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Long Term Maintenance Plan (LTMP) 2012 - 2026

Body Corporate 169774

2 Alpers Avenue,
Epsom, Auckland



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Approved for Release

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Senior Facilities Consultant

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2 Alpers Avenue, Epsom, Auckland



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1 | Site Survey Information

The property was inspected by Opus on 13th August 2012 and took into account external areas only. The information included with this maintenance plan is based upon this visual survey.

It should be considered that items which constitute operational maintenance items and costs are not included within the scope of this plan as per the Unit Titles Act 2010, Regulations 30. 1. (e) as these costs should already be identified separately within the Body Corporate Annual Budget. An example of such items is the routine replacement of lighting lamps. This plan does include allowance for the replacement of such light fittings and systems as they reach the end of their expected life and provides budget information and a guideline to the future maintenance requirements of the property. The maintenance requirements are based on provision of 'like with like'.

The budgetary financial information pertaining to costing and unit rates is taken from the latest edition of Rawlinson's New Zealand Construction Handbook (Currently Twenty Sixth Edition 2011) and excludes GST and Inflation. We will provide the ability to enter an inflation figure via an optional data function which can be inserted by the Body Corporate as required. All building, construction terminology, site terms and abbreviations used within our reports are taken from the Standards New Zealand Miscellaneous Publication NZMP 4212 Glossary of building terminology revised and republished in June 1998.

This report does not purport to be a full Building Survey or Health and Safety Inspection of the Building and Property and therefore matters such as 'Leaky Buildings' Syndrome and Asbestos have not been commented upon other than to advise the Body Corporate to seek further advice from a suitably trained and qualified practitioner / consultant in these specialist areas.

All enquiries regarding the information included in the plan are to be directed to:

Peter McGregor, Facilities Management Consultant

Property Services

Opus International Consultants Limited

100 Beaumont Street

Auckland 1010

Telephone: (09) 355 9237

Facsimile: (09) 355 9583

2 | Property Information

Property Address:	2 Alpers Avenue, Epsom, Auckland
Legal Description:	Lot 2 DP34635
Function and Use:	Residential Units
Year of Construction:	Circa 1989.
Planning Issues:	None known or advised.
Approximate Land Area:	961 m ²

Property Description:

The property located at 2 Alpers Avenue, Epsom, Auckland was constructed circa 1989. The site consists of an Apartment building with common walkways and a common ground floor garage. The Apartment complex consists of 18 Units and a building managers Office. There is a passenger lift that provides access to all levels.

The building is constructed of concrete foundations, post and beams, floors and walls with a textured finish. The roofing material is of a grey membrane with internal gutters and PVC downpipes.

The grounds consisted of a concrete driveway, retaining walls and some minor landscaping. There was a variety of fencing techniques; wire mesh, painted concrete blocks and timber.

3 | The Unit Titles Act 2010 and LTMP's

GENERAL INFORMATION ON THE UNIT TITLES ACT 2010:

Unit Titles are the most widely used form of multi-unit property ownership. New Zealand has over 18,000 unit title developments of which approximately 12,650 of these are residential developments, comprising more than 90,000 units in total. Unit title developments are typically apartment blocks, commercial units, townhouse developments, office blocks and industrial or retail complexes.

Within a unit title development, the owners own a defined part of the building, such as an apartment or a unit. They may also have shared ownerships in common areas such as lifts, lobbies or driveways. Collectively, all the unit owners in a unit title development make up the Body Corporate. The Body Corporate is responsible for a range of management, financial and administrative matters relating to the common property and to the building as a whole.

The Unit Titles Act 2010, was enacted on 1 April 2010, and supersedes the 1972 Act which until that point had been the law governing unit title developments. Since 1972, when the original Unit Titles Act first came into force, there have been major changes in the number, scale and nature of property developments in New Zealand and as such the new Unit Titles Act 2010 was required to provide a sound basis for the creation and sustainable management of intensive, multi-unit developments.

Under The Unit Titles Act 2010, the Body Corporate is required to declare the provision of a Long Term Maintenance Fund and the annual sum of money inserted into the same. A vehicle for making this declaration is included below for completion and signature.

In order to achieve full benefit from the prepared LTMP it is recommended that an update exercise be carried out every two or three years.

BODY CORPORATE DECLARATION UNDER REGULATION 30 OF THE UNIT TITLES ACT 2010:

Cl (1) (f) The Body Corporate has a Long Term Maintenance Fund	Yes / No
Cl (1)(g)The Body Corporate applies the annual sum of (insert sum)	
As at (insert date)	/2012
Signed on behalf of Body Corporate 169774:	

4 | Executive Summary

This summary provides a brief overview of the property condition outlining major risks and urgent requirements for maintenance. Additional information is contained within the main report.

At the time of inspection no access was afforded to the Lift Motor Room located to the ground floor corridor.

MAJOR RISKS TO HEALTH & SAFETY OR PROPERTY CONDITION:



During the inspection it was noted that sections of the steel deck system contained corrosion and galvanic corrosion. These types of corrosion can affect the strength of the steel deck system and concrete floor. We recommend a detailed inspection by a suitably qualified person to identify the source and remedy.



It was noted that the North concrete wall within the North Carpark contained efflorescence, efflorescence is a sign that the membrane has failed and water is flowing through the concrete. We recommend a detailed inspection by a suitably qualified person to identify the source and remedy.

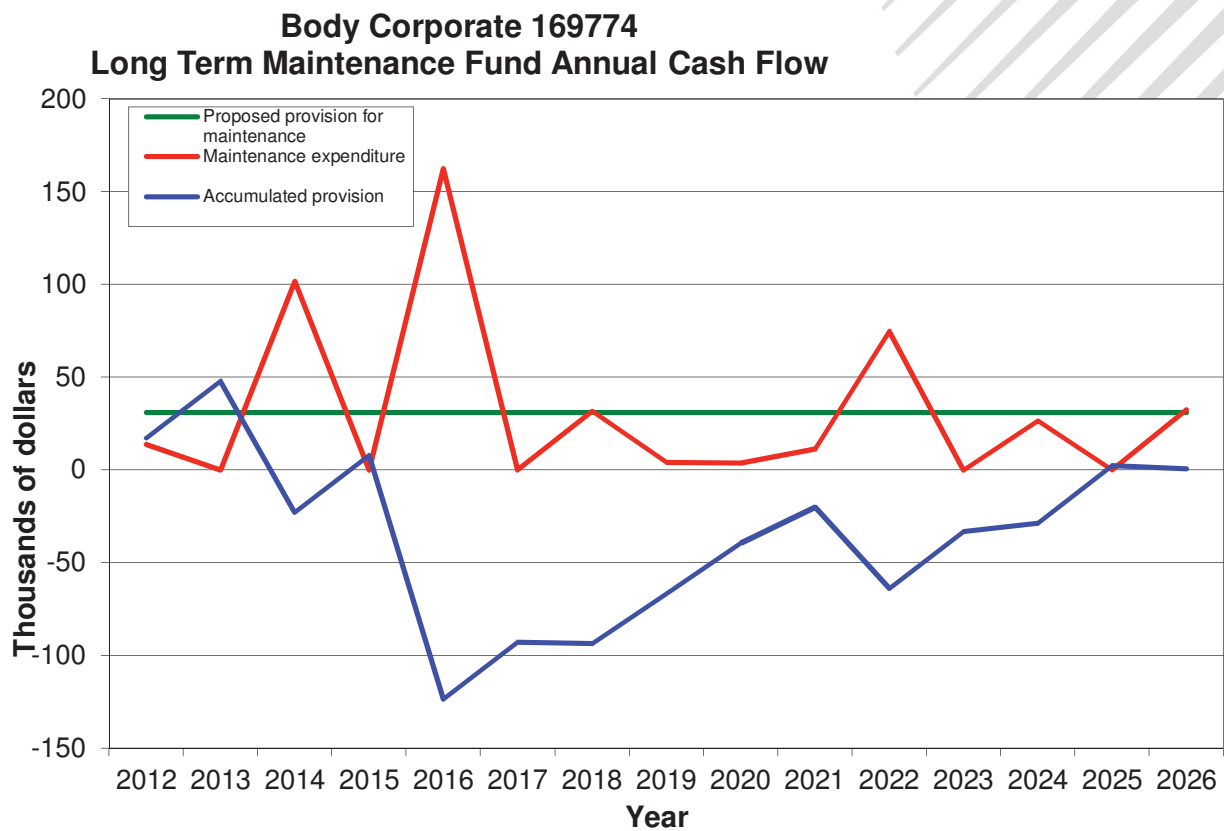
SUMMARY OF INITIAL WORKS:

A summary of the items identified in the initial five years is provided within the table below.

Year	Element	Description	Estimate in (\$)
2012	Carpentry	Allowance for Investigation into corrosion located to steel deck in Garages.	\$10,000
2012	Interior Lighting	Replacement of obsolete lighting fittings in garage.	\$3,840
2014	Exterior painting	Repainting of building's exterior.	\$73,805
2014	Exterior Lighting	Replacement of exterior light fittings; PIR motion sensor, fluorescent and bulkheads.	\$6,190
2014	Paving	Repainting of carpark lines and numbers.	\$620
2014	Carpentry	Replacement of door closers.	\$750
2014	Electrical	Replacement of gate controls, gate motor and garage door openers	\$8,700
2014	Heating and ventilation	Replacement of ceiling extract fan in Bathroom of Managers Office.	\$500
2014	Lift	Refurbishment of interior of Lift car.	\$10,000
2014	Security	Replacement of security components; intercom/door release and mag locks.	\$1,250
2016	Cladding / windows / doors	Allowance for repairs to seals and hinges and garage door sills.	\$1,600
2016	Roofing	Replacement of roofing membrane.	\$121,562
2016	Fencing	Allowance for repairs to vehicle access gate; wheels and track guide.	\$1,000
2016	Fire protection	Replacement of fire protection components; fire alarm panel, manual call points, sirens and heat and smoke detectors.	\$29,760
2016	Heating and ventilation	Replacement of extraction fans located on roof.	\$7,200
2016	Interior painting	Repainting of interior of Managers Office.	\$1,467

CASH FLOW:

The graph below shows that \$30,900 per year is the average sum required to meet the identified expenditure leaving a cash neutral position at the end of the term of the plan.



It can be seen from the Graph above that using the average figure there is a significant shortfall in 2016, this is due to the planned replacement of the roof. The Body Corporate will need to consider the level of contributions required to meet the anticipated expenditure once the existing accumulated funds have been included within the spreadsheet following initial update by the Body Corporate.

CONTINGENCIES:

There is no allowance within the plan for contingencies which would cover items that are not able to be predicted using component life cycles - such as leaking pipe work.

We would strongly recommend that a contingency fund as defined by the Unit Titles Act 2010 be established and suggest that the Body Corporate annually contribute around \$3,100 per annum with a view of a maximum target of \$47,000 being accrued over time.

5 | Exterior Property Description & Condition

ROOFING:



Figure 1 - Grey roof membrane

The visual inspection of the roof noted the roofing is of a grey membrane with internal membrane gutters. The roof was generally observed to be in a fair condition. However, we noted that there were areas of the membrane that was lifting, roof penetrations that were poorly made, minimum or no upstands to parapet wall and poor roof falls. We recommend considering minor repairs to the membrane to prolong the life of the product and to prevent potential issues with water ingress. We have allowed replacement of the membrane in 2016. We recommend monitoring the issues and bringing forward the replacement date if required.

CLADDING:



Figure 2 -Exterior cladding

The cladding is concrete walls with a textured plastered finish. The cladding appears in sound condition no allowance has been made within the life of the plan for replacement work other than maintenance painting.



Figure 3 - Water ingress through decks

During the survey it was observed that there are a number of decks showing signs of water ingress with water flowing out the bottom of the parapet and staining the deck below. This is potentially due to the waterproof barrier failing and/or poor drainage to the deck. We recommend a detailed inspection by a suitably qualified person to identify the source. We have not included this within the plan as the decks are within the individual Unit boundaries and therefore the responsibility of the owners.



Figure 4 - Decay to Garage door sills

It was noted that a number of the garage door sill were decaying. We have allowed a sum to replace the affected areas in 2012.

EXTERIOR PAINTING:

The paintwork to the apartment walkways / corridors and lift lobbies remains in a fair condition with only some minor scrapes and areas of impact damage. We have allowed for the next repaint in 2014.

JOINERY:

The joinery is powder coated aluminium which, where we were able to inspect, appears to be in sound condition and should not require replacement for the life of the plan. We have made an allowance of \$400 every five (5) years for the periodic maintenance of window seals and hinges, on an as required basis.

LIGHTING:

Due to the time of inspection no external lights were witnessed in operation. As such we have for the purposes of this plan anticipated that all lights are in an operationally fair condition. We have allowed for the replacement of the light fittings in 2014.

FLOORING:

The flooring for the walkways and corridors used to access the apartments are of tiles. These areas were observed to be in a satisfactory condition. We have allowed replacement in 2024.

FENCING:

The perimeter boundary fences are a mixture of different constructions; timber, painted concrete blocks and wire mesh. The concrete fence was observed to be in a satisfactory condition and should not require replacement within the life of the plan. We have allowed for repainting in 2014.

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The wire fence and timber fence were observed to be in a satisfactory condition and we have allowed for replacement in 2021. This should be reviewed as the date approaches.

GROUNDS:



The site was paved in concrete and was observed to be in a satisfactory condition. We have allowed replacement in 2049.

6 | Interior Property Description & Condition

CARPENTRY:

Generally carpentry items that were inspected appeared to be in a satisfactory condition. We have allowed replacement of the door closers in 2014 and for the Managers office bathroom components in 2019.

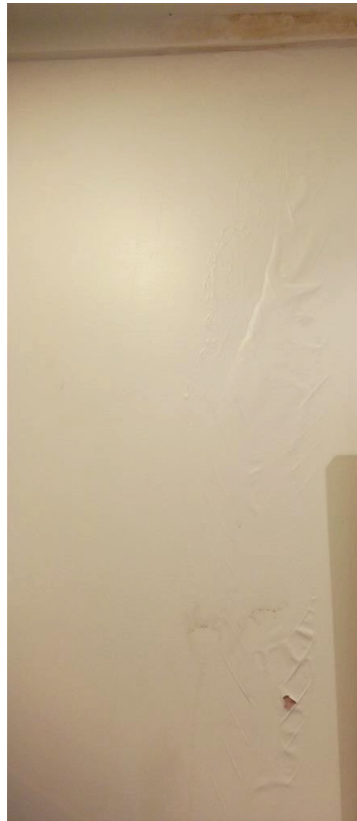


Figure 5 - Water ingress in Managers Office

During the survey it was noted that a wall in the Managers Office Bathroom showed signs of water ingress or a water leak. We recommend a detailed inspection by a suitably qualified person to identify the source and remedy.

In the garage it was noted that sections of the steel deck system contained corrosion and galvanic corrosion. These types of corrosion can affect the strength of the steel deck system and concrete floor. We have allowed a PC sum to allow for a detailed inspection by a suitably qualified person to identify the source.

ELECTRICAL:

As part of the inspection no specific invasive survey was undertaken in respect of the installed electrical cabling. It is considered that at the time of installation during construction of the building, the cables would have been installed to the prevailing applicable standards. Consequently we have not included for any work to be undertaken on the cables within the period of this plan.



Figure 6 - Main building switchboard

The main building switchboard is located within the North garage. From a visual inspection the board appears to be in a satisfactory condition. Replacement of the switchboard has been allowed for in 2029.

As both good practice and to maintain safety within the building we would recommend that all switchboards are scanned with a thermal imager annually to detect loose connections which are a significant cause of electrical fires.

FIRE PROTECTION:

The fire protection system installed within the building comprises of heat and smoke detectors, manual call points and sirens. As these separate systems contribute to the system as a whole we have taken into account the lifecycles of the same and allowed for replacement and servicing of these systems as required within this plan. To ensure the continued operation of all systems we have also estimated to replace the components within each of the apartments.

FLOOR COVERINGS:

The internal floor covering in the Managers Office is of carpet and tiles to the bathroom. The tiles were observed to be in satisfactory condition and we have allowed replacement in 2024. The carpet requires re-stretching and contained areas of staining. We have allowed replacement in 2020.



Figure 7 - Flooring to Managers Office

INTERIOR PAINTING:

The paintwork to the buildings internal areas is generally in fair condition with only some minor scrapes and areas of impact damage. We have allowed for the Unit to be repainted in 2016.

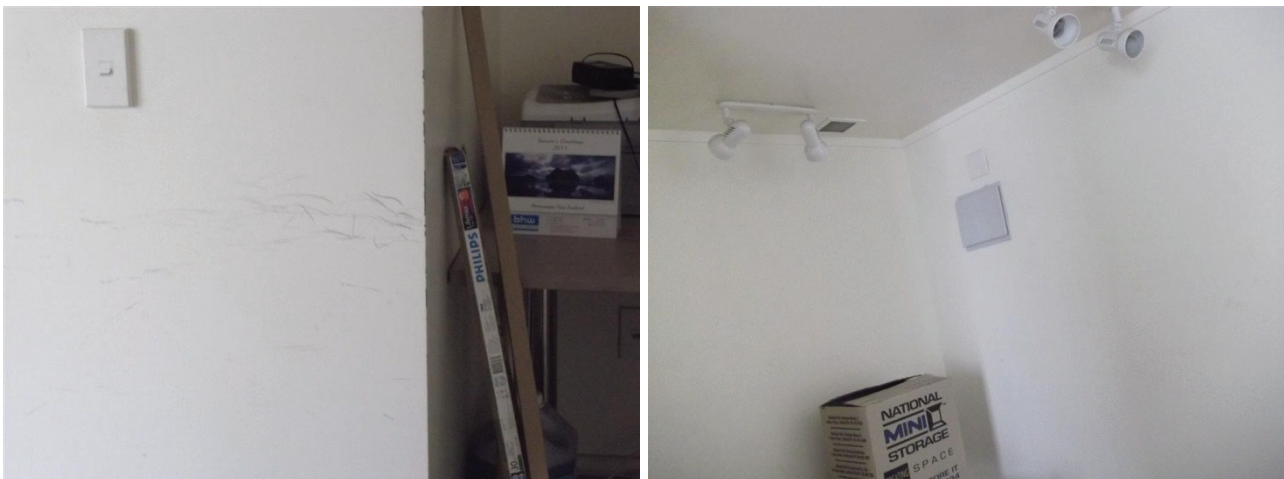


Figure 8 - Managers Office paintwork

LIFTS:

It is standard practice that a comprehensive lift maintenance contract be in place which would cover all work required to keep the lifts in an operational and certifiable condition, including cable replacement when due. Therefore, no allowance has been made as part of this plan for annual routine maintenance of the lifts.

The inspection of the building indicated that there is a lift installed. At the time of inspection no access was provided to the lift motor room. We have as part of the plan taken account of general lifecycles of the lift motor components and allowed for these to be replaced as appropriate.

The internal lift car is finished with steel handles and carpeted walls and was noted to have areas of impact damage and staining. We have allowed for a refurbishment of the lift car in 2014. The planned replacement of the lift controls and motor has been allowed for in 2018.

LIGHTING:

The inspection of the building found the existing light fittings to the Managers Office was in a fair condition. We have allowed replacement in 2018.

We noted that the fluorescent fittings in the garages were obsolete and unsafe, please see appendix C. We have allowed replacement of these fittings in 2012.



Figure 9 - Obsolete light fittings in Garages

PLUMBING:

As part of the inspection no specific invasive survey was undertaken in respect of the installed plumbing and drainage systems. It is considered that at the time of installation during construction of the building that these systems would have been installed to the prevailing applicable standards. Consequently we have not included for any work to be undertaken on the plumbing and drainage systems within the period of this plan.



Figure 10 - Leaking pipework in Garage

At the time of inspection a minor leak was noted to a section of pipework to the North Garage. This will need to be addressed immediately by a suitably qualified person to repair the leak.

SECURITY:



Figure 11 - Vehicle entrance and key pads

The property access on foot and vehicle is via the entrance on Alpers Avenue. Painted steel gates are used for security and access to residents is via key pad technology. Visitors to the building can obtain access by key pad contact with the relevant Apartment. This system has been included within this plan and replacement has been allowed for in 2014.

7 | Routine Maintenance

WASHING DOWN:

We advise that the recommendation of paint and roofing manufacturers with regard to washing exterior surfaces should be followed. Generally an annual wash is the minimum required. We have not included the cost of this washing within the proposed long term maintenance fund as it is a recurring expenditure that should be budgeted for annually.

8 | Maintenance Costs

The plan identifies that the average annual cost for the long term maintenance of the building over the next 15 years is approximately \$30,900. The costs have been calculated on current rates in year 2012 dollars. No adjustment has been made for inflation and all cost estimates are exclusive of GST.

We have allowed for maintaining the building replacing elements on a like for like basis. Life expectancies are based upon product and manufacturer's data. Where data is unavailable regarding the remaining life of the elements, these have been based upon the survey team's experience. If appropriate and regular maintenance is carried out on the elements and equipment integral to the building, the life expectancy should be met. We have not allowed for any modernisation that may be desired by the owners in the future.

The graph included within Section 4 of this plan depicts the long term maintenance costs over the forthcoming 15-year period. We have included a 'proposed Long Term Maintenance Fund' figure in the summary as a guide only, however the agreed sum provided, if any, is for the Body Corporate to agree upon.

Regulation 30 (2) UTA2010 states 'A body corporate must carry out a review of its plan at least once every 3 years.' If the work record sheet included within the spreadsheets is updated regularly, and there are no significant changes to the building, the plan can be updated as a paper exercise for minimal cost.

9 | Appendix A – Operator ‘Quick Start’ Instructions

The Long Term Maintenance Plan (LTMP) has been designed and prepared in order to allow the **Operator** to locally make changes and manage updates. To keep things simple and prevent data and formula corruption, changes can only be made in cells coloured grey. All other cells within the plan are locked and protected via password.

The LTMP is provided as a datum copy via CD. We would recommend that the **Operator** develop a protocol (based on preference) whereby the LTMP is copied as a dated working copy which is backed up at regular intervals and saved as a final ‘Year End’ copy at the end of each financial period. This allows the recording of the financial position at each year end regardless of any subsequent changes which may be made.

ACCUMULATED FUNDS

The existing accumulated funds are often client confidential and not generally identified to Opus during the plan preparation. However, it is important that existing accumulated funds are identified and incorporated within the plan as follows;

1. Go to ‘Summary’ sheet.
2. Enter existing fund amounts within the grey cell indicated by the **RED** Circle below.

This will introduce the chosen amount into the plan and initiate changes in the ‘Accumulated Provision’ row of the ‘Summary’ and the ‘Cash Flow’ chart.

XYZ Building, 0 - 0 Local St, Suburb														File No: 1-45304.00		
15 YEAR MAINTENANCE PLAN														Plan prepared 14 Sep 2009		
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Total
Main Building	19,657	262,265	248,597	105,978	6,239	37,209	4,015	42,345	139,819	37,047	11,951	-	46,288	7,980	2,780	972,170
TOTAL	19,657	262,265	248,597	105,978	6,239	37,209	4,015	42,345	139,819	37,047	11,951	-	46,288	7,980	2,780	972,170
Existing accumulated funds	0		No of years to be covered				15	Averaged annual provision				64,812				
Proposed provision for maintenance	64,900	64,900	64,900	64,900	64,900	64,900	64,900	64,900	64,900	64,900	64,900	64,900	64,900	64,900	64,900	64,900
Maintenance expenditure	19,657	262,265	248,597	105,978	6,239	37,209	4,015	42,345	139,819	37,047	11,951	0	46,288	7,980	2,780	
Accumulated provision	45,243	-152,122	-335,819	-376,897	-318,236	-290,545	-229,660	-207,105	-282,024	-254,171	-201,222	-136,322	-117,710	-60,790	1,330	
Inflation	0.00% per annum													Included GST	0.00%	
Inflation provision	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Accumulated provision	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

PROPOSED PROVISION FOR MAINTENANCE

In preparing the plan, Opus calculates the overall total of the anticipated expenditure over the 15 years of the plan and proposes a provisional amount for maintenance based on 1/15th of this total. The **Operator** may have a valid reason to vary this i.e. to manage cash flows. To change 'Proposed provision for Maintenance' as follows;

1. Go to 'Summary' sheet.
2. Enter the revised provisional amount within the corresponding grey cell indicated by the **RED** Circle below.

XYZ Building, 0 - 0 Local St, Suburb															File No: 1-45304.00	
15 YEAR MAINTENANCE PLAN															Plan prepared 14 Sep 2009	
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Total
Main Building	19,857	262,285	248,597	105,978	6,239	37,209	4,015	42,345	139,819	37,047	11,951	-	46,288	7,980	2,780	972,170
TOTAL	19,857	262,285	248,597	105,978	6,239	37,209	4,015	42,345	139,819	37,047	11,951	-	46,288	7,980	2,780	972,170
Existing accumulated funds	0		No of years to be covered					15	Averaged annual provision					64,812		
Proposed provision for maintenance	64,900	64,900	64,900	64,900	64,900	64,900	64,900	64,900	64,900	64,900	64,900	64,900	64,900	64,900	64,900	64,900
Maintenance expenditure	19,857	262,285	248,597	105,978	6,239	37,209	4,015	42,345	139,819	37,047	11,951	0	46,288	7,980	2,780	
Accumulated provision	45,243	-152,122	-335,819	-376,897	-318,236	-290,545	-229,660	-207,105	-282,024	-254,171	-201,222	-136,322	-117,710	-60,790	1,330	
Inflation	0.00% per annum														Included GST	0.00%
Inflation provision	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Accumulated provision	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

This will then update the cells across the row and recalculate and change the figures within the 'Accumulated Provision' row - and these altered amounts initiate corresponding revisions in the 'Cash Flow' chart

Alternatively to allow for a general increase in provision each year the user can enter a different amount across the row.

NOTE this action will cause the formula that updates the row to be overwritten and changed in each cell. All future revisions will need to be entered manually.

GOODS AND SERVICES TAX (GST)

All cost within the plan are GST exclusive, not all Body Corporates are registered for GST and therefore to adjust the plan to include GST;

1. Go to the 'GST' cell indicated by the **BLUE** Circle above.
2. Insert the current rate of GST.

This will adjust all sums across the whole work sheet to be GST inclusive.

INFLATION

The plan is calculated upon unitary figures based on prices determined at the year which the survey is undertaken and the LTMP is created minus any inflation factor. The body corporate may wish to include a nominated factor for inflation and the LTMP provides a function to allow this. The inflation factor can be changed in two ways:

Option 1 - Fixed Inflation

As a single inflation percentage amount applied consistently throughout each year of the LTMP – as follows;

1. Go to sheet 'Summary' sheet.
2. Go to the general inflation cell indicated by the **RED** Circle below.
3. Enter the inflation figure within the grey cell.

This will enter the inflation figure across each cell of the row and adjust the figures in the 'Survey Data' sheet. These changes will then flow through the whole spread sheet.

XYZ Building, 0 - 0 Local St, Suburb															File No: 1-45304.00	
15 YEAR MAINTENANCE PLAN															Plan prepared 14 Sep 2009	
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Total
Main Building	19,657	262,265	248,597	105,978	6,239	37,209	4,015	42,345	139,819	37,047	11,951	-	46,288	7,980	2,780	972,170
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Existing accumulated funds	0	No of years to be covered					15	Averaged annual provision					64,812			
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	
Proposed provision for maintenance	64,900	64,900	64,900	64,900	64,900	64,900	64,900	64,900	64,900	64,900	64,900	64,900	64,900	64,900	64,900	64,900
Maintenance expenditure	19,657	262,265	248,597	105,978	6,239	37,209	4,015	42,345	139,819	37,047	11,951	0	46,288	7,980	2,780	
Accumulated provision	45,243	-162,122	-336,819	-376,897	-318,236	-290,646	-229,660	-207,105	-282,024	-254,171	-201,222	-136,322	-117,710	-60,790	1,330	
	Inflation 0.00% p annum														Included GST 0.00%	
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	
Inflation provision	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Accumulated provision	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Option 2 - Variable inflation

As inflation amount variable on a year by year basis. For example, **Operator** may anticipate that inflation is likely to be high for a number of years and forecast a subsequent drop off beyond that point;

1. Go to sheet 'Summary' sheet.
2. Go to 'Inflation Provision' row indicated by the **BLUE** Circle above.
3. Enter the inflation figure into each year at the appropriate rate.

This will adjust the figures in the 'Survey Data' sheet which will then flow through the whole spread sheet.

PLANNED WORK IN A SPECIFIC YEAR

To find the planned work schedule for the current / next year:

1. Go to 'Survey Data' sheet.
2. Go to Row A and find the column labelled '1st Replace' (Column S).
3. Use the filter tab to highlight the year you want.

Only the work scheduled for that year will then be visible.

Building	Location	Int / Ext	Element Group	Element	Description	Action	Trade	Qty	Unit	1st Replace	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	
Building 1	Driveway	Exterior	balcony / decking	front entry	state paving	repair	paving	1	sum	2010	\$500			\$500							\$500					
Building 1	Driveway	Exterior	balcony / decking	front entry	state paving	relay	paving	1	sum	2010	\$1,000															
											\$1,500	\$0	\$0	\$500	\$0	\$0	\$500	\$0	\$0	\$500	\$0	\$0	\$500	\$0	\$0	
Building 1		Exterior	cladding / window	windows	rubber seals	replace	glazer	1	sum	2010	\$500			\$500							\$500					
Building 1		Exterior	cladding / window	fbreglass panels	broken	replace	builder	4	m	2010	\$800			\$800							\$800					
Building 1		Exterior	cladding / window	fbreglass panels	missing	replace	builder	9	m	2010	\$1,800															
Building 1		Exterior	cladding / window	door	roller grille	replace	builder	1	each	2020											\$2,500					
Building 1	Level 1 - Foyer	Exterior	cladding / window	door	automatic	replace	builder	1	each	2010	\$2,500															
Building 1		Exterior	cladding / window	door	folding	replace	builder	1	each	2010	\$2,500															
											\$8,100	\$0	\$0	\$500	\$0	\$0	\$500	\$0	\$0	\$500	\$2,500	\$0	\$0	\$500	\$0	\$0
Building 1		Exterior	exterior painting	wall	concrete	paint	paint	143	sq m	2012			\$1,432												\$1,432	
Building 1		Exterior	exterior painting	wall	grilles	paint	paint	473	sq m	2012			\$8,019													\$8,019
Building 1		Exterior	exterior painting	roof	colorsteel	replace	paint	1,257	sq m	2012			\$24,504													\$24,504
Building 1		Exterior	exterior painting	wall	colorsteel	replace	paint	215	sq m	2012			\$4,189													\$4,189

PLANNED WORK OVER THE NEXT FEW YEARS

Operator may wish to view work forecast and adjust the schedule to include works to items in different years to correspond with existing or planned project requirements

1. Go to 'Survey Data' sheet.
2. Go to Row A and find the column labelled '1st Replace' (Column S).
3. Use the filter tab to highlight 'Custom.'
4. Select 'is greater than' then enter the year previous to the required year.
5. Select 'and'
6. Select 'is less than' then enter last required year.
7. Select 'OK'.

CHANGING A DATE THAT AN ITEM OF WORK OCCURS

LTMP is prepared on the basis of the assessed condition of each item at point of survey to determine a '1st Replace' year. The **Operator** may wish to alter and vary the planned '1st Replace' year in order to pre-empt or postpone to take into account uncharacteristic deterioration rates or to include an asset item into a planned project. Changes to the planned '1st Replace' year can be altered as follows;

Building	Location	Int / Ext	Element Group	Element	Description	Action	Trade	Qty	Unit	1 st Replace	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Building 1	Driveway	Exterior	balcony / decking	front entry	slate paving	repair	paving	1	sum	2010	\$500			\$500			\$500			\$500			\$500		
Building 1	Driveway	Exterior	balcony / decking	front entry	slate paving	relay	paving	1	sum	2010	\$1,000														
											\$1,500	\$0	\$0	\$500	\$0	\$0	\$500	\$0	\$0	\$500	\$0	\$0	\$500	\$0	\$0
Building 1		Exterior	cladding / window	windows	rubber seals	replace	glazer	1	sum	2010	\$500			\$500			\$500			\$500			\$500		
Building 1		Exterior	cladding / window	fibreglass panels	broken	replace	builder	4	m	2010	\$800						\$800						\$800		
Building 1		Exterior	cladding / window	fibreglass panels	missing	replace	builder	9	m	2010	\$1,800														
Building 1		Exterior	cladding / window	door	roller grille	replace	builder	1	each	2020													\$2,500		
Building 1	Level 1 - Foyer	Exterior	cladding / window	door	automatic	replace	builder	1	each	2010	\$2,500														
Building 1		Exterior	cladding / window	door	rolling	replace	builder	1	each	2010	\$2,500														
											\$8,100	\$0	\$0	\$500	\$0	\$0	\$500	\$0	\$0	\$500	\$2,500	\$0	\$500	\$0	\$500
Building 1		Exterior	exterior painting	wall	concrete	paint	paint	143	sq m	2012			\$1,432											\$1,432	
Building 1		Exterior	exterior painting	wall	grilles	paint	paint	673	sq m	2012			\$8,019											\$8,019	
Building 1		Exterior	exterior painting	roof	colorsteel	replace	paint	1,297	sq m	2012			\$24,504												
Building 1		Exterior	exterior painting	wall	colorsteel	replace	paint	215	sq m	2012			\$4,189												

1. Go to sheet 'Survey Data'.
2. Go to Row A and find the column labelled '1st Replace' (Column S).
3. Identify the item in question.
4. Revise the '1st Replace' cell (S xxx) to the required year.

This action will update all occurrences of this item throughout the whole spreadsheet.

ACCUMULATED FUNDS

Please Note

LTMP has been developed to allow **Operator** to manage and adjust figures and dates of actions as a desktop exercise on an ongoing basis. However, it is our recommendation that the plan should be subject of physical review and update by Opus every 3-5 years. This resurvey should be carried out to ensure that the components are performing as anticipated during the original survey and reflect any changes in asset condition or revisions to the building layout. This also allows the adjustment of those component prices which alter outside of nominal changes in accordance with the rate of inflation.

WORK SHEET RECORD

1. A Work Record Sheet has been provided within the Excel spread sheet file provided with the plan. This lists the items identified with the first five years, the estimated cost.
2. Provision has been made to enter the actual cost and date work completed. We have also provided space at the bottom to enter any addition works carried out. If this sheet is kept up to date it should satisfy the requirements of The Unit Titles Act 2010 Reg 35 k (ii).

10 | Appendix B – Document Exclusions

ASBESTOS

- As Opus does not undertake consultancy works involving Asbestos, the survey/inspection does not purport to constitute a dedicated Asbestos Survey and does not meet the Asbestos Identification, Assessment and Control of Asbestos in Buildings guidance as identified within Section 5 of the New Zealand Guidelines for the Management and Removal of Asbestos, 3rd Edition. It is deemed that the Client has or will obtain the necessary specialist advice from a competent Asbestos Consultant in this regard. Consequently advice concerning Asbestos is expressly excluded from the report. Should Opus suspect the presence of Asbestos Containing Materials (ACM's) then this may be communicated to the Client as part of the inspection. Opus does not accept any liability for Asbestos that is not identified during the course of this Survey.

WEATHERTIGHTNESS

- Opus does not undertake consultancy works involving the determination of and/or the provision of advice in relation to 'Leaky Buildings'. It is deemed that the client has or will obtain the necessary specialist advice from a competent 'Leaky Building' expert in this regard. Opus may advise the Client if they identify any visible damp ingress issues as part of the inspection. Opus does not accept any liability for 'Leaky Building' issues that could not be identified during the course of this survey/inspection.

SEISMIC PERFORMANCE

- As part of this inspection and report, no allowance has been made to review documentation or to assess on-site the building or any associated structures in respect of Seismic Performance. It is deemed that the client has or will obtain the necessary specialist advice from a competent Structural Engineer in this regard. Consequently advice concerning Seismic Performance is expressly excluded from the report.

EXTENT OF INSPECTION

- Concealed services, such as plumbing, electrical installations, specialist data cabling, underground drainage systems, channels, pipes or cables will not be tested or inspected.
- Incidence or monitoring of any landfill gas or ground water deviation is expressly excluded.
- No allowance has been made for excavation of any type for potential viewing of subterranean piles, foundations or any other subsurface structural elements. Exposed water catchment tanks will be identified and surveyed where safe means of access is made available.
- There will be no intrusive investigation of areas of the structure and woodwork etc. which are covered, enclosed or inaccessible and will be assumed to be in sound and good repair. It is a visual inspection only.

- No allowance has been made for provision of any additional access equipment to allow the survey of any inaccessible roofing platforms or any other restrictive areas.
- As defined in the Unit Titles Act 2010, Regulations, clause 30.1.(e) no determination or inclusion of any items and costs deemed to be 'Operational' costs i.e. costs attributable to routine maintenance tasks which would be carried out under contract on an annual (or shorter timeframe) basis have been made.
- No provision has been made for the use or local installation of any monitoring equipment during any part of our survey or reporting.
- No preparation of any drawings in respect of the survey / inspection or Report, have been allowed.
- Unless otherwise expressly stated within the report, the following assumptions are made:
 - i) No deleterious or hazardous materials are present or techniques have been used.
 - ii) The property is not subject to any unusual or especially onerous restrictions, encumbrances, or outgoing.
 - iii) The inspection of those parts which have not been able to be inspected at the time of Survey would neither reveal material defects, nor cause the competent person to alter their opinion with regard to the integrity of the property as inspected.
 - iv) We have not carried out any investigation into past or present uses, either of the property or of any neighbouring land, to establish whether there is any potential for contamination, and have therefore assumed that none exists. However, should it be established subsequently that contamination exists at the property or on any neighbouring land, or that the premises have been or are being put to a contaminative use, this may affect the advice given within this report.

11 | Appendix C – Lighting

LIGHTING

new zealand

lightLINK

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F6 Lighting for Emergency

The Building Industry Authority (BIA) says it intends to release its proposed fire safety revisions for public comment in the near future and invites interested people and organisations to contact the BIA office to go on the mailing list. The Approved Documents include F6 Lighting for Emergency. It says each of the Approved Documents will have a set of explanatory notes identifying the main changes and stating whether or not the proposed amendments are more stringent than the current documents.

If you wish to be included on the mailing list to receive any of the BIA proposed amendments call Nicci at the BIA on 0800 242 243, fax 04 471 0798 or send an email with your postal address to bis@bia.govt.nz

MEPS fire risk

The failure of government to consult the electrical industry could prove damaging for building owners following the introduction of MEPS, as fluorescent lamp replacements in older fittings have been found to increase the risk of fire.

Since the government brought the fluorescent lamp market under state control last year and banned 38mm tubes, melted starters are being discovered in fittings designed for 38mm T12 lamps where the lamps have been replaced with now minimum standard 26mm diameter T8 lamps.

The starters in these fittings were never designed to strike T8 lamps and this could be the cause of potentially dangerous fires with some starter switches melting down trying to strike the lamp with insufficient voltage.

Electrical inspector Mike Chopping has now discovered three instances of fire damage to starters and warns there is potential for a major fire especially where fluorescent fittings are mounted on flammable surfaces such as softboard tiles.

His company, M. A Chopping Limited, inspects electrical fires in the Auckland area for the Energy Safety Service (ESS).

T12, 38mm lamps were effectively banned by The Energy Efficiency (Energy Using Products) Regulations 2002, which mandated Minimum Energy Performance Standards (MEPS) for both lamps and ballasts. As from 1 July 2002 the majority of halophosphate fluorescent lamps could no longer be legally imported into New Zealand, even for fluorescent fittings specifically designed for them.

This was done without consultation with the electrical contractors association (Ecanz) according to Ecanz general manager Ray Barbara, nor did the enforcement body, EECA, advise Ecanz of the law change at the time so that contractors could deal more effectively with the risks.

No 'best practice' advice has been developed by EECA to advise how to safely address the issue of lamp replacement for electricians or fluorescent lamp buyers (eg full refurbishment of the fitting or replacement) – perhaps because the cost of both options make a mockery of the dollar savings in electricity created by mandating the more 'efficient' lamps.

The banned T12 lamps require only 400 volts to ignite, and starters of the day were designed to deliver this. The newer T8, 26mm lamps require around 900 volts and the older starters will simply struggle to excite them.

The minimum standard T8 lamps also contain less mercury which makes for difficult starting when run on older ballasts, and modern starter switches in conjunction with old ballasts might not always deliver a high enough ignition pulse, especially if the ballast has degraded with heat over time.

The ESS says it cannot conclude that fluorescent fires it has investigated are attributable specifically to starters melting down, but cautions against several potential dangers relating to fluorescent battens.

Principal technical advisor Peter Morfee says the ESS has looked into fluorescent fires and established various causes. "Running mains cabling wedged between the ballast and sidewall of fluorescent battens can cause fires as a result of cable damage from overheating.

"Battens mounted on softboard ceilings can also cause fires because the fitting sinks into the tiles leaving no air gap above the fitting, which can overheat the ballast.

"Fluorescent fittings should not be left with lamps glowing at the ends or flickering trying to start."

Morfee says the rate of fluorescent fires has not increased since the introduction of lamp MEPS but, "there are poor quality imported starters that could be causing problems.

"Starters are not a 'declared item' nor do they have to comply with any standards here, but they should be electrically safe." He recommends fitting a new starter whenever you fit a new lamp, as do most



Electrical inspector Mike Chopping shows a melted fluorescent starter that has overheated trying to strike a lamp

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lighting companies.

If fitting a new starter still does not strike the lamp, another solution could be to fit a more expensive electronic starter or just replace the whole fitting. However, many older luminaires such as resonant start types may also contain toxic and illegal PCB ballasts and capacitors which are also illegal to dispose of in landfills.

If MEPS are here to stay, so are the problems and extra costs they bring. If you discover any electrical fires or potential for fires, they should be reported to the ESS for investigation.

Rexel changes

Garth Mudford has taken up the position of lighting national product manager at Rexel's lighting division headquarters in Wellington, replacing Ed Buckett. In his new position Mudford will be responsible for all lighting product that Rexel (NZ) Electrical Supplies deals with. He has worked for Rexel for around 9 years and has been Rexel Lighting's central region manager for the last five. Prior to this he had two years in Auckland working with lighting and Osram lamps. Mudford has a business management degree from Waikato University, majoring in marketing and has obtained qualifications in illumination engineering from both the Central Institute of Technology (CIT) and Auckland Institute of Technology (AIT - now AUT).

Ed Buckett is retiring to the Coromandel and says has been involved in the lighting longer than he cares to remember.

He has been a lighting designer, luminaire designer and manufacturer and contributed towards developing the NZS 6703 interior lighting standard, AS/NZS60598 Luminaires and NZS4243 energy conservation standards. He joined Rexel (then GEC) 11 years ago as technical manager after selling his



Garth Mudford (left) is Rexel's new lighting national product manager while Ed Bucket (right) relinquishes his Rexel position for retirement

manufacturing companies, Esquire Industries and Dibuchi Lighting to the company. He has been national product manager - lighting since 2000.

Reefton relit

New Zealand's first town to get electricity, Reefton, has been given a lighting facelift to commemorate the event. Reefton was the first town in the southern hemisphere to have a public supply of electricity, and among the first in the world.

On 1 August 1888 at 7pm, Walter Prince, an English electrical engineer and entrepreneur flicked the switch to light up Reefton's main street with power generated from a dynamo in the Inangahua River. Reefton was a major quartz mining centre at the time - a natural magnet for technology and capital.

The new lights, along the town's oldest block of shops, were switched 115 years later to the minute during an evening's celebration in Reefton. The new lights, made by Kendelier Lighting in Auckland and modeled on the original electric arc lamps are mounted on square hardwood poles like the original ones.

When first switched on the effect of the arc lights were described by the Inangahua Herald. "The bright luminous rays of the arc light burst forth, lighting up the scene with a strange and dazzling brilliancy," It said.

"The never-before-seen effects of electric lighting had an extraordinary effect on the locals. "It was as light as day, but the perspective was terribly confusing, and many people got into difficulties through trying to climb over the shadows of fences and walking through the substances. When you saw a stump and a shadow you didn't know which to step over."

The Reefton relighting project will eventually be extended along the remaining five blocks of the town and it is hoped to connect the town's streetlighting to the two of the later power stations, built in 1908 and 1935, once these are refurbished.

Kern Consultants

Russ Kern has left Thorn Lighting (NZ) Ltd to establish his own business, Kern Consultants. Kern had been with Thorn Lighting for nine years after moving from Sinclair Knight Mertz where he previously

worked as building services consultant. Prior to this he worked with Bishman electrical contractors for five years, also as a building services engineer.

Kern says he will be offering full building consultancy and design services, including power, phones and MATV as well as specialist lighting design in his new practice.



Russ Kern, formerly with Thorn Lighting for nine years now heads up his own company, Kern Consultants

Dirt depreciation

US research shows we may be over designing by allowing for too much dirt depreciation on lighting equipment. The international Association of Lighting Management Companies (NALMCO) recently completed a three-year study of luminaire dirt depreciation it says may significantly impact lighting design.

Results indicate existing light loss factors related to dirt and dust build up on lamp and luminaire surfaces overestimate the extent of light loss. This could justify the reduction in the number of fixtures required to achieve target light levels and reduce capital outlay and operating costs for lighting system owners.

Lighting designs provide a higher initial light level than maintained light level to take into account light loss or depreciation of performance over time.

One light loss factor is luminaire dirt depreciation (LDD), which represents lumen output after some of the light is absorbed by dirt and dust. The current LDD factors recommended in the US were produced in the 1950s when smoking was the norm and air conditioning was provided by open windows and these interior environmental conditions were not representative of modern buildings.

The study, conducted in the field, included over two hundred sites at office, retail and school facilities in the US and

12 | Appendix D – Spreadsheets



BODY CORPORATE 169774

File No **1-45931.00**

15 YEAR LONG TERM MAINTENANCE PLAN

Plan prepared **13 August 2012**

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total
2 Alpers Avenue	13,840	-	101,815	-	162,589	-	31,500	4,120	3,767	11,455	74,805	-	26,392	-	32,519	462,802
TOTAL	13,840	-	101,815	-	162,589	-	31,500	4,120	3,767	11,455	74,805	-	26,392	-	32,519	462,802

Existing accumulated LTMP fund	0	No of years covered	15	Averaged annual provision	30,854
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	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Proposed provision for LTMP Fund	30,900	30,900	30,900	30,900	30,900	30,900	30,900	30,900	30,900	30,900	30,900	30,900	30,900	30,900	30,900
Maintenance expenditure	13,840	0	101,815	0	162,589	0	31,500	4,120	3,767	11,455	74,805	0	26,392	0	32,519
Accumulated provision	17,060	47,960	-22,955	7,945	-123,744	-92,844	-93,444	-66,664	-39,531	-20,086	-63,991	-33,091	-28,583	2,317	698

Inflation **0.00%** per annum Included GST **0.00%**

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Inflation provision	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Accumulated provision	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

BODY CORPORATE 169774

File No 1-45931.00

15 YEAR LONG TERM MAINTENANCE PLAN

The property was surveyed by Opus on 13 August 2012. The area(s) surveyed were those identified as and/or believed to be common area(s).

All information included in this document is based upon this visual survey as at this date.

This plan has been created for the benefit of BODY CORPORATE 169774 for the purpose of providing budget information and a guideline to the future Long Term Maintenance (capital asset replacement) requirements of the property.

Maintenance requirements are derived on provision of asset replacement on a 'like for like' basis. No allowance has been made for any capital improvements such as structural strengthening with respect to earthquake or other as may be required in future. No allowance has been made for potential additional replacement costs associated with heritage assets - unless explicitly noted within the plan. No allowance has been made for building consents.

Asset Lifecycles are taken from New Zealand Asset Management Support (NAMS) guidelines, manufacturer's information (where available) or otherwise by using the experience of the audit team with respect to asset performance.

Budgetary financial information pertaining to cost and unit rates is taken from Rawlinson's New Zealand Construction Handbook Twenty Fifth Edition 2010.

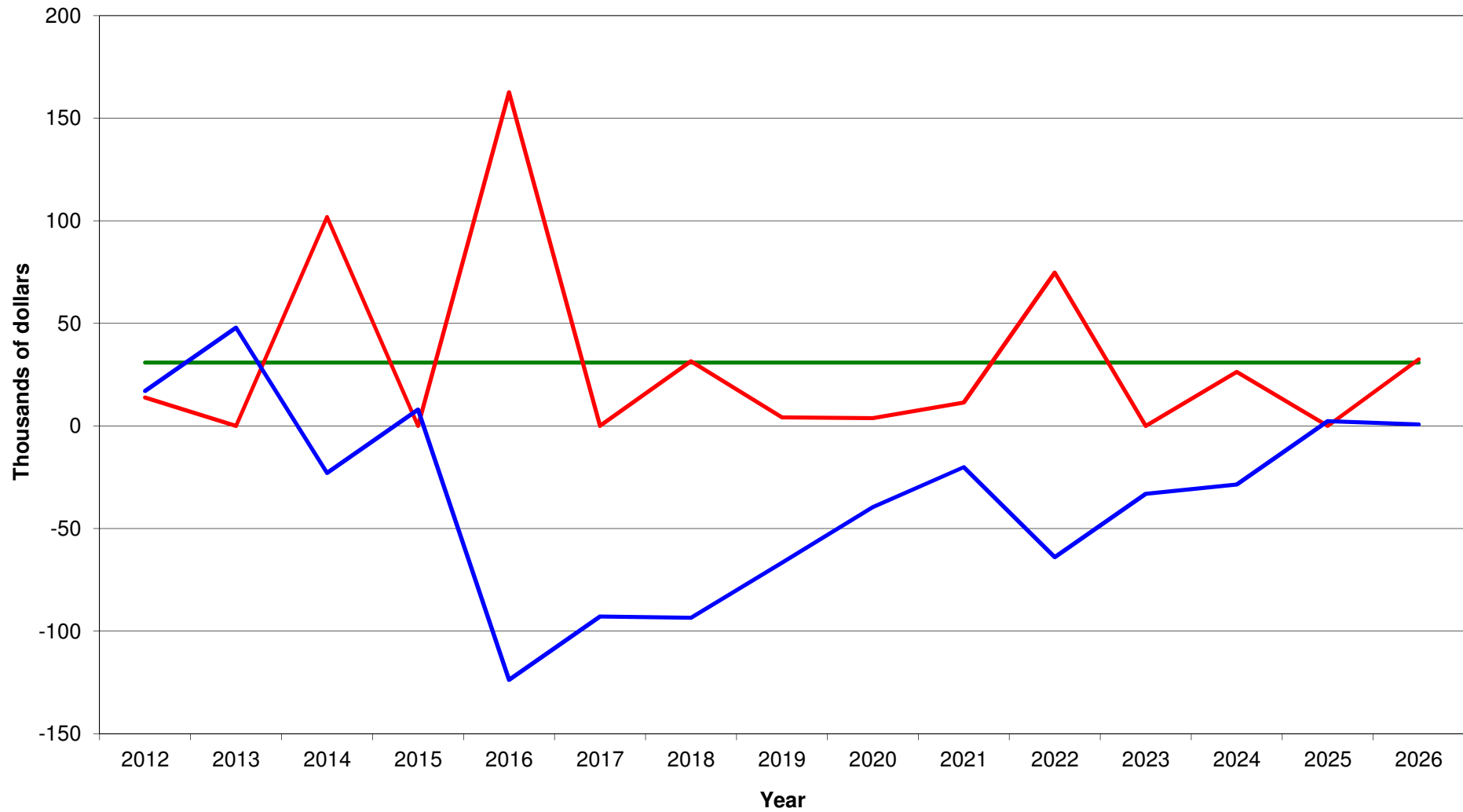
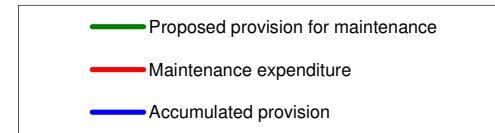
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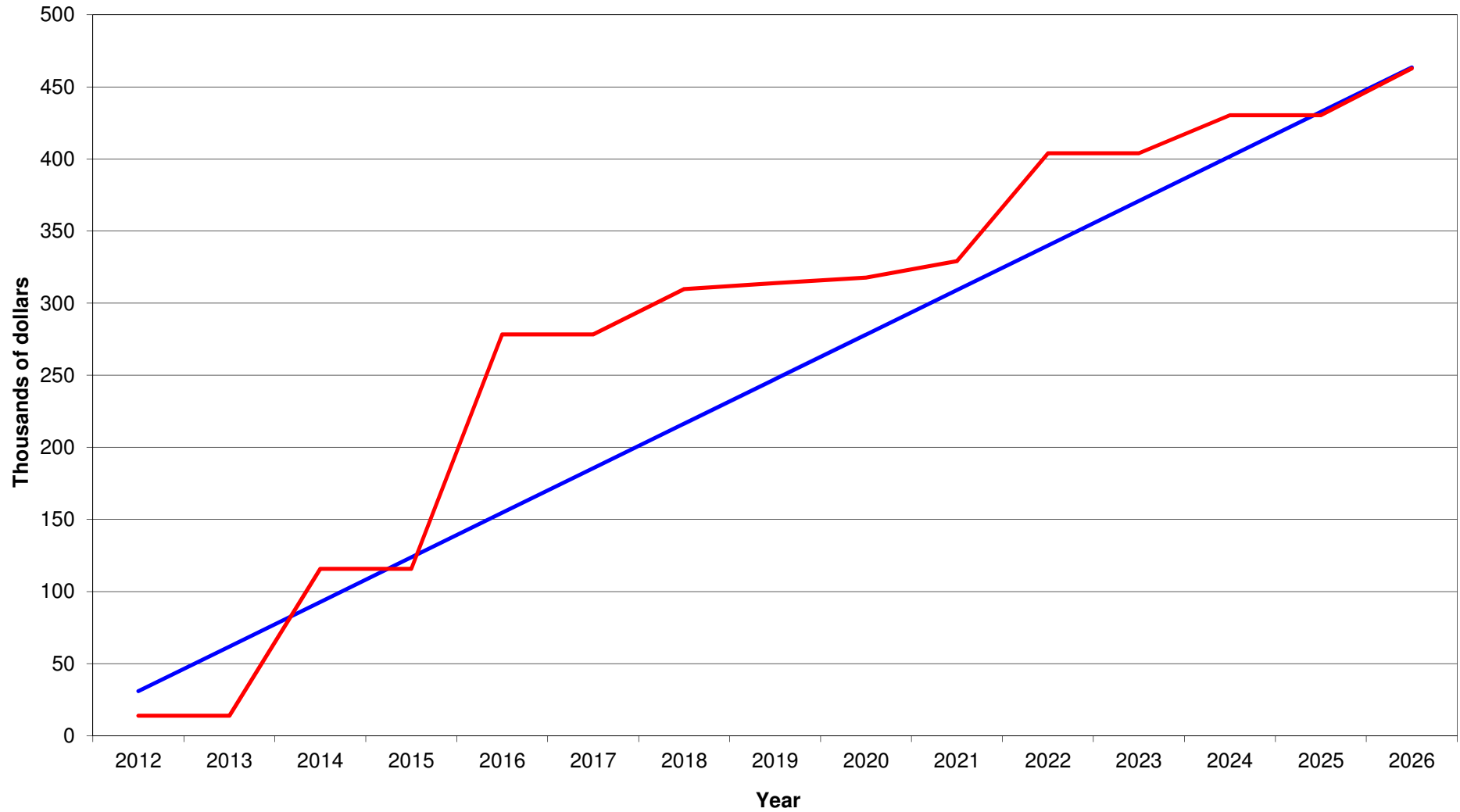
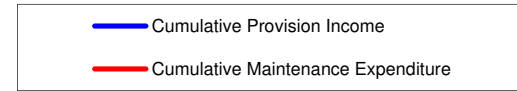
All enquiries regarding the information included in the plan are to be directed to:

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**Body Corporate 169774
Long Term Maintenance Fund Annual Cash Flow**



**Body Corporate 169774
Long Term Maintenance Fund Cumulative Cash Flow**



YEAR WORK PLANNED	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Exterior																
Balcony / decking	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cladding / windows / doors	-	-	-	-	1,600	-	-	-	-	400	-	-	-	-	27,500	29,500
Roofing	-	-	-	-	121,562	-	-	-	-	-	-	-	-	-	3,552	125,114
Exterior painting	-	-	73,805	-	-	-	-	-	-	-	73,805	-	-	-	-	147,610
Lighting	-	-	6,190	-	-	-	-	-	-	-	-	-	200	-	-	6,390
Flooring	-	-	-	-	-	-	-	-	-	-	-	-	23,000	-	-	23,000
Grounds																-
Paving	-	-	620	-	-	-	-	620	-	-	-	-	620	-	-	1,860
Electrical																-
Fencing	-	-	-	-	1,000	-	-	-	-	10,255	1,000	-	-	-	-	12,255
Interior																
Appliances	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carpentry	10,000	-	750	-	-	-	-	3,500	-	-	-	-	-	-	-	14,250
Curtains / blinds	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Electrical	-	-	8,700	-	-	-	-	-	-	-	-	-	-	-	-	8,700
Fire protection	-	-	-	-	29,760	-	-	-	-	-	-	-	-	-	-	29,760
Floor coverings	-	-	-	-	-	-	-	-	3,767	-	-	-	272	-	-	4,039
Heating and ventilation	-	-	500	-	7,200	-	-	-	-	-	-	-	-	-	-	7,700
Interior painting	-	-	-	-	1,467	-	-	-	-	-	-	-	-	-	1,467	2,934
Lift	-	-	10,000	-	-	-	30,000	-	-	-	-	-	-	-	-	40,000
Lighting	3,840	-	-	-	-	-	1,500	-	-	-	-	-	-	-	-	5,340
Plumbing	-	-	-	-	-	-	-	-	-	-	-	-	1,050	-	-	1,050
Security	-	-	1,250	-	-	-	-	-	-	800	-	-	1,250	-	-	3,300
	13,840	-	101,815	-	162,589	-	31,500	4,120	3,767	11,455	74,805	-	26,392	-	32,519	462,802

Building	Location	Int / Ext	Element Group	Element	Description	Action	Trade	Qty	Estimated Instal	Life Expect	1st Replace	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026			
Exterior	Garages	Exterior	cladding / window	timber sills		repairs	builder	1	2016	0	2016					\$1,200													
Exterior	Garages	Exterior	cladding / window	garage door	domestic	replace	builder	8	1989	30	2026																\$20,800		
Exterior		Exterior	cladding / window	seals hinges etc		replace	builder	1	2011	5	2016					\$400					\$400						\$400		
Grounds		Exterior	cladding / window	letter box		replace	builder	18	2001	25	2026																\$6,300		
												\$0	\$0	\$0	\$0	\$1,600	\$0	\$0	\$0	\$0	\$400	\$0	\$0	\$0	\$0	\$27,500			
1st floor	Walkway	Exterior	exterior painting	door	timber	paint	paint	6	2006	8	2014			\$510													\$510		
1st floor	Walkway	Exterior	exterior painting	soffit		paint	paint	108	2006	8	2014			\$1,674													\$1,674		
1st floor	Walkway	Exterior	exterior painting	wall		paint	paint	189	2006	8	2014			\$2,816													\$2,816		
2nd floor	Walkway	Exterior	exterior painting	door	timber	paint	paint	6	2006	8	2014			\$510													\$510		
2nd floor	Walkway	Exterior	exterior painting	soffit		paint	paint	108	2006	8	2014			\$1,674													\$1,674		
2nd floor	Walkway	Exterior	exterior painting	wall		paint	paint	189	2006	8	2014			\$2,816													\$2,816		
3rd floor	Walkway	Exterior	exterior painting	door	timber	paint	paint	6	2006	8	2014			\$510													\$510		
3rd floor	Walkway	Exterior	exterior painting	posts		paint	paint	18	2006	8	2014			\$306													\$306		
3rd floor	Walkway	Exterior	exterior painting	soffit		paint	paint	32	2006	8	2014			\$502													\$502		
3rd floor	Walkway	Exterior	exterior painting	wall		paint	paint	189	2006	8	2014			\$2,816													\$2,816		
Exterior		Exterior	exterior painting	access	scaffolding	paint	paint	1,315	2006	8	2014			\$28,920													\$28,920		
Exterior	Garages	Exterior	exterior painting	garage door		paint	paint	8	2006	8	2014			\$2,640													\$2,640		
Exterior		Exterior	exterior painting	soffit		paint	paint	152	2006	8	2014			\$2,351													\$2,351		
Exterior		Exterior	exterior painting	wall		paint	paint	1,315	2006	8	2014			\$19,587													\$19,587		
Ground Floor		Exterior	exterior painting	door	timber	paint	paint	4	2006	8	2014			\$340													\$340		
Ground Floor		Exterior	exterior painting	soffit		paint	paint	42	2006	8	2014			\$657													\$657		
Ground Floor		Exterior	exterior painting	wall		paint	paint	89	2006	8	2014			\$1,327													\$1,327		
Grounds		Exterior	exterior painting	wall		paint	paint	175	2006	8	2014			\$2,605													\$2,605		
Stairway	North	Exterior	exterior painting	soffit		paint	paint	28	2006	8	2014			\$434													\$434		
Stairway	North	Exterior	exterior painting	wall		paint	paint	13	2006	8	2014			\$188													\$188		
Stairway	South	Exterior	exterior painting	soffit		paint	paint	28	2006	8	2014			\$434													\$434		
Stairway	South	Exterior	exterior painting	wall		paint	paint	13	2006	8	2014			\$188													\$188		
												\$0	\$0	\$73,805	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$73,805	\$0	\$0	\$0	\$0
1st floor	Walkway	Exterior	floor coverings	floor	tiles	replace	flooring	43	1989	35	2024																\$4,043		
2nd floor	Walkway	Exterior	floor coverings	floor	tiles	replace	flooring	43	1989	35	2024																\$4,043		
3rd floor	Walkway	Exterior	floor coverings	floor	tiles	replace	flooring	43	1989	35	2024																\$4,043		
Ground Floor	Corridor	Exterior	floor coverings	floor	tiles	replace	flooring	97	1989	35	2024																\$9,229		
Stairway	North	Exterior	floor coverings	floor	tiles	replace	flooring	9	1989	35	2024																\$821		
Stairway	South	Exterior	floor coverings	floor	tiles	replace	flooring	9	1989	35	2024																\$821		
												\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$23,000	\$0	\$0	
Grounds		Exterior	paving	carpark	marking - lines	paint	paint	40	2009	5	2014			\$100						\$100							\$100		
Grounds		Exterior	paving	carpark	marking - alph	paint	paint	52	2009	5	2014			\$520						\$520							\$520		
												\$0	\$0	\$620	\$0	\$0	\$0	\$0	\$620	\$0	\$0	\$0	\$0	\$620	\$0	\$0			
Grounds		Site	fences	gate	single pedestr	replace	fencer	2	1996	25	2021																\$1,640		
Grounds		Site	fences	gates	wheels/guides	replace	fencer	1	2010	6	2016					\$1,000											\$1,000		
Grounds		Site	fences	gates	double vehicle	replace	fencer	1	1996	25	2021																\$1,000		
Grounds		Site	fences	timber	neighbour 1/2	replace	fencer	99	1996	25	2021																\$5,957		
Grounds		Site	fences	wire mesh	neighbour 1/2	replace	fencer	24	1996	25	2021																\$1,658		
												\$0	\$0	\$0	\$0	\$1,000	\$0	\$0	\$0	\$0	\$0	\$10,255	\$1,000	\$0	\$0	\$0			
1st floor	Walkway	Exterior	lighting upgrade	light fitting & bulb	bulkhead	replace	electrical	2	1999	15	2014			\$500															
2nd floor	Walkway	Exterior	lighting upgrade	light fitting & bulb	bulkhead	replace	electrical	2	1999	15	2014			\$500															
3rd floor	Walkway	Exterior	lighting upgrade	light fitting & bulb	bulkhead	replace	electrical	4	1999	15	2014			\$1,000															
Exterior		Exterior	lighting upgrade	light fitting & bulb	fluorescent	replace	electrical	1	1994	20	2014			\$240															
Exterior		Exterior	lighting upgrade	PIR motion sensor		replace	electrical	2	2004	10	2014			\$200											\$200				
Ground Floor		Exterior	lighting upgrade	light fitting & bulb	bulkhead	replace	electrical	5	1999	15	2014			\$1,250															
Grounds		Exterior	lighting upgrade	light fitting & bulb	floodlight	replace	electrical	1	1999	15	2014			\$500															
Stairway	North	Exterior	lighting upgrade	light fitting & bulb	bulkhead	replace	electrical	4	1999	15	2014			\$1,000															
Stairway	South	Exterior	lighting upgrade	light fitting & bulb	bulkhead	replace	electrical	4	1999	15	2014			\$1,000															
												\$0	\$0	\$6,190	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200	\$0	\$0		
3rd floor	Walkway	Exterior	roofing	roof	polycarbonate	replace	roofer	30	1998	25	2026																\$3,552		
Exterior		Exterior	roofing	downpipe	PVC	replace	roofer	125	1996	20	2016					\$3,744													
Exterior		Exterior	roofing	rain head	metal	replace	roofer	4	1996	20	2016					\$1,400													
Exterior		Exterior	roofing	roof	butyl membra	replace	roofer	595	1996	20	2016					\$86,210													
Exterior		Exterior	roofing	skylights	polycarbonate	replace	roofer	18	1996	20	2016					\$21,600													

Building	Location	Int / Ext	Element Group	Element	Description	Action	Trade	Qty	Estimated Instal	Life Expect	1st Replace	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026			
Exterior		Exterior	roofing	spouting	copper	replace	roofer	18	1991	25	2016					\$2,208													
Exterior		Exterior	roofing	flashings		replace	roofer	160	1996	20	2016					\$6,400													
												\$0	\$0	\$0	\$0	#####	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,552
Ground Floor		Interior	carpentry	door closer		replace	builder	2	1989	25	2014			\$750															
Managers Office	Bathroom	Interior	carpentry	fixtures and fittings	shower unit	replace	builder	1	1989	30	2019								\$1,500										
Managers Office	Bathroom	Interior	carpentry	fixtures and fittings	toilet unit	replace	builder	1	1989	30	2019								\$1,000										
Managers Office	Bathroom	Interior	carpentry	fixtures and fittings	vanity and sink	replace	builder	1	1989	30	2019								\$1,000										
Ground Floor	North Garage	Interior	carpentry	fixtures and fittings		replace	builder	1	2012	0	2012	\$10,000																	
												\$10,000	\$0	\$750	\$0	\$0	\$0	\$0	\$0	\$3,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Grounds		Exterior	electrical	gate controls		replace	electrical	1	1999	15	2014			\$2,200															
Grounds		Exterior	electrical	gate motor		replace	electrical	1	1999	15	2014			\$2,500															
Ground Floor	North Garage	Interior	electrical	garage door opener		replace	electrical	8	1999	15	2014			\$4,000															
												\$0	\$0	\$8,700	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3rd floor	Walkway	Exterior	fire protection	siren		replace	fire protection	1	1996	20	2016					\$200													
Exterior		Exterior	fire protection	siren		replace	fire protection	2	1996	20	2016					\$400													
Ground Floor	Managers Office	Interior	fire protection	siren		replace	fire protection	1	1996	20	2016					\$200													
Ground Floor	North Garage	Interior	fire protection	heat detector		replace	fire protection	8	1996	20	2016					\$1,200													
Ground Floor	North Garage	Interior	fire protection	manual call point		replace	fire protection	1	1996	20	2016					\$100													
Ground Floor	South Garage	Interior	fire protection	heat detector		replace	fire protection	8	1996	20	2016					\$1,200													
Ground Floor	South Garage	Interior	fire protection	manual call point		replace	fire protection	1	1996	20	2016					\$100													
Ground Floor		Exterior	fire protection	fire alarm panel		replace	fire protection	1	2001	15	2016					\$1,500													
Ground Floor		Exterior	fire protection	manual call point		replace	fire protection	1	1996	20	2016					\$100													
Ground Floor		Exterior	fire protection	siren		replace	fire protection	5	1996	20	2016					\$1,000													
General	Units	Interior	fire protection	siren		replace	fire protection	18	1996	20	2016					\$3,600													
General	Units	Interior	fire protection	heat detector		replace	fire protection	36	1996	20	2016					\$5,400													
General	Units	Interior	fire protection	manual call point		replace	fire protection	18	1996	20	2016					\$1,800													
General	Units	Interior	fire protection	smoke detector		replace	fire protection	54	2001	15	2016					\$12,960													
												\$0	\$0	\$0	\$0	\$29,760	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Ground Floor	Managers Office	Interior	floor coverings	coving	carpet	replace	flooring	60	2005	15	2020								\$3,767										
Managers Office	Bathroom	Interior	floor coverings	floor	tiles	replace	flooring	3	1989	35	2024													\$272					
												\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,767	\$0	\$0	\$0	\$272	\$0	\$0	\$0	
Managers Office	Bathroom	Interior	heating and ventil	fan	ceiling	replace	electrical	1	1999	15	2014			\$500															
Exterior	Roof	Interior	heating and ventil	fan		replace	electrical	6	2001	15	2016					\$7,200													
												\$0	\$0	\$500	\$0	\$7,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Ground Floor	Managers Office	Interior	internal painting	ceiling	gib / tiles etc	paint	paint	37	2006	10	2016					\$513										\$513			
Ground Floor	Managers Office	Interior	internal painting	door	timber / ply	paint	paint	1	2006	10	2016					\$65										\$65			
Ground Floor	Managers Office	Interior	internal painting	wall	gib / timber etc	paint	paint	48	2006	10	2016					\$627										\$627			
Managers Office	Bathroom	Interior	internal painting	ceiling	gib / tiles etc	paint	paint	3	2006	10	2016					\$39										\$39			
Managers Office	Bathroom	Interior	internal painting	wall	gib / timber etc	paint	paint	17	2006	10	2016					\$223										\$223			
												\$0	\$0	\$0	\$0	\$1,467	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,467
Ground Floor	Lift Motor Room	Interior	lifts	controls		replace	specialist	1	1998	20	2018							\$15,000											
Ground Floor	Lift Motor Room	Interior	lifts	lift car upgrade		replace	specialist	1	1994	20	2014			\$10,000															
Ground Floor	Lift Motor Room	Interior	lifts	pump		replace	specialist	1	1998	20	2018							\$15,000											
												\$0	\$0	\$10,000	\$0	\$0	\$0	\$30,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Ground Floor	Managers Office	Interior	lighting upgrade	light fitting & bulb	incandescent	replace	electrical	6	2003	15	2018							\$600											
Ground Floor	North Garage	Interior	lighting upgrade	light fitting & bulb	fluorescent	replace	electrical	8	1992	20	2012	\$1,920																	
Ground Floor	North Garage	Interior	lighting upgrade	timer		replace	electrical	1	2008	10	2018							\$150											
Ground Floor	South Garage	Interior	lighting upgrade	light fitting & bulb	fluorescent	replace	electrical	8	1992	20	2012	\$1,920																	
Ground Floor	South Garage	Interior	lighting upgrade	timer		replace	electrical	1	2008	10	2018							\$150											
Managers Office	Bathroom	Interior	lighting upgrade	light fitting & bulb	downlight	replace	electrical	3	2003	15	2018							\$600											
												\$3,840	\$0	\$0	\$0	\$0	\$0	\$0	\$1,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1st floor	Walkway	Exterior	plumbing	fixtures and fittings	garden tap	replace	plumber	1	1989	35	2024														\$150				
2nd floor	Walkway	Exterior	plumbing	fixtures and fittings	garden tap	replace	plumber	1	1989	35	2024														\$150				

Building	Location	Int / Ext	Element Group	Element	Description	Action	Trade	Qty	Estimated Instal	Life Expect	1st Replace	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	
3rd floor	Walkway	Exterior	plumbing	fixtures and fittings	garden tap	replace	plumber	1	1989	35	2024																
Exterior		Exterior	plumbing	fixtures and fittings	garden tap	replace	plumber	2	1989	35	2024																
Ground Floor		Exterior	plumbing	fixtures and fittings	garden tap	replace	plumber	2	1989	35	2024																
												\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,050	\$0	\$0
Grounds		Exterior	security	intercom / door release		replace	security	1	2004	10	2014			\$350													
Grounds		Exterior	security	key pad	door lock	replace	security	2	2011	10	2021										\$800						
Grounds		Exterior	security	mag lock		replace	security	2	2004	10	2014			\$900													
												\$0	\$0	\$1,250	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$800	\$0	\$0	\$1,250	\$0	\$0

BODY CORPORATE 169774

Works Record Sheet

Year	Element	Description	Estimate	Cost	Year
2012	Carpentry	Allowance for Investigation into corrosion located to steel deck in Garages.	\$10,000		
2012	Interior Lighting	Replacement of obsolete lighting fittings in garage.	\$3,840		
2014	Exterior painting	Repainting of buildings exterior.	\$73,805		
2014	Exterior Lighting	Replacement of exterior light fittings; PIR motion sensor, fluorescent and bulkheads.	\$6,190		
2014	Paving	Repainting of carpark lines and numbers.	\$620		
2014	Carpentry	Replacement of door closers.	\$750		
2014	Electrical	Replacement of gate controls, gate motor and garage door openers	\$8,700		
2014	Heating and ventilation	Replacement of ceiling extract fan in Bathroom of Managers Office.	\$500		
2014	Lift	Refurbishment of interior of Lift car.	\$10,000		
2014	Security	Replacement of security components; intercom/door release and mag locks.	\$1,250		
2016	Cladding / windows / doors	Allowance for repairs to seals and hinges and garage door sills.	\$1,600		
2016	Roofing	Replacement of roofing membrane.	\$121,562		
2016	Fencing	Allowance for repairs to vehicle access gate; wheels and track guide.	\$1,000		
2016	Fire protection	Replacement of fire protection components; fire alarm panel, manual call points, sirens and heat and smoke detectors.	\$29,760		
2016	Heating and ventilation	Replacement of extraction fans located on roof.	\$7,200		
2016	Interior painting	Repainting of interior of Managers Office.	\$1,467		