Michael Callahan(RS) Associates, LLC.

High Rise Sample II

AnyCity, AnyState
Account Sample - Version 1
January 1, 2019

Michael Callahan(RS) & Associates, LLC.
Toll Free 1.877.357.2322
Local 1.603.944.0903
Fax 1.603.749.3807
Email mcallahanrs@gmail.com

TABLE OF CONTENTS
High Rise Sample II

PART I • INFORMATION ABOUT YOUR RESERVE STUDY

Important Information ---- 1-1
Introduction ---- 1-1
Funding Options ---- 1-1
Types of Reserve Studies ---- 1-2
Physical Analysis ---- 1-2
Developing a Component List ---- 1-2
Operational Expenses ---- 1-3
Reserve Expenses ---- 1-3
Budgeting is Normally Excluded For: ---- 1-3
Financial Analysis ---- 1-4
Preparing the Reserve Study ---- 1-4
Funding Methods ---- 1-4
Funding Strategies ---- 1-4
Component Funding Model Distribution of Accumulated Reserves ---- 1-5
Funding Reserves ---- 1-6
User's Guide to Your Reserve Anaylsis Study ---- 1-7
Report Summaries ---- 1-7
Index Reports ---- 1-7
Detail Reports ---- 1-7
Projections ---- 1-7
Definitions ---- 1-7
A Multi-Purpose Tool ---- 1-10
Designation/Award ---- 1-10
Consultant Certifies That ---- 1-11

PART II • RESERVE STUDY

Current Assessment Funding Model Summary (Cash Flow) ---- 2-1
Current Assessment Funding Model Projection ---- 2-2
Current Assessment Funding Model VS Fully Funded Chart ---- 2-3
Current Assessment Annual Expenditure Chart ---- 2-4
Current Assessment Spread Sheet ---- 2-5
Distribution of Accumulated Reserves ---- 2-9

TABLE OF CONTENTS
High Rise Sample II

Annual Expenditure Detail ---------- 2-11
Detail Report by Category ---------- 2-14
Category Detail Index ---------- 2-51
Asset Summary Report ---------- 2-53

Important Information

This document has been provided pursuant to an agreement containing restrictions on its use. No part of this document may be copied or distributed, in any form or by any means, nor disclosed to third parties without the expressed written permission of Michael Callahan & Associates, LLC. The client shall have the right to reproduce and distribute copies of this report, or the information contained within, as may be required for compliance with all applicable regulations.

This reserve analysis study and the parameters under which it has been completed are based upon information provided to us in part by representatives of the association, its contractors, assorted vendors, specialist and independent contractors, the Community Association Institute, and various construction pricing and scheduling manuals including, but not limited to: Marshall & Swift Valuation Service, RS Means Facilities Maintenance & Repair Cost Data, RS Means Repair & Remodeling Cost Data, National Construction Estimator, National Repair & Remodel Estimator, Dodge Cost Manual and McGraw-Hill Professional. Additionally, costs are obtained from numerous vendor catalogues, actual quotations or historical costs, and our own experience in the field of property management and reserve study preparation.

It has been assumed, unless otherwise noted in this report, that all assets have been designed and constructed properly and that each estimated useful life will approximate that of the norm per industry standards and/or manufacturer's specifications. In some cases, estimates may have been used on assets, which have an indeterminable but potential liability to the association. The decision for the inclusion of these as well as all assets considered is left to the client.

We recommend that your reserve analysis study be updated every two-three years due to fluctuating interest rates, inflationary changes, and the unpredictable nature of the lives of many of the assets under consideration. All of the information collected during our inspection of the association and computations made subsequently in preparing this reserve analysis study are retained in our computer files. Therefore, annual updates may be completed quickly and inexpensively each year.

Michael Callahan & Associates, LLC. would like to thank you for using our services. We invite you to call us at any time, should you have questions, comments or need assistance. In addition, any of the parameters and estimates used in this study may be changed at your request, after which we will provide a revised study.

This reserve analysis study is provided as an aid for planning purposes and not as an accounting tool. Since it deals with events yet to take place, there is no assurance that the results enumerated within it will, in fact, occur as described.

Part I

Introduction

Preparing the annual budget and overseeing the organization's finances are perhaps the most important responsibilities of board members. The annual operating and reserve budgets reflect the planning and goals of the organization and set the level and quality of service for all of the association's activities.

Funding Options

When a major repair or replacement is required in a community, an organization has essentially three options available to address the expenditure:

The first, and only logical means that the Board has to ensure its ability to maintain the assets for which it

is obligated, is by **assessing an adequate level of reserves**.

Whereas, if the organization was setting aside reserves for this purpose, using the vehicle of the regularly assessed monthly fees, it would have had the full term of the life of the roof, for example, to accumulate the necessary moneys.

The second option is for the organization to **acquire a loan** from a lending institution in order to effect the required repairs. In many cases, banks will lend to an organization. With this method, the current board is pledging the future assets of an organization.

The third option, too often used, is simply to **defer the required repair or replacement**. This option, which is not recommended, can create an environment of declining property values due to expanding lists of deferred maintenance items and the organization's financial inability to keep pace with the normal aging process of the common area components. This, in turn, can have a seriously negative impact on maintaining the organization by making it difficult, or even impossible, for potential buyers to obtain financing from lenders. Increasingly, lending institutions are requesting copies of the association's most recent reserve study before granting loans, either for the association itself, a prospective purchaser, or for an individual within such an association.

Types of Reserve Studies

Most reserve studies fit into one of three categories:

Full Reserve Study;

Update with site inspection; and

Update without site inspection.

In a **Full Reserve Study**, the reserve provider conducts a component inventory, a condition assessment (based upon on-site visual observations), and life and valuation estimates to determine both a "fund status" and "funding plan".

In an **Update with site inspection**, the reserve provider conducts a component inventory (verification only, not quantification unless new components have been added to the inventory), a condition assessment (based upon on-site visual observations), and life and valuation estimates to determine both the "fund status and "funding plan."

In an **Update without site inspection**, the reserve provider conducts life and valuation estimates to determine the "fund status" and "funding plan."

The Reserve Study: A Physical and a Financial Analysis

There are two components of a reserve study: a physical analysis and a financial analysis.

Physical Analysis

During the physical analysis, a reserve study provider evaluates information regarding the physical status and repair/replacement cost of the organization's major common area components. To do so, the provider conducts a component inventory, a condition assessment, and life and valuation estimates.

Developing a Component List

The budget process begins with full inventory of all the major components for which the organization is responsible. The determination of whether an expense should be labeled as operational, reserve, or excluded altogether is sometimes subjective. Since this labeling may have a major impact on the financial plans of the organization, subjective determinations should be minimized. We suggest the following considerations when labeling an expense.

Operational Expenses

Occur at least annually, no matter how large the expense, and can be budgeted for effectively each year. They are characterized as being reasonably predictable, both in terms of frequency and cost. Operational expenses include all minor expenses, which would not otherwise adversely affect an operational budget from one year to the next. Examples of ***operational expenses*** include:

Utilities:
- Electricity
- Gas
- Water
- Telephone
- Cable TV

Administrative:
- Supplies
- Bank Service Charges
- Dues & Publications
- Licenses, Permits & Fees
- Insurance(s)

Services:
- Landscaping
- Accounting
- Painting

Repair Expenses:
- Roof Repairs
- Equipment Repairs
- Minor Concrete Repairs
- Operating Contingency

Reserve Expenses

These are major expenses that occur other than annually, and which must be budgeted for in advance in order to ensure the availability of the necessary funds in time for their use. Reserve expenses are reasonably predictable both in terms of frequency and cost. However, they may include significant assets that have an indeterminable but potential liability that may be demonstrated as a likely occurrence. They are expenses that, when incurred, would have a significant effect on the smooth operation of the budgetary process from one year to the next, if they were not reserved for in advance. Examples of reserve expenses include:

- Roof Replacements
- Reserve Study
- Deck Resurfacing
- Fencing Replacement
- Asphalt Seal Coating
- Asphalt Repairs
- Asphalt Overlays
- Interior Furnishings
- Lighting Replacement
- Equipment Replacement

Budgeting is Normally Excluded for:

Repairs or replacements of assets which are deemed to have an estimated useful life equal to or exceeding the estimated useful life of the facility or community itself, or exceeding the legal life of the community as defined in an organization's governing documents. Examples include the complete replacement of foundations, wiring (electrical services) and plumbing (water & Sewer services). Also excluded are insignificant expenses that may be covered either by an operating or reserve contingency, or otherwise in a general maintenance fund. Expenses that are necessitated by acts of nature, accidents or other occurrences that are more properly insured for, rather than reserved for, are also excluded.

Financial Analysis

The financial analysis assesses the organization's reserve balance or "fund status" (measured in cash or as percent fully funded) to determine a recommendation for the appropriate reserve contribution rate in the

future, known as the "funding plan".

Preparing the Reserve Study

Once the reserve assets have been identified and quantified, their respective replacement costs, useful lives and remaining lives must be assigned so that a funding schedule can be constructed. Replacement costs and useful lives can be found in published manuals such as construction estimators, appraisal handbooks, and valuation guides. Remaining lives are calculated from the useful lives and ages of assets and adjusted according to conditions such as design, manufactured quality, usage, exposure to the elements and maintenance history.

By following the recommendations of an effective reserve study, the organization should avoid any major shortfalls. However, to remain accurate, the report should be updated every two – three years to reflect such changes as shifts in economic parameters, additions of phases or assets, or expenditures of reserve funds. The organization can assist in simplifying the reserve analysis update process by keeping accurate records of these changes throughout the year.

Funding Methods

From the simplest to the most complex, reserve analysis providers use many different computational processes to calculate reserve requirements. However, there are two basic processes identified as industry standards: the cash flow method and the component method.

The cash flow method develops a reserve-funding plan where contributions to the reserve fund are designed to offset the variable annual expenditures from the reserve fund. Different reserve funding plans are tested against the actual anticipated schedule of reserve expenses until the desired funding goal is achieved. This method sets up a "window" in which all future anticipated replacement costs are computed, based upon the individual lives of the components under consideration. The Michael Callahan & Associates, LLC. Threshold and the Michael Callahan & Associates, LLC. Current Assessment funding models are based upon the cash flow method.

The component method develops a reserve-funding plan where the total contribution is based upon the sum of contributions for individual components. The component method is the more conservative of the two funding options, and assures that the association will achieve and maintain an ideal level of reserve over time. This method also allows for computations on individual components in the analysis. The Michael Callahan & Associates, LLC. Component Funding model is based upon the component methodology.

Funding Strategies

Once an organization has established its funding goals, the organization can select an appropriate funding plan. There are four basic strategies from which most organizations select. It is recommended that the organization consult professionals to determine the best strategy or combination of plans that best suit the organization's need. Additionally, organizations should consult with their financial advisor to determine the tax implications of selecting a particular plan. Further, consultation with the American Institute of Certified Public Accountants (AICPA) for their reporting requirements is advisable. The four funding plans and descriptions of each are detailed below. Organizations will have to update their reserve studies more or less frequently depending on the funding strategy they select.

Full Funding---Given that the basis of funding for reserves is to distribute the costs of the replacements over the lives of the components in question, it follows that the ideal level of reserves would be proportionately related to those lives and costs. If an organization has a component with an expected estimated useful life of ten years, it would set aside approximately one-tenth of the replacement cost each year. At the end of three years, one would expect three-tenths of the replacement cost to have accumulated, and if so, that component would be "fully-funded." This model is important in that it is a

measure of the adequacy of an organization's reserves at any one point of time, and is independent of any particular method which may have been used for past funding or may be under consideration for future funding. This formula represents a snapshot in time and is based upon current replacement cost, independent of future inflationary or investment factors:

Fully Funded Reserves = **Age** divided by **Useful Life** the results multiplied by **Current Replacement Cost**

When an organization's total accumulated reserves for all components meet this criterion, its reserves are considered "fully-funded."

The Michael Callahan & Associates, LLC. **Threshold Funding Model (Minimum Funding)**. The goal of this funding method is to keep the reserve cash balance above zero. This means that while each individual component may not be fully funded, the reserve balance overall does not drop below zero during the projected period. An organization using this funding method must understand that even a minor reduction in a component's remaining useful life can result in a deficit in the reserve cash balance.

The Michael Callahan & Associates, LLC. **Threshold Funding Model.** This method is based upon the cash flow funding concept. The minimum reserve cash balance in threshold funding, however, is set at a predetermined dollar amount (other than $0).

The Michael Callahan & Associates, LLC. **Current Assessment Funding Model**. This method is also based upon the cash flow funding concept. The initial reserve assessment is set at the organization's current fiscal year funding level and a timeframe (yrs) projection is calculated to illustrate the adequacy of the current funding over time.

The Michael Callahan & Associates, LLC. **Recommended Assessment Funding Model**. This method is also based upon the cash flow funding concept. The reserve assessment is set (directed) at a level that will properly fund the reserves over a timeframe (yrs) projections and is calculated to illustrate the needed funding over time.

The Michael Callahan & Associates, LLC. **Component Funding Model**. This is a straight-line funding model. It distributes the cash reserves to individual reserve components and then calculates what the reserve assessment and interest contribution (minus taxes) should be, again by each reserve component. The current annual assessment is then determined by summing all the individual component assessments, hence the name "Component Funding Model". This is the most conservative funding model. It leads to or maintains the fully funded reserve position. The following details this calculation process.

Component Funding Model Distribution of Accumulated Reserves

The "Distribution of Accumulated Reserves Report" is a "Component Funding Model" calculation. This distribution **does not** apply to the cash flow funding models.

When calculating reserves based upon the component methodology, a beginning reserve balance must be allocated for each of the individual components considered in the analysis, before the individual calculations can be completed. When this distribution is not available, or of sufficient detail, the following method is suggested for allocating reserves:

The first step the program performs in this process is subtracting, from the total accumulated reserves, any amounts for assets that have predetermined (fixed) reserve balances. The user can "fix" the accumulated reserve balance within the program on the individual asset's detail page. If, by error, these amounts total more than the amount of funds available, then the remaining assets are adjusted accordingly. A provision for a contingency reserve is then deducted by the determined percentage used, and if there are sufficient remaining funds available.

The second step is to identify the ideal level of reserves for each asset. As indicated in the prior section,

this is accomplished by evaluating the component's age proportionate to its estimated useful life and current replacement cost. Again, the equation used is as follows:

Fully Funded Reserves = (Age/Useful Life) x Current Replacement Cost

The Michael Callahan & Associates, LLC. software program performs the above calculations to the actual month the component was placed-in-service. The program projects that the accumulation of necessary reserves for repairs or replacements will be available on the first day of the fiscal year in which they are scheduled to occur.

The next step the program performs is to arrange all of the assets used in the study in ascending order by remaining life, and alphabetically within each grouping of remaining life items. These assets are then assigned their respective ideal level of reserves until the amount of funds available is depleted, or until all assets are appropriately funded. If any assets are assigned a zero remaining life (scheduled for replacement in the current fiscal year), then the amount assigned equals the current replacement cost and funding begins for the next cycle of replacement. If there are insufficient funds available to accomplish this, then the software automatically adjusts the zero remaining life items to one year, and that asset assumes its new grouping position alphabetically in the final printed report.

If, at the completion of this task, there are additional moneys that have not been distributed, the remaining reserves are then assigned, in ascending order, to a level equal to, but not exceeding, the current replacement cost for each component. If there are sufficient moneys available to fund all assets at their current replacement cost levels, then any excess funds are designated as such and are not factored into any of the report computations. If, at the end of this assignment process there are designated excess funds, they can be used to offset the monthly contribution requirements recommended, or used in any other manner the client may desire.

Assigning the reserves in this manner defers the make-up period for any under-funding over the longest remaining life of all assets under consideration, thereby minimizing the impact of any deficiency. For example, if the report indicates an under funding of $50,000, this under-funding will be assigned to components with the longest remaining lives in order to give more time to "replenish" the account. If the $50,000 under-funding were to be assigned to short remaining life items, the impact would be felt immediately.

If the reserves are under-funded, the monthly contribution requirements, as outlined in this report, can be expected to be higher than normal. In future years, as individual assets are replaced, the funding requirements will return to their normal levels.

Funding Reserves

Three assessment and contribution figures are provided in the report, the "Monthly Reserve Assessment Required", the "Average Net Monthly Interest Earned" contribution and the "Total Monthly Allocation to Reserves." The organization should allocate the "Monthly Reserve Assessment Required" amount to reserves each month when the interest earned on the reserves is left in the reserve accounts as part of the contribution. Any interest earned on reserve deposits, must be left in reserves and only amounts set aside for taxes should be removed.

The second alternative is to allocate the "Total Monthly Allocation" to reserves (this is the member assessment plus the anticipated interest earned for the fiscal year). This method assumes that all interest earned will be assigned directly as operating income. This allocation takes into consideration the anticipated interest earned on accumulated reserves regardless of whether or not it is actually earned. When taxes are paid, the amount due will be taken directly from the organization's operating accounts as the reserve accounts are allocated only those moneys net of taxes.

Users' Guide to your Reserve Analysis Study

Part II of your Michael Callahan & Associates, LLC. Report contains the reserve analysis study for your organization. There are seven types of reports in the study as described below.

Report Summaries

The Report Summary for all funding models lists all of the parameters that were used in calculating the report as well as the summary of your reserve analysis study.

Index Reports

The **Distribution of Accumulated Reserves** report lists all assets in remaining life order. It also identifies the ideal level of reserves that should have accumulated for the organization as well as the actual reserves available. This information is valid only for the "Component Funding Model" calculation.

The **Component Listing/Summary** lists all assets by category (i.e. roofing, painting, lighting, etc.) together with their remaining life, current cost, monthly reserve contribution, and net monthly allocation.

Detail Reports

The Detail Report itemizes each asset and lists all measurements, current and future costs, and calculations for that asset. Provisions for percentage replacements, salvage values, and one-time replacements can also be utilized. These reports can be sorted by category or group.

The numerical listings for each asset are enhanced by extensive narrative detailing factors such as design, manufactured quality, usage, exposure to elements and maintenance history.

The Michael Callahan & Associates, LLC. Detail Index is an alphabetical listing of all assets, together with the page number of the asset's detail report, the projected replacement year, and the asset number.

Projections

Twenty-year or Thirty-year projections add to the usefulness of your reserve analysis study.

Definitions

Report I.D.
Includes the Report Date (example: November 15, 1992), Account Number (example: 9773), and Version (example: 1.0). Please use this information (displayed on the summary page) when referencing your report.

Budget Year Beginning/Ending
The budgetary year for which the report has been prepared for organizations with fiscal years ending December 31st, the monthly contribution figures indicated are for the 12-month period beginning 1/1/20xx and ending 12/31/20xx.

Number of Units and/or Phases
If applicable, the number of units and/or phases have been included in this version of the report.

Inflation
This figure is used to approximate the future cost to repair or replace each component in the report. The current cost for each component is compounded on an annual basis by the number of remaining years to replacement, and the total is used in calculating the monthly reserve contribution that will be necessary to accumulate the required funds in time for replacement.

Annual Assessment Increase
This represents the percentage rate at which the organization will increase its assessment to reserves at the end of each year. For example, in order to accumulate $10,000 in 10 years, you could set aside

$1,000 per year. As an alternative, you could set aside $795 the first year and increase that amount by 5% each year until the year of replacement. In either case you arrive at the same amount. The idea is that you start setting aside a lower amount and increase that number each year in accordance with the planned percentage. Ideally this figure should be equal to the rate of inflation. It can, however, be used to aide those organizations that have not set aside appropriate reserves in the past, by making the initial year's allocation less formidable.

Investment Yield Before Taxes

The average interest rate anticipated by the organization based upon its current investment practices.

Taxes on Interest Yield
The estimated percentage of interest income that will be set aside to pay income taxes on the interest earned.

Projected Reserve Balance
The anticipated reserve balance on the first day of the fiscal year for which this report has been prepared based upon information provided and not audited.

Percent Fully Funded
The ratio, at the beginning of the fiscal year, of the actual (or projected) reserve balance to the calculated fully funded balance, expressed as a percentage.

Phase Increment Detail and/or Age
Comments made regarding aging of the components on the basis of construction date or date of acceptance by the organization.

Monthly Assessment
The assessment to reserves required by the organization each month.

Interest Contribution (After Taxes)
The interest that should be earned on the reserves, net of taxes, based upon their beginning reserve balance and monthly contributions for one year. This figure is averaged for budgeting purposes.

Total Monthly Allocation
The sum of the monthly assessment and interest contribution figures.

Group and Category
The report may be prepared and sorted either by group (location, building, phase, etc.) or by category (roofing, painting, etc.). The standard report printing format is by category.

Percentage of Replacement or Repairs
In some cases, an asset may not be replaced in its entirety or the cost may be shared with a second party. Examples are budgeting for a percentage of replacement of streets over a period of time, or sharing the expense to replace a common wall with a neighboring party.

Placed-In-Service Date
The month and year that the asset was placed-in-service. This may be the construction date, the first escrow closure date in a given phase, or the date of the last servicing or replacement.

Estimated Useful Life
The estimated useful life of an asset based upon industry standards, manufacturer specifications, visual inspection, location, usage, organization standards and prior history. All of these factors are taken into consideration when tailoring the estimated useful life to the particular asset. For example, the carpeting in a hallway or elevator (a heavy traffic area) will not have the same life as the identical carpeting in a seldom-used meeting room or office.

Adjustment to Useful Life
Once the useful life is determined, it may be adjusted, up or down, by this separate figure for the current cycle of replacement. This will allow for a current period adjustment without affecting the estimated replacement cycles for future replacements.

Estimated Remaining Life
This calculation is completed internally based upon the report's fiscal year date and the date the asset was placed-in-service.

Replacement Year
The year that the asset is scheduled to be replaced. The appropriate funds will be available by the first day of the fiscal year for which replacement is anticipated.

Annual Fixed Reserves
An optional figure which, if used, will override the normal process of allocating reserves to each asset.

Fixed Assessment
An optional figure which, if used, will override all calculations and set the assessment at this amount. This assessment can be set for monthly, quarterly or annually as necessary.

Salvage Value
The salvage value of the asset at the time of replacement, if applicable.

One-Time Replacement
Notation if the asset is to be replaced on a one-time basis.

Current Replacement Cost
The estimated replacement cost effective at the beginning of the fiscal year for which the report is being prepared

Future Replacement Cost
The estimated cost to repair or replace the asset at the end of its estimated useful life based upon the current replacement cost and inflation.

Component Inventory
The task of selecting and qualifying reserve components. This task can be accomplished through on-site visual, review of organization design and organizational documents, a review of established organization precedents, and discussion with appropriate organization representative(s).

A Multi-Purpose Tool

Your Michael Callahan & Associates, LLC. Report is an important part of your organization's budgetary process. Following its recommendations should ensure the organization's smooth budgetary transitions from one fiscal year to the next. In addition Michael Callahan & Associates, LLC. reserve study serves a variety of useful purposes:

- Following the recommendations of a reserve study performed by a professional consultant can protect the Board of Directors in a community from personal liability concerning reserve components and reserve funding.
- A reserve analysis study is required by your accountant during the preparation of the organization's annual audit.
- The Michael Callahan & Associates, LLC. reserve study is often requested by lending institutions during the process of loan applications, both for the community and, in many cases, the individual owners.
- Your Michael Callahan & Associates, LLC. Report is also a detailed inventory of the organization's major assets and serves as a management tool for scheduling, coordinating and planning future repairs and replacements.
- Your Michael Callahan & Associates, LLC. Report is a tool that can assist the Board in fulfilling its legal and fiduciary obligations for maintaining the community in a state of good repair.
- Since the Michael Callahan & Associates, LLC. reserve analysis study includes measurements and cost estimates of the client's assets, the detail reports may be used to evaluate the accuracy and price of contractor bids when assets are due to be repaired or replaced.
- Your Michael Callahan & Associates, LLC. Report provides a record of the time, cost, and quantities of past reserve replacements. At times the organization's management company and board of directors are transitory which may result in the loss of these important records.

Designation/Award

In March 2000, Michael Callahan was awarded the Reserve Specialist (RS) designation from Community Associations Institute (CAI). Mr. Callahan was the 48th person in the United States to receive this professional designation.

The RS designation was developed by CAI for professional reserve analysts who wish to confirm to their peers and/or clients that they have demonstrated a basic level of competency within the industry. The RS designation is awarded to reserve analysts who are dedicated to the highest standards of professionalism and reserve analysis preparation.

In 1999 Michael Callahan, RS was awarded the CAI-Community Association Professional of the Year Award. In 2003 Michael Callahan, RS was awarded the CAI-Association Professional Service Award.

Consultant certifies that:

1) Consultant has no other involvement with association which could result in actual or perceived

conflicts of interest.

2) Component conditional assessments were developed by actual field observation.

3) Financial assumptions used in this analysis are listed on the Funding Assessment Summary.

4) Consultant is a Reserve Specialist (RS) designee.

5) Future updates of this report performed by Michael Callahan & Associates, LLC. would range in cost from 1/3 to 1/2 the original cost to perform the reserve analysis. The Association is entitled to one set of free revisions to the original report. A revision is not an update. A revision is to make changes adjustments to the original report after the client has had time to review the report. The changes/adjustments must be made available to MCA within 90 days of receiving the first draft of the report. Revision changes/adjustments must be for past repairs/replacements, future repair/replacement adjustments/changes are considered an update if they are for the current fiscal year or future fiscal years.

6) There are no material issues known to consultant at this time which would cause a distortion of the association's situation.

7) It is assumed that all building assets/construction was built to code at the time of construction and was built with proper application, unless otherwise noted throughout the report and/or if information stating otherwise was provided to Michael Callahan & Associates, LLC. by the client. Michael Callahan & Associates, LLC. will not and did not do any testing for construction defects. No testing was done for any building codes.

8) The findings in this report are an opinion based on an actual visual on-site-inspection and from information provided to Michael Callahan & Associates, LLC. by the client. No testing of any kind was performed during the visual on-site-inspection. This report does not include destructive testing results. The visual on-site-inspection consists of a visual inspection of all accessible areas. Conditions or issues that could not be detected by a visual inspection are not the responsibility of Michael Callahan & Associates, LLC. or any consultant of Michael Callahan & Associates, LLC. Michael Callahan & Associates, LLC. is not required to report issues of any kind on any component.

9) No warranty, expressed or implied is made concerning services performed for this report, including the Consultant's findings, recommendations or professional advice.

10) LIMITATIONS OF RESERVE ANALYSIS

This reserve analysis is intended as a tool for the association’s Board of Directors to be used in evaluating the association’s current physical and financial condition with regard to reserve components. The results of this reserve analysis represent the independent opinion of the preparer. There is no implied warranty or guarantee of this work product.

For the purposes of this reserve analysis, it has been assumed that all components have been installed properly, no construction defects exist and all components are operational. Additionally, it has been assumed that all components will be maintained properly in the future.

The representations set forth in this reserve analysis are based on the best information and estimates of the preparer as of the date of this analysis. These estimates are subject to change. This reserve analysis

includes estimates of replacement costs and life expectancies as well as assumptions regarding future events. Some estimates are projections of future events based on information currently available and are not necessarily indicative of the actual future outcome. The longer the time period between the estimate and the estimated event, the more likely the possibility or error and/or discrepancy. For example, some assumptions inevitably will not materialize and unanticipated events and circumstances many occur subsequent to the preparation of this reserve analysis. Therefore, the actual replacement costs and remaining lives may vary from this reserve analysis and the variation may be significant.

Additionally, inflation and other economic events may impact this reserve analysis, particularly over an extended period of time and those events could have a significant and negative impact on the accuracy of this reserve analysis and, further, the funds available to meet the association's obligation for repair, replacement or other maintenance of major components during their estimated useful life. Furthermore, the occurrence of vandalism, severe weather conditions, earthquakes, floods, acts of nature or other unforeseen events cannot be predicted and/or accounted for and excluded when assessing life expectancy, repair and/or replacement costs of the components.

High Rise Sample II
AnyCity, AnyState
MCA Current Assessment Funding Model Summary (Cash Flow)

Report Date	January 1, 2019
Account Number	Sample
Version	1
Budget Year Beginning	January 1, 2019
Budget Year Ending	December 31, 2019
Total Units	99
Phase Development	1 of 1

Report Parameters

Inflation	4.00%
Annual Reserve Funding Increase	4.00%
Interest Rate on Reserve Deposit	4.00%
Tax Rate on Interest	30.00%
Contingency	5.00%
2019 Beginning Balance	$1,461,897

High Rise Sample II is located in AnyCity AnyState the property consists of residential unit.

For budgeting purposes Michael Callahan & Associates, LLC. will use January, 1 2000 for all original components. Components replaced since original will be noted throughout the report with the placed-in-service replacement date or an estimated replacement date.

The Official Michael Callahan & Associates, LLC. visual on-site-inspection was performed on March, 29 2018.

The detail section of this reserve study will have information on all assets included in this report. Some assets may be listed for inventory purposes only.

The anticipated reserve fund balance is based on current reserve fund & contribution information that was provided to MCA, LLC. by the client.

Fiscal Year January, 1 2019 Beginning Balance: $1,461,897

Current Assessment Funding Model. This model type is also referred to as a Cash Flow model or Statutory Funding model. This analysis is based on the current annual assessment, parameters, and reserve fund balance. Because It is calculated using the current annual assessment, it will give an accurate projection of how well the association is funded for the next 20 years of planned reserve expenditures.

Asset repair & replacement costs are estimates based on National Data, Local Contractors, provided bid proposals from the client, and actual costs provided by the client.

Current Assessment Funding Model Summary of Calculations

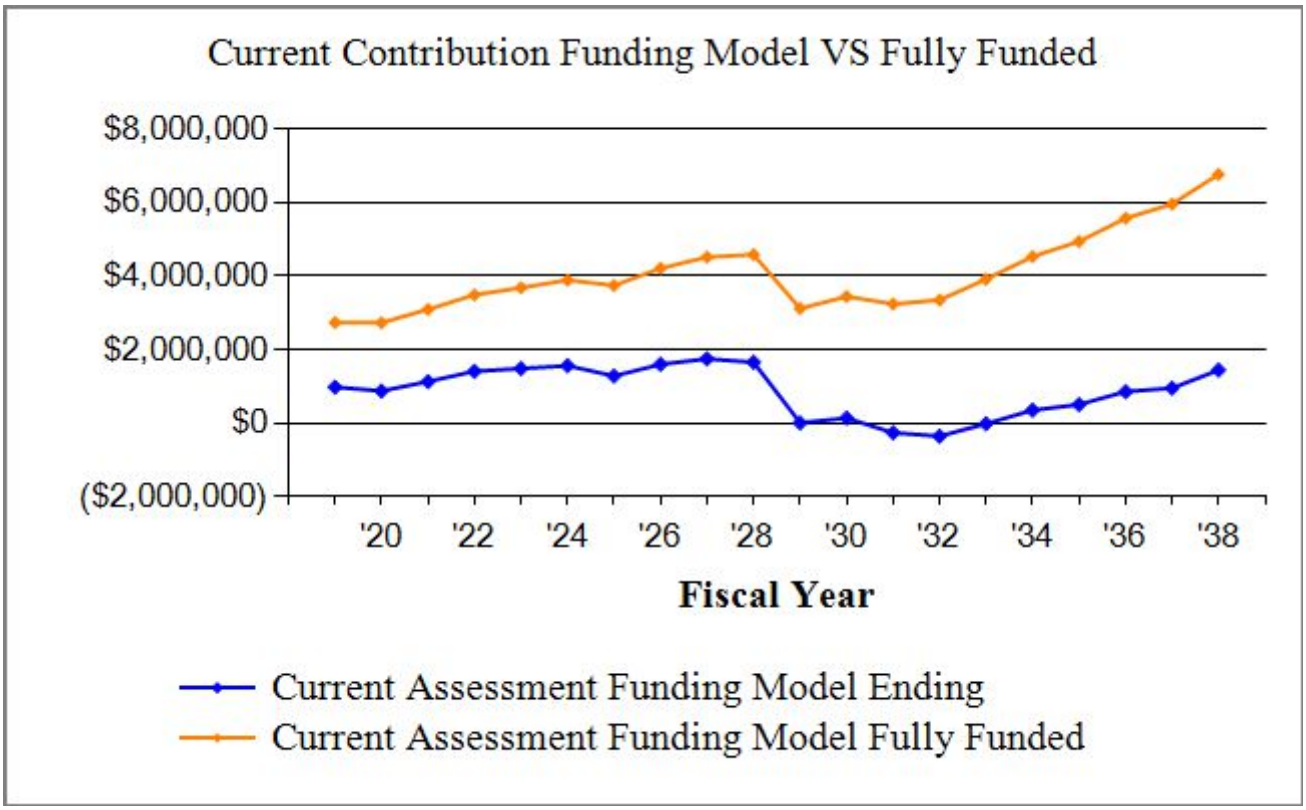
Required Annual Contribution	$213,996.00
$2,161.58 per unit annually	
Average Net Annual Interest Earned	$26,744.84
Total Annual Allocation to Reserves	$240,740.84
$2,431.73 per unit annually	

High Rise Sample II
MCA Current Assessment Funding Model Projection

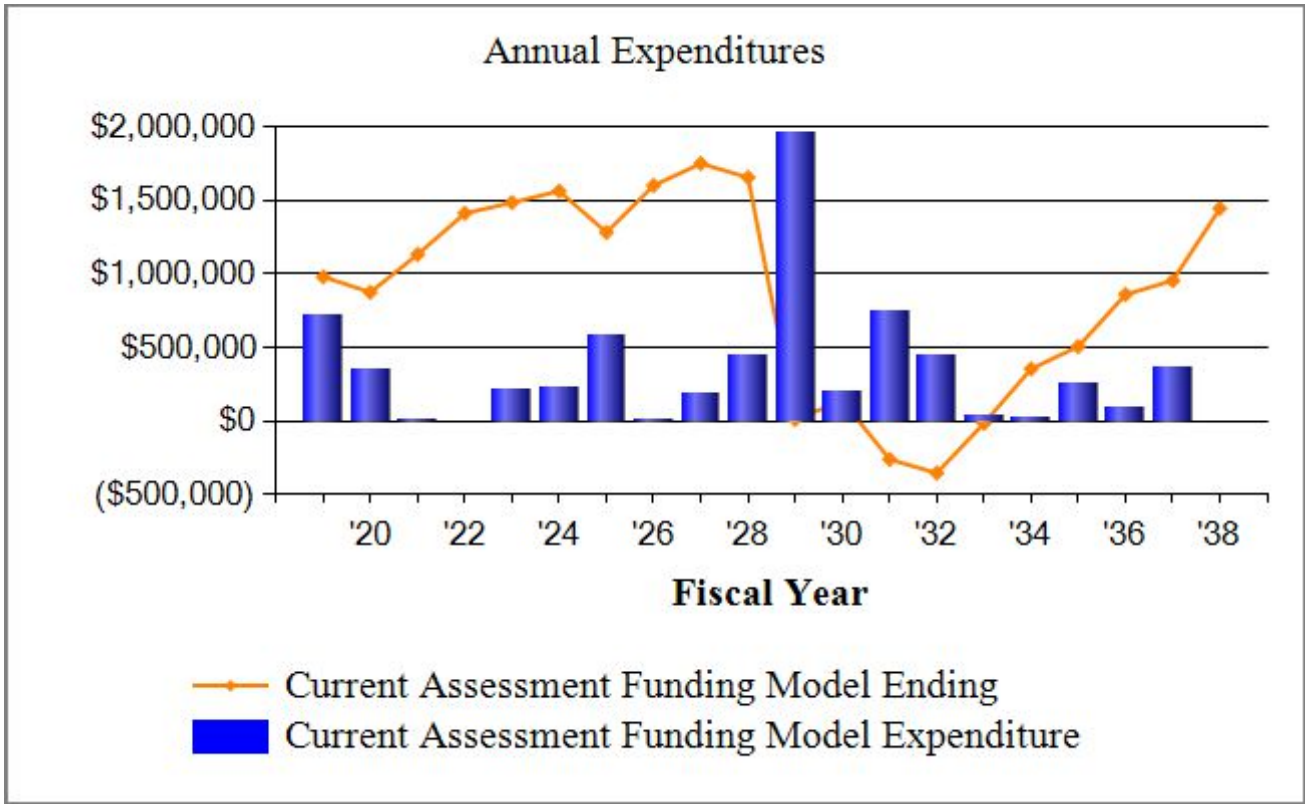
Beginning Balance: $1,461,897

Year	Current Cost	Annual Contribution	Annual Interest	Annual Expenditures	Projected Ending Reserves	Fully Funded Reserves	Percent Funded
2019	4,713,202	213,996	26,745	720,720	981,918	2,741,265	36%
2020	4,901,730	222,556	23,883	351,520	876,836	2,734,110	32%
2021	5,097,799	231,458	30,887	5,192	1,133,990	3,096,801	37%
2022	5,301,711	240,716	38,492		1,413,198	3,489,747	40%
2023	5,513,780	250,345	40,487	217,594	1,486,436	3,684,618	40%
2024	5,734,331	260,359	42,611	224,959	1,564,447	3,890,887	40%
2025	5,963,704	270,773	34,964	586,491	1,283,694	3,746,818	34%
2026	6,202,252	281,604	43,651	6,316	1,602,633	4,212,778	38%
2027	6,450,342	292,868	47,709	191,600	1,751,611	4,517,588	39%
2028	6,708,356	304,583	45,139	444,073	1,657,260	4,584,341	36%
2029	6,976,690	316,766	321	1,962,560	11,788	3,120,701	0%
2030	7,255,758	329,437	3,823	204,678	140,370	3,445,676	4%
2031	7,545,988	342,614		741,476	-258,492	3,242,460	
2032	7,847,828	356,319		450,402	-352,575	3,351,035	
2033	8,161,741	370,572		31,170	-13,174	3,917,846	
2034	8,488,210	385,395	9,696	25,934	355,984	4,531,384	8%
2035	8,827,739	400,810	13,848	262,217	508,425	4,943,080	10%
2036	9,180,848	416,843	23,464	87,266	861,466	5,573,318	15%
2037	9,548,082	433,517	26,049	364,647	956,385	5,961,221	16%
2038	9,930,006	450,857	39,403		1,446,645	6,765,642	21%

High Rise Sample II
MCA Current Assessment Funding Model VS Fully Funded Chart



The Current Assessment Funding Model is based on the current annual assessment, parameters, and reserve fund balance. Because it is calculated using the current annual assessment, it will give the accurate projection of how well the association will be funded for the projected years of planned reserve expenditures.


Annual Expenditures
$2,000,000
$1,500,000
$1,000,000
$500,000
$0
($500,000)
'20
'22
'24
'26
'28
'30
'32
'34
'36
'38
Fiscal Year
Current Assessment Funding Model Ending
Current Assessment Funding Model Expenditure

High Rise Sample II
MCA Current Assessment Spread Sheet

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Beginning Balance	1,461,897	981,918	876,836	1,133,990	1,413,198	1,486,436	1,564,447	1,283,694	1,602,633	1,751,611
Annual Assessment	213,996	222,556	231,458	240,716	250,345	260,359	270,773	281,604	292,868	304,583
Interest Earned	26,745	23,883	30,887	38,492	40,487	42,611	34,964	43,651	47,709	45,139
Expenditures	720,720	351,520	5,192		217,594	224,959	586,491	6,316	191,600	444,073
Fully Funded Reserves	2,741,265	2,734,110	3,096,801	3,489,747	3,684,618	3,890,887	3,746,818	4,212,778	4,517,588	4,584,341
Percent Fully Funded	36%	32%	37%	40%	40%	40%	34%	38%	39%	36%
Ending Balance	981,918	876,836	1,133,990	1,413,198	1,486,436	1,564,447	1,283,694	1,602,633	1,751,611	1,657,260
Description										
Comments	*Unfunded*									
Elevators - Cab Refurbishments (cargo)					5,849					
Elevators - Cab Refurbishments (parking garage)					4,679					
Elevators - Cab Refurbishments (residential)					28,077					
Elevators - Drives, Elevator #1										
Elevators - Drives, Elevator #2										
Elevators - Drives, Elevator #3										
Equipment - Air Handler (Unit #1)					140,383					
Equipment - Air Handler (Unit #2)										
Equipment - Auto Court Safety System										
Equipment - Back-Up Generator										
Equipment - Booster Pump System		67,600								
Equipment - Car Lifts, Schedule #1										444,073
Equipment - Car Lifts, Schedule #2										
Equipment - Chiller Auxiliary										
Equipment - Chillers (tube)										
Equipment - Cooling Tower, Replacement	300,000									
Equipment - Exhaust Fan Sensors							26,572			
Equipment - Exhaust Fans, Original					38,605					
Equipment - Exhaust Fans, Replaced										
Equipment - Fire Control Panel, Replacements		202,800								
Equipment - HVAC (split system), Elevator Ro..		21,840								
Equipment - Pump Motors (P2)	9,600					11,680				
Equipment - Pump Motors (P3)	4,800					5,840				
Equipment - Pump Motors, 2016						207,439				
Equipment - Pump Motors, 2016 (P3)			5,192					6,316		

High Rise Sample II
MCA Current Assessment Spread Sheet

Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Equipment - Security System (Fob)										
Equipment - Security System (Intercom)										
Equipment - Security System (Video/Cameras)										
Equipment - Telephone System							12,653			
Equipment - Whalen Units, Common Area		41,600								
Exterior - Caulking	100,000									
Exterior - Concrete Repairs & Replacements										
Fitness Room - Fitness Equipment										
Fitness Room - Refurbishment	60,000									
Flooring - Carpet	72,324									
Garage Door - Loading Dock										
Garage Door - Underground Parking										
Grounds - Block Wall, Repairs & Replacements										
Grounds - Garden Lights		17,680								
Grounds - Parking Area/Walkway Pavers										
Lighting - Exterior										
Lighting - Exterior, Roof	33,996									
Lighting - Interior										
Lobby - Renovations	140,000								191,600	
Mailboxes (wall clusters)										
Roof - Flat, Rubber Membrane							547,266			
Roof - Pitched, Metal										
Year Total:	**720,720**	**351,520**	**5,192**		**217,594**	**224,959**	**586,491**	**6,316**	**191,600**	**444,073**

High Rise Sample II
MCA Current Assessment Spread Sheet

	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
Beginning Balance	1,657,260	11,788	140,370	-258,492	-352,575	-13,174	355,984	508,425	861,466	956,385
Annual Assessment	316,766	329,437	342,614	356,319	370,572	385,395	400,810	416,843	433,517	450,857
Interest Earned	321	3,823				9,696	13,848	23,464	26,049	39,403
Expenditures	1,962,560	204,678	741,476	450,402	31,170	25,934	262,217	87,266	364,647	
Fully Funded Reserves	3,120,701	3,445,676	3,242,460	3,351,035	3,917,846	4,531,384	4,943,080	5,573,318	5,961,221	6,765,642
Percent Fully Funded	0%	4%	-8%	-11%	0%	8%	10%	15%	16%	21%
Ending Balance	11,788	140,370	-258,492	-352,575	-13,174	355,984	508,425	861,466	956,385	1,446,645
Description										
Comments	*Unfunded*									
Elevators - Cab Refurbishments (cargo)										
Elevators - Cab Refurbishments (parking garage)										
Elevators - Cab Refurbishments (residential)										
Elevators - Drives, Elevator #1										
Elevators - Drives, Elevator #2								58,437		
Elevators - Drives, Elevator #3										
Equipment - Air Handler (Unit #1)										
Equipment - Air Handler (Unit #2)				133,206						
Equipment - Auto Court Safety System					31,170					
Equipment - Back-Up Generator										
Equipment - Booster Pump System										
Equipment - Car Lifts, Schedule #1										
Equipment - Car Lifts, Schedule #2			499,522							
Equipment - Chiller Auxiliary									283,614	
Equipment - Chillers (tube)	1,243,405									
Equipment - Cooling Tower, Replacement										
Equipment - Exhaust Fan Sensors									42,542	
Equipment - Exhaust Fans, Original										
Equipment - Exhaust Fans, Replaced									18,232	
Equipment - Fire Control Panel, Replacements										
Equipment - HVAC (split system), Elevator Ro..										
Equipment - Pump Motors (P2)	14,210					17,289				
Equipment - Pump Motors (P3)	7,105					8,645				
Equipment - Pump Motors, 2016				283,895						
Equipment - Pump Motors, 2016 (P3)			7,685					9,350		

High Rise Sample II
MCA Current Assessment Spread Sheet

Description	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
Equipment - Security System (Fob)	49,905									
Equipment - Security System (Intercom)	13,355									
Equipment - Security System (Video/Cameras)	42,482									
Equipment - Telephone System									20,258	
Equipment - Whalen Units, Common Area										
Exterior - Caulking	148,024									
Exterior - Concrete Repairs & Replacements	444,073									
Fitness Room - Fitness Equipment		59,123								
Fitness Room - Refurbishment			96,062							
Flooring - Carpet			115,793							
Garage Door - Loading Dock			22,414							
Garage Door - Underground Parking				33,301						
Grounds - Block Wall, Repairs & Replacements		20,986								
Grounds - Garden Lights										
Grounds - Parking Area/Walkway Pavers		25,198								
Lighting - Exterior										
Lighting - Exterior, Roof										
Lighting - Interior		99,372								
Lobby - Renovations							262,217			
Mailboxes (wall clusters)								19,479		
Roof - Flat, Rubber Membrane										
Roof - Pitched, Metal										
Year Total:	**1,962,560**	**204,678**	**741,476**	**450,402**	**31,170**	**25,934**	**262,217**	**87,266**	**364,647**	

High Rise Sample II
MCA Distribution of Accumulated Reserves

Description	Remaining Life	Replacement Year	Assigned Reserves	Fully Funded Reserves
Equipment - Pump Motors (P3)	0	2019	4,800	4,800
Equipment - Pump Motors (P2)	0	2019	9,600	9,600
Lighting - Exterior, Roof	0	2019	33,996	33,996
Fitness Room - Refurbishment	0	2019	60,000	60,000
Flooring - Carpet	0	2019	72,324	72,324
Exterior - Caulking	0	2019	100,000	100,000
Lobby - Renovations	0	2019	140,000	140,000
Equipment - Cooling Tower, Replacement	0	2019	300,000	300,000
Grounds - Garden Lights	1	2020	16,150	16,150
Equipment - HVAC (split system), Elevator ..	1	2020	19,950	19,950
Equipment - Whalen Units, Common Area	1	2020	38,000	38,000
Equipment - Booster Pump System	1	2020	61,750	61,750
Equipment - Fire Control Panel, Replacements	1	2020	185,250	185,250
Equipment - Pump Motors, 2016 (P3)	2	2021	2,880	2,880
Elevators - Cab Refurbishments (parking gar..	4	2023	3,304	3,304
Elevators - Cab Refurbishments (cargo)	4	2023	4,130	4,130
Elevators - Cab Refurbishments (residential)	4	2023	19,826	19,826
Equipment - Exhaust Fans, Original	4	2023	27,261	27,261
Equipment - Air Handler (Unit #1)	4	2023	100,000	100,000
Equipment - Pump Motors, 2016	5	2024	63,937	63,937
Equipment - Telephone System	6	2025	5,000	5,000
Equipment - Exhaust Fan Sensors	6	2025	10,500	10,500
Roof - Flat, Rubber Membrane	6	2025	* 313,439	328,709
Equipment - Car Lifts, Schedule #1	9	2028		211,714
Equipment - Security System (Intercom)	10	2029		1,504
Equipment - Security System (Video/Camera..	10	2029		4,783
Equipment - Security System (Fob)	10	2029		5,619
Exterior - Concrete Repairs & Replacements	10	2029		196,552
Equipment - Chillers (tube)	10	2029		516,923
Fitness Room - Fitness Equipment	11	2030		3,200
Grounds - Block Wall, Repairs & Replaceme..	11	2030		8,634
Grounds - Parking Area/Walkway Pavers	11	2030		10,366
Lighting - Interior	11	2030		40,882
Garage Door - Loading Dock	12	2031		2,800
Equipment - Car Lifts, Schedule #2	12	2031		191,226
Garage Door - Underground Parking	13	2032		2,667
Equipment - Air Handler (Unit #2)	13	2032		28,000
Equipment - Auto Court Safety System	14	2033		5,400
Mailboxes (wall clusters)	17	2036		1,500
Elevators - Drives, Elevator #2	17	2036		13,000

High Rise Sample II
MCA Distribution of Accumulated Reserves

Description	Remaining Life	Replacement Year	Assigned Reserves	Fully Funded Reserves
Equipment - Exhaust Fans, Replaced	18	2037		900
Equipment - Chiller Auxiliary	18	2037		39,200
Equipment - Back-Up Generator	21	2040		76,000
Roof - Pitched, Metal	21	2040		147,288
Elevators - Drives, Elevator #3	22	2041		8,000
Lighting - Exterior	27	2046		1,020
Elevators - Drives, Elevator #1	28	2047		2,000
Comments		Unfunded		
Total Asset Summary			$1,592,098	$3,126,546
Contingency at 5.00%			$83,795	$164,555
Summary Total			$1,675,893	$3,291,101

Percent Fully Funded	51%
Current Average Liability per Unit (Total Units: 99)	-$16,315

'' Indicates Partially Funded*

High Rise Sample II
MCA Annual Expenditure Detail

Description	Expenditures
Replacement Year 2019	
Equipment - Cooling Tower, Replacement	300,000
Equipment - Pump Motors (P2)	9,600
Equipment - Pump Motors (P3)	4,800
Exterior - Caulking	100,000
Fitness Room - Refurbishment	60,000
Flooring - Carpet	72,324
Lighting - Exterior, Roof	33,996
Lobby - Renovations	140,000
Total for 2019	**$720,720**
Replacement Year 2020	
Equipment - Booster Pump System	67,600
Equipment - Fire Control Panel, Replacements	202,800
Equipment - HVAC (split system), Elevator Room	21,840
Equipment - Whalen Units, Common Area	41,600
Grounds - Garden Lights	17,680
Total for 2020	**$351,520**
Replacement Year 2021	
Equipment - Pump Motors, 2016 (P3)	5,192
Total for 2021	**$5,192**
No Replacement in 2022	
Replacement Year 2023	
Elevators - Cab Refurbishments (cargo)	5,849
Elevators - Cab Refurbishments (parking garage)	4,679
Elevators - Cab Refurbishments (residential)	28,077
Equipment - Air Handler (Unit #1)	140,383
Equipment - Exhaust Fans, Original	38,605
Total for 2023	**$217,594**
Replacement Year 2024	
Equipment - Pump Motors (P2)	11,680
Equipment - Pump Motors (P3)	5,840
Equipment - Pump Motors, 2016	207,439
Total for 2024	**$224,959**

High Rise Sample II
MCA Annual Expenditure Detail

Description	Expenditures
Replacement Year 2025	
Equipment - Exhaust Fan Sensors	26,572
Equipment - Telephone System	12,653
Roof - Flat, Rubber Membrane	547,266
Total for 2025	**$586,491**
Replacement Year 2026	
Equipment - Pump Motors, 2016 (P3)	6,316
Total for 2026	**$6,316**
Replacement Year 2027	
Lobby - Renovations	191,600
Total for 2027	**$191,600**
Replacement Year 2028	
Equipment - Car Lifts, Schedule #1	444,073
Total for 2028	**$444,073**
Replacement Year 2029	
Equipment - Chillers (tube)	1,243,405
Equipment - Pump Motors (P2)	14,210
Equipment - Pump Motors (P3)	7,105
Equipment - Security System (Fob)	49,905
Equipment - Security System (Intercom)	13,355
Equipment - Security System (Video/Cameras)	42,482
Exterior - Caulking	148,024
Exterior - Concrete Repairs & Replacements	444,073
Total for 2029	**$1,962,560**
Replacement Year 2030	
Fitness Room - Fitness Equipment	59,123
Grounds - Block Wall, Repairs & Replacements	20,986
Grounds - Parking Area/Walkway Pavers	25,198
Lighting - Interior	99,372
Total for 2030	**$204,678**
Replacement Year 2031	
Equipment - Car Lifts, Schedule #2	499,522

High Rise Sample II
MCA Annual Expenditure Detail

Description	Expenditures
Replacement Year 2031 continued...	
Equipment - Pump Motors, 2016 (P3)	7,685
Fitness Room - Refurbishment	96,062
Flooring - Carpet	115,793
Garage Door - Loading Dock	22,414
Total for 2031	**$741,476**
Replacement Year 2032	
Equipment - Air Handler (Unit #2)	133,206
Equipment - Pump Motors, 2016	283,895
Garage Door - Underground Parking	33,301
Total for 2032	**$450,402**
Replacement Year 2033	
Equipment - Auto Court Safety System	31,170
Total for 2033	**$31,170**
Replacement Year 2034	
Equipment - Pump Motors (P2)	17,289
Equipment - Pump Motors (P3)	8,645
Total for 2034	**$25,934**
Replacement Year 2035	
Lobby - Renovations	262,217
Total for 2035	**$262,217**
Replacement Year 2036	
Elevators - Drives, Elevator #2	58,437
Equipment - Pump Motors, 2016 (P3)	9,350
Mailboxes (wall clusters)	19,479
Total for 2036	**$87,266**
Replacement Year 2037	
Equipment - Chiller Auxiliary	283,614
Equipment - Exhaust Fan Sensors	42,542
Equipment - Exhaust Fans, Replaced	18,232
Equipment - Telephone System	20,258
Total for 2037	**$364,647**

Roof - Flat, Rubber Membrane - 2025

		1 Total	@ $432,512.00
Asset ID	1179	Asset Cost	$432,512.00
		Percent Replacement	100%
	Roofing	Future Cost	$547,265.66
Placed in Service	January 2000	Assigned Reserves	$313,439.11
Useful Life	20		
Adjustment	5	Annual Assessment	$11,236.88
Replacement Year	2025	Interest Contribution	$9,090.93
Remaining Life	6	Reserve Allocation	$20,327.81

6,758 - sq.ft. of rubber membrane roofing	@	$32.00 =	$216,256.00
		Total =	$216,256.00

Typically, flat rubber membrane roofs come with a 20yr. Limited Warranty.

Flat roof systems work by providing a waterproof membrane over a building. They consist of one or more layers of hydrophobic material placed over a structural deck with a vapor barrier typically placed between the deck and roof membrane. Flashing, thin strips of material such as copper, intersect with the membrane and other building components (such as parapet walls) to prevent water infiltration. Water is directed to drains, downspouts, and gutters by the slight pitch of the roof.

The work includes but is not limited to the installation of:

- Substrate Preparation
- Roof Drains
- Vapor Barrier
- Wood Blocking
- Insulation
- Separation Layers
- Roof Membrane
- Fasteners
- Adhesive for Flashings

Roof - Flat, Rubber Membrane continued...

- Roof Membrane Flashings
- Metal Flashings
- Sealant

Over-All:

The roof should be monitored/visual inspection twice a year. Once before the winter months and once after the winter months. Any noted issues/damage should be addressed immediately to avoid further damage to the roofing system and/or damage to the interior of the building. If the roofing system becomes damaged and/or leaking issues start, the Remaining Life of the roof should be adjusted accordingly.

Rubber Membrane roof maintenance (repairs) should be done by a professional roofer that has experience with both new roof appliations and repairing of rubber membrane roofs.

The most common repairs needed on a rubber membrane roof are lifting seams and actual damage to the rubber membrane. Other types of needed mainteance to a rubber roof is the sealant around protrusions in the roof such as vents, junction boxes, skylights, wires/cables, and roof top mechanicals.

Roof - Pitched, Metal - 2040

		1 Total	@ $310,080.00
Asset ID	1054	Asset Cost	$310,080.00
		Percent Replacement	100%
	Roofing	Future Cost	$706,600.40
Placed in Service	January 2000	Assigned Reserves	*none*
Useful Life	40		
Replacement Year	2040	Annual Assessment	$10,266.42
Remaining Life	21	Interest Contribution	$287.46
		Reserve Allocation	$10,553.88

Roof - Pitched, Metal continued...

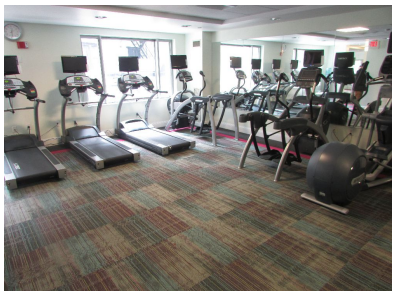
8,160 - sq.ft. of metal pitched roofing	@	$38.00 =	$310,080.00
		Total =	$310,080.00

Roofing - Total Current Cost	**$742,592**
Assigned Reserves	**$313,439**
Fully Funded Reserves	**$475,997**

Fitness Room - Fitness Equipment - 2030

Asset ID	1216	1 Total	@ $38,405.00
		Asset Cost	$38,405.00
		Percent Replacement	100%
	Interior Furnishings	Future Cost	$59,122.73
Placed in Service	January 2018	Assigned Reserves	*none*
Useful Life	12		
Replacement Year	2030	Annual Assessment	$1,901.92
Remaining Life	11	Interest Contribution	$53.25
		Reserve Allocation	$1,955.17





2	- incline trainer w/tv	@ $5,350.00 =	$10,700.00
2	- reflex treadmill w/tv	@ 5,125.00 =	10,250.00
1	- Tour De France	@ 3,495.00 =	3,495.00
2	- LED elliptical	@ 3,790.00 =	7,580.00
2	- LED recumbent	@ 3,190.00 =	6,380.00
		Total =	$38,405.00

Fitness Room - Refurbishment - 2019

Asset ID	1196	1 Total	@ $60,000.00
		Asset Cost	$60,000.00
		Percent Replacement	100%
	Interior Furnishings	Future Cost	$60,000.00
Placed in Service	January 2007	Assigned Reserves	$60,000.00
Useful Life	12		
Replacement Year	2019	Annual Assessment	$2,791.82
Remaining Life	0	Interest Contribution	$78.17
		Reserve Allocation	$2,869.99

Fitness Room - Refurbishment continued...



This line item is for the refurbishment of the fitness room.

Flooring - Carpet - 2019

		1 Total	@ $72,324.00
Asset ID	1158	Asset Cost	$72,324.00
		Percent Replacement	100%
	Interior Furnishings	Future Cost	$72,324.00
Placed in Service	January 2007	Assigned Reserves	$72,324.00
Useful Life	12		
Replacement Year	2019	Annual Assessment	$3,365.26
Remaining Life	0	Interest Contribution	$94.23
		Reserve Allocation	$3,459.48



882 - sq.yds. of carpet	@	$82.00 =	$72,324.00
		Total =	$72,324.00

This measurement includes the replacement of the elevator carpet.

Lighting - Interior - 2030

		1 Total	@ $64,550.00
Asset ID	1180	Asset Cost	$64,550.00
		Percent Replacement	100%
	Interior Furnishings	Future Cost	$99,371.76
Placed in Service	January 2000	Assigned Reserves	*none*
Useful Life	30		
Replacement Year	2030	Annual Assessment	$3,196.69
Remaining Life	11	Interest Contribution	$89.51
		Reserve Allocation	$3,286.20

255	- recessed light fixtures	@	$180.00 =	$45,900.00
38	- EXIT signs	@	225.00 =	8,550.00
16	- ceiling (hanging)	@	225.00 =	3,600.00
1	- chandelier (large)	@	4,000.00 =	4,000.00
1	- chandelier (small)	@	2,500.00 =	2,500.00
			Total =	$64,550.00

Lobby - Renovations - 2019

		1 Total	@ $140,000.00
Asset ID	1209	Asset Cost	$140,000.00
		Percent Replacement	100%
	Interior Furnishings	Future Cost	$140,000.00
Placed in Service	January 2007	Assigned Reserves	$140,000.00
Useful Life	8		
Replacement Year	2019	Annual Assessment	$8,849.33
Remaining Life	0	Interest Contribution	$247.78
		Reserve Allocation	$9,097.11



This line item is for the renovation of the lobby area.

Mailboxes (wall clusters) - 2036

		1 Total	@ $10,000.00
Asset ID	1181	Asset Cost	$10,000.00
		Percent Replacement	100%
	Interior Furnishings	Future Cost	$19,479.00
Placed in Service	January 2016	Assigned Reserves	*none*
Useful Life	20		
Replacement Year	2036	Annual Assessment	$371.24
Remaining Life	17	Interest Contribution	$10.39
		Reserve Allocation	$381.64

Interior Furnishings - Total Current Cost	**$385,279**
Assigned Reserves	**$272,324**
Fully Funded Reserves	**$317,906**

Elevators - Cab Refurbishments (cargo) - 2023

		1 Total	@ $5,000.00
Asset ID	1110	Asset Cost	$5,000.00
		Percent Replacement	100%
	Equipment	Future Cost	$5,849.29
Placed in Service	January 2000	Assigned Reserves	$4,130.43
Useful Life	20		
Adjustment	3	Annual Assessment	$120.88
Replacement Year	2023	Interest Contribution	$119.04
Remaining Life	4	Reserve Allocation	$239.92

1 - cab	@ $5,000.00 =	$5,000.00
	Total =	$5,000.00

This line item is for the refurbishment of the elevator cabs. It would include the cosmetic refurbishment. It does not include any mechanicals.

Elevators - Cab Refurbishments (parking garage) - 2023

		1 Total	@ $4,000.00
Asset ID	1194	Asset Cost	$4,000.00
		Percent Replacement	100%
	Equipment	Future Cost	$4,679.43
Placed in Service	January 2000	Assigned Reserves	$3,304.35
Useful Life	20		
Adjustment	3	Annual Assessment	$96.71
Replacement Year	2023	Interest Contribution	$95.23
Remaining Life	4	Reserve Allocation	$191.94

1 - cab	@ $4,000.00 =	$4,000.00
	Total =	$4,000.00

This line item is for the refurbishment of the elevator cabs. It would include the cosmetic refurbishment. It does not include any mechanicals.

Elevators - Cab Refurbishments (residential) - 2023

		1 Total	@ $24,000.00
Asset ID	1193	Asset Cost	$24,000.00
		Percent Replacement	100%
	Equipment	Future Cost	$28,076.61
Placed in Service	January 2000	Assigned Reserves	$19,826.09
Useful Life	20		
Adjustment	3	Annual Assessment	$580.25
Replacement Year	2023	Interest Contribution	$571.38
Remaining Life	4	Reserve Allocation	$1,151.62

2 - cabs @$12,000.00 = $24,000.00

Total = $24,000.00

This line item is for the refurbishment of the elevator cabs. It would include the cosmetic refurbishment. It does not include any mechanicals.

Elevators - Drives, Elevator #1 - 2047

		1 Total	@ $30,000.00
Asset ID	1015	Asset Cost	$30,000.00
		Percent Replacement	100%
	Equipment	Future Cost	$89,961.10
Placed in Service	January 2017	Assigned Reserves	*none*
Useful Life	30		
Replacement Year	2047	Annual Assessment	$880.42
Remaining Life	28	Interest Contribution	$24.65
		Reserve Allocation	$905.07

Elevators - Drives, Elevator #1 continued...


Elevator #1 has a new Drive is a Yaskawa 91A 460v Q Rise 1000A installed in February, 2017. At the time of replacement of this Drive the cost was $30K. The Allen Bradley Drives are no longer been manufacture for this application.

Elevators - Drives, Elevator #2 - 2036

Asset ID	1211	1 Total	@ $30,000.00
		Asset Cost	$30,000.00
		Percent Replacement	100%
	Equipment	Future Cost	$58,437.01
Placed in Service	January 2006	Assigned Reserves	*none*
Useful Life	30		
Replacement Year	2036	Annual Assessment	$1,113.72
Remaining Life	17	Interest Contribution	$31.18
		Reserve Allocation	$1,144.91



Elevator #2 has an Allen Bradley 1336M Drive replaced in 2006.

Elevators #2 and #3 cost to replace Drives were a 3rd of elevator #1 because, of the Allen Bradley Drive been an exact replacement of the original Drive.

Elevators - Drives, Elevator #2 continued...

Elevators - Drives, Elevator #3 - 2041

Asset ID	1212	1 Total	@ $30,000.00
		Asset Cost	$30,000.00
		Percent Replacement	100%
	Equipment	Future Cost	$71,097.56
Placed in Service	January 2011	Assigned Reserves	*none*
Useful Life	30		
Replacement Year	2041	Annual Assessment	$971.20
Remaining Life	22	Interest Contribution	$27.19
		Reserve Allocation	$998.40

Elevator #3 has an Allen Bradley 1336M Drive replaced in 2011.

Equipment - Air Handler (Unit #1) - 2023

		1 Total	@ $120,000.00
Asset ID	1113	Asset Cost	$120,000.00
		Percent Replacement	100%
	Equipment	Future Cost	$140,383.03
Placed in Service	January 1999	Assigned Reserves	$100,000.00
Useful Life	20		
Adjustment	4	Annual Assessment	$2,806.29
Replacement Year	2023	Interest Contribution	$2,878.58
Remaining Life	4	Reserve Allocation	$5,684.87

1 - air handler	@$80,000.00 =	$80,000.00
1 - removal/install	@40,000.00 =	40,000.00
	Total =	$120,000.00

An air handler, is a device used to condition and circulate air as part of a heating, ventilating, and air-conditioning system. Usually, an air handler is a large metal box containing a blower, heating and/or cooling elements, filter racks or chambers, sound attenuators, and dampers. Air handlers usually connect to ductwork that distributes the conditioned air through the building, and returns it to the AHU. Sometimes AHUs discharge (supply) and admit (return) air directly to and from the space served, without ductwork.

Air handlers typically employ a large squirrel cage blower driven by an induction motor to move the air. The blower may operate at a single speed, offer a variety of pre-set speeds, or be driven by a variable drive so as to allow a wide range of air flow rates. Flow rate may also be controlled by inlet vanes or outlet dampers on the fan.

In large commercial air handling units, multiple blowers may be present, typically placed at the end of the AHU and the beginning of the supply ductwork (therefore also called "supply fans"). They are often augmented by fans in the return air duct ("return fans"), pushing the air into the AHU.

Depending on the location and the application, air handlers may need to provide heating, or cooling, or both to change the supply air temperature.

Large commercial air handling units contain coils that circulate hot water or steam for heating, and chilled water for cooling. The hot water or steam is provided by a central boiler, and the

Equipment - Air Handler (Unit #1) continued...

chilled water is provided by a central chiller.

Air filtration is almost always present in order to provide clean dust-free air to the building occupants.

Humidification is often necessary in colder climates where continuous heating will make the air drier, resulting in uncomfortable air quality and increased static electricity. Various types of humidification may be used: -Evaporative: dry air blown over a reservoir will evaporate some of the water. The rate of evaporation can be increased by spraying the water onto baffles in the air stream.

-Vaporizer: steam or vapour from a boiler is blown directly into the air stream.

-Spray mist: water is diffused either by a nozzle or other mechanical means into fine droplets and carried by the air.

In order to maintain indoor air quality, air handlers commonly have provisions to allow the introduction of outside air into, and the exhausting of air from the building. In temperate climates, mixing the right amount of cooler outside air with warmer return air can be used to approach the desired supply air temperature. A mixing chamber is therefore used which has dampers controlling the ratio between the return, outside, and exhaust air. A heat recovery heat exchanger, of many types, may be fitted to the air handler for energy savings and increasing capacity.

Controls are necessary to regulate every aspect of an air handler, such as: rate of air flow, supply air temperature, mixed air temperature, humidity, air quality.

The blowers in an air handler can create substantial vibration and the large area of the duct system would transmit this noise and vibration to the occupants of the building. To avoid this, vibration isolators (flexible sections) are normally inserted into the duct immediately before and after the air handler and often also between the fan compartment and the rest of the AHU.

The mainteance of the AHU should be done on an 'as-needed' basis. The filters should be replaced as needed. Drive belts should be checked and replaced as needed. The drive bearings should be checked and either greased or replaced as needed.

If the unit is making noise other than air transfer noise when running this is a good indication that something is not working properly. Either a belt is loose or damaged, or a bearing is worn or not properly greased. If the motor is straining that is also an indication that maintenance is needed.

PM maintenance can help prevent major damage to the unit.

Equipment - Air Handler (Unit #2) - 2032

		1 Total	@ $80,000.00
Asset ID	1185	Asset Cost	$80,000.00
		Percent Replacement	100%
	Equipment	Future Cost	$133,205.88
Placed in Service	January 2012	Assigned Reserves	*none*
Useful Life	20		
Replacement Year	2032	Annual Assessment	$3,521.73
Remaining Life	13	Interest Contribution	$98.61
		Reserve Allocation	$3,620.34

1 - air handler	@$55,000.00 =	$55,000.00
1 - removal/install	@ 25,000.00 =	25,000.00
	Total =	$80,000.00

Equipment - Auto Court Safety System - 2033

		1 Total	@ $18,000.00
Asset ID	1186	Asset Cost	$18,000.00
		Percent Replacement	100%
	Equipment	Future Cost	$31,170.18
Placed in Service	January 2013	Assigned Reserves	*none*
Useful Life	20		
Replacement Year	2033	Annual Assessment	$754.08
Remaining Life	14	Interest Contribution	$21.11
		Reserve Allocation	$775.20

Equipment - Auto Court Safety System continued...

This line item is for the replacement of the alarm system for cars leaving the courtyard drive area.

Equipment - Back-Up Generator - 2040

		1 Total	@ $160,000.00
Asset ID	1114	Asset Cost	$160,000.00
		Percent Replacement	100%
	Equipment	Future Cost	$364,602.89
Placed in Service	January 2000	Assigned Reserves	*none*
Useful Life	40		
Replacement Year	2040	Annual Assessment	$5,297.43
Remaining Life	21	Interest Contribution	$148.33
		Reserve Allocation	$5,445.76

1	- generator	@$140,000.00 =	$140,000.00
1	- removal/install	@ 20,000.00 =	20,000.00
		Total =	$160,000.00

The back up generator is on a start up/maintenance program. The back up generator will run for a short period of time in order to keep the moving parts well lubed. This start up maintenance will also indicate any other issues or needed PM servcing to the back up generator.

The back up generator should be on a maintenance program that addresses the replacement of the filters (fuel and oil), belts, filter, and plugs as-needed.

Equipment - Booster Pump System - 2020

		1 Total	@ $65,000.00
Asset ID	1187	Asset Cost	$65,000.00
		Percent Replacement	100%
	Equipment	Future Cost	$67,600.00
Placed in Service	January 2000	Assigned Reserves	$61,750.00
Useful Life	20		
Replacement Year	2020	Annual Assessment	$1,680.56
Remaining Life	1	Interest Contribution	$1,776.06
		Reserve Allocation	$3,456.61

This booster pumps system raises the water pressure in order to properly deliver water to all of the units throughout the bldg.

Equipment - Car Lifts, Schedule #1 - 2028

		1 Total	@ $312,000.00
Asset ID	1188	Asset Cost	$312,000.00
		Percent Replacement	100%
	Equipment	Future Cost	$444,073.29
Placed in Service	January 2000	Assigned Reserves	*none*
Useful Life	30		
Adjustment	-2	Annual Assessment	$17,971.60
Replacement Year	2028	Interest Contribution	$503.20
Remaining Life	9	Reserve Allocation	$18,474.81

Equipment - Car Lifts, Schedule #1 continued...

24 - car lifts @$13,000.00 = $312,000.00
Total = $312,000.00

Equipment - Car Lifts, Schedule #2 - 2031

		1 Total	@ $312,000.00
Asset ID	1189	Asset Cost	$312,000.00
		Percent Replacement	100%
	Equipment	Future Cost	$499,522.05
Placed in Service	January 2000	Assigned Reserves	*none*
Useful Life	30		
Adjustment	1	Annual Assessment	$14,517.45
Replacement Year	2031	Interest Contribution	$406.49
Remaining Life	12	Reserve Allocation	$14,923.94

24 - car lifts @$13,000.00 = $312,000.00
Total = $312,000.00

Equipment - Chiller Auxiliary - 2037

		1 Total	@ $140,000.00
Asset ID	1190	Asset Cost	$140,000.00
		Percent Replacement	100%
	Equipment	Future Cost	$283,614.31
Placed in Service	January 2012	Assigned Reserves	*none*
Useful Life	25		
Replacement Year	2037	Annual Assessment	$5,029.40
Remaining Life	18	Interest Contribution	$140.82
		Reserve Allocation	$5,170.23

Equipment - Chiller Auxiliary continued...

1 - chiller (parking garage location)	@$140,000.00 =	$140,000.00
	Total =	$140,000.00

Equipment - Chillers (tube) - 2029

		1 Total	@ $840,000.00
Asset ID	1191	Asset Cost	$840,000.00
		Percent Replacement	100%
	Equipment	Future Cost	$1,243,405.20
Placed in Service	January 2003	Assigned Reserves	*none*
Useful Life	25		
Adjustment	1	Annual Assessment	$44,640.49
Replacement Year	2029	Interest Contribution	$1,249.93
Remaining Life	10	Reserve Allocation	$45,890.42

2 - chillers	@$380,000.00 =	$760,000.00
2 - removal/install	@ 40,000.00 =	80,000.00
	Total =	$840,000.00

A chiller is a machine that removes heat from a liquid via a vapor compression or absorption refrigeration cycle. This liquid can then be circulated through a heat exchanger to cool equipment, or another process stream (such as air or process water). As a necessary by product,

Equipment - Chillers (tube) continued...

refrigeration creates waste heat that must be exhausted to ambience, or for greater efficiency, recovered for heating purposes.

Chilled water is used to cool and dehumidify air in mid- to large-size bldgs./facilities.

Equipment - Cooling Tower, Replacement - 2019

		1 Tower	@ $300,000.00
Asset ID	1192	Asset Cost	$300,000.00
		Percent Replacement	100%
	Equipment	Future Cost	$300,000.00
Placed in Service	January 2003	Assigned Reserves	$300,000.00
Useful Life	20		
Adjustment	-4	Annual Assessment	$10,180.80
Replacement Year	2019	Interest Contribution	$285.06
Remaining Life	0	Reserve Allocation	$10,465.86

1 - cooling tower	@$200,000.00 =	$200,000.00
1 - removal/install	@100,000.00 =	100,000.00
	Total =	$300,000.00

Cooling towers are heat rejection devices used to transfer process waste heat to the atmosphere. Cooling towers may either use the evaporation of water to reject process heat and cool the working fluid to near the wet-bulb air temperature or rely solely on air to cool the working fluid to near the dry-bulb air temperature. Common applications include cooling the circulating water used in oil refineries, chemical plants, power plants and building cooling. The towers vary in size from small roof-top units to very large hyperboloid structures that can be up to 200 metres tall and 100 metres in diameter, or rectangular structures that can be over 40 metres tall and 80 metres long. Smaller towers are normally factory-built, while larger ones are constructed on site.

Cooling towers can generally be classified by use into either HVAC (air-conditioning) or industrial duty.

An HVAC cooling tower is a subcategory rejecting heat from a chiller. Water-cooled chillers are normally more energy efficient than air-cooled chillers due to heat rejection to tower water

Equipment - Cooling Tower, Replacement continued...

at near wet-bulb temperatures. Air-cooled chillers must reject heat to the dry-bulb temperature, and thus have a lower average reverse-Carnot cycle effectiveness. Large office buildings, hospitals, schools typically use one or more cooling towers as part of their air conditioning systems. Generally, industrial cooling towers are much larger than HVAC towers.

HVAC use of a cooling tower pairs the cooling tower with a water-cooled chiller or water-cooled condenser.

Typical methods to circumvent freezing are: air flow through the tower is reduced, a basin heater is installed, a heater is installed indoors on the water loop, a drain system or remote basin design is used, and in some cases where evaporative closed loop towers are used the tower spray water is drained completely.

Cooling towers with malfunctions can freeze during very cold weather. Typically, freezing starts at the corners of a cooling tower with a reduced or absent heat load. Increased freezing conditions can create growing volumes of ice, resulting in increased structural loads. During the winter, some sites continuously operate cooling towers with 40 °F water leaving the tower. Basin heaters, tower draindown, and other freeze protection methods are often employed in cold climates.

The estimated costs used for the future replacement includes the removal of the old unit and installation of the new unit.

Equipment - Exhaust Fan Sensors - 2025

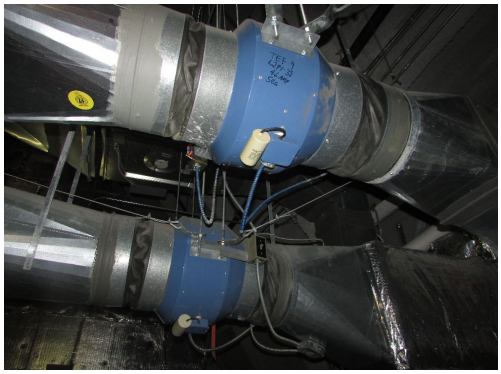
		1 Total	@ $21,000.00
Asset ID	1195	Asset Cost	$21,000.00
		Percent Replacement	100%
	Equipment	Future Cost	$26,571.70
Placed in Service	January 2013	Assigned Reserves	$10,500.00
Useful Life	12		
Replacement Year	2025	Annual Assessment	$898.45
Remaining Life	6	Interest Contribution	$319.16
		Reserve Allocation	$1,217.61

Equipment - Exhaust Fan Sensors continued...

42 - exhaust fan sensors	@	$500.00 =	$21,000.00
		Total =	$21,000.00

Equipment - Exhaust Fans, Original - 2023

		1 Total	@ $33,000.00
Asset ID	1173	Asset Cost	$33,000.00
		Percent Replacement	100%
	Equipment	Future Cost	$38,605.33
Placed in Service	January 2000	Assigned Reserves	$27,260.87
Useful Life	20		
Adjustment	3	Annual Assessment	$797.84
Replacement Year	2023	Interest Contribution	$785.64
Remaining Life	4	Reserve Allocation	$1,583.48



33 - exhaust fans	@	$1,000.00 =	$33,000.00
		Total =	$33,000.00

Equipment - Exhaust Fans, Replaced - 2037

		1 Total	@ $9,000.00
Asset ID	1203	Asset Cost	$9,000.00
		Percent Replacement	100%
	Equipment	Future Cost	$18,232.35
Placed in Service	January 2017	Assigned Reserves	*none*
Useful Life	20		
Replacement Year	2037	Annual Assessment	$323.32
Remaining Life	18	Interest Contribution	$9.05
		Reserve Allocation	$332.37

9 - exhaust fans	@ $1,000.00 =	$9,000.00
	Total =	$9,000.00

Equipment - Fire Control Panel, Replacements - 2020

		1 Total	@ $195,000.00
Asset ID	1016	Asset Cost	$195,000.00
		Percent Replacement	100%
	Equipment	Future Cost	$202,800.00
Placed in Service	January 2000	Assigned Reserves	$185,250.00
Useful Life	20		
Replacement Year	2020	Annual Assessment	$5,041.67
Remaining Life	1	Interest Contribution	$5,328.17
		Reserve Allocation	$10,369.84

The estimated cost is for the replacement of the main fire control panel, sub-panels, and software upgrade only. The estimated cost does not include any other part of the fire control system (pull stations, smoke detectors, emergency lights, valves, pumps, motors).

Fire control systems must always be kept in a good state of repair/working.

Testing is required. Any system failures would need to be addressed immediately.

Equipment - Fire Control Panel, Replacements continued...

The fire control panels are testing along with the rest of the system. Any failure in the fire control panel will require immediate repair and/or replacement.

Equipment - HVAC (split system), Elevator Room - 2020

		1 Total	@ $21,000.00
Asset ID	1201	Asset Cost	$21,000.00
		Percent Replacement	100%
	Equipment	Future Cost	$21,840.00
Placed in Service	January 2000	Assigned Reserves	$19,950.00
Useful Life	20		
Replacement Year	2020	Annual Assessment	$542.95
Remaining Life	1	Interest Contribution	$573.80
		Reserve Allocation	$1,116.75

1 - HVAC split system	@$16,000.00 =	$16,000.00
1 - removal/install	@ 5,000.00 =	5,000.00
	Total =	$21,000.00

Equipment - Pump Motors (P2) - 2019

		1 Total	@ $9,600.00
Asset ID	1215	Asset Cost	$9,600.00
		Percent Replacement	100%
	Equipment	Future Cost	$9,600.00
Placed in Service	January 2000	Assigned Reserves	$9,600.00
Useful Life	5		
Replacement Year	2019	Annual Assessment	$900.74
Remaining Life	0	Interest Contribution	$25.22
		Reserve Allocation	$925.96

2 - 5hp pump motor (ground water run off) @ $4,800.00 = $9,600.00

Equipment - Pump Motors (P2) continued...

Total = $9,600.00

Equipment - Pump Motors (P3) - 2019

Asset ID	1214	1 Total	@ $4,800.00
		Asset Cost	$4,800.00
		Percent Replacement	100%
	Equipment	Future Cost	$4,800.00
Placed in Service	January 2000	Assigned Reserves	$4,800.00
Useful Life	5		
Replacement Year	2019	Annual Assessment	$450.37
Remaining Life	0	Interest Contribution	$12.61
		Reserve Allocation	$462.98

1 - 5hp pump motor (ground water run off) @ $4,800.00 = $4,800.00

Total = $4,800.00

Equipment - Pump Motors, 2016 - 2024

Asset ID	1202	1 Total	@ $170,500.00
		Asset Cost	$170,500.00
		Percent Replacement	100%
	Equipment	Future Cost	$207,439.32
Placed in Service	January 2016	Assigned Reserves	$63,937.50
Useful Life	8		
Replacement Year	2024	Annual Assessment	$10,336.69
Remaining Life	5	Interest Contribution	$2,079.68
		Reserve Allocation	$12,416.37

1	- 60hp pump motor (WEG)	@	30,500.00 =	30,500.00
2	- 60hp pump motors (chill water lines)	@	30,500.00 =	61,000.00
2	- 40hp pump motors (condenser water lines)	@	21,000.00 =	42,000.00
2	- 25hp pump motors (heating lines	@	18,500.00 =	37,000.00
			Total =	$170,500.00

Equipment - Pump Motors, 2016 (P3) - 2021

		1 Total	@ $4,800.00
Asset ID	1213	Asset Cost	$4,800.00
		Percent Replacement	100%
	Equipment	Future Cost	$5,191.68
Placed in Service	January 2016	Assigned Reserves	$2,880.00
Useful Life	5		
Replacement Year	2021	Annual Assessment	$431.96
Remaining Life	2	Interest Contribution	$92.73
		Reserve Allocation	$524.70

1 - 5hp pump motor (ground water run off) @ $4,800.00 = $4,800.00

Total = $4,800.00

Equipment - Security System (Fob) - 2029

		1 Total	@ $33,714.00
Asset ID	1198	Asset Cost	$33,714.00
		Percent Replacement	100%
	Equipment	Future Cost	$49,904.96
Placed in Service	January 2017	Assigned Reserves	*none*
Useful Life	12		
Replacement Year	2029	Annual Assessment	$1,791.68
Remaining Life	10	Interest Contribution	$50.17
		Reserve Allocation	$1,841.84

Equipment - Security System (Intercom) - 2029

		1 Total	@ $9,022.00
Asset ID	1207	Asset Cost	$9,022.00
		Percent Replacement	100%
	Equipment	Future Cost	$13,354.76
Placed in Service	January 2017	Assigned Reserves	*none*
Useful Life	12		
Replacement Year	2029	Annual Assessment	$479.46
Remaining Life	10	Interest Contribution	$13.42
		Reserve Allocation	$492.88

Equipment - Security System (Video/Cameras) - 2029

		1 Total	@ $28,699.00
Asset ID	1206	Asset Cost	$28,699.00
		Percent Replacement	100%
	Equipment	Future Cost	$42,481.53
Placed in Service	January 2017	Assigned Reserves	*none*
Useful Life	12		
Replacement Year	2029	Annual Assessment	$1,525.16
Remaining Life	10	Interest Contribution	$42.70
		Reserve Allocation	$1,567.87

Equipment - Telephone System - 2025

		1 Total	@ $10,000.00
Asset ID	1199	Asset Cost	$10,000.00
		Percent Replacement	100%
	Equipment	Future Cost	$12,653.19
Placed in Service	January 2013	Assigned Reserves	$5,000.00
Useful Life	12		
Replacement Year	2025	Annual Assessment	$427.83
Remaining Life	6	Interest Contribution	$151.98
		Reserve Allocation	$579.81

Equipment - Whalen Units, Common Area - 2020

		1 Total	@ $40,000.00
Asset ID	1200	Asset Cost	$40,000.00
		Percent Replacement	100%
	Equipment	Future Cost	$41,600.00
Placed in Service	January 2000	Assigned Reserves	$38,000.00
Useful Life	20		
Replacement Year	2020	Annual Assessment	$1,034.19
Remaining Life	1	Interest Contribution	$1,092.96
		Reserve Allocation	$2,127.15

Equipment - Whalen Units, Common Area continued...

Equipment - Total Current Cost	**$3,060,135**
Assigned Reserves	**$856,189**
Fully Funded Reserves	**$1,960,458**

Exterior - Caulking - 2019

		1 Total	@ $100,000.00
Asset ID	1167	Asset Cost	$100,000.00
		Percent Replacement	100%
	Building Components	Future Cost	$100,000.00
Placed in Service	January 2000	Assigned Reserves	$100,000.00
Useful Life	10		
Replacement Year	2019	Annual Assessment	$5,314.34
Remaining Life	0	Interest Contribution	$148.80
		Reserve Allocation	$5,463.15

This line item is for exterior caulking. Properly applied caulking keeps window, doors, sliding glass doors, building joints, and transition areas air/water tight. Typically, exterior caulking will last 6-10yrs depending on the quality of the caulking.

The caulking replacement is set up based on a dollar amount to address caulking of windows, doors, sliding glass doors, building joints, and transition areas. The Useful Life cycle has been set at 8yrs.

The old caulking must be completely removed from the joint/area to be re-caulked. The area also needs to be cleaned of all debris/dirt in order for the new caulking to seal completely and correctly. Never use water to clean the areas, always use pressured air to clean out any area to be caulked.

Exterior caulking of joints, transition areas, window frames, door frames, and roof top protrusions is meant to keep the building both air and water tight in these areas. Caulking should be done on an 'as-needed' basis as well as a scheduled replacement in order to prevent failures that could lead to leaking issues that cause damage to the buildings components.

Exterior - Concrete Repairs & Replacements - 2029

		1 Total	@ $300,000.00
Asset ID	1182	Asset Cost	$300,000.00
		Percent Replacement	100%
	Building Components	Future Cost	$444,073.29
Placed in Service	January 2000	Assigned Reserves	*none*
Useful Life	10		
Adjustment	19	Annual Assessment	$15,943.03
Replacement Year	2029	Interest Contribution	$446.40
Remaining Life	10	Reserve Allocation	$16,389.44

This line item is set up to help address any unforeseen issues with the concrete exterior. Needed maintenance (repairs and/or area replacements) should be minimal for the first 20-30yrs.

The useful life has been set at 10yrs with a 19yr remaining life adjustment in order to give the first cycle a 29yr total useful life. After the first cycle the useful life cycle will be 10yrs total.

The concrete repairs & replacements have been set up to take place in conjunction with the exterior caulking.

The set dollar amount is an estimate based on a small percent of the entire concrete exterior needing repairs and/or area replacements.

Garage Door - Loading Dock - 2031

		1 Total	@ $14,000.00
Asset ID	1183	Asset Cost	$14,000.00
		Percent Replacement	100%
	Building Components	Future Cost	$22,414.45
Placed in Service	January 2016	Assigned Reserves	*none*
Useful Life	15		
Replacement Year	2031	Annual Assessment	$651.42
Remaining Life	12	Interest Contribution	$18.24
		Reserve Allocation	$669.66

Rountine PM - make sure the doors move up and down freely. The tracks are balanced and not damaged. The motor is clean and clear of debris and build up that could cause it to run hot. Make sure the drive chain is not worn out, well lubricated, no kinks and track properly.

Garage Door - Underground Parking - 2032

		1 Total	@ $20,000.00
Asset ID	1089	Asset Cost	$20,000.00
		Percent Replacement	100%
	Building Components	Future Cost	$33,301.47
Placed in Service	January 2017	Assigned Reserves	*none*
Useful Life	15		
Replacement Year	2032	Annual Assessment	$880.43
Remaining Life	13	Interest Contribution	$24.65
		Reserve Allocation	$905.08

Rou tine PM - make sure the doors move up and down freely. The tracks are balanced and not damaged. The motor is clean and clear of debris and build up that could cause it to run hot. Make sure the drive chain is not worn out, well lubricated, no kinks and track properly.

Lighting - Exterior - 2046

		1 Total	@ $10,200.00
Asset ID	1184	Asset Cost	$10,200.00
		Percent Replacement	100%
	Building Components	Future Cost	$29,410.36
Placed in Service	January 2016	Assigned Reserves	*none*
Useful Life	30		
Replacement Year	2046	Annual Assessment	$303.16
Remaining Life	27	Interest Contribution	$8.49
		Reserve Allocation	$311.65

12	- wall light fixtures	@ $400.00 =	$4,800.00
30	- recessed light fixtures	@ 180.00 =	5,400.00
		Total =	$10,200.00

Lighting - Exterior, Roof - 2019

		1 Total	@ $33,996.00
Asset ID	1217	Asset Cost	$33,996.00
		Percent Replacement	100%
	Building Components	Future Cost	$33,996.00
Placed in Service	January 2000	Assigned Reserves	$33,996.00
Useful Life	20		
Adjustment	-2	Annual Assessment	$1,153.69
Replacement Year	2019	Interest Contribution	$32.30
Remaining Life	0	Reserve Allocation	$1,185.99

Lighting - Exterior, Roof continued...

12 - LED (change colors)	@ $2,833.00 =	$33,996.00
	Total =	$33,996.00

Building Components - Total Current Cost	**$478,196**
Assigned Reserves	**$133,996**
Fully Funded Reserves	**$337,034**

Grounds - Block Wall, Repairs & Replacements - 2030

		1 Total	@ $68,160.00
Asset ID	1178	Asset Cost	$13,632.00
		Percent Replacement	20%
	Grounds Components	Future Cost	$20,985.84
Placed in Service	January 2000	Assigned Reserves	*none*
Useful Life	10		
Adjustment	20	Annual Assessment	$675.09
Replacement Year	2030	Interest Contribution	$18.90
Remaining Life	11	Reserve Allocation	$694.00



2,840 - sq.ft. of pavers	@	$24.00 =	$68,160.00
		Total =	$68,160.00

Grounds - Garden Lights - 2020

		1 Total	@ $17,000.00
Asset ID	1210	Asset Cost	$17,000.00
		Percent Replacement	100%
	Grounds Components	Future Cost	$17,680.00
Placed in Service	January 2000	Assigned Reserves	$16,150.00
Useful Life	20		
Replacement Year	2020	Annual Assessment	$439.53
Remaining Life	1	Interest Contribution	$464.51
		Reserve Allocation	$904.04

Grounds - Garden Lights continued...

Grounds - Parking Area/Walkway Pavers - 2030

		1 Total	@ $81,840.00
Asset ID	1177	Asset Cost	$16,368.00
		Percent Replacement	20%
	Grounds Components	Future Cost	$25,197.78
Placed in Service	January 2000	Assigned Reserves	*none*
Useful Life	10		
Adjustment	20	Annual Assessment	$810.59
Replacement Year	2030	Interest Contribution	$22.70
Remaining Life	11	Reserve Allocation	$833.28

3,410 - sq.ft. of pavers	@	$24.00 =	$81,840.00
		Total =	$81,840.00

Grounds Components - Total Current Cost	**$47,000**
Assigned Reserves	**$16,150**
Fully Funded Reserves	**$35,150**

Comments

		1 Comment	
Asset ID	1170	Asset Cost	
		Percent Replacement	100%
	Comment	Future Cost	
Placed in Service	January 2018	Assigned Reserves	*none*
Useful Life	100		
Replacement Year	2118	Annual Assessment	No Assessment
Remaining Life	99	Interest Contribution	$0.00
		Reserve Allocation	

Windows & Doors - The common area windows and doors should be replaced and/or repaired on an 'as-needed' basis.

Concrete - Typically, budgeting for concrete repairs and/or replacements as a reserve component is excluded as it is anticipated that any repairs and/or replacements will be addressed immediately to avoid further damage and for safety concerns. Good maintenance would not allow the needs for repairs to accumulate to a point that the repairs would become a major expense. Minor repairs and/or area replacements, as needed, should be addressed immediately as a maintenance issue using the client's annual operational budget and/or reserve fund contingency funds.

Infrastructure Systems (Electrical, Water, and Sewer) - Typically, budgeting for the complete replacement of an infrastructure system throughout a building is excluded. It is anticipated that any needed repairs and/or replacements would be made on an 'as-needed' basis.

It is impossible to predict the Remaining Life of an infrastrcuture system in part or in whole. Most of the infrastructure systems are enclosed within the walls, ceilings, and floors of the building(s). The infrastructure systems are built and esigned to last the legal life of the Bldg. (75-100yrs.).

Most issues that require repairs and/or replacements are due to unforeseen issues, component defects, construction defects, and improper installation.

Granite Flooring - Typically, budgeting for granite repairs and/or replacements as a reserve component is excluded as it is anticipated that any repairs and/or replacements will be addressed immediately to avoid further damage and for safety concerns. Good maintenance would not allow the needs for repairs to accumulate to a point that the repairs would become a major expense. Minor repairs and/or area replacements, as needed, should be addressed immediately as a maintenance issue using the client's annual operational budget and/or reserve fund contingency funds.

Drop Ceiling Panels: It is estimated that panels will be replaced on an 'as-needed' based on damaged panels. The drop ceiling system (all panels/metal grid) will most likely never need to be completely replaced all at once. Funding for panel replacement should come from an annual maintenance operational line item.

Comment - Total Current Cost	**$0**
Assigned Reserves	**$0**
Fully Funded Reserves	**$0**

Detail Report Summary

Total of All Assets

Assigned Reserves	$1,592,098.35
Annual Contribution	$203,296.20
Annual Interest	$30,090.88
Annual Allocation	$233,387.08

Contingency at 5.00%

Assigned Reserves	$83,794.65
Annual Contribution	$10,699.80
Annual Interest	$1,583.73
Annual Allocation	$12,283.53

Grand Total

Assigned Reserves	$1,675,893.00
Annual Contribution	$213,996.00
Annual Interest	$31,674.62
Annual Allocation	$245,670.61

High Rise Sample II
MCA Category Detail Index

Asset ID	Description	Replacement	Page
1170	Comments	Unfunded	2-48
1110	Elevators - Cab Refurbishments (cargo)	2023	2-21
1194	Elevators - Cab Refurbishments (parking garage)	2023	2-21
1193	Elevators - Cab Refurbishments (residential)	2023	2-22
1015	Elevators - Drives, Elevator #1	2047	2-22
1211	Elevators - Drives, Elevator #2	2036	2-23
1212	Elevators - Drives, Elevator #3	2041	2-24
1113	Equipment - Air Handler (Unit #1)	2023	2-25
1185	Equipment - Air Handler (Unit #2)	2032	2-27
1186	Equipment - Auto Court Safety System	2033	2-27
1114	Equipment - Back-Up Generator	2040	2-28
1187	Equipment - Booster Pump System	2020	2-29
1188	Equipment - Car Lifts, Schedule #1	2028	2-29
1189	Equipment - Car Lifts, Schedule #2	2031	2-30
1190	Equipment - Chiller Auxiliary	2037	2-30
1191	Equipment - Chillers (tube)	2029	2-31
1192	Equipment - Cooling Tower, Replacement	2019	2-32
1195	Equipment - Exhaust Fan Sensors	2025	2-33
1173	Equipment - Exhaust Fans, Original	2023	2-34
1203	Equipment - Exhaust Fans, Replaced	2037	2-35
1016	Equipment - Fire Control Panel, Replacements	2020	2-35
1201	Equipment - HVAC (split system), Elevator Room	2020	2-36
1215	Equipment - Pump Motors (P2)	2019	2-36
1214	Equipment - Pump Motors (P3)	2019	2-37
1202	Equipment - Pump Motors, 2016	2024	2-37
1213	Equipment - Pump Motors, 2016 (P3)	2021	2-38
1198	Equipment - Security System (Fob)	2029	2-38
1207	Equipment - Security System (Intercom)	2029	2-38
1206	Equipment - Security System (Video/Cameras)	2029	2-39
1199	Equipment - Telephone System	2025	2-39
1200	Equipment - Whalen Units, Common Area	2020	2-39
1167	Exterior - Caulking	2019	2-41
1182	Exterior - Concrete Repairs & Replacements	2029	2-42
1216	Fitness Room - Fitness Equipment	2030	2-17
1196	Fitness Room - Refurbishment	2019	2-17
1158	Flooring - Carpet	2019	2-18
1183	Garage Door - Loading Dock	2031	2-43
1089	Garage Door - Underground Parking	2032	2-43

High Rise Sample II
MCA Category Detail Index

Asset ID	Description	Replacement	Page
1178	Grounds - Block Wall, Repairs & Replacements	2030	2-46
1210	Grounds - Garden Lights	2020	2-46
1177	Grounds - Parking Area/Walkway Pavers	2030	2-47
1184	Lighting - Exterior	2046	2-44
1217	Lighting - Exterior, Roof	2019	2-44
1180	Lighting - Interior	2030	2-19
1209	Lobby - Renovations	2019	2-19
1181	Mailboxes (wall clusters)	2036	2-20
1179	Roof - Flat, Rubber Membrane	2025	2-14
1054	Roof - Pitched, Metal	2040	2-15

Total Funded Assets	47
Total Unfunded Assets	1
Total Assets	48

High Rise Sample II
MCA Asset Summary Report

Description	Asset ID	Date In Service	Current Cost	Useful Life	Adjustment	Remaining	Future Cost	Quantity	Unit Cost
Roofing									
Roof - Flat, Rubber Membrane	1179	2025	432,512	20	5	6	547,266	1 @	432,512.00
Roof - Pitched, Metal	1054	2040	310,080	40	0	21	706,600	1 @	310,080.00
Interior Furnishings									
Fitness Room - Fitness Equipment	1216	2030	38,405	12	0	11	59,123	1 @	38,405.00
Fitness Room - Refurbishment	1196	2019	60,000	12	0	0	60,000	1 @	60,000.00
Flooring - Carpet	1158	2019	72,324	12	0	0	72,324	1 @	72,324.00
Lighting - Interior	1180	2030	64,550	30	0	11	99,372	1 @	64,550.00
Lobby - Renovations	1209	2019	140,000	8	0	0	140,000	1 @	140,000.00
Mailboxes (wall clusters)	1181	2036	10,000	20	0	17	19,479	1 @	10,000.00
Equipment									
Elevators - Cab Refurbishments (car..	1110	2023	5,000	20	3	4	5,849	1 @	5,000.00
Elevators - Cab Refurbishments (par..	1194	2023	4,000	20	3	4	4,679	1 @	4,000.00
Elevators - Cab Refurbishments (resi..	1193	2023	24,000	20	3	4	28,077	1 @	24,000.00
Elevators - Drives, Elevator #1	1015	2047	30,000	30	0	28	89,961	1 @	30,000.00
Elevators - Drives, Elevator #2	1211	2036	30,000	30	0	17	58,437	1 @	30,000.00
Elevators - Drives, Elevator #3	1212	2041	30,000	30	0	22	71,098	1 @	30,000.00
Equipment - Air Handler (Unit #1)	1113	2023	120,000	20	4	4	140,383	1 @	120,000.00
Equipment - Air Handler (Unit #2)	1185	2032	80,000	20	0	13	133,206	1 @	80,000.00
Equipment - Auto Court Safety Syste..	1186	2033	18,000	20	0	14	31,170	1 @	18,000.00
Equipment - Back-Up Generator	1114	2040	160,000	40	0	21	364,603	1 @	160,000.00
Equipment - Booster Pump System	1187	2020	65,000	20	0	1	67,600	1 @	65,000.00
Equipment - Car Lifts, Schedule #1	1188	2028	312,000	30	-2	9	444,073	1 @	312,000.00
Equipment - Car Lifts, Schedule #2	1189	2031	312,000	30	1	12	499,522	1 @	312,000.00
Equipment - Chiller Auxiliary	1190	2037	140,000	25	0	18	283,614	1 @	140,000.00
Equipment - Chillers (tube)	1191	2029	840,000	25	1	10	1,243,405	1 @	840,000.00
Equipment - Cooling Tower, Replace..	1192	2019	300,000	20	-4	0	300,000	1 @	300,000.00
Equipment - Exhaust Fan Sensors	1195	2025	21,000	12	0	6	26,572	1 @	21,000.00
Equipment - Exhaust Fans, Original	1173	2023	33,000	20	3	4	38,605	1 @	33,000.00
Equipment - Exhaust Fans, Replaced	1203	2037	9,000	20	0	18	18,232	1 @	9,000.00
Equipment - Fire Control Panel, Rep..	1016	2020	195,000	20	0	1	202,800	1 @	195,000.00
Equipment - HVAC (split system), El..	1201	2020	21,000	20	0	1	21,840	1 @	21,000.00
Equipment - Pump Motors (P2)	1215	2019	9,600	5	0	0	9,600	1 @	9,600.00
Equipment - Pump Motors (P3)	1214	2019	4,800	5	0	0	4,800	1 @	4,800.00
Equipment - Pump Motors, 2016	1202	2024	170,500	8	0	5	207,439	1 @	170,500.00
Equipment - Pump Motors, 2016 (P3)	1213	2021	4,800	5	0	2	5,192	1 @	4,800.00
Equipment - Security System (Fob)	1198	2029	33,714	12	0	10	49,905	1 @	33,714.00
Equipment - Security System (Interc..	1207	2029	9,022	12	0	10	13,355	1 @	9,022.00
Equipment - Security System (Video/..	1206	2029	28,699	12	0	10	42,482	1 @	28,699.00
Equipment - Telephone System	1199	2025	10,000	12	0	6	12,653	1 @	10,000.00
Equipment - Whalen Units, Common..	1200	2020	40,000	20	0	1	41,600	1 @	40,000.00
Building Components									
Exterior - Caulking	1167	2019	100,000	10	0	0	100,000	1 @	100,000.00

High Rise Sample II
MCA Asset Summary Report

Description	Asset ID	Date In Service	Current Cost	Useful Life	Adjustment	Remaining	Future Cost	Quantity	Unit Cost
Building Components continued...									
Exterior - Concrete Repairs & Repla..	1182	2029	300,000	10	19	10	444,073	1 @	300,000.00
Garage Door - Loading Dock	1183	2031	14,000	15	0	12	22,414	1 @	14,000.00
Garage Door - Underground Parking	1089	2032	20,000	15	0	13	33,301	1 @	20,000.00
Lighting - Exterior	1184	2046	10,200	30	0	27	29,410	1 @	10,200.00
Lighting - Exterior, Roof	1217	2019	33,996	20	-2	0	33,996	1 @	33,996.00
Grounds Components									
Grounds - Block Wall, Repairs & Re..	1178	2030	13,632	10	20	11	20,986	1 @	68,160.00
Grounds - Garden Lights	1210	2020	17,000	20	0	1	17,680	1 @	17,000.00
Grounds - Parking Area/Walkway P..	1177	2030	16,368	10	20	11	25,198	1 @	81,840.00
Comment									
Comments	*1170*	*Unfunded*							