID	Street Name	From	To	Sub Category	Rem Life (Years)
FPW020JA	WALKWAY	WANSEY ROAD	ALISON ROAD	Footpath	38.4
FPW082AA	Walkway	Bennet Place	Broome Street	Footpath	38.4
FPL020EC	ALISON Road	Carrington Lane	Melody Street	Footpath	28.8
FPL031CA	ANZAC Parade	Doncaster Avenue	High Street	Footpath	18
FPL031CD	ANZAC Parade	High Street	Barker Street	Footpath	28.8
FPL031CE	ANZAC Parade	High Street	Barker Street	Footpath	18
FPL071FC	BEAUCHAMP Road	Bunnerong Road	Baird Lane	Footpath	28.8
FPL238AA	DOLPHIN Street	The End	Arden Street	Footpath	18
FPL495BA	MALABAR Road	Athol Street	Greenwood Street	Footpath	28.8
FPL495BC	MALABAR Road	Athol Street	Greenwood Street	Footpath	28.8
FPL495CB	MALABAR Road	Napper Street	Bedford Place	Footpath	28.8
FPL503DA	MAROUBRA Road	Flower Street	Clio Lane	Footpath	28.8
FPL511AA	MEARS Avenue	Avoca Street	Mears Lane	Footpath	28.8
FPR020AB	ALISON Road	Beach Lane	Arden Street	Footpath	28.8
FPR020EC	ALISON Road	Raleigh Street	Carrington Road	Footpath	28.8
FPR031SF	ANZAC Parade	Forrest Street	Kenny Avenue	Footpath	28.8
FPR128BA	BUNDOCK Street	Hendy Avenue	Ellen Street	Footpath	28.8
FPR197DF	COOGEE BAY Road	Mount Street	Brook Street	Footpath	28.8
FPR227AB	DAY Avenue	Tunstall Avenue	Eastern Avenue	Footpath	28.8
FPR238FE	DOLPHIN Street	Courland Street	Judge Street	Footpath	28.8
FPR495AA	MALABAR Road	Rainbow Street	Bundock Lane	Footpath	7.2
FPR495II	MALABAR Road	Osprey Ct	Beauchamp Road	Footpath	28.8
FPR500DB	MARINE Parade	Severn Street	McKeon Street	Footpath	28.8
FPR503CF	MAROUBRA Road	Malabar Road	Flower Street	Footpath	28.8
FPR635AA	RAINBOW Street	Anzac Parade	Wallace Lane	Footpath	28.8
FPR635AD	RAINBOW Street	Anzac Parade	Wallace Lane	Footpath	28.8
FPR635AF	RAINBOW Street	Anzac Parade	Wallace Lane	Footpath	28.8
FPR635BC	RAINBOW Street	Paton Street	Avoca Street	Footpath	28.8
FIR024EA	ALMA Road	Width Change	Bell Street	Footpath	28.8

Asset ID	Street Name	From	To	Sub Category	Rem Life (Years)
FPL013AC	ALBERT Street	Llanfoyst Street	Avoca Street	Footpath	28.8
FPL025AA	ABBE RECEVEUR Place	Grose Street	The End	Footpath	28.8
FPL035BH	ARCADIA Street	Beach Street	Arden Street	Footpath	28.8
FPL038JD	ARDEN Street	Carr Street	Dudley Street	Footpath	28.8
FPL038JE	ARDEN Street	Carr Street	Dudley Street	Footpath	28.8
FPL048FC	AVOCA Street	Barker Street	Howard Street	Footpath	28.8
FPL067AC	BAY Street	Clifford Street	The End	Footpath	28.8
FPL112BA	BRANDON Street	Arden Street	Knox Street	Footpath	28.8
FPL113EC	BREAM Street	Melody Street	Carrington Road	Footpath	28.8
FPL161CD	CARRINGTON Road	Dolphin Street	Coogee Street	Footpath	28.8
FPL161EC	CARRINGTON Road	Alison Road	Glen Lane	Footpath	28.8
FPL161GA	CARRINGTON Road	Clovelly Road	Ravenswood Avenue	Footpath	28.8
FPL031PB	ANZAC Parade	Byng Street	Kitchener Street	Footpath	38.4
FPL031PC	ANZAC Parade	Kitchener Street	Fitzgerald Avenue	Footpath	38.4
FPL031QB	ANZAC Parade	Minneapolis Crs	Beauchamp Road	Footpath	38.4
FPL213AF	CUZCO Street	Close Street	The End	Footpath	28.8
FPL213AM	CUZCO Street	Close Street	The End	Footpath	28.8
FPL225AB	DAVIDSON CRES	Beauchamp Road	Malabar Road	Footpath	28.8
FPL245CC	DOUGLAS Street	The End	Varna Street	Footpath	28.8
FPL249BB	DUDLEY Street	Arden Street	Alexander Street	Footpath	28.8
FPL249FC	DUDLEY Street	Howard Street	St Pauls Street (South)	Footpath	28.8
FPL249FF	DUDLEY Street	St Pauls Street (North)	Coogee Bay Road	Footpath	28.8
FPL253BA	DUNDAS Street	Oberon Street	Rainbow Street	Footpath	28.8
FPL298EB	FLOWER Street	Galvin Street	Maroubra Road	Footpath	28.8
FPL346BA	GREVILLE Street	Fern Street	Seaview Street	Footpath	28.8
FPL346BC	GREVILLE Street	Seaview Street	Knox Street	Footpath	28.8
FPL347AA	GROSE Street	Anzac Parade	Abbe Receveur Place	Footpath	28.8

Asset ID	Street Name	From	To	Sub Category	Rem Life (Years)
FPL430AC	KEITH Street	Surfside Avenue	Clovelly Road	Footpath	28.8
FPL433AC	KEMMIS Street	Clovelly Road	Frenchmans Road	Footpath	28.8
FPL447AA	KNOX Street	Clovelly Road	Susan Lane	Footpath	28.8
FPL460AA	LEETON Avenue	The End (North)	Alison Road	Footpath	28.8
FPL496AB	MANSON Place	Simeon Street	Knox Street	Footpath	28.8
FPL496AC	MANSON Place	Simeon Street	Knox Street	Footpath	28.8
FPL563AB	NEPTUNE Street	Dundas Street	Beach Street	Footpath	28.8
FPL563AC	NEPTUNE Street	Dundas Street	Beach Street	Footpath	18
FPL573AA	NORTHUMBERLAND Street	Boundary Street	Park Lane	Footpath	28.8
FPL607AC	PATON Street	Rigney Avenue	Sturt Street	Footpath	28.8
FPL647AE	ROBEY Street	Wise Street	Fitzgerald Avenue	Footpath	28.8
FPL647AG	ROBEY Street	Wise Street	Fitzgerald Avenue	Footpath	28.8
FPL647AI	ROBEY Street	Wise Street	Fitzgerald Avenue	Footpath	28.8
FPL647AK	ROBEY Street	Wise Street	Fitzgerald Avenue	Footpath	28.8
FPL647AN	ROBEY Street	Wise Street	Fitzgerald Avenue	Footpath	28.8
FPL647AP	ROBEY Street	Wise Street	Fitzgerald Avenue	Footpath	28.8
FPL666AA	SEAVIEW Street	Greville Street	Nolan Avenue	Footpath	28.8
FPL699CB	STURT Street	Botany Street	Paton Street	Footpath	28.8
FPL740AD	VARNA Street	Leichhardt Street	Carlton Street	Footpath	28.8
FPL740AE	VARNA Street	Carlton Street	Arden Street	Footpath	28.8
FPL984AB	ESPERANCE CL	Clonard Way	17 Esperance Cl	Footpath	28.8
FPOARGAA	ARGYLE Street RESERVE	Argyle Street	Playground	Footpath	18
FPOBURAA	BURNIE PARK	Burnie Street	Pacific Street	Footpath	28.8
FPOTIMAA	TIMBERY RESERVE	Anzac Parade	Seat	Footpath	28.8
FPR010AA	AEOLIA Street	Perouse Road	Aeolia Lane	Footpath	28.8
FPR013AB	ALBERT Street	George Street	Victoria Street	Footpath	28.8
FPR015AA	ALBION Street	Carrington Road	Albion Lane	Footpath	28.8
FPR104AA	BOUNDARY Street	Arden Street	Pacific Lane	Footpath	28.8

Asset ID	Street Name	From	To	Sub Category	Rem Life (Years)
FPR104AC	BOUNDARY Street	Pacific Lane	Pacific Street	Footpath	28.8
FPR113EA	BREAM Street	Melody Street	Carrington Road	Footpath	28.8
FPR119GC	BROOK Street	Arcadia Street	Alison Road	Footpath	28.8
FPR143CE	BYRON Street	Carr Street	Coogee Bay Road	Footpath	28.8
FPR159DB	CARR Street	Mount Street	Carr Lane	Footpath	7.2
FPR159EC	CARR Street	Melody Street	Carrington Road	Footpath	28.8
FPR270AA	ELPHINSTONE Road	Bundock Street	Wauhope Crs (North)	Footpath	28.8
FPR270AB	ELPHINSTONE Road	Wauhope Crs (North)	Wauhope Crs (South)	Footpath	28.8
FPR276AB	EULALIE Avenue	Avoca Street	The End	Footpath	28.8
FPR318GB	GARDEN Street	Green Street	Maroubra Road	Footpath	18
FPR325AB	GEORGE Street	Albert Street	Alison Road	Footpath	7.2
FPR393BF	HOWARD Street	Clarke Lane	Canberra Street	Footpath	28.8
FPR393CB	HOWARD Street	Ethel Street	Sully Street	Footpath	28.8
FPR423BC	JUDGE Street	Coogee Street	The End (North)	Footpath	7.2
FPR447BA	KNOX Street	Greville Street	Brandon Street	Footpath	28.8
FPR526AA	MILFORD Street	Avoca Street	Judge Street	Footpath	28.8
FPR548GD	MOVERLY Road	Coldstream Street (North)	Malabar Road	Footpath	28.8
FPR565BB	NEW ORLEANS CRES	Sims Grv	Sims Lane	Footpath	28.8
FPR569AA	NOLAN Avenue	Fern Street	Seaview Street	Footpath	28.8
FPR579AB	NYMBOIDA Street	Coldstream Street	Tucabia Street	Footpath	28.8
FPR619AB	PITT Street	Alison Road	Albert Street	Footpath	28.8
FPR623AB	POWELL Street	Powell Lane	Coogee Bay Road	Footpath	28.8
FPR701AA	SULLY Street	Howard Street	The End	Footpath	28.8
FPR808BA	GLANFIELD Street	Royal Street	Hannan Street	Footpath	28.8
FPW025AA	Walkway	14R Abbe Receveur Place	Anzac Parade	Footpath	28.8
FPW508AA	Walkway	29R Mawson Parade	Anzac Parade	Footpath	28.8

Asset ID	Street Name	From	To	Sub Category	Rem Life (Years)
FPW516AA	Walkway	86R Melody Street	Stark Street	Footpath	28.8
FPW613AA	Walkway	93R Perry Street	Harold Street	Footpath	28.8
FPW656EA	Walkway	10R Royal Street	Marjorie Crs	Footpath	28.8
FPR238CA	DOLPHIN Street	Brook Street	Mount Street	Footpath	38.4
FPL119EB	BROOK Street	Coogee Bay Road	Ormond Gardens	Footpath	38.4
FPL200FA	COOPER Street	Boyce Road	Maroubra Road	Footpath	38.4
FPL581BA	OBERON Street	Dundas Street	Arden Street	Stairs	38.4
FPR085AC	BILGA CRES	Byna Street	Duri Street	Footpath	38.4
FPW314AA	Walkway	Gabee Place	Byna Street	Footpath	38.4
FPW637AB	Walkway	53 Mirrabooka Crs	Goora Street	Footpath	38.4
FPW031VC	Walkway	1597B Anzac Parade	Goorawahl Avenue	Stairs	48
FPL068DH	BEACH Street	Arcadia Street	Alison Road	Stairs	38.4
FPL108BD	BOYCE Road	Flower Street	Cooper Street	Stairs	38.4
FPL108BF	BOYCE Road	Flower Street	Cooper Street	Stairs	38.4
FPL108BH	BOYCE Road	Flower Street	Cooper Street	Stairs	38.4
FPL108BI	BOYCE Road	Flower Street	Cooper Street	Stairs	38.4
FPL108BK	BOYCE Road	Flower Street	Cooper Street	Stairs	38.4
FPL108BM	BOYCE Road	Flower Street	Cooper Street	Stairs	38.4
FPL108BO	BOYCE Road	Flower Street	Cooper Street	Stairs	38.4
FPL236AC	DIVISION Street	Arden Street	Hamilton Street	Stairs	38.4
FPL291AA	FIRST Avenue	Malabar Road	The Causeway	Stairs	38.4
FPL291AB	FIRST Avenue	Malabar Road	The Causeway	Stairs	38.4
FPL291BA	FIRST Avenue	The Causeway	Duncan Street	Stairs	38.4
FPL309AC	FRASER Street	Clovelly Road	The End	Stairs	38.4
FPL330AB	GLEN Avenue	Alison Road	The End	Stairs	38.4
FPL330AC	GLEN Avenue	Alison Road	The End	Stairs	38.4
FPL330AD	GLEN Avenue	Alison Road	The End	Stairs	38.4
FPL330AF	GLEN Avenue	Alison Road	The End	Stairs	38.4
FPL330AG	GLEN Avenue	Alison Road	The End	Stairs	38.4
FPL330AI	GLEN Avenue	Alison Road	The End	Stairs	38.4

Asset ID	Street Name	From	To	Sub Category	Rem Life (Years)
FPL354AD	HAMILTON Street	Alison Road	Division Street	Stairs	38.4
FPL354AH	HAMILTON Street	Alison Road	Division Street	Stairs	38.4
FPL354AI	HAMILTON Street	Alison Road	Division Street	Stairs	38.4
FPL496AA	MANSON Place	Simeon Street	Knox Street	Stairs	38.4
FPL647BC	ROBEY Street	Fitzgerald Avenue	Wade Street	Stairs	38.4
FPL671AB	SHACKEL Avenue	Bruce Avenue	The End	Stairs	38.4
FPL702BB	SURFSIDE Avenue	Park Street	Keith Street	Stairs	38.4
FPL740AB	VARNA Street	Fern Street	Wallace Street	Stairs	38.4
FPR213AD	CUZCO Street	35 Cuzco St	37 Cuzco St	Stairs	38.4
FPR309AA	FRASER Street	Clovelly Road	The End	Stairs	38.4
FPR393BA	HOWARD Street	Titania Street	Lion Street	Stairs	24
FPR393BC	HOWARD Street	Titania Street	Lion Street	Stairs	24
FPR407BC	IRETON Street	Victoria Lane	Victoria Street	Stairs	38.4
FPR435DB	KENNEDY Street	Middle Street	Meeks Street	Stairs	38.4
FPR435DC	KENNEDY Street	Middle Street	Meeks Street	Stairs	38.4
FPR496AA	MANSON Place	Simeon Street	Knox Street	Stairs	38.4
FPR496AC	MANSON Place	Simeon Street	Knox Street	Stairs	38.4
FPR516EC	MELODY Street	1 Melody Street	Alison Road	Stairs	38.4
FPR546HD	MOUNT Street	Alison Road	Division Street	Stairs	38.4
FPR635EB	RAINBOW Street	Hendy Avenue	Malabar Road	Stairs	38.4
FPR661AC	SALISBURY Road	Kensington Road	Balfour Road	Stairs	38.4
FPR689AB	STARK Street	Melody Street	Carrington Road	Stairs	38.4
FPR702BC	SURFSIDE Avenue	Park Street	Blackwood Avenue	Stairs	38.4
FPW009AD	Walkway	59R Adina Avenue	Goonda	Stairs	38.4
FPW031HA	ANZAC Parade	Anzac Parade	Median Carpark	Stairs	38.4
FPW044AA	Walkway	6R Astoria Cct	Fitzgerald Avenue	Stairs	38.4
FPW067AB	Walkway	Bay Street	Brook Street	Stairs	38.4
FPW197CA	Walkway	136R Coogee Bay Road	Powell Street	Stairs	38.4
FPW393CA	Walkway	Howard Street	Meymott Street	Stairs	38.4

Asset ID	Street Name	From	To	Sub Category	Rem Life (Years)
FPW466AA	Walkway	Liguria Street	Seaside Parade	Stairs	38.4
FPW537BA	Walkway	Mons Avenue	9-13R Beatty Street	Stairs	38.4
FPW537CA	Walkway	71 Mons Avenue	78 Mons Avenue	Stairs	38.4
FPW727AA	Walkway	Tower Street	Gordons Bay Coastal Walkway	Stairs	38.4
FPW770AA	Walkway	1R Wilkes Avenue	Kain Avenue	Stairs	38.4
FPW014AA	Walkway	16R Albi Place	Judge Street	Stairs	30
FPL020IB	ALISON Road	Elizabeth Street	Botany Street	Footpath	48
FPL031EA	ANZAC Parade	Middle Street	Meeks Street	Footpath	30
FPL031FA	ANZAC Parade	Meeks Street	Rainbow Street	Footpath	30
FPL031LA	ANZAC Parade	Gale Road	Alma Road	Footpath	30
FPL197DA	COOGEE BAY Road	Mount Street	Brook Street	Footpath	12
FPL495ID	MALABAR Road	Tyrwhitt Street	Meagher Avenue	Footpath	48
FPL503GB	MAROUBRA Road	Ferguson Street	Robey Street	Footpath	48
FPL612CA	PEROUSE Road	Barker Street	St Pauls Street	Footpath	48
FPR031DA	ANZAC Parade	Barker Street	Strachan Street	Footpath	48
FPR031EA	ANZAC Parade	Strachan Street	Borrodale Road	Footpath	48
FPR031FA	ANZAC Parade	Borrodale Road	Gardeners Road	Footpath	48
FPL038IA	ARDEN Street	Coogee Bay Road	Carr Street	Footpath	30
FPL048DC	AVOCA Street	Milford Street	Mears Avenue	Footpath	48
FPL108EA	BOYCE Road	Anzac Parade	Bruce Bennetts Place	Footpath	48
FPL308AA	FRANKLIN Street	Bunnerong Road	Norfolk Lane	Footpath	30
FPL678AA	SILVER Street	Belmore Road	Arthur Lane	Footpath	30
FPL707BA	ST PAULS Street	Perouse Road	Daintrey Crs (West)	Footpath	48
FPR039CB	ARTHUR Street	Clara Street	Belmore Road	Footpath	30
FPR048DC	AVOCA Street	Short Street	Belmore Road	Footpath	48
FPR308AA	FRANKLIN Street	Bunnerong Road	Waterton Avenue	Footpath	30
FPR707BA	ST PAULS Street	Perouse Road	Nancye Street	Footpath	48

Asset ID	Street Name	From	To	Sub Category	Rem Life (Years)
FPW038HA	Walkway	Dolphin Street	Arden Street	Footpath	30
FPL102EA	BOTANY Street	Middle Street	Barker Street	Footpath	38.4
FPL050AA	BADEN Street	Beach Street	The End	Footpath	38.4
FPL068CC	BEACH Street	Bream Street	Arcadia Street	Footpath	48
FPL197CA	COOGEE BAY Road	Melody Street	Mount Lane	Footpath	48
FPR130ID	BUNNERONG Road	Perry Street	Harold Street	Footpath	24
FPL130HF	BUNNERONG Road	Beauchamp Road	Daunt Avenue	Footpath	28.8
FPR020HB	ALISON Road	The Avenuenue	Abbey Street	Footpath	30
FPR197CB	COOGEE BAY Road	Byron Street	Mount Street	Footpath	48
FPL038BF	ARDEN Street	Burnie Street	Clovelly Road	Footpath	12
FPL125BA	BRUCE BENNETTS Place	Piccadilly Place	Maroubra Road	Footpath	48
FPL546IA	MOUNT Street	Marcel Avenue	Division Lane	Footpath	48
FPR038BE	ARDEN Street	Arden Lane	Clovelly Road	Footpath	48
FPR038CB	ARDEN Street	Clovelly Road	Dans Avenue	Footpath	48
FPR125AA	BRUCE BENNETTS Place	Boyce Road	Piccadilly Place	Footpath	30
FPR125BA	BRUCE BENNETTS Place	Piccadilly Place	Maroubra Road	Footpath	30
FPR249BA	DUDLEY Street	Arden Street	Asher Street	Footpath	48
FPR257BA	EARL Street	Clovelly Road	Challis Lane	Footpath	48
FPR335AB	GARDENERS Road	Houston Road	Bruce Street	Footpath	48
FPR335AD	GARDENERS Road	Mary Hamer Lane	Doncaster Avenue	Footpath	48
FPR365AA	HAVELOCK Avenue	Arden Street	Asher Street	Footpath	12
FPR451AB	KURRAWA Avenue	Carr Street	Paul Lane	Footpath	48
FPR707AB	ST PAULS Street	Dine Street	Perouse Road	Footpath	48
FPL068EA	BEACH Street	Clovelly Road	Burnie Street	Footpath	6.4

Asset ID	Street Name	From	To	Sub Category	Rem Life (Years)
FPL020CA	ALISON Road	Brook Street	Leeton Avenue	Footpath	38.4
FPL020DA	ALISON Road	Leeton Avenue	Mount Street	Footpath	38.4
FPL635CC	RAINBOW Street	Canberra Lane	Canberra Street	Footpath	38.4
FPL635DA	RAINBOW Street	Canberra Street	Ellen Street	Footpath	38.4
FPL639AB	RANDWICK Street	Sydney Street	Gordon Street	Footpath	38.4
FPL769AA	WILD Street	Fitzgerald Avenue	Donovan Avenue	Footpath	38.4
FPL769EB	WILD Street	Cobham Street	Wild Lane	Footpath	38.4
FPR128AA	BUNDOCK Street	Malabar Road	Hendy Avenue	Footpath	38.4
FPR128CA	BUNDOCK Street	Canberra Street	Avoca Street	Footpath	38.4
FPR238DA	DOLPHIN Street	Mount Street	Melody Street	Footpath	38.4
FPR635DB	RAINBOW Street	Ellen Street	Hendy Avenue	Footpath	38.4
FPR769EA	WILD Street	Hinkler Street	Paine Street	Footpath	38.4
FPL016AA	ALEXANDER Street	Dudley Street	Oberon Street	Footpath	38.4
FPL024AA	ALMA Road	Anzac Parade	Garden Street	Footpath	24
FPL078AA	BELLEVUE Street	Sackville Street	Bond Street	Footpath	38.4
FPL095BA	BONA VISTA Avenue	Bond Street	Maroubra Road	Footpath	38.4
FPL108HA	BOYCE Road	Royal Street	Bunnerong Road	Footpath	38.4
FPL159BA	CARR Street	Arden Street	Brook Street	Footpath	38.4
FPL249CA	DUDLEY Street	Brook Street	Mount Street	Footpath	38.4
FPL255AA	DUTRUC Street	Alison Road	Rae Street	Footpath	38.4
FPL257CA	EARL Street	Challis Street	Stephen Street	Footpath	38.4
FPL363AA	HARRISON Avenue	Gregory Street	Storey Street	Footpath	38.4
FPL375AA	HEREWARD Street	McKeon Street	Maroubra Road	Footpath	38.4
FPL381AA	HINKLER Street	Bunnerong Road	Parer Street	Footpath	38.4
FPL440AA	KIDMAN Street	Brook Street	Mount Street	Footpath	38.4
FPL526AA	MILFORD Street	Avoca Street	Judge Street	Footpath	38.4
FPL546CA	MOUNT Street	Dudley Street	Carr Street	Footpath	38.4
FPL633AD	RAE Street	Wood Lane	Dutruc Street	Footpath	38.4
FPL634BB	RAGLAN Street	Victoria Lane	Victoria Street	Footpath	38.4

Asset ID	Street Name	From	To	Sub Category	Rem Life (Years)
FPL685AA	SOUDAN Street	Avoca Street	Soudan Lane	Footpath	38.4
FPL702BA	SURFSIDE Avenue	Park Street	Keith Street	Footpath	38.4
FPL705BA	ST MARKS Road	Alison Road	Rae Street	Footpath	38.4
FPL775AA	WILSON Street	Marine Parade	Torrington Road	Footpath	38.4
FPR134AA	BURNIE Street	Clovelly Road	Arden Street	Footpath	38.4
FPR253AA	DUNDAS Street	Neptune Street	Oberon Street	Footpath	38.4
FPR435DA	KENNEDY Street	Middle Street	Meeks Street	Footpath	38.4
FPR481AA	LURLINE Street	Torrington Road	Waterside Avenue	Footpath	38.4
FPR546EA	MOUNT Street	Coogee Bay Road	Dolphin Street	Footpath	38.4
FPR685AA	SOUDAN Street	Avoca Street	St Pauls Lane	Footpath	38.4
FPL031JC	ANZAC Parade	Moverly Road	Storey Street	Footpath	48
FPL102FA	BOTANY Street	Barker Street	Norton Street	Footpath	48
FPL102HA	BOTANY Street	Arthur Street	Alison Road	Footpath	48
FPL439CA	KENSINGTON Road	Todman Avenue	Addison Street	Footpath	48
FPL694BA	STOREY Street	Hannan Street	Hannan Lane	Footpath	48
FPL694CA	STOREY Street	Anzac Parade	Loch Maree Street	Footpath	48
FPR031RB	ANZAC Parade	Messines Place	Pozieres Avenue	Footpath	48
FPR031SD	ANZAC Parade	Franklin Street	Mitchell Street	Footpath	48
FPR102FD	BOTANY Street	Magill Street	High Street	Footpath	48
FPR197CA	COOGEE BAY Road	Melody Street	Byron Street	Footpath	48

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
2022	\$606,934	\$640,000	\$1,250,000	\$1,350,000	\$0	\$3,846,934
2023	\$606,934	\$646,400	\$1,262,500	\$1,350,000	\$0	\$3,865,834
2024	\$606,934	\$652,864	\$1,275,125	\$1,350,000	\$0	\$3,884,923
2025	\$606,934	\$659,393	\$1,287,876	\$1,350,000	\$0	\$3,904,203
2026	\$606,934	\$665,987	\$1,300,755	\$1,350,000	\$0	\$3,923,676
2027	\$606,934	\$672,646	\$1,313,763	\$1,350,000	\$0	\$3,943,343
2028	\$606,934	\$679,373	\$1,326,900	\$1,350,000	\$0	\$3,963,207
2029	\$606,934	\$686,167	\$1,340,169	\$1,350,000	\$0	\$3,983,270
2030	\$606,934	\$693,028	\$1,353,571	\$1,350,000	\$0	\$4,003,533
2031	\$606,934	\$699,959	\$1,367,107	\$1,350,000	\$0	\$4,023,999

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