LEVEL 1

RESERVE STUDY

FOR

HARRISON WEST CONDOMINIUMS OWNERS ASSOCIATION

(Current Assessment Funding Model)

January 1, 2009 - December 31, 2009

Prepared By: _____

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Quality Check By: _____

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Date: **December 10, 2008**

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CAI-RS
DESIGNATION
NO. 117
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Harrison West Condominiums

PART I • RESERVE STUDY

Disclosures

This reserve study should be reviewed carefully. It may or may not include all common and limited common element components which will require major maintenance, repair, or replacement in future years, and may not include regular contributions to a reserve account for the cost of such maintenance, repair, or replacement.

Funding for repair and replacement of certain components may be discretionary and in some cases the Board of Directors may choose not to include replacement reserve funding for such components. Components which do not have a readily determined useful life and/or a remaining useful life of 30 years or less may not be included in the reserve study component inventory.

The failure to include a component in a reserve study, or to provide contributions to a reserve account for a component, may, under some circumstances, require you to pay, on demand, as a special assessment, your share of common expenses for the cost of major maintenance, repair, or replacement of a reserve component.

Professional Disclosures-

The authors of this reserve study have no other involvement with the Harrison West Condominiums Owners Association other than to prepare or update this reserve study, maintenance plan or operating budget.

Carson M. Horton, RS, the person responsible for the development of this reserve study is a Community Associations Institute (CAI) certified Reserve Specialist (RS), recognized for expertise in the preparation and analysis of reserve funding plans.

No invasive or destructive testing has been employed in the investigative phase of this study and no environmental assessment of any kind was performed. This reserve study is not intended to address or discover construction defects and no representation is made herein that is meant to imply any such warranty.

Information regarding the useful life expectancy of common area components was obtained primarily from Life Cycle Costing for Facilities - (Reed Construction Data); the 2007 Study of Life Expectancy of Home Components - (NAHB & Bank of America); and the Condition Assessment Report prepared by Architectural Investigative Reports & Opinions (AIRO) and dated September 17, 2008. The AIRO report is a primary reference source for information relating to the useful life, remaining life and condition of common area components which are the subject of this reserve study.

Information regarding Association financial parameters has been provided by representatives of the Association, and is assumed to be accurate for the purposes of this report. The reserve study is a reflection of information provided to us by third parties and cannot be used for the purpose of performing an audit, forensic analysis or verification of historical records.

Information regarding the reserve fund beginning balance has been obtained from Association representatives. The information is deemed reliable, but is not based on an audit of the Association's financial condition and should not be used for purposes other than those intended in this study.

This reserve study was prepared in accordance with nationally recognized guidelines for the preparation of a reserve study as published by the Community Associations Institute (CAI) and the American

Institute of Certified Public Accountants (AICPA).

Oregon law requires the Association to prepare a reserve study and for the study to be updated annually. The annual update may or may not include a physical inspection of the property.

Executive Summary

Introduction

This reserve study is a Level 1 study as defined by the Community Associations Institute reserve study guidelines. The study is an analysis of the general and limited common elements which are the responsibility of the Harrison West Condominiums Owners Association (Association) to maintain, repair and replace, according to the Association's governing documents or as may be required by state law.

The reserve study utilizes information obtained from the following sources:

- Building Construction Cost Data, Western Edition - 2008 (RS Means)
- The National Construction Estimator Costbooks - 2008
- Bowen Property Management
- Life Cycle Costing for Facilities - (Reed Construction Publishers)
- Study of Life Expectancy of Home Components - 2007 (NAHB)
- The Condition Assessment Report prepared by Architectural Investigative Reports & Opinions, dated September 17, 2008
- The Harrison West Condominiums Owners Association
- Local area vendors and service providers

The time period covered in this reserve study is 30 years. Components included in the study are required to have an identifiable and generally accepted useful life of between 2 and 30 years, and all exterior painting and coating costs as required by Oregon law.

The Association will be responsible for maintenance, repair and replacement costs for the general and limited common elements included in the component inventory established in the reserve study and which are defined in the Declaration for the Harrison West Condominiums Owners Association. Routine maintenance and repair expenditures not included in this reserve study are assumed to be included in the annual operating budget for the Association.

Throughout this report the term "Association", when capitalized, shall be used in reference to the Harrison West Condominiums Owners Association. The acronym AIRO is used in reference to the company Architectural Investigative Reports & Opinions.

Financial Analysis

Current Condition-

The following analysis pertains to the general and limited common element reserve fund for the Harrison West Condominiums Owners Association:

The Association's fiscal year begins on: January 1.

The 30 year period covered by this study is January 1, 2009 to December 31, 2038.

The estimated reserve fund balance as of January 1, 2009 is: **$468,991.00**.

Funding Projections-

Reserve funds will be accumulated in the replacement fund based on estimates of the future need for replacement or major repair of common area assets.

If additional funds are required, the Association reserves the right, subject to association documents, to increase regular assessments or levy special assessments, or it may delay repair or replacement of components until funds are available.

Actual costs may vary from the amounts included in the study and investment income, and income tax levels may affect reserve funding levels. The variances may be substantial, and therefore amounts accumulated in the reserve replacement fund may not be adequate to meet future funding requirements.

This funding projection utilizes a cash flow funding model known as *Current Assessment Funding* to calculate the reserve funding requirements for the period covered in this reserve study. *Current Assessment Funding* is a funding method which allows the Association to specify the amount of the reserve contribution for the current funding cycle; and when it is warranted to specify the assessment for future years.

This funding projection includes specified current reserve contributions in the years and amounts which follow:

2009: $234,000.00	**2016: $624,780.00**
2010: $311,220.00	**2017: $545,220.00**
2011: $390,780.00	**2018: $468,000.00**
2012: $468,000.00	**2019: $390,780.00**
2013: $545,220.00	**2020: $311,220.00**
2014: $624,780.00	**2021: $234,000.00**
2015: $702,000.00	

The reserve contribution for will increase **3.5%** for each of the remaining years of the study after 2021.

Under this *Current Assessment Funding* projection the minimum reserve fund balance for any year covered in this study will be: **$523,362.00**; which is the projected reserve fund balance at the end of **2016**.

The reserve funding projections derived from this study assume:

Earnings on reserve deposits: **2.25%** per annum

Annual inflation rate: **3.66%**

Income taxes have not been included in the funding parameters used in this study

Recommended Funding-

The reserve contribution specified by the Board of Directors for 2009 is: **$234,000.00.** .

This contribution will result in a percent funded level of **40%** at the end of 2009. The percent funded level will range from a low of **20%** in 2016 to a high of **223%** in 2027.

Future reserve fund expenditures which are anticipated, but not included in this funding schedule are expected to offset the excess reserve accumulations which are created by this funding schedule between 2018 and 2038.

These expenses include electrical system upgrades and repair, restoration and waterproofing of the parking garage roof and pedestrian plaza. These components appear as unfunded items in the *Distribution of Accumulated Reserves* which begins on page **1-16.**

Component Summary

Component Inventory-

This reserve study includes an estimate of the useful life and remaining useful life for the common area components listed in the *Component Index* which begins on page **1-95** of this reserve study.

Maintenance, repair and replacement expenditures not funded from the Association's replacement reserve fund should be provided for in the Association's annual operating budget.

The *Reserve Fund Expenditure Detail* which begins on page **1-21** of this report indicates the next reserve expenditures scheduled to occur will be in the year **2009.**

The amount of these expenditures is projected to be **$34,269.00.**

Components Not Included in This Reserve Study-

Common area components which do not have a generally accepted useful life of thirty years or less are not included in this reserve study.

Components which have a useful life of one year or less are not included in this reserve study.

Components which do not have a readily determined life expectancy are not included in this reserve study.

Components which do not have a minimum replacement cost of **$1,000.00** in any one year are not included in this reserve study.*

* With the exception of exterior painting and coating expenses which are required by Oregon law to be included in all reserve studies.

Components Included in This Reserve Study-

Components which may have a useful life expectancy greater than thirty years, but due to their effective age are expected to wear out within the next thirty years are included in this reserve study.

Components funded in this reserve study include only those common elements which:

A. Are the responsibility of the Association to maintain, repair or replace according to the

governing documents;

B. Are generally considered to have a limited useful life of between more than 1 year and up to and including 30 years;
C. Have a remaining useful life determined to be 30 years or less, either by generally accepted opinions of useful life or by inspection and analysis of specific components by our analysts;
D. The cost of repair or replacement exceeds a minimum dollar amount as determined by the Association or our analysts;
E. Are required by state law to be included in a reserve study prepared for a common interest development.

Conclusions

Financial Summary-

The funding model utilizes a cash flow funding model known as the *Threshold Funding Method*, which will maintain a minimum balance in the reserve fund of **$100,000.00.**

Assuming the funding requirements do not deviate from the scheduled expenditures contained in this study, the Association's reserve balance will not fall below this dollar amount at any time during the next 30 years.

The Association's fiscal year begins on **January 1.**

This reserve funding projection covers the thirty year period between January 1, 2009 and December 31, 2038.

The beginning balance held in reserves as of January 1, 2009 will be: **$468,991.00**.

Interest earned on reserve deposits is assumed to be: **2.25%.**

The annual inflation rate used in this study is: **3.66%.**

The reserve contribution specified by the Board of Directors for 2009 is: **$234,000.00.** .

This contribution will result in a percent funded level of **40%** at the end of 2009. The percent funded level will range from a low of **20%** in 2016 to a high of **223%** in 2027.

Future reserve fund expenditures which are anticipated, but not included in this funding schedule are expected to offset the excess reserve accumulations which are created by this funding schedule between 2018 and 2038.

Annual Updates-

Annual updates and revisions to the funding parameters are expected to be performed as recommended by the authors of this reserve study. Failure to perform the required updates in a timely manner, will likely result in an inadequate level of reserve funding for the Association and is in violation of Oregon statute.

Project Description

Property Description-

The Harrison West Condominiums property is comprised of five structures situated on 1.14 acres in an urban location in downtown Portland, OR. The property is accessed via SW Harrison Street to the south, a municipal roadway maintained by the City of Portland, OR. All of the buildings are steel reinforced concrete construction with flat roofs which are roofed with single-ply T.P.O. roof membranes.

The Association is comprised of 196 residential condominium units; 195 of which are privately owned; with one unit being owned by the Harrison West Condominiums Owners Association, which is used as a common area meeting room by the Association. The primary structure located on the property is a 25 story high-rise tower which contains 184 residential condominium units.

Four smaller buildings situated along the north and east perimeters of the property contain a total of 12 townhouse style condominium units. The townhouse buildings are two story, split-level designs with each building containing three condominium units.

Throughout this report the buildings are identified as #1, 2, 3, 4 & 5; with building # 1 being the 25 story tower; building #2 being located in the northwest-most corner of the property; and the remaining buildings numbered 3, 4 & 5 continuing in a clock-wise direction around the perimeter of the property. An aerial photograph showing the building numbering sequence is included in the Appendix.

The buildings are oriented around a street level pedestrian plaza which encompasses building 1 on the west, north and east elevations, and extends to the perimeter of the property on the west, north and east sides. The plaza is used exclusively by the residents of Harrison West Condominiums and is secured by metal fencing and locked, gated entries at multiple locations on all four sides of the property.

Contained within the footprint of building 1 is a three level basement which houses various common areas including a laundry room, trash room, assigned resident storage lockers; emergency power generator room; hallways and stairs.

Located beneath the street level pedestrian plaza which surrounds building 1 is a parking garage which provides 164 off street parking spaces for the residents of the Harrison West Condominiums. Also contained within the parking garage area are maintenance and storage rooms utilized by the full-time maintenance staff.

Square Footage of Improvements-

The total square feet of enclosed space contained within all buildings according to the Multnomah County Tax Assessors office is as follows:

- Building 1, above ground: 188,050 total area
- Buildings 2 through 5, above ground: 22,335 total area
- Basement level parking: 61,120 total area
- Basement level, semi-finished space: 8,110 total area

The primary public entrance to the property is through building 1 at the south side of the building where there is a covered vehicle and pedestrian entrance oriented along SW Harrison Street. The ground level

entrance into building 1 is secured by an electronic building entry system which is monitored 24 hours a day.

Building 1 is elevator served at all floors, including all basement levels, with three passenger elevators. One freight elevator is situated in the parking garage area in the southeast quadrant of the garage. This elevator serves the basement level entrance into building 1, providing street level access to a covered elevator loading area along the south side of the off street parking area which is accessed from SW Harrison Street.

Association Responsibilities-

General common elements which are the responsibility of the Association to maintain, repair or replace include, but may not be limited to:

- Land, pathways, driveways, fences, grounds, association meeting room and laundry room
- Pipes, ducts, flues, chutes, conduit, wiring and other utility or communications installations up to the outlet within each unit
- Roofs, foundations, bearing & shear walls; perimeter walls, beams, columns and girders to the interior surfaces within any condominium unit
- Stairways, landings, hallways, lobbies, elevators, entrances and exits which do not pertain to any individual condominium unit
- Fire & life safety equipment, either permanently installed within any of the five structures; any such devices which may be portable in nature, but which are intended for the benefit of all unit owners
- HVAC equipment which serves the common areas of building 1
- Solid waste compaction equipment
- Miscellaneous loose furnishings, equipment, appliances and tools which the Association may currently own or may purchase in the future

Limited common elements pertaining to one or more condominium units for which the Association is responsible for the maintenance, repair and replacement costs include, but may not be limited to:

- Patios and decks which pertain to individual condominium units
- Designated parking spaces within the underground parking garage
- Storage lockers located in the basement area and designated as limited common area on the official Plat

Painting of interior unit entry doors is the responsibility of the Association, the cost of which is included in this reserve study as a non-capital expense.

Unit Owner Responsibilities-

The individual unit owners will be responsible for all maintenance and replacement costs for the interior of their condominium and certain limited common elements pertaining exclusively to their individual unit. All unit owners are responsible for their individual electric service, CATV, telephone and Internet services.

Report Parameters & Assumptions

Parameters-

This reserve study was prepared using information provided by the Harrison West Condominiums Owners Association or its representatives, and information contained in the original condition assessment performed at the time the property was converted to condominiums. Information regarding the Association's current financial condition, maintenance, repair expenses and operating expenses is assumed to be correct.

Representations of fact are assumed to be true and made in good faith by all parties associated with the development of this study.

Opinions and conclusions stated herein are based solely on the representations made in the information described in the first paragraph. HOA Services Group, LLC does not warrant information provided to us by any third party associated with this reserve study or subsequent updates to the reserve study or operating budget.

This reserve study has been prepared in conjunction with a *Condition Assessment Report* which was completed by Architectural Investigative Reports & Opinions (AIRO) and their consulting architect in 2008. Assumptions regarding the useful life (UFL) and remaining life (RL) of common area components are based on the opinions of the consulting architect, and are included in the AIRO report dated September 17, 2008.

Information regarding the current condition of the wet and dry fire suppression systems was obtained from an assessment of the system prepared by Pielow Fair Associates (PFA) in May of 2005; a copy of which is included in the Appendix.

Reserve funds will be accumulated in the replacement fund based on estimates of the future need for replacement or major repairs of common property components.

If additional funds are required, the Association reserves the right, subject to member approval, to increase regular assessments or levy special assessments, or it may delay repairs or replacement of components until funds are available.

Actual costs may vary from the amounts included in the study and investment income and income tax levels may affect reserve funding levels. The variances may be material and therefore amounts accumulated in the reserve replacement fund may not be adequate to meet future funding requirements.

Assumptions-

The authors of this reserve study have attempted to maintain an equitable approach to developing the replacement reserve funding schedule for the Harrison West Owners Association by establishing reasonable expectations for the expected useful life and replacement schedule of common area components.

The goal of a fair and equitable funding plan is deemed to be in the interest of current unit owners by not over funding the reserve account, while at the same time ensuring that in later years the owners will have adequate replacement reserves to meet the repair and replacement needs of the Association. The

result of such an approach will, by necessity, require certain assumptions be made regarding the lifespan and replacement requirements of certain components.

Therefore, the authors have established partial replacement reserves for certain components and complete replacement reserves for others based on the reasonable expectation that not all components will completely wear out within the expected lifespan and funding may not be necessary to completely replace such components.

The Association may wish to review this approach at some point. Should it be determined that partial replacement reserve funding is not satisfactory, this reserve study should be updated to reflect the additional funding required for complete replacement of all components in the scheduled year of replacement.

This reserve study assumes any product or service warranties for common area components will be maintained through the efforts of the Association and all specialty trade work will be performed by qualified, duly licensed personnel.

Assessment Summary

Introduction-

This reserve study utilizes information contained in the *Condition Assessment Report* dated September 17, 2008 which was prepared by the independent architectural consulting firm, Architectural Investigative Reports & Opinions. This physical assessment of common area components included an evaluation of the technical aspects of the facilities design, systems performance, current maintenance practices, deferred maintenance and remaining life expectancy of components by the consulting architect.

Quantity surveys for most common area components were obtained through physical measurement of surfaces by members of HOA Services Group, LLC reserve study team and by review of plans and specifications made available by the maintenance staff. Input from Mr. Jeff Rams (Maintenance Supervisor) and Mr. Matt LaPenna (Maintenance Engineer) was utilized extensively in identifying components, component maintenance procedures, and replacement schedules for many common area components.

Opinions regarding the useful life, remaining life and current condition of common area components are those of the consulting architect or vendors who service the components in question. Recommendations for corrective action or immediate repair of common area components are generally those of the consulting architect.

Replacement Costs-

Replacement cost estimates are based on the estimated *current* cost to repair or replace the component; or allowances which are intended to provide a lump sum at a predetermined point, for expenses which are not easily determined in advance.

All replacement cost projections should be viewed as budgeting guidelines to aid in the long term financial planning for the Association. Cost estimates obtained from vendors are generally not hard bid amounts and should not be assumed to be exact replacement costs.

Vendor List-

When appropriate, information regarding individual components, their replacement cost and specific recommendations for maintenance and repair was obtained from local area vendors. Vendors consulted for advice regarding various components currently service the facility or are in a business which provides building maintenance services for properties similar to Harrison West.

Information from the following vendors was used in the preparation of this reserve study:

1. **Sherwin-Williams Paints** - Glen White (503-819-1682)
   Sherlastic® elastomeric paint coatings
2. **Thyssen/Krupp Elevators** - Bill Greenwood (503-255-0079)
   Passenger & freight elevators
3. **Carlson Roofing Company, Inc.** - Greg Carlson (503-846-1575)
   Single-ply T.P.O. roof membranes
4. **Nu Flow Technologies** - Zach Collett (425-351-4853)
   Water pipe restoration services

5. **Western Construction Group** - Brendon Beltz (503-239-7075)
   Parking garage & pedestrian plaza waterproofing
6. **Columbia River Roofing** - Eric Finnerty (503-890-7793)
   Parking garage & pedestrian plaza waterproofing
7. **Lube Cube, Inc.** (1-800-777-2823)
   Diesel fuel tank
8. **Coin Meter, Inc.** - Ron Katterman (503-452-4111)
   Laundry equipment
9. **Cummins Northwest, Inc.** - Chuck Fleer (503-289-0900)
   Emergency power generating system
10. **Classic Painting, Inc.** - Geoff Edmonds - (503-449-4789)
    Interior & exterior painting
11. **Fire Systems West, Inc.** (360-693-9906)
    Fire suppression systems
12. **Commercial Plumbing Services, Inc.**
    Water control valves
13. **PCI, Inc** - (503-503-777-5548)
    Trash compactor & sanitizer

Component Condition-

The following terms are used throughout this report when referring to the present condition of common area components:

Poor - The condition of the component warrants immediate repair and is likely to require partial or full replacement to remediate the condition. Components listed in *Poor* condition typically have no remaining useful life and will be scheduled for replacement within one year of the date of this report.

Fair - Components listed in *Fair* condition can be expected to have some amount of remaining useful life. Although immediate replacement is not necessarily required, the component is likely to show signs of wear or deterioration sufficient to assume replacement cannot be avoided through preventive maintenance. Corrective maintenance and replacement should be anticipated for components listed as being in *Fair* condition.

Good - Components listed as being in *Good* condition are assumed to be performing as intended without a measurable degree of discomfort or inconvenience to the user. Components in *Good* condition do not present a safety hazard and can be expected to have a remaining useful life of at least 25% of the total life expectancy of the component were it new. The remaining useful life of components in *Good* condition may be able to be extended through an adequate program of preventive maintenance. Components in
Good condition do not require corrective maintenance or repair at the present time.

Excellent - Components listed as being in *Excellent* condition are assumed to be functioning as new components and can be expected to have a remaining useful life of at least 75% of the useful life of a similar new component.

Findings & Recommendations-

The Harrison West Condominiums property presents a number of challenges when preparing a long term repair and replacement schedule such as that represented by this reserve study.

Due to the age of the facility, it is likely the Association will be faced with repair and replacement expenses which otherwise would not be necessary, as most major building systems will reach the end of their useful life within the next thirty years.

Several major building systems have been identified during our research which will require sizable replacement reserves when repair or replacement becomes necessary. The following components will require major reserve funding during the period covered by this reserve study:

- Fire suppression system updates
- Parking garage waterproofing
- Water supply line restoration
- Passenger elevator upgrades
- Electrical system components

A reserve spending plan which is prioritized to accommodate these major expenses will be a major challenge for the Harrison West owners in the coming years.

The AIRO Condition Assessment Report includes recommendations for replacement funding for several components which have not been included in this reserve schedule. The board of directors may choose to include funding for these components at some point in the future. Among the items not included in this reserve schedule are the following:

- Flag poles
- Metal railings and security fencing
- Storage lockers
- Fireman's access stairs
- Windows
- Laundry equipment

The logistics and magnitude of tasks such as painting may be more manageable if the work is scheduled to occur over a number of years, rather than all at once. Reserve funding for such expenses will need to be scheduled to be available over a period of years to coincide with the anticipated work schedule.

The estimated useful life and remaining life of the roofing is based on information provided by Carlson Roofing Company, Inc., Greg Carlson of Carlson Roofing Company was consulted during the preparation of this study and has indicated the remaining life of the roof membranes on all buildings is approximately 18 years.

Invasive or Destructive Investigation-

No invasive or destructive testing or inspection was performed during our examination of the property. Recommended corrective and preventive maintenance procedures are meant to be a guideline for the Association to consider in the development of their ongoing preventive maintenance program.

No warranty, guarantee or other assurance of performance should be assumed as a result of the assessment performed by HOA Services Group, LLC during the preparation of this reserve study.

HOA Services Group, LLC encourages all clients to consult maintenance and repair providers for detailed cost estimates and specific repair recommendations.

Harrison West Condominiums
Portland, OR
Current Assessment Funding Model Summary

Report Date	December 09, 2008
Account Number	HARW608
Version	VERSION 1
Budget Year Begining	January 01, 2009
Budget Year Ending	December 31, 2009
Total Units	195
Phase Development	1 of 1

Required Annual Contribution

Inflation	3.66%
Annual Assessment Increase	0.00%
Interest Rate on Reserve Deposit	2.25%
Tax Rate on Interest	0.00%
Contingency	3.00%
2009 Begining Balance	$468,991.00

This funding projection utilizes a cash flow funding model known as *Current Assessment Funding*to calculate the reserve funding requirements for the period covered in this reserve study. *Current Assessment Funding*is a funding method which allows the Association to specify the amount of the reserve contribution for the current funding cycle; and when it is warranted to specify the assessment for future years.

This funding projection includes specified current reserve contributions in the years and amounts which follow:

2009: $234,000.00
2010: $311,220.00
2011: $390,780.00
2012: $468,000.00
2013: $545,220.00
2014: $624,780.00
2015: $702,000.00
2016: $624,780.00
2017: $545,220.00
2018: $468,000.00
2019: $390,780.00
2020: $311,220.00
2021: $234,000.00

The reserve contribution for will increase **3.5%**for each of the remaining years of the study after 2021.

Under this *Current Assessment Funding*projection the minimum reserve fund balance for any year covered in this study will be: **$523,362.00**; which is the projected reserve fund balance at the end of **2016**.

Interest earned on reserve deposits is assumed to be: **2.25%.**

The annual inflation rate used in this study is:**3.66%.**

Current Assessment Funding Model Summary of Calculations

Required Monthly Contribution	$19,500.00
$100.00 per unit monthly	
Average Net Monthly Interest Earned	$1,062.86
Total Monthly Allocation to Reserves	$20,562.86
$105.45 per unit monthly	

Harrison West Condominiums
Current Assessment Funding Model Projection

Beginning Balance: $468,991

Year	Current Cost	Annual Contribution	Annual Interest	Annual Expenditures	Projected Ending Reserves	Fully Reserves	Percent Funded
2009	2,590,677	234,000	12,754	34,269	681,477	1,682,216	40%
2010	2,685,496	311,220	12,159	314,626	690,229	1,833,332	37%
2011	2,783,785	390,780	13,595	303,178	791,426	2,017,773	39%
2012	2,885,671	468,000	15,400	366,641	908,185	2,160,140	42%
2013	2,991,287	545,220	19,585	340,978	1,132,012	2,364,437	47%
2014	3,100,768	624,780	24,786	379,000	1,402,578	2,553,449	54%
2015	3,214,256	702,000	31,671	388,392	1,747,857	2,760,161	63%
2016	3,331,898	624,780	5,242	1,854,517	523,362	2,558,388	20%
2017	1,973,815	545,220	16,022	112,883	971,721	1,109,113	87%
2018	2,046,056	468,000	26,373	64,267	1,401,827	1,244,704	112%
2019	2,120,942	390,780	34,738	84,713	1,742,632	1,368,777	127%
2020	2,198,568	311,220	42,355	47,533	2,048,674	1,543,271	132%
2021	2,279,036	234,000	47,412	89,419	2,240,668	1,685,841	132%
2022	2,362,449	241,020	51,125	121,872	2,410,941	1,805,688	133%
2023	2,448,914	248,251	56,896	42,194	2,673,894	2,021,885	132%
2024	2,538,545	255,698	56,376	332,038	2,653,930	1,947,934	136%
2025	2,631,455	263,369	62,081	65,299	2,914,081	2,163,633	134%
2026	2,727,767	271,270	33,988	1,565,472	1,653,866	793,332	208%
2027	2,827,603	279,408	34,681	279,167	1,688,788	754,717	223%
2028	2,931,093	287,790	40,977	41,632	1,975,924	976,737	202%
2029	3,038,371	296,424	46,161	105,400	2,213,109	1,147,540	192%
2030	3,149,576	305,317	51,640	106,375	2,463,691	1,332,616	184%
2031	3,264,850	314,476	58,431	63,176	2,773,422	1,579,982	175%
2032	3,384,344	323,911	61,370	248,721	2,909,982	1,648,152	176%
2033	3,508,211	333,628	69,143	48,597	3,264,157	1,942,586	168%
2034	3,636,611	343,637	76,446	86,962	3,597,277	2,217,302	162%
2035	3,769,711	353,946	83,213	127,969	3,906,467	2,469,141	158%
2036	3,907,682	364,564	72,618	908,922	3,434,728	1,907,623	180%
2037	4,050,704	375,501	76,860	256,516	3,630,573	2,033,818	178%
2038	4,198,959	386,766	84,959	102,182	4,000,116	2,341,564	170%

Harrison West Condominiums
Distribution of Accumulated Reserves

Description	Remaining Life	Replacement Year	Assigned Reserves	Fully Funded Reserves
Control Valves - Water Supply System - Rep..	0	2009	16,950	16,950
Electronic Equipment/Computers - Replace..	0	2009	2,000	2,000
Exhaust Fan - Laundry Room - Replacement	0	2009	1,075	1,075
Exterior Paint - Railings / Fencing /Grilles	0	2009	2,844	2,844
Exterior Wooden Benches - Replacement	0	2009	1,400	1,400
Landscaping - Tree Care	0	2009	5,000	5,000
Trash Compactor - Disinfectant System - Up..	0	2009	5,000	5,000
Concrete Stairs & Landings - Repairs	1	2010	17,600	17,600
Exterior Paint - Unit Entry Doors	1	2010	765	765
Milcor Fire-Rated Access Doors - Replacem..	1	2010	10,120	10,120
Water Supply Lines - Repair & Restoration	1	2010	265,406	265,406
Inspections & Reserve Study Renewals	2	2011	2,667	2,667
Exterior Coatings - Unit Balconies - Iso/Flex..	3	2012	22,781	22,781
Exterior Paint - Common Area Doors	3	2012	425	425
Exterior Paint - Decorative Landscape Trelli..	3	2012	1,800	1,800
Common Area Furnishings - Replacement	4	2013	3,214	3,214
Interior Paint - Common Area Doors	4	2013	916	916
Interior Paint - Unit Entry Doors	4	2013	843	843
Interior Paint - Walls/Ceiling/Trim - Associa..	4	2013	429	429
Interior Paint - Walls/Ceiling/Trim - Corrido..	4	2013	3,305	3,305
Appliances - Association Room - Replaceme..	5	2014	1,875	1,875
Cabinets & Counters - Association Room - ..	5	2014	1,500	1,500
Decorative Landscape Trellises - Wood Repl..	5	2014	3,487	3,487
Electronic Equipment/Televisions - Replace..	5	2014	562	562
Flooring Replacement/Carpet - Association ..	5	2014	945	945
Interior Paint - Walls/Ceiling/Trim - 1st Floo..	5	2014	1,125	1,125
Concrete Pavement - Parking Garage - Repair	6	2015	18,682	18,682
Exterior Paint - Concrete & Plaster Surfaces	7	2016	52,500	52,500
Fire Suppression - Wet & Dry System - Upg..	7	2016	*23,775	723,709
Flooring Replacement/Carpet - Upper Floor ..	7	2016		25,920
Flooring Replacement/Vinyl - Laundry Room	7	2016		990
Landscape Lighting - Replacement	7	2016		300
Landscaping - Plant Replacement	7	2016		2,730
Lighting - Ceiling Mounted Fixtures - Repla..	7	2016		600
Trash Chute Doors - Replacement	7	2016		32,353
Booster Pumps/Controls & Switches - Repla..	8	2017		1,227
Booster Pumps/Water Supply System - Rebu..	8	2017		2,045
Exterior Paint - Unit Balcony Railings	9	2018		6,244
Concrete Driveways - Partial Replacement	10	2019		18,435

Harrison West Condominiums
Distribution of Accumulated Reserves

Description	Remaining Life	Replacement Year	Assigned Reserves	Fully Funded Reserves
Trash Compactor - Replacement	10	2019		4,846
CCTV Security System - Replacement	12	2021		2,100
Controlled Access Entry System - Replacem..	12	2021		900
Electric Water Heaters/Laundry Room - Rep..	12	2021		950
Flooring Replacement/Woven Vinyl - Breez..	12	2021		1,200
Interior Paint - Metal Handrails - Stairwells	12	2021		650
Interior Paint - Storage/Utility/Parking Areas	12	2021		306
Interior Paint - Walls/Ceiling - Stairwells	12	2021		306
A/C Condensing Units - Replacement	13	2022		1,347
Flooring Replacement/Vinyl - Association R..	13	2022		375
Common Area Doors/Metal - Partial Replac..	15	2024		84,811
Common Area Doors/Wood - Replacement	15	2024		2,474
Electric Space Heaters - Replacement	15	2024		1,200
Emergency Power Generator - Replacement	15	2024		26,847
Emergency Power Generator/Fuel Tank - Re..	15	2024		1,545
Overhead Garage Door Opener - Replacement	15	2024		767
Fresh Air Supply Fan - Building 1 - Replace..	17	2026		499
Fresh Air Supply Fan/Controls - Replacement	17	2026		240
Fresh Air Supply Fan/Fire Damper - Replace..	17	2026		150
Lighting - Exterior Decorative Fixtures - Re..	17	2026		1,537
Lighting - Interior Recessed Fixtures - Repla..	17	2026		7,500
Lighting - Interior Utility Fixtures - Replace..	17	2026		2,070
Lighting - Wall Mounted Fixtures - Replace..	17	2026		2,756
Passenger Elevators - Renovations & Upgra..	17	2026		67,500
T.P.O Roof Membrane - Replacement (All B..	18	2027		9,714
Lighting - Low Voltage Exit Signs - Replace..	22	2031		707
Mailboxes - 1st Floor Lobby - Replacement	22	2031		630
Pumbing Fixtures - Common Areas - Replac..	22	2031		240
Electric In-line Heating Strips - Corridors - ..	23	2032		1,015
Exhaust Fans - Parking Garage - Replacement	23	2032		1,575
Rooftop Exhaust Fans - Bldg. 1 - Replaceme..	23	2032		1,060
Glass Entrance Doors/Harrison St. - Replace..	27	2036		1,500
Landscaping - Irrigation System - Upgrades	28	2037		1,006
Signs - Replacement	29	2038		937
Pedestrian Plaza - Concrete/Membrane Rest..		unfunded		
Electrical Wiring & Metering Systems - Rep..		unfunded		

Harrison West Condominiums
Distribution of Accumulated Reserves

Description	Remaining Life	Replacement Year	Assigned Reserves	Fully Funded Reserves
Total Asset Summary			$468,991	$1,491,033
Fully Funded Level			31%	

'' Indicates Partially Funded*

Harrison West Condominiums
Capital / Non-Capital Allocation (Accounting Report)

Description	Replacement Year	Useful Life	Adjustment	Remaining Life	Current Cost	Assigned Reserves	Fully Funded
Capital							
A/C Condensing Units - Replacement	2022	15	1	13	7,185	0	1,347
Appliances - Association Room - Replaceme..	2014	15	5	5	2,500	1,875	1,875
Booster Pumps/Controls & Switches - Repla..	2017	15	-4	8	4,500	0	1,227
Booster Pumps/Water Supply System - Rebu..	2017	20	-9	8	7,500	0	2,045
CCTV Security System - Replacement	2021	15	0	12	10,500	0	2,100
Cabinets & Counters - Association Room - R..	2014	15	5	5	2,000	1,500	1,500
Common Area Doors/Metal - Partial Replace..	2024	30	29	15	113,724	0	84,811
Common Area Doors/Wood - Replacement	2024	30	29	15	3,318	0	2,474
Common Area Furnishings - Replacement	2013	7	0	4	7,500	3,214	3,214
Concrete Driveways - Partial Replacement	2019	40	14	10	22,625	0	18,435
Concrete Pavement - Parking Garage - Repair	2015	10	40	6	21,230	18,682	18,682
Concrete Stairs & Landings - Repairs	2010	30	15	1	18,000	17,600	17,600
Control Valves - Water Supply System - Rep..	2009	20	24	0	16,950	16,950	16,950
Controlled Access Entry System - Replacem..	2021	15	0	12	4,500	0	900
Decorative Landscape Trellises - Wood Repl..	2014	10	-2	5	9,300	3,487	3,487
Electric In-line Heating Strips - Corridors - ..	2032	25	1	23	8,800	0	1,015
Electric Space Heaters - Replacement	2024	25	0	15	3,000	0	1,200
Electric Water Heaters/Laundry Room - Rep..	2021	15	0	12	4,750	0	950
Electrical Wiring & Metering Systems - Repl..	*unfunded*						
Electronic Equipment/Computers - Replace..	2009	7	-4	0	2,000	2,000	2,000
Electronic Equipment/Televisions - Replace..	2014	8	0	5	1,500	562	562
Emergency Power Generator - Replacement	2024	35	24	15	36,000	0	26,847
Emergency Power Generator/Fuel Tank - Re..	2024	25	4	15	3,200	0	1,545
Exhaust Fan - Laundry Room - Replacement	2009	25	0	0	1,075	1,075	1,075
Exhaust Fans - Parking Garage - Replacement	2032	25	1	23	13,650	0	1,575
Exterior Coatings - Unit Balconies - Iso/Flex..	2012	5	1	3	45,562	22,781	22,781
Exterior Wooden Benches - Replacement	2009	20	4	0	1,400	1,400	1,400
Fire Suppression - Wet & Dry System - Upg..	2016	30	21	7	838,845	23,775	723,709
Flooring Replacement/Carpet - Association ..	2014	7	1	5	2,520	945	945
Flooring Replacement/Carpet - Upper Floor ..	2016	10	0	7	86,400	0	25,920
Flooring Replacement/Vinyl - Association R..	2022	15	1	13	2,000	0	375
Flooring Replacement/Vinyl - Laundry Room	2016	10	0	7	3,300	0	990
Flooring Replacement/Woven Vinyl - Breez..	2021	15	0	12	6,000	0	1,200
Fresh Air Supply Fan - Building 1 - Replace..	2026	20	0	17	3,325	0	499
Fresh Air Supply Fan/Controls - Replacement	2026	20	0	17	1,600	0	240
Fresh Air Supply Fan/Fire Damper - Replace..	2026	20	0	17	1,000	0	150
Glass Entrance Doors/Harrison St. - Replace..	2036	30	0	27	15,000	0	1,500
Landscape Lighting - Replacement	2016	10	0	7	1,000	0	300
Landscaping - Irrigation System - Upgrades	2037	30	1	28	10,400	0	1,006
Landscaping - Plant Replacement	2016	10	0	7	9,100	0	2,730
Landscaping - Tree Care	2009	3	0	0	5,000	5,000	5,000
Lighting - Ceiling Mounted Fixtures - Repla..	2016	10	0	7	2,000	0	600
Lighting - Exterior Decorative Fixtures - Re..	2026	20	0	17	10,250	0	1,537
Lighting - Interior Recessed Fixtures - Repla..	2026	20	0	17	50,000	0	7,500
Lighting - Interior Utility Fixtures - Replace..	2026	20	0	17	13,800	0	2,070
Lighting - Low Voltage Exit Signs - Replace..	2031	25	0	22	5,890	0	707

Harrison West Condominiums
Capital / Non-Capital Allocation (Accounting Report)

Description	Replacement Year	Useful Life	Adjustment	Remaining Life	Current Cost	Assigned Reserves	Fully Funded
Lighting - Wall Mounted Fixtures - Replace..	2026	20	0	17	18,375	0	2,756
Mailboxes - 1st Floor Lobby - Replacement	2031	25	0	22	5,250	0	630
Milcor Fire-Rated Access Doors - Replacem..	2010	40	5	1	10,350	10,120	10,120
Overhead Garage Door Opener - Replacement	2024	20	-2	15	4,600	0	767
Passenger Elevators - Renovations & Upgrad..	2026	20	0	17	450,000	0	67,500
Pedestrian Plaza - Concrete/Membrane Resto..	*unfunded*						
Pumbing Fixtures - Common Areas - Replac..	2031	25	0	22	2,000	0	240
Rooftop Exhaust Fans - Bldg. 1 - Replaceme..	2032	25	1	23	9,185	0	1,060
Signs - Replacement	2038	30	2	29	10,000	0	937
T.P.O Roof Membrane - Replacement (All B..	2027	20	1	18	68,000	0	9,714
Trash Chute Doors - Replacement	2016	30	21	7	37,500	0	32,353
Trash Compactor - Disinfectant System - Up..	2009	20	0	0	5,000	5,000	5,000
Trash Compactor - Replacement	2019	20	-7	10	21,000	0	4,846
Water Supply Lines - Repair & Restoration	2010	1	45	1	271,304	265,406	265,406
Capital - Total					$2,352,263	$401,373	$1,415,909
Non-Capital							
Exterior Paint - Common Area Doors	2012	1	5	3	850	425	425
Exterior Paint - Concrete & Plaster Surfaces	2016	10	0	7	175,000	52,500	52,500
Exterior Paint - Decorative Landscape Trelli..	2012	5	1	3	3,600	1,800	1,800
Exterior Paint - Railings / Fencing /Grilles	2009	1	2	0	2,844	2,844	2,844
Exterior Paint - Unit Balcony Railings	2018	12	0	9	24,975	0	6,244
Exterior Paint - Unit Entry Doors	2010	4	0	1	1,020	765	765
Inspections & Reserve Study Renewals	2011	3	0	2	8,000	2,667	2,667
Interior Paint - Common Area Doors	2013	1	6	4	2,137	916	916
Interior Paint - Metal Handrails - Stairwells	2021	15	0	12	3,250	0	650
Interior Paint - Storage/Utility/Parking Areas	2021	15	0	12	1,530	0	306
Interior Paint - Unit Entry Doors	2013	1	6	4	1,966	843	843
Interior Paint - Walls/Ceiling - Stairwells	2021	15	0	12	1,530	0	306
Interior Paint - Walls/Ceiling/Trim - 1st Floo..	2014	7	1	5	3,000	1,125	1,125
Interior Paint - Walls/Ceiling/Trim - Associa..	2013	7	0	4	1,000	429	429
Interior Paint - Walls/Ceiling/Trim - Corridors	2013	1	6	4	7,711	3,305	3,305
Non-Capital - Total					$238,414	$67,618	$75,123
Total Asset Summary					$2,590,677	$468,991	$1,491,033
Fully Funded Level						31%	

Harrison West Condominiums
Reserve Fund Expenditure Detail

Description	Expenditures
Replacement Year 2009	
Control Valves - Water Supply System - Replacement	16,950
Electronic Equipment/Computers - Replacement	2,000
Exhaust Fan - Laundry Room - Replacement	1,075
Exterior Paint - Railings / Fencing /Grilles	2,844
Exterior Wooden Benches - Replacement	1,400
Landscaping - Tree Care	5,000
Trash Compactor - Disinfectant System - Upgrade	5,000
Total for 2009	**$34,269**
Replacement Year 2010	
Concrete Stairs & Landings - Repairs	18,659
Exterior Paint - Railings / Fencing /Grilles	2,948
Exterior Paint - Unit Entry Doors	1,057
Milcor Fire-Rated Access Doors - Replacement	10,729
Water Supply Lines - Repair & Restoration	281,233
Total for 2010	**$314,626**
Replacement Year 2011	
Exterior Paint - Railings / Fencing /Grilles	3,056
Inspections & Reserve Study Renewals	8,596
Water Supply Lines - Repair & Restoration	291,526
Total for 2011	**$303,178**
Replacement Year 2012	
Exterior Coatings - Unit Balconies - Iso/Flex Membrane	50,751
Exterior Paint - Common Area Doors	947
Exterior Paint - Decorative Landscape Trellises	4,010
Exterior Paint - Railings / Fencing /Grilles	3,168
Landscaping - Tree Care	5,569
Water Supply Lines - Repair & Restoration	302,196
Total for 2012	**$366,641**
Replacement Year 2013	
Common Area Furnishings - Replacement	8,660
Exterior Paint - Common Area Doors	981
Exterior Paint - Railings / Fencing /Grilles	3,283
Interior Paint - Common Area Doors	2,468
Interior Paint - Unit Entry Doors	2,271
Interior Paint - Walls/Ceiling/Trim - Association Room	1,155

Harrison West Condominiums
Reserve Fund Expenditure Detail

Description	Expenditures
Replacement Year 2013 continued...	
Interior Paint - Walls/Ceiling/Trim - Corridors	8,904
Water Supply Lines - Repair & Restoration	313,257
Total for 2013	**$340,978**
Replacement Year 2014	
Appliances - Association Room - Replacement	2,992
Cabinets & Counters - Association Room - Replacement	2,394
Decorative Landscape Trellises - Wood Replacement	11,131
Electronic Equipment/Televisions - Replacement	1,795
Exterior Paint - Common Area Doors	1,017
Exterior Paint - Railings / Fencing /Grilles	3,404
Exterior Paint - Unit Entry Doors	1,221
Flooring Replacement/Carpet - Association Room	3,016
Inspections & Reserve Study Renewals	9,575
Interior Paint - Common Area Doors	2,558
Interior Paint - Unit Entry Doors	2,354
Interior Paint - Walls/Ceiling/Trim - 1st Floor Lobby	3,591
Interior Paint - Walls/Ceiling/Trim - Corridors	9,229
Water Supply Lines - Repair & Restoration	324,722
Total for 2014	**$379,000**
Replacement Year 2015	
Concrete Pavement - Parking Garage - Repair	26,340
Exterior Paint - Common Area Doors	1,055
Exterior Paint - Railings / Fencing /Grilles	3,528
Interior Paint - Common Area Doors	2,652
Interior Paint - Unit Entry Doors	2,440
Interior Paint - Walls/Ceiling/Trim - Corridors	9,567
Landscaping - Tree Care	6,204
Water Supply Lines - Repair & Restoration	336,607
Total for 2015	**$388,392**
Replacement Year 2016	
Electronic Equipment/Computers - Replacement	2,572
Exterior Paint - Common Area Doors	1,093
Exterior Paint - Concrete & Plaster Surfaces	225,069
Exterior Paint - Railings / Fencing /Grilles	3,657
Fire Suppression - Wet & Dry System - Upgrades	1,078,848
Flooring Replacement/Carpet - Upper Floor Corridors	111,120

Harrison West Condominiums
Reserve Fund Expenditure Detail

Description	Expenditures
Replacement Year 2016 continued...	
Flooring Replacement/Vinyl - Laundry Room	4,244
Interior Paint - Common Area Doors	2,749
Interior Paint - Unit Entry Doors	2,529
Interior Paint - Walls/Ceiling/Trim - Corridors	9,917
Landscape Lighting - Replacement	1,286
Landscaping - Plant Replacement	11,704
Lighting - Ceiling Mounted Fixtures - Replacement	2,572
Trash Chute Doors - Replacement	48,229
Water Supply Lines - Repair & Restoration	348,926
Total for 2016	**$1,854,517**
Replacement Year 2017	
Booster Pumps/Controls & Switches - Replacement	5,999
Booster Pumps/Water Supply System - Rebuild	9,999
Exterior Coatings - Unit Balconies - Iso/Flex Membrane	60,743
Exterior Paint - Common Area Doors	1,133
Exterior Paint - Decorative Landscape Trellises	4,799
Exterior Paint - Railings / Fencing /Grilles	3,791
Inspections & Reserve Study Renewals	10,665
Interior Paint - Common Area Doors	2,850
Interior Paint - Unit Entry Doors	2,622
Interior Paint - Walls/Ceiling/Trim - Corridors	10,280
Total for 2017	**$112,883**
Replacement Year 2018	
Exterior Paint - Common Area Doors	1,175
Exterior Paint - Railings / Fencing /Grilles	3,930
Exterior Paint - Unit Balcony Railings	34,515
Exterior Paint - Unit Entry Doors	1,410
Interior Paint - Common Area Doors	2,954
Interior Paint - Unit Entry Doors	2,718
Interior Paint - Walls/Ceiling/Trim - Corridors	10,657
Landscaping - Tree Care	6,910
Total for 2018	**$64,267**
Replacement Year 2019	
Concrete Driveways - Partial Replacement	32,412
Exterior Paint - Common Area Doors	1,218
Exterior Paint - Railings / Fencing /Grilles	4,074

Harrison West Condominiums
Reserve Fund Expenditure Detail

Description	Expenditures
Replacement Year 2019 continued...	
Interior Paint - Common Area Doors	3,062
Interior Paint - Unit Entry Doors	2,817
Interior Paint - Walls/Ceiling/Trim - Corridors	11,047
Trash Compactor - Replacement	30,084
Total for 2019	**$84,713**
Replacement Year 2020	
Common Area Furnishings - Replacement	11,137
Exterior Paint - Common Area Doors	1,262
Exterior Paint - Railings / Fencing /Grilles	4,223
Inspections & Reserve Study Renewals	11,880
Interior Paint - Common Area Doors	3,174
Interior Paint - Unit Entry Doors	2,920
Interior Paint - Walls/Ceiling/Trim - Association Room	1,485
Interior Paint - Walls/Ceiling/Trim - Corridors	11,451
Total for 2020	**$47,533**
Replacement Year 2021	
CCTV Security System - Replacement	16,163
Controlled Access Entry System - Replacement	6,927
Electric Water Heaters/Laundry Room - Replacement	7,312
Exterior Paint - Common Area Doors	1,308
Exterior Paint - Railings / Fencing /Grilles	4,377
Flooring Replacement/Carpet - Association Room	3,879
Flooring Replacement/Woven Vinyl - Breezeways	9,236
Interior Paint - Common Area Doors	3,290
Interior Paint - Metal Handrails - Stairwells	5,003
Interior Paint - Storage/Utility/Parking Areas	2,355
Interior Paint - Unit Entry Doors	3,027
Interior Paint - Walls/Ceiling - Stairwells	2,355
Interior Paint - Walls/Ceiling/Trim - 1st Floor Lobby	4,618
Interior Paint - Walls/Ceiling/Trim - Corridors	11,870
Landscaping - Tree Care	7,697
Total for 2021	**$89,419**
Replacement Year 2022	
A/C Condensing Units - Replacement	11,465
Electronic Equipment/Televisions - Replacement	2,394
Exterior Coatings - Unit Balconies - Iso/Flex Membrane	72,703

Harrison West Condominiums
Reserve Fund Expenditure Detail

Description	Expenditures
Replacement Year 2022 continued...	
Exterior Paint - Common Area Doors	1,356
Exterior Paint - Decorative Landscape Trellises	5,744
Exterior Paint - Railings / Fencing /Grilles	4,538
Exterior Paint - Unit Entry Doors	1,628
Flooring Replacement/Vinyl - Association Room	3,191
Interior Paint - Common Area Doors	3,411
Interior Paint - Unit Entry Doors	3,138
Interior Paint - Walls/Ceiling/Trim - Corridors	12,305
Total for 2022	**$121,872**
Replacement Year 2023	
Electronic Equipment/Computers - Replacement	3,308
Exterior Paint - Common Area Doors	1,406
Exterior Paint - Railings / Fencing /Grilles	4,704
Inspections & Reserve Study Renewals	13,233
Interior Paint - Common Area Doors	3,536
Interior Paint - Unit Entry Doors	3,253
Interior Paint - Walls/Ceiling/Trim - Corridors	12,755
Total for 2023	**$42,194**
Replacement Year 2024	
Common Area Doors/Metal - Partial Replacement	194,994
Common Area Doors/Wood - Replacement	5,689
Decorative Landscape Trellises - Wood Replacement	15,946
Electric Space Heaters - Replacement	5,144
Emergency Power Generator - Replacement	61,726
Emergency Power Generator/Fuel Tank - Replacement	5,487
Exterior Paint - Common Area Doors	1,457
Exterior Paint - Railings / Fencing /Grilles	4,876
Interior Paint - Common Area Doors	3,665
Interior Paint - Unit Entry Doors	3,372
Interior Paint - Walls/Ceiling/Trim - Corridors	13,222
Landscaping - Tree Care	8,573
Overhead Garage Door Opener - Replacement	7,887
Total for 2024	**$332,038**
Replacement Year 2025	
Concrete Pavement - Parking Garage - Repair	37,734
Exterior Paint - Common Area Doors	1,511

Harrison West Condominiums
Reserve Fund Expenditure Detail

Description	Expenditures
Replacement Year 2025 continued...	
Exterior Paint - Railings / Fencing /Grilles	5,054
Interior Paint - Common Area Doors	3,799
Interior Paint - Unit Entry Doors	3,495
Interior Paint - Walls/Ceiling/Trim - Corridors	13,706
Total for 2025	**$65,299**
Replacement Year 2026	
Exterior Paint - Common Area Doors	1,566
Exterior Paint - Concrete & Plaster Surfaces	322,425
Exterior Paint - Railings / Fencing /Grilles	5,239
Exterior Paint - Unit Entry Doors	1,879
Flooring Replacement/Carpet - Upper Floor Corridors	159,186
Flooring Replacement/Vinyl - Laundry Room	6,080
Fresh Air Supply Fan - Building 1 - Replacement	6,126
Fresh Air Supply Fan/Controls - Replacement	2,948
Fresh Air Supply Fan/Fire Damper - Replacement	1,842
Inspections & Reserve Study Renewals	14,739
Interior Paint - Common Area Doors	3,938
Interior Paint - Unit Entry Doors	3,623
Interior Paint - Walls/Ceiling/Trim - Corridors	14,207
Landscape Lighting - Replacement	1,842
Landscaping - Plant Replacement	16,766
Lighting - Ceiling Mounted Fixtures - Replacement	3,685
Lighting - Exterior Decorative Fixtures - Replacement	18,885
Lighting - Interior Recessed Fixtures - Replacement	92,121
Lighting - Interior Utility Fixtures - Replacement	25,426
Lighting - Wall Mounted Fixtures - Replacement	33,855
Passenger Elevators - Renovations & Upgrades	829,093
Total for 2026	**$1,565,472**
Replacement Year 2027	
Common Area Furnishings - Replacement	14,324
Exterior Coatings - Unit Balconies - Iso/Flex Membrane	87,018
Exterior Paint - Common Area Doors	1,623
Exterior Paint - Decorative Landscape Trellises	6,875
Exterior Paint - Railings / Fencing /Grilles	5,431
Interior Paint - Common Area Doors	4,082
Interior Paint - Unit Entry Doors	3,756
Interior Paint - Walls/Ceiling/Trim - Association Room	1,910

Harrison West Condominiums
Reserve Fund Expenditure Detail

Description	Expenditures
Replacement Year 2027 continued...	
Interior Paint - Walls/Ceiling/Trim - Corridors	14,727
Landscaping - Tree Care	9,549
T.P.O Roof Membrane - Replacement (All Buildings)	129,871
Total for 2027	**$279,167**
Replacement Year 2028	
Exterior Paint - Common Area Doors	1,683
Exterior Paint - Railings / Fencing /Grilles	5,630
Flooring Replacement/Carpet - Association Room	4,989
Interior Paint - Common Area Doors	4,232
Interior Paint - Unit Entry Doors	3,893
Interior Paint - Walls/Ceiling/Trim - 1st Floor Lobby	5,939
Interior Paint - Walls/Ceiling/Trim - Corridors	15,266
Total for 2028	**$41,632**
Replacement Year 2029	
Appliances - Association Room - Replacement	5,131
Cabinets & Counters - Association Room - Replacement	4,104
Control Valves - Water Supply System - Replacement	34,785
Exterior Paint - Common Area Doors	1,744
Exterior Paint - Railings / Fencing /Grilles	5,836
Exterior Wooden Benches - Replacement	2,873
Inspections & Reserve Study Renewals	16,418
Interior Paint - Common Area Doors	4,387
Interior Paint - Unit Entry Doors	4,036
Interior Paint - Walls/Ceiling/Trim - Corridors	15,825
Trash Compactor - Disinfectant System - Upgrade	10,261
Total for 2029	**$105,400**
Replacement Year 2030	
Electronic Equipment/Computers - Replacement	4,255
Electronic Equipment/Televisions - Replacement	3,191
Exterior Paint - Common Area Doors	1,808
Exterior Paint - Railings / Fencing /Grilles	6,050
Exterior Paint - Unit Balcony Railings	53,130
Exterior Paint - Unit Entry Doors	2,170
Interior Paint - Common Area Doors	4,547
Interior Paint - Unit Entry Doors	4,183
Interior Paint - Walls/Ceiling/Trim - Corridors	16,404

Harrison West Condominiums
Reserve Fund Expenditure Detail

Description	Expenditures
Replacement Year 2030 continued...	
Landscaping - Tree Care	10,637
Total for 2030	**$106,375**
Replacement Year 2031	
Exterior Paint - Common Area Doors	1,874
Exterior Paint - Railings / Fencing /Grilles	6,271
Interior Paint - Common Area Doors	4,714
Interior Paint - Unit Entry Doors	4,337
Interior Paint - Walls/Ceiling/Trim - Corridors	17,005
Lighting - Low Voltage Exit Signs - Replacement	12,989
Mailboxes - 1st Floor Lobby - Replacement	11,577
Pumbing Fixtures - Common Areas - Replacement	4,410
Total for 2031	**$63,176**
Replacement Year 2032	
Booster Pumps/Controls & Switches - Replacement	10,287
Electric In-line Heating Strips - Corridors - Replacement	20,116
Exhaust Fans - Parking Garage - Replacement	31,203
Exterior Coatings - Unit Balconies - Iso/Flex Membrane	104,151
Exterior Paint - Common Area Doors	1,943
Exterior Paint - Decorative Landscape Trellises	8,229
Exterior Paint - Railings / Fencing /Grilles	6,501
Inspections & Reserve Study Renewals	18,287
Interior Paint - Common Area Doors	4,886
Interior Paint - Unit Entry Doors	4,495
Interior Paint - Walls/Ceiling/Trim - Corridors	17,627
Rooftop Exhaust Fans - Bldg. 1 - Replacement	20,996
Total for 2032	**$248,721**
Replacement Year 2033	
Exterior Paint - Common Area Doors	2,014
Exterior Paint - Railings / Fencing /Grilles	6,738
Interior Paint - Common Area Doors	5,065
Interior Paint - Unit Entry Doors	4,660
Interior Paint - Walls/Ceiling/Trim - Corridors	18,272
Landscaping - Tree Care	11,848
Total for 2033	**$48,597**
Replacement Year 2034	
Common Area Furnishings - Replacement	18,422

Harrison West Condominiums
Reserve Fund Expenditure Detail

Description	Expenditures
Replacement Year 2034 continued...	
Decorative Landscape Trellises - Wood Replacement	22,844
Exhaust Fan - Laundry Room - Replacement	2,641
Exterior Paint - Common Area Doors	2,088
Exterior Paint - Railings / Fencing /Grilles	6,985
Exterior Paint - Unit Entry Doors	2,505
Interior Paint - Common Area Doors	5,250
Interior Paint - Unit Entry Doors	4,830
Interior Paint - Walls/Ceiling/Trim - Association Room	2,456
Interior Paint - Walls/Ceiling/Trim - Corridors	18,941
Total for 2034	**$86,962**
Replacement Year 2035	
Concrete Pavement - Parking Garage - Repair	54,056
Exterior Paint - Common Area Doors	2,164
Exterior Paint - Railings / Fencing /Grilles	7,241
Flooring Replacement/Carpet - Association Room	6,416
Inspections & Reserve Study Renewals	20,370
Interior Paint - Common Area Doors	5,442
Interior Paint - Unit Entry Doors	5,007
Interior Paint - Walls/Ceiling/Trim - 1st Floor Lobby	7,639
Interior Paint - Walls/Ceiling/Trim - Corridors	19,634
Total for 2035	**$127,969**
Replacement Year 2036	
CCTV Security System - Replacement	27,714
Controlled Access Entry System - Replacement	11,877
Electric Water Heaters/Laundry Room - Replacement	12,537
Exterior Paint - Common Area Doors	2,243
Exterior Paint - Concrete & Plaster Surfaces	461,892
Exterior Paint - Railings / Fencing /Grilles	7,506
Flooring Replacement/Carpet - Upper Floor Corridors	228,043
Flooring Replacement/Vinyl - Laundry Room	8,710
Flooring Replacement/Woven Vinyl - Breezeways	15,836
Glass Entrance Doors/Harrison St. - Replacement	39,591
Interior Paint - Common Area Doors	5,642
Interior Paint - Metal Handrails - Stairwells	8,578
Interior Paint - Storage/Utility/Parking Areas	4,038
Interior Paint - Unit Entry Doors	5,190
Interior Paint - Walls/Ceiling - Stairwells	4,038

Harrison West Condominiums
Reserve Fund Expenditure Detail

Description	Expenditures
Replacement Year 2036 continued...	
Interior Paint - Walls/Ceiling/Trim - Corridors	20,353
Landscape Lighting - Replacement	2,639
Landscaping - Plant Replacement	24,018
Landscaping - Tree Care	13,197
Lighting - Ceiling Mounted Fixtures - Replacement	5,279
Total for 2036	**$908,922**
Replacement Year 2037	
A/C Condensing Units - Replacement	19,658
Booster Pumps/Water Supply System - Rebuild	20,520
Electronic Equipment/Computers - Replacement	5,472
Exterior Coatings - Unit Balconies - Iso/Flex Membrane	124,658
Exterior Paint - Common Area Doors	2,326
Exterior Paint - Decorative Landscape Trellises	9,850
Exterior Paint - Railings / Fencing /Grilles	7,780
Flooring Replacement/Vinyl - Association Room	5,472
Interior Paint - Common Area Doors	5,848
Interior Paint - Unit Entry Doors	5,380
Interior Paint - Walls/Ceiling/Trim - Corridors	21,098
Landscaping - Irrigation System - Upgrades	28,454
Total for 2037	**$256,516**
Replacement Year 2038	
Electronic Equipment/Televisions - Replacement	4,254
Exterior Paint - Common Area Doors	2,411
Exterior Paint - Railings / Fencing /Grilles	8,065
Exterior Paint - Unit Entry Doors	2,893
Inspections & Reserve Study Renewals	22,689
Interior Paint - Common Area Doors	6,062
Interior Paint - Unit Entry Doors	5,577
Interior Paint - Walls/Ceiling/Trim - Corridors	21,870
Signs - Replacement	28,361
Total for 2038	**$102,182**

Component Detail Reports

Introduction

The following section contains individual reports for each component included in this reserve study. These reports contain details pertaining to each component along with a narrative summarizing the findings contained in the Condition Assessment Report prepared by AIRO, or similar reports prepared by other sources.

Information taken from the assessment reports will include the following:

- Component Condition
- Estimated Remaining Life
- Estimated Useful Life (after repair or replacement)
- Corrective Action Require
- Page numbers of report where component information may be found

Component costs, estimated quantities, in service dates and other pertinent information may also be found in these pages.

Funding Concepts-

Certain components have been identified as *Partial Replacement* expenses. Partial replacement funding is used in the case of components which typically do not wear out and require complete replacement at the same time.

This approach to replacement funding allows the Association to begin accumulating a certain amount of money toward the anticipated replacement expense without overburdening the membership with excessive reserve funding requirements for components which may not require complete replacement within the estimated remaining lifespan of the item in question.

The percentage replacement figure may be based on experience with similar components in other situations, or it may be arbitrary based on the belief that 100% replacement is not likely to be required at any one time. These amounts should be reviewed by the Board of Directors and adjustments made based on further input, when it becomes available.

Contingency funding and replacement *Allowances* are used in cases where it is not generally realistic to predict in advance, with any degree of certainty, what the replacement cost is likely to be; or in circumstances where the replacement costs may not be reflective of the components which are currently in service. *Contingencies* and *Allowances* in any budget projection should be monitored and revised as more specific information becomes available which may help to clarify the future funding needs of the Association.

Unfunded components are costs which have not been included in the replacement reserve schedule because further information is required to make a credible assessment of the replacement costs; or because the magnitude of these expenses is such that a special assessment is likely to be required to fund replacement.

T.P.O Roof Membrane - Replacement (All Buildings) - 2027

		1 Total	@ $68,000.00
Asset ID	1024	Asset Cost	$68,000.00
	Capital	Percent Replacement	100%
	Roofing & Waterproofing Membranes	Future Cost	$129,870.52
Placed in Service	July 2006	Assigned Reserves	*none*
Useful Life	20		
Adjustment	1	Monthly Assessment	$487.33
Replacement Year	2027	Interest Contribution	$5.98
Remaining Life	18	Reserve Allocation	$493.31

Funding for replacement of the Firestone T.P.O. single-ply roof membrane on buildings 1 through 5.

Condition: Good

Remaining Life: 17 years

Useful Life: 20 years

Corrective Action Required: No

AIRO Page No: 35-36

Components costs were obtained from Carlson Roofing Company.

Roofing & Waterproofing Membranes - Total Current Cost	**$68,000**
Assigned Reserves	**$0**
Fully Funded Reserves	**$9,714**

Exterior Coatings - Unit Balconies - Iso/Flex Membrane - 2012

		13,500 SF	@ $6.75
Asset ID	1012	Asset Cost	$45,562.50
	Capital	Percent Replacement	50%
	Exterior Painting & Coatings	Future Cost	$50,750.59
Placed in Service	July 2006	Assigned Reserves	$22,781.25
Useful Life	5		
Adjustment	1	Monthly Assessment	$707.68
Replacement Year	2012	Interest Contribution	$8.68
Remaining Life	3	Reserve Allocation	$716.37

Funding for the periodic application of Lympall Iso/Flex elastomeric membrane to all unit balconies.

Condition: Good

Remaining Life: 3 years

Useful Life: 5 years

Corrective Action Required: No

AIRO Page No: 36-38

Components costs were obtained from Building Construction Cost Data-Western Edition, 2007 (RS Means).

Exterior Paint - Common Area Doors - 2012

		10 Each	@ $85.00
Asset ID	1015	Asset Cost	$850.00
	Non-Capital	Percent Replacement	100%
	Exterior Painting & Coatings	Future Cost	$946.78
Placed in Service	July 2006	Assigned Reserves	$425.00
Useful Life	1		
Adjustment	5	Monthly Assessment	$13.20
Replacement Year	2012	Interest Contribution	$0.16
Remaining Life	3	Reserve Allocation	$13.36

Funding for the periodic repainting of exterior common area doors. All doors located in the garage levels are included in the exterior door count. Funding for this expense is will be available beginning in 2012.

Condition: Fair

Remaining Life: 3 years

Useful Life: 5 years

Exterior Paint - Common Area Doors continued...

Corrective Action Required: No

AIRO Page No: 33-35

Painting cost estimates were obtained from Geoff Edmonds of Classic Painting, Inc. (CCB# 78686), 503-449-4789.

Exterior Paint - Concrete & Plaster Surfaces - 2016

		70,000 SF	@ $2.50
Asset ID	1002	Asset Cost	$175,000.00
	Non-Capital	Percent Replacement	100%
	Exterior Painting & Coatings	Future Cost	$225,069.41
Placed in Service	July 2006	Assigned Reserves	$52,500.00
Useful Life	10		
		Monthly Assessment	$1,796.97
Replacement Year	2016	Interest Contribution	$22.05
Remaining Life	7	Reserve Allocation	$1,819.02

Funding for the periodic repainting of all exterior walls and other concrete surfaces. This painting expense is not scheduled to be included in the ongoing maintenance painting cycle. Due to the magnitude of this task and the expenses associated with painting the upper sections of building 1, this work should be scheduled for completion at the same time.

The paint material is an elastomeric coating manufactured by Sherwin-Williams Paint Company.

Condition: Good

Remaining Life: 7 years

Useful Life: 10 years

Corrective Action Required: No

AIRO Page No: 28-32

Painting cost estimates were obtained from Geoff Edmonds of Classic Painting, Inc. (CCB# 78686), 503-449-4789.

Exterior Paint - Decorative Landscape Trellises - 2012

		6 Total	@ $600.00
Asset ID	1042	Asset Cost	$3,600.00
	Non-Capital	Percent Replacement	100%
	Exterior Painting & Coatings	Future Cost	$4,009.92
Placed in Service	July 2006	Assigned Reserves	$1,800.00
Useful Life	5		
Adjustment	1	Monthly Assessment	$55.91
Replacement Year	2012	Interest Contribution	$0.68
Remaining Life	3	Reserve Allocation	$56.60

Funding for the periodic repainting and sealing of the decorative landscape trellises. All of the trellises are scheduled to be painted at the same time.

Condition: Fair to Good

Remaining Life: 3 years

Useful Life: 5 years

Corrective Action Required: Yes

AIRO Page No: 19-26

Painting cost estimates were obtained from Geoff Edmonds of Classic Painting, Inc. (CCB# 78686), 503-449-4789.

Exterior Paint - Railings / Fencing /Grilles - 2009

		6,500 SF	@ $3.50
Asset ID	1028	Asset Cost	$2,843.75
	Non-Capital	Percent Replacement	12.5%
	Exterior Painting & Coatings	Future Cost	$2,843.75
Placed in Service	July 2006	Assigned Reserves	$2,843.75
Useful Life	1		
Adjustment	2	Monthly Assessment	$242.67
Replacement Year	2009	Interest Contribution	$2.97
Remaining Life	0	Reserve Allocation	$245.65

Funding for the periodic repainting of the painted metal fencing and security grilles. This expense is equally allocated over the eight year lifecycle of the component and is included in the ongoing maintenance painting schedule. Funding for this expense will be available beginning in 2009.

Condition: Fair to Good

Remaining Life: Scheduled to begin in 2009

Useful Life: 8 years

Exterior Paint - Railings / Fencing /Grilles continued...

Corrective Action Required: Yes

AIRO Page No: 16-18

Painting cost estimates were obtained from Geoff Edmonds of Classic Painting, Inc. (CCB# 78686), 503-449-4789.

Exterior Paint - Unit Balcony Railings - 2018

		2,700 LF	@ $9.25
Asset ID	1060	Asset Cost	$24,975.00
	Non-Capital	Percent Replacement	100%
	Exterior Painting & Coatings	Future Cost	$34,514.87
Placed in Service	July 2006	Assigned Reserves	*none*
Useful Life	12		
		Monthly Assessment	$288.07
Replacement Year	2018	Interest Contribution	$3.53
Remaining Life	9	Reserve Allocation	$291.60

Funding for the periodic repainting of the unit balcony railings. This expense is scheduled to occur at the same time the exterior of building 1 is painted.

Condition: Good

Remaining Life: 9 years

Useful Life: 12 years

Corrective Action Required: No

AIRO Page No: 36-38

Painting cost estimates were obtained from Geoff Edmonds of Classic Painting, Inc. (CCB# 78686), 503-449-4789.

Exterior Paint - Unit Entry Doors - 2010

		12 Total	@ $85.00
Asset ID	1120	Asset Cost	$1,020.00
	Non-Capital	Percent Replacement	100%
	Exterior Painting & Coatings	Future Cost	$1,057.33
Placed in Service	July 2006	Assigned Reserves	$765.00
Useful Life	4		
		Monthly Assessment	$22.63
Replacement Year	2010	Interest Contribution	$0.27
Remaining Life	1	Reserve Allocation	$22.91

Funding for the periodic repainting of exterior unit entry doors on all townhouse units. Funding for this expense is scheduled to begin in 2010.

Exterior Paint - Unit Entry Doors continued...

It is assumed all doors will be painted during each maintenance cycle.

Condition: Good

Remaining Life: 1 year

Useful Life: 4 years

Corrective Action Required: No

AIRO Page No: 33-35

Painting cost estimates were obtained from Geoff Edmonds of Classic Painting, Inc. (CCB# 78686), 503-449-4789

Exterior Painting & Coatings - Total Current Cost	**$253,851**
Assigned Reserves	**$81,115**
Fully Funded Reserves	**$87,359**

CCTV Security System - Replacement - 2021

		14 Each	@ $750.00
Asset ID	1112	Asset Cost	$10,500.00
	Capital	Percent Replacement	100%
	Fencing/Security	Future Cost	$16,163.06
Placed in Service	July 2006	Assigned Reserves	*none*
Useful Life	15		
		Monthly Assessment	$97.69
Replacement Year	2021	Interest Contribution	$1.19
Remaining Life	12	Reserve Allocation	$98.89

Replacement funding for the CCTV security monitoring system which serves the facility.

Condition: Good

Remaining Life: 12 years

Useful Life: 15 years

Corrective Action Required: No

AIRO Page No: 52-53

Components costs were obtained from Building Construction Cost Data-Western Edition, 2007 (RS Means).

Controlled Access Entry System - Replacement - 2021

		1 Total	@ $4,500.00
Asset ID	1113	Asset Cost	$4,500.00
	Capital	Percent Replacement	100%
	Fencing/Security	Future Cost	$6,927.02
Placed in Service	July 2006	Assigned Reserves	*none*
Useful Life	15		
		Monthly Assessment	$41.86
Replacement Year	2021	Interest Contribution	$0.51
Remaining Life	12	Reserve Allocation	$42.38

Funding contingency for repair and replacement of electronic entry system components in building 1.

Condition: Good

Remaining Life: 12 years

Useful Life: 15 years

Corrective Action Required: No

Controlled Access Entry System - Replacement continued...

AIRO Page No: 52-53

Components costs were obtained from Building Construction Cost Data-Western Edition, 2007 (RS Means).

Fencing/Security - Total Current Cost	**$15,000**
Assigned Reserves	**$0**
Fully Funded Reserves	**$3,000**

Landscape Lighting - Replacement - 2016

		4 Each	@ $250.00
Asset ID	1032	Asset Cost	$1,000.00
	Capital	Percent Replacement	100%
	Common Area Lighting	Future Cost	$1,286.11
Placed in Service	July 2006	Assigned Reserves	*none*
Useful Life	10		
		Monthly Assessment	$14.12
Replacement Year	2016	Interest Contribution	$0.17
Remaining Life	7	Reserve Allocation	$14.29

Funding allowance for the periodic replacement of landscape lighting.

Condition: Good

Remaining Life: 7 years

Useful Life: 10 years

Corrective Action Required: No

AIRO Page No:

Components costs were obtained from Building Construction Cost Data-Western Edition, 2007 (RS Means).

Lighting - Ceiling Mounted Fixtures - Replacement - 2016

		1 Total	@ $2,000.00
Asset ID	1122	Asset Cost	$2,000.00
	Capital	Percent Replacement	100%
	Common Area Lighting	Future Cost	$2,572.22
Placed in Service	July 2006	Assigned Reserves	*none*
Useful Life	10		
		Monthly Assessment	$28.24
Replacement Year	2016	Interest Contribution	$0.34
Remaining Life	7	Reserve Allocation	$28.59

Funding allowance for the replacement of interior ceiling mounted light fixtures in building 1.

Condition: Good

Remaining Life: 7 years

Useful Life: 10 years

Corrective Action Required: No

AIRO Page No: 39-41

Components costs were obtained from Building Construction Cost Data-Western Edition,

2007 (RS Means).

Lighting - Exterior Decorative Fixtures - Replacement - 2026

		41 Total	@ $250.00
Asset ID	1058	Asset Cost	$10,250.00
	Capital	Percent Replacement	100%
	Common Area Lighting	Future Cost	$18,884.88
Placed in Service	July 2006	Assigned Reserves	*none*
Useful Life	20		
		Monthly Assessment	$75.93
Replacement Year	2026	Interest Contribution	$0.93
Remaining Life	17	Reserve Allocation	$76.86

Funding allowance for the replacement of exterior building mounted decorative light fixtures on buildings 1 through 5.

Condition: Good

Remaining Life: 17 years

Useful Life: 20 years

Corrective Action Required: No

AIRO Page No:

Components costs were obtained from Building Construction Cost Data-Western Edition, 2007 (RS Means).

Lighting - Interior Recessed Fixtures - Replacement - 2026

		400 Total	@ $125.00
Asset ID	1095	Asset Cost	$50,000.00
	Capital	Percent Replacement	100%
	Common Area Lighting	Future Cost	$92,121.38
Placed in Service	July 2006	Assigned Reserves	*none*
Useful Life	20		
		Monthly Assessment	$370.42
Replacement Year	2026	Interest Contribution	$4.54
Remaining Life	17	Reserve Allocation	$374.97

Funding allowance for the replacement of interior recessed light fixtures in building 1.

Condition: Good

Remaining Life: 7 years

Lighting - Interior Recessed Fixtures - Replacement continued...

Useful Life: 10 years

Corrective Action Required: No

AIRO Page No: 39-41

Components costs were obtained from Building Construction Cost Data-Western Edition, 2007 (RS Means).

Lighting - Interior Utility Fixtures - Replacement - 2026

		115 Total	@ $120.00
Asset ID	1048	Asset Cost	$13,800.00
	Capital	Percent Replacement	100%
	Common Area Lighting	Future Cost	$25,425.50
Placed in Service	July 2006	Assigned Reserves	*none*
Useful Life	20		
		Monthly Assessment	$102.23
Replacement Year	2026	Interest Contribution	$1.25
Remaining Life	17	Reserve Allocation	$103.49

Funding allowance for the replacement of interior utility light fixture located in the parking garage, utility areas and stairwells.

Condition: Good

Remaining Life: 7 years

Useful Life: 10 years

Corrective Action Required: No

AIRO Page No: 39-41

Components costs were obtained from Building Construction Cost Data-Western Edition, 2007 (RS Means).

Lighting - Low Voltage Exit Signs - Replacement - 2031

		62 Total	@ $95.00
Asset ID	1093	Asset Cost	$5,890.00
	Capital	Percent Replacement	100%
	Common Area Lighting	Future Cost	$12,988.58
Placed in Service	July 2006	Assigned Reserves	*none*
Useful Life	25		
		Monthly Assessment	$37.99
Replacement Year	2031	Interest Contribution	$0.46
Remaining Life	22	Reserve Allocation	$38.46

Funding allowance for the replacement of low voltage lighted exit signs in buildings 1.

Condition: Good

Remaining Life: 7 years

Useful Life: 10 years

Corrective Action Required: No

AIRO Page No: 39-41

Components costs were obtained from Building Construction Cost Data-Western Edition, 2007 (RS Means).

Lighting - Wall Mounted Fixtures - Replacement - 2026

		105 Total	@ $175.00
Asset ID	1121	Asset Cost	$18,375.00
	Capital	Percent Replacement	100%
	Common Area Lighting	Future Cost	$33,854.60
Placed in Service	July 2006	Assigned Reserves	*none*
Useful Life	20		
		Monthly Assessment	$136.13
Replacement Year	2026	Interest Contribution	$1.67
Remaining Life	17	Reserve Allocation	$137.80

Funding allowance for the replacement of interior wall mounted light fixtures in building 1.

Condition: Good

Remaining Life: 7 years

Useful Life: 10 years

Corrective Action Required: No

AIRO Page No: 39-41

Lighting - Wall Mounted Fixtures - Replacement continued...

Components costs were obtained from Building Construction Cost Data-Western Edition, 2007 (RS Means).

Common Area Lighting - Total Current Cost	**$101,315**
Assigned Reserves	**$0**
Fully Funded Reserves	**$15,471**

Appliances - Association Room - Replacement - 2014

		1 Total	@ $2,500.00
Asset ID	1106	Asset Cost	$2,500.00
	Capital	Percent Replacement	100%
Fixtures, Furnishings & Appliances		Future Cost	$2,992.23
Placed in Service	July 1994	Assigned Reserves	$1,875.00
Useful Life	15		
Adjustment	5	Monthly Assessment	$14.06
Replacement Year	2014	Interest Contribution	$0.17
Remaining Life	5	Reserve Allocation	$14.24

Replacement funding for kitchen appliances located in the association meeting room. Items included in replacement cost estimate; refrigerator, dishwasher, electric range, garbage disposal.

Condition: Good

Remaining Life: 13 years

Useful Life: 15 years

Corrective Action Required: No

AIRO Page No: 19-26

Components costs were obtained from the National Construction Estimator Costbooks, 2008.

Cabinets & Counters - Association Room - Replacement - 2014

		1 Total	@ $2,000.00
Asset ID	1107	Asset Cost	$2,000.00
	Capital	Percent Replacement	100%
Fixtures, Furnishings & Appliances		Future Cost	$2,393.78
Placed in Service	July 1994	Assigned Reserves	$1,500.00
Useful Life	15		
Adjustment	5	Monthly Assessment	$11.25
Replacement Year	2014	Interest Contribution	$0.13
Remaining Life	5	Reserve Allocation	$11.39

Replacement funding for kitchen cabinets and countertops located in the association meeting room.

Condition: Good

Remaining Life: 13 years

Useful Life: 15 years

Cabinets & Counters - Association Room - Replacement continued...

Corrective Action Required: No

AIRO Page No: 19-26

Components costs were obtained from the National Construction Estimator Costbooks, 2008.

Common Area Furnishings - Replacement - 2013

		1 Total	@ $7,500.00
Asset ID	1111	Asset Cost	$7,500.00
	Capital	Percent Replacement	100%
	Fixtures, Furnishings & Appliances	Future Cost	$8,659.76
Placed in Service	July 2006	Assigned Reserves	$3,214.28
Useful Life	7		
		Monthly Assessment	$102.30
Replacement Year	2013	Interest Contribution	$1.25
Remaining Life	4	Reserve Allocation	$103.56

Replacement funding for loose furnishings located in common areas of building 1.

Condition: Fair to Good

Remaining Life: 4 years

Useful Life: 7 years

Corrective Action Required: No

AIRO Page No: 19-26

Replacement costs are a lump sum allowance; actual amounts will depend on the quality and quantity of individual items replaced during the replacement cycle.

Pumbing Fixtures - Common Areas - Replacement - 2031

		1 Total	@ $2,000.00
Asset ID	1108	Asset Cost	$2,000.00
	Capital	Percent Replacement	100%
	Fixtures, Furnishings & Appliances	Future Cost	$4,410.38
Placed in Service	July 2006	Assigned Reserves	*none*
Useful Life	25		
		Monthly Assessment	$12.90
Replacement Year	2031	Interest Contribution	$0.15
Remaining Life	22	Reserve Allocation	$13.06

Funding allowance for the replacement of plumbing fixtures in the association meeting room

Pumbing Fixtures - Common Areas - Replacement continued...

and the laundry room. Items included in replacement cost estimate include; toilets, bathroom lavatories and faucets; kitchen sink and faucet, and the laundry sink and faucet.

Condition: Good

Remaining Life: 25 years

Useful Life: 22 years

Corrective Action Required: No

AIRO Page No: 19-26

Components costs were obtained from Building Construction Cost Data-Western Edition, 2007 (RS Means).

Fixtures, Furnishings & Appliances - Total Current Cost	**$14,000**
Assigned Reserves	**$6,589**
Fully Funded Reserves	**$6,829**

Decorative Landscape Trellises - Wood Replacement - 2014

		6 Each	@ $1,550.00
Asset ID		Asset Cost	$9,300.00
	Capital	Percent Replacement	100%
	Grounds Components	Future Cost	$11,131.12
Placed in Service	July 2006	Assigned Reserves	$3,487.50
Useful Life	10		
Adjustment	-2	Monthly Assessment	$113.72
Replacement Year	2014	Interest Contribution	$1.39
Remaining Life	5	Reserve Allocation	$115.12

Funding contingency for replacement of the wooden portion of the decorative landscape trellises at various locations thoughout the property.

Condition: Good

Remaining Life: 5 years

Useful Life: 10 years

Corrective Action Required: Yes

AIRO Page No: 19-26

Components costs were obtained from the National Construction Estimator Costbooks-2008.

Exterior Wooden Benches - Replacement - 2009

		2 Each	@ $700.00
Asset ID	1053	Asset Cost	$1,400.00
	Capital	Percent Replacement	100%
	Grounds Components	Future Cost	$1,400.00
Placed in Service	July 1985	Assigned Reserves	$1,400.00
Useful Life	20		
Adjustment	4	Monthly Assessment	$9.47
Replacement Year	2009	Interest Contribution	$0.11
Remaining Life	0	Reserve Allocation	$9.58

Funding for the replacement of wooden benches located in common areas.

Condition: Fair

Remaining Life: Scheduled for replacement in 2009.

Useful Life: 20 years

Corrective Action Required: Yes

AIRO Page No: 19-26

Components costs were obtained from Building Construction Cost Data-Western Edition,

Exterior Wooden Benches - Replacement continued...

2007 (RS Means).

Grounds Components - Total Current Cost	**$10,700**
Assigned Reserves	**$4,887**
Fully Funded Reserves	**$4,887**

Common Area Doors/Metal - Partial Replacement - 2024

		234 Each	@ $972.00
Asset ID	1085	Asset Cost	$113,724.00
	Capital	Percent Replacement	50%
	Doors	Future Cost	$194,993.52
Placed in Service	July 1965	Assigned Reserves	*none*
Useful Life	30		
Adjustment	29	Monthly Assessment	$910.05
Replacement Year	2024	Interest Contribution	$11.16
Remaining Life	15	Reserve Allocation	$921.22

Partial replacement funding for metal doors located throughout common areas of building 1 and the parking garage. Replacement of the door and hardware is assumed. Typical hardware package includes locking handle; 1-1/2 pair of ball-bearing hinges; hydraulic surface mounted door closer.

Replacement of the door frames is not included in the cost estimate.

Condition: Good

Remaining Life: 15 years

Useful Life: 30 years

Corrective Action Required: No

AIRO Page No: 33-35

Components costs were obtained from Building Construction Cost Data-Western Edition, 2007 (RS Means).

Common Area Doors/Wood - Replacement - 2024

		4 Each	@ $829.50
Asset ID	1087	Asset Cost	$3,318.00
	Capital	Percent Replacement	100%
	Doors	Future Cost	$5,689.11
Placed in Service	July 1965	Assigned Reserves	*none*
Useful Life	30		
Adjustment	29	Monthly Assessment	$26.55
Replacement Year	2024	Interest Contribution	$0.32
Remaining Life	15	Reserve Allocation	$26.87

Replacement funding for wood doors located in the common areas of building 1 and the parking garage. Removal and replacement of the existing door and hardware is assumed. Typical hardware package includes locking handle; 1-1/2 pair of ball-bearing hinges; hydraulic surface mounted door closer.

Common Area Doors/Wood - Replacement continued...

Replacement of the door frames is not included in the cost estimate.

Condition: Good

Remaining Life: 15 years

Useful Life: 30 years

Corrective Action Required: No

AIRO Page No: 33-35

Components costs were obtained from Building Construction Cost Data-Western Edition, 2007 (RS Means).

Glass Entrance Doors/Harrison St. - Replacement - 2036

		1 Total	@ $15,000.00
Asset ID	1062	Asset Cost	$15,000.00
	Capital	Percent Replacement	100%
	Doors	Future Cost	$39,590.75
Placed in Service	July 2006	Assigned Reserves	*none*
Useful Life	30		
		Monthly Assessment	$88.75
Replacement Year	2036	Interest Contribution	$1.08
Remaining Life	27	Reserve Allocation	$89.84

Funding allowance for replacement of the glass entry door located at the SW Harrison Street entrance of building 1.

Condition: Good

Remaining Life: 27 years

Useful Life: 30 years

Corrective Action Required: No

AIRO Page No: 33-35

This expense is a funding allowance for replacement of the decorative glass entrance door and hardware. Actual costs may vary depending on factors which cannot be predicted in advance.

Milcor Fire-Rated Access Doors - Replacement - 2010

		100 Each	@ $207.00
Asset ID	1125	Asset Cost	$10,350.00
	Capital	Percent Replacement	50%
	Doors	Future Cost	$10,728.81
Placed in Service	July 1965	Assigned Reserves	$10,120.00
Useful Life	40		
Adjustment	5	Monthly Assessment	$31.17
Replacement Year	2010	Interest Contribution	$0.38
Remaining Life	1	Reserve Allocation	$31.56

Partial replacement funding for replacement of the plumbing access doors located in the corridors of building 1. Replacement of 50% of the existing doors is assumed.

Condition: Poor to Fair

Remaining Life: 1 year

Useful Life: 40 years

Corrective Action Required: Yes

AIRO Page No: 52-53

Components costs were obtained from Building Construction Cost Data-Western Edition, 2007 (RS Means).

Overhead Garage Door Opener - Replacement - 2024

		1 Total	@ $4,600.00
Asset ID	1097	Asset Cost	$4,600.00
	Capital	Percent Replacement	100%
	Doors	Future Cost	$7,887.25
Placed in Service	July 2006	Assigned Reserves	*none*
Useful Life	20		
Adjustment	-2	Monthly Assessment	$36.81
Replacement Year	2024	Interest Contribution	$0.45
Remaining Life	15	Reserve Allocation	$37.26

Funding contingency for the replacement of the automatic overhead garage door opener.

Condition: Good

Remaining Life: 15 years

Useful Life: 20 years

Corrective Action Required: No

AIRO Page No: 35

Overhead Garage Door Opener - Replacement continued...

Components costs were obtained from Building Construction Cost Data-Western Edition, 2007 (RS Means).

Doors - Total Current Cost	**$146,992**
Assigned Reserves	**$10,120**
Fully Funded Reserves	**$99,672**

Fire Suppression - Wet & Dry System - Upgrades - 2016

		279,615 SF	@ $3.00
Asset ID	1078	Asset Cost	$838,845.00
	Capital	Percent Replacement	100%
	Fire Suppression Components	Future Cost	$1,078,847.72
Placed in Service	July 1965	Assigned Reserves	$23,774.74
Useful Life	30		
Adjustment	21	Monthly Assessment	$11,542.74
Replacement Year	2016	Interest Contribution	$141.64
Remaining Life	7	Reserve Allocation	$11,684.39

Funding for updating the fire suppression systems throughout the property. Based on the recommendations of Pielow Fair Associates, LLC in the assessment summary dated May 27, 2005.

Condition: Fair

Remaining Life: 7 years

Useful Life: 30 years

Corrective Action Required: Yes

AIRO Page No: N/A

Components costs were obtained from the Pielow Fair Associates, LLC in the assessment summary dated May 27, 2005.

Fire Suppression Components - Total Current Cost	**$838,845**
Assigned Reserves	**$23,775**
Fully Funded Reserves	**$723,709**

Mailboxes - 1st Floor Lobby - Replacement - 2031

		1 Total	@ $5,250.00
Asset ID	1038	Asset Cost	$5,250.00
	Capital	Percent Replacement	100%
	Mailboxes	Future Cost	$11,577.25
Placed in Service	July 2006	Assigned Reserves	*none*
Useful Life	25		
		Monthly Assessment	$33.86
Replacement Year	2031	Interest Contribution	$0.41
Remaining Life	22	Reserve Allocation	$34.28

Funding contingency for the replacement of the in-wall mailboxes located in the 1st floor lobby of building 1.

Condition: Good

Remaining Life: 22 years

Useful Life: 25 years

Corrective Action Required: No

AIRO Page No:

Components costs were obtained from www.mailboxes.com.

Mailboxes - Total Current Cost	**$5,250**
Assigned Reserves	**$0**
Fully Funded Reserves	**$630**

Signs - Replacement - 2038

		1 Total	@ $10,000.00
Asset ID	1126	Asset Cost	$10,000.00
	Capital	Percent Replacement	100%
	Signs	Future Cost	$28,361.21
Placed in Service	July 2006	Assigned Reserves	*none*
Useful Life	30		
Adjustment	2	Monthly Assessment	$57.74
Replacement Year	2038	Interest Contribution	$0.70
Remaining Life	29	Reserve Allocation	$58.45

Funding contingency for replacement of signage throughout the property.

Condition: Good

Remaining Life: 30 years

Useful Life: 30 years

Corrective Action Required: No

AIRO Page No: 19

Components costs were obtained from Building Construction Cost Data-Western Edition, 2007 (RS Means).

Signs - Total Current Cost	**$10,000**
Assigned Reserves	**$0**
Fully Funded Reserves	**$937**

A/C Condensing Units - Replacement - 2022

		3 Each	@ $2,395.00
Asset ID	1103	Asset Cost	$7,185.00
	Capital	Percent Replacement	100%
	HVAC Components	Future Cost	$11,464.95
Placed in Service	July 2006	Assigned Reserves	*none*
Useful Life	15		
Adjustment	1	Monthly Assessment	$63.21
Replacement Year	2022	Interest Contribution	$0.77
Remaining Life	13	Reserve Allocation	$63.99

Replacement funding for air-conditioning equipment located in the elevator room, association meeting room and maintenance shop.

Condition: Good

Remaining Life: 13 years

Useful Life: 15 years

Corrective Action Required: No

AIRO Page No: 46-49

Components' costs were obtained from the National Construction Estimator Costbooks-2008.

Electric In-line Heating Strips - Corridors - Replacement - 2032

		4 Each	@ $2,200.00
Asset ID	1100	Asset Cost	$8,800.00
	Capital	Percent Replacement	100%
	HVAC Components	Future Cost	$20,115.94
Placed in Service	July 2006	Assigned Reserves	*none*
Useful Life	25		
Adjustment	1	Monthly Assessment	$55.60
Replacement Year	2032	Interest Contribution	$0.68
Remaining Life	23	Reserve Allocation	$56.28

Replacement funding for the electric in-line heating strips which supply heat into the common area corridors. The heating mechanisms are an electric resistance heat strip located within the forced air supply ducting in the 1st floor mechanical room.

Condition: Good

Remaining Life: 23 years

Useful Life: 25 years

Corrective Action Required: No

Electric In-line Heating Strips - Corridors - Replacement continued...

AIRO Page No: 46-49

Components costs were obtained from Building Construction Cost Data-Western Edition, 2007 (RS Means).

Electric Space Heaters - Replacement - 2024

		8 Each	@ $375.00
Asset ID	1109	Asset Cost	$3,000.00
	Capital	Percent Replacement	100%
	HVAC Components	Future Cost	$5,143.86
Placed in Service	July 1999	Assigned Reserves	*none*
Useful Life	25		
		Monthly Assessment	$24.00
Replacement Year	2024	Interest Contribution	$0.29
Remaining Life	15	Reserve Allocation	$24.30

Replacement funding for the electric space heaters located in the maintenance shop, laundry room and storage locker areas.

Condition: Good

Remaining Life: 15 years

Useful Life: 25 years

Corrective Action Required: No

AIRO Page No: 46-49

Components costs were obtained from Building Construction Cost Data-Western Edition, 2007 (RS Means).

Exhaust Fan - Laundry Room - Replacement - 2009

		1 Each	@ $1,075.00
Asset ID	1123	Asset Cost	$1,075.00
	Capital	Percent Replacement	100%
	HVAC Components	Future Cost	$1,075.00
Placed in Service	July 2009	Assigned Reserves	$1,075.00
Useful Life	25		
		Monthly Assessment	$6.55
Replacement Year	2009	Interest Contribution	$0.08
Remaining Life	0	Reserve Allocation	$6.63

Replacement funding for the laundry room exhaust fan. Maintenance personnel indicate the

Exhaust Fan - Laundry Room - Replacement continued...

existing fan is non-functioning. Replacement is scheduled for 2009.

Condition: Good

Remaining Life: Replacement scheduled for 2009.

Useful Life: 25 years

Corrective Action Required: No

AIRO Page No: 46-49

Components costs were obtained from Building Construction Cost Data-Western Edition, 2007 (RS Means).

Exhaust Fans - Parking Garage - Replacement - 2032

		3 Each	@ $4,550.00
Asset ID	1096	Asset Cost	$13,650.00
	Capital	Percent Replacement	100%
	HVAC Components	Future Cost	$31,202.56
Placed in Service	July 2006	Assigned Reserves	*none*
Useful Life	25		
Adjustment	1	Monthly Assessment	$86.25
Replacement Year	2032	Interest Contribution	$1.05
Remaining Life	23	Reserve Allocation	$87.31

Replacement funding for the parking garage in-line exhaust fans.

Condition: Good

Remaining Life: 23 years

Useful Life: 25 years

Corrective Action Required: No

AIRO Page No: 46-49

Components costs were obtained from Building Construction Cost Data-Western Edition, 2007 (RS Means).

Fresh Air Supply Fan - Building 1 - Replacement - 2026

		1 Total	@ $3,325.00
Asset ID	1091	Asset Cost	$3,325.00
	Capital	Percent Replacement	100%
	HVAC Components	Future Cost	$6,126.07
Placed in Service	July 2006	Assigned Reserves	*none*
Useful Life	20		
		Monthly Assessment	$24.63
Replacement Year	2026	Interest Contribution	$0.30
Remaining Life	17	Reserve Allocation	$24.93

Funding contingency for the replacement of the fresh air supply fan which provides fresh air throughout the interior of building 1. The fan is located in the ist floor mechanical room and provides interior fresh air throughout all levels of the building through a vertical air plenum within the building core.

Condition: Good

Remaining Life: 17 years

Useful Life: 20 years

Corrective Action Required: No

AIRO Page No: 46-49

Components costs were obtained from Building Construction Cost Data-Western Edition, 2007 (RS Means).

Fresh Air Supply Fan/Controls - Replacement - 2026

		1 Total	@ $1,600.00
Asset ID	1101	Asset Cost	$1,600.00
	Capital	Percent Replacement	100%
	HVAC Components	Future Cost	$2,947.88
Placed in Service	July 2006	Assigned Reserves	*none*
Useful Life	20		
		Monthly Assessment	$11.85
Replacement Year	2026	Interest Contribution	$0.14
Remaining Life	17	Reserve Allocation	$11.99

Funding contingency for the replacement of the fresh air supply fan controls which provides fresh air throughout the interior of building 1. The fan is located in the basement level mechanical room and provides interior fresh air throughout all levels of the building through a vertical air plenum within the building core.

Condition: Good

Fresh Air Supply Fan/Controls - Replacement continued...

Remaining Life: 17 years

Useful Life: 20 years

Corrective Action Required: No

AIRO Page No: 46-49

Components costs were obtained from Building Construction Cost Data-Western Edition, 2007 (RS Means).

Fresh Air Supply Fan/Fire Damper - Replacement - 2026

		1 Total	@ $1,000.00
Asset ID	1102	Asset Cost	$1,000.00
	Capital	Percent Replacement	100%
	HVAC Components	Future Cost	$1,842.42
Placed in Service	July 2006	Assigned Reserves	*none*
Useful Life	20		
		Monthly Assessment	$7.40
Replacement Year	2026	Interest Contribution	$0.09
Remaining Life	17	Reserve Allocation	$7.49

Funding contingency for the replacement of the fire damper within the fresh air supply fan duct which provides fresh air throughout the interior of building 1.

Condition: Good

Remaining Life: 17 years

Useful Life: 20 years

Corrective Action Required: No

AIRO Page No: 46-49

Components costs were obtained from Building Construction Cost Data-Western Edition, 2007 (RS Means).

Rooftop Exhaust Fans - Bldg. 1 - Replacement - 2032

		11 Each	@ $835.00
Asset ID	1090	Asset Cost	$9,185.00
	Capital	Percent Replacement	100%
	HVAC Components	Future Cost	$20,996.01
Placed in Service	July 2006	Assigned Reserves	*none*
Useful Life	25		
Adjustment	1	Monthly Assessment	$58.03
Replacement Year	2032	Interest Contribution	$0.71
Remaining Life	23	Reserve Allocation	$58.75

Funding contingency for replacement of the exhaust fans and controls which are located on the roof of building 1. These fans exhaust stale interior air from building 1 and the elevator equipment room.

Condition: Good

Remaining Life: 23 years

Useful Life: 25 years

Corrective Action Required: No

AIRO Page No: 46-49

Components costs were obtained from Building Construction Cost Data-Western Edition, 2007 (RS Means).

HVAC Components - Total Current Cost	**$48,820**
Assigned Reserves	**$1,075**
Fully Funded Reserves	**$8,161**

Inspections & Reserve Study Renewals - 2011

		1 Total	@ $8,000.00
Asset ID	1023	Asset Cost	$8,000.00
	Non-Capital	Percent Replacement	100%
	Inspections	Future Cost	$8,596.31
Placed in Service	July 2008	Assigned Reserves	$2,666.66
Useful Life	3		
		Monthly Assessment	$236.33
Replacement Year	2011	Interest Contribution	$2.90
Remaining Life	2	Reserve Allocation	$239.23

Funding allowance for the periodic inspection of the buildings and other common elements; and renewal of the Association's reserve study every three years beginning in 2012.

Annual reserve study updates are required by Oregon statute, but may or may not involve a physical inspection of any components. The reserve study should be revised every three years in conjunction with a physical assessment of the common components.

Inspections - Total Current Cost	**$8,000**
Assigned Reserves	**$2,667**
Fully Funded Reserves	**$2,667**

Concrete Driveways - Partial Replacement - 2019

		2,500 SF	@ $9.05
Asset ID	1055	Asset Cost	$22,625.00
	Capital	Percent Replacement	100%
	Concrete Pavement	Future Cost	$32,411.61
Placed in Service	July 1965	Assigned Reserves	*none*
Useful Life	40		
Adjustment	14	Monthly Assessment	$240.65
Replacement Year	2019	Interest Contribution	$2.95
Remaining Life	10	Reserve Allocation	$243.60

Replacement funding for concrete driveways located along the south side of building 1.

Condition: Poor to Good

Remaining Life: 10 years

Useful Life: 30 years

Corrective Action Required: Yes

AIRO Page No: 9 -13

Components costs were obtained from the National Construction Estimator Costbooks-2008.

Concrete Pavement - Parking Garage - Repair - 2015

		22,000 SF	@ $9.65
Asset ID	1057	Asset Cost	$21,230.00
	Capital	Percent Replacement	10%
	Concrete Pavement	Future Cost	$26,340.08
Placed in Service	July 1965	Assigned Reserves	$18,682.40
Useful Life	10		
Adjustment	40	Monthly Assessment	$64.28
Replacement Year	2015	Interest Contribution	$0.78
Remaining Life	6	Reserve Allocation	$65.07

Partial replacement funding for concrete pavement throughout the parking garage. Includes cost of concrete pumping.

Condition: Fair

Remaining Life: 6 years

Useful Life: 10 years between repair cycles.

Corrective Action Required: Yes

AIRO Page No: 9-13

Concrete Pavement - Parking Garage - Repair continued...

Components costs were obtained from the National Construction Estimator Costbooks-2008.

Pedestrian Plaza - Concrete/Membrane Restoration

		1 Total	@ $1,000,000.00
Asset ID	1073	Asset Cost	$250,000.00
	Capital	Percent Replacement	25%
	Concrete Pavement	Future Cost	$345,494.26
Placed in Service	July 2018	Assigned Reserves	*none*
Useful Life	1		
Replacement Year	2018	*No Future Assessments*	
Remaining Life	9		

Funding contingency for the repair and restoration of the concrete plaza and underlying waterproofing membrane. Funding for this expense is scheduled to be available beginning in 2010 at the rate of 25% each year until 100% funding is achieved.

Condition: Poor

Remaining Life: 0 years

Useful Life: N/A

Corrective Action Required: Yes

AIRO Page No: 9-13

Component costs are a contingency for an expense of an unknown magnitude. Further investigation is warranted to determine the scope of repair and an accurate replacement cost estimate.

NOTE: It is recommended the Association consult Western Construction Group regarding the development of a scope of work and repair cost estimate. WCG is the contractor engaged by the developers to apply the Iso/Flex elastomeric coating to the pavement in 2007 and 2008 and is familiar with the extent of the water intrusion problems associated with the parking garage.

Branch Manager Brendon Beltz is available for consultation at: 503-239-7075.

Concrete Pavement - Total Current Cost	**$43,855**
Assigned Reserves	**$18,682**
Fully Funded Reserves	**$37,118**

Concrete Stairs & Landings - Repairs - 2010

		9 Each	@ $2,000.00
Asset ID	1016	Asset Cost	$18,000.00
	Capital	Percent Replacement	100%
	Balconies, Landings & Stairs	Future Cost	$18,658.80
Placed in Service	July 1965	Assigned Reserves	$17,600.00
Useful Life	30		
Adjustment	15	Monthly Assessment	$54.22
Replacement Year	2010	Interest Contribution	$0.66
Remaining Life	1	Reserve Allocation	$54.89

Repair contingency for concrete stairs located throughout the exterior of the property.

Condition: Poor to Fair

Remaining Life: 1 year

Useful Life: 30 years

Corrective Action Required: Yes

AIRO Page No: 36-38

This expense is a lump sum contingency. The actual cost will depend on the level of finish and extent of repairs required for each staircase.

Balconies, Landings & Stairs - Total Current Cost	**$18,000**
Assigned Reserves	**$17,600**
Fully Funded Reserves	**$17,600**

Landscaping - Plant Replacement - 2016

		5,200 TSF	@ $1.75
Asset ID	1020	Asset Cost	$9,100.00
	Capital	Percent Replacement	100%
	Landscaping & Tree Care	Future Cost	$11,703.60
Placed in Service	July 2006	Assigned Reserves	*none*
Useful Life	10		
		Monthly Assessment	$128.53
Replacement Year	2016	Interest Contribution	$1.57
Remaining Life	7	Reserve Allocation	$130.11

Funding allowance for replacement of ornamental landscaping located throughout the property. Replacement of dead, diseased and outdated landscaping should be anticipated periodically.

Condition: Good

Remaining Life: 7 years

Useful Life: 10 years

Corrective Action Required: No

AIRO Page No: N/A

Landscaping - Tree Care - 2009

		1 Total	@ $5,000.00
Asset ID	1019	Asset Cost	$5,000.00
	Capital	Percent Replacement	100%
	Landscaping & Tree Care	Future Cost	$5,000.00
Placed in Service	July 2006	Assigned Reserves	$5,000.00
Useful Life	3		
		Monthly Assessment	$149.40
Replacement Year	2009	Interest Contribution	$1.83
Remaining Life	0	Reserve Allocation	$151.23

Funding allowance for the ongoing care and pruning of large trees located on the property. As the trees mature maintenance costs should be expected to increase. The Association should consult a Certified Arborist before any major pruning or tree work is undertaken.

Condition: Good

Remaining Life: Schduled for 2009.

Useful Life: 3 years

Corrective Action Required: No

AIRO Page No: 16

Landscaping - Tree Care continued...

Components costs were obtained from Certified Arborist Sean Kahrhoff: 503-804-5945.

Landscaping & Tree Care - Total Current Cost	**$14,100**
Assigned Reserves	**$5,000**
Fully Funded Reserves	**$7,730**

Landscaping - Irrigation System - Upgrades - 2037

		5,200 Total	@ $2.00
Asset ID	1017	Asset Cost	$10,400.00
	Capital	Percent Replacement	100%
	Irrigation Equipment	Future Cost	$28,454.24
Placed in Service	July 2006	Assigned Reserves	*none*
Useful Life	30		
Adjustment	1	Monthly Assessment	$60.75
Replacement Year	2037	Interest Contribution	$0.74
Remaining Life	28	Reserve Allocation	$61.50

Funding contingency for upgrading the landscape irrigation system components. Items which typically require upgrade or replacement include; controllers, valves, timers and sprinkler heads.

Condition: Good

Remaining Life: 17 years

Useful Life: 20 years

Corrective Action Required: No

AIRO Page No: 16

Components costs were obtained from Building Construction Cost Data-Western Edition, 2007 (RS Means).

Irrigation Equipment - Total Current Cost	**$10,400**
Assigned Reserves	**$0**
Fully Funded Reserves	**$1,006**

Booster Pumps/Controls & Switches - Replacement - 2017

		3 Each	@ $1,500.00
Asset ID	1099	Asset Cost	$4,500.00
	Capital	Percent Replacement	100%
	Plumbing System Components	Future Cost	$5,999.32
Placed in Service	July 2006	Assigned Reserves	*none*
Useful Life	15		
Adjustment	-4	Monthly Assessment	$56.98
Replacement Year	2017	Interest Contribution	$0.69
Remaining Life	8	Reserve Allocation	$57.68

Replacement funding for booster pump controls and switches. A total of three pumps are used in the fresh water supply and fire suppression systems.

Condition: Good

Remaining Life: 10 years

Useful Life: 15 years

Corrective Action Required: No

AIRO Page No: 44-46

Components costs were obtained from Building Construction Cost Data-Western Edition, 2007 (RS Means).

Booster Pumps/Water Supply System - Rebuild - 2017

		3 Each	@ $2,500.00
Asset ID	1079	Asset Cost	$7,500.00
	Capital	Percent Replacement	100%
	Plumbing System Components	Future Cost	$9,998.86
Placed in Service	July 2006	Assigned Reserves	*none*
Useful Life	20		
Adjustment	-9	Monthly Assessment	$94.98
Replacement Year	2017	Interest Contribution	$1.16
Remaining Life	8	Reserve Allocation	$96.14

Funding for rebuilding the water supply booster pumps. A total of three pumps are used in the fresh water supply and fire suppression systems; 2-15HP & 1-20HP.

Condition: Good

Remaining Life: 8 years

Useful Life: 20 years

Corrective Action Required: No

Booster Pumps/Water Supply System - Rebuild continued...

AIRO Page No: 44-46

Components costs were obtained from local area vendors.

Control Valves - Water Supply System - Replacement - 2009

		3 Each	@ $5,650.00
Asset ID	1081	Asset Cost	$16,950.00
	Capital	Percent Replacement	100%
	Plumbing System Components	Future Cost	$16,950.00
Placed in Service	July 1965	Assigned Reserves	$16,950.00
Useful Life	20		
Adjustment	24	Monthly Assessment	$114.68
Replacement Year	2009	Interest Contribution	$1.40
Remaining Life	0	Reserve Allocation	$116.09

Replacement funding for the water supply control valves used to regulate water supplies for domestic water and fire suppression systems. The valves are scheduled for replacement in 2009.

Condition: Poor to Fair

Remaining Life: 20 years

Useful Life: 20 years

Corrective Action Required: Yes

AIRO Page No: 44-46

Components costs were obtained from the National Construction Estimator Costbooks-2008.

Electric Water Heaters/Laundry Room - Replacement - 2021

		2 Each	@ $2,375.00
Asset ID	1098	Asset Cost	$4,750.00
	Capital	Percent Replacement	100%
	Plumbing System Components	Future Cost	$7,311.86
Placed in Service	July 2006	Assigned Reserves	*none*
Useful Life	15		
		Monthly Assessment	$44.19
Replacement Year	2021	Interest Contribution	$0.54
Remaining Life	12	Reserve Allocation	$44.73

Replacement funding for two Bradford-White 119 gallon electric water heaters located in the laundry room.

Electric Water Heaters/Laundry Room - Replacement continued...

Condition: Good

Remaining Life: 15 years

Useful Life: 13 years

Corrective Action Required: No

AIRO Page No: 44-46

Components costs were obtained from Building Construction Cost Data-Western Edition, 2007 (RS Means).

Water Supply Lines - Repair & Restoration - 2010

		195 Each	@ $9,743.00
Asset ID	1018	Asset Cost	$271,303.57
	Capital	Percent Replacement	14.28%
	Plumbing System Components	Future Cost	$281,233.28
Placed in Service	July 1964	Assigned Reserves	$265,405.67
Useful Life	1		
Adjustment	45	Monthly Assessment	$806.27
Replacement Year	2010	Interest Contribution	$9.89
Remaining Life	1	Reserve Allocation	$816.16

Funding contingency for repair and restoration of the water supply lines which provide domestic water to all outlets in buildings 1 through 5. This component cost is based on a proposal from Nu Flow America, Inc. of Redmond, WA. This proposal is a price quote for the application of an interior pipe coating which meets ANSI/NSF Standard 61, as outlined in the Scope of Work contained in the proposal. A copy of this proposal is included in the Appendix

Condition: Poor to Fair

Remaining Life: 1 year

Useful Life: 50 years

Corrective Action Required: Yes

AIRO Page No: 44-46

NOTE: Funding is scheduled to be available in equal amounts over a seven year period beginning in 2010 based on the financing plan included in the Nu Flow proposal.

Plumbing System Components - Total Current Cost	**$305,004**
Assigned Reserves	**$282,356**
Fully Funded Reserves	**$286,578**

Interior Paint - Common Area Doors - 2013

		228 Each	@ $75.00
Asset ID	1067	Asset Cost	$2,137.50
	Non-Capital	Percent Replacement	12.5%
	Interior Painting	Future Cost	$2,468.03
Placed in Service	July 2006	Assigned Reserves	$916.07
Useful Life	1		
Adjustment	6	Monthly Assessment	$29.15
Replacement Year	2013	Interest Contribution	$0.35
Remaining Life	4	Reserve Allocation	$29.51

Funding for the periodic repainting of interior common area doors. This expense is equally allocated over the eight year lifecycle of the component and is included in the ongoing maintenance painting schedule. Funding for this expense will be available beginning in 2013.

Condition: Fair to Good

Remaining Life: 4 years

Useful Life: 7 years

Corrective Action Required: No

AIRO Page No: 39-41

Painting cost estimates were obtained from Geoff Edmonds of Classic Painting, Inc. (CCB# 78686), 503-449-4789.

Interior Paint - Metal Handrails - Stairwells - 2021

		1,000 LF	@ $3.25
Asset ID	1070	Asset Cost	$3,250.00
	Non-Capital	Percent Replacement	100%
	Interior Painting	Future Cost	$5,002.85
Placed in Service	July 2006	Assigned Reserves	*none*
Useful Life	15		
		Monthly Assessment	$30.23
Replacement Year	2021	Interest Contribution	$0.37
Remaining Life	12	Reserve Allocation	$30.60

Funding for the periodic repainting of the metal handrails in the stairwells of building 1.

Condition: Good

Remaining Life: 12 years

Useful Life: 15 years

Corrective Action Required: No

Interior Paint - Metal Handrails - Stairwells continued...

AIRO Page No: N/A

Painting cost estimates were obtained from Geoff Edmonds of Classic Painting, Inc. (CCB# 78686), 503-449-4789

Interior Paint - Storage/Utility/Parking Areas - 2021

		1 Total	@ $18,000.00
Asset ID	1031	Asset Cost	$1,530.00
	Non-Capital	Percent Replacement	8.5%
	Interior Painting	Future Cost	$2,355.18
Placed in Service	July 2006	Assigned Reserves	*none*
Useful Life	15		
		Monthly Assessment	$14.23
Replacement Year	2021	Interest Contribution	$0.17
Remaining Life	12	Reserve Allocation	$14.40

Funding for the periodic repainting of interior storage, utility and parking areas. This expense is equally allocated over the twelve year lifecycle of the component and is included in the ongoing maintenance painting schedule. Funding for this expense will be available beginning in 2021.

Condition: Good

Remaining Life: 12 years

Useful Life: 15 years

Corrective Action Required: No

AIRO Page No: N/A

Painting cost estimates were obtained from Geoff Edmonds of Classic Painting, Inc. (CCB# 78686), 503-449-4789

Interior Paint - Unit Entry Doors - 2013

		184 Total	@ $75.00
Asset ID	1068	Asset Cost	$1,966.50
	Non-Capital	Percent Replacement	14.25%
	Interior Painting	Future Cost	$2,270.59
Placed in Service	July 2006	Assigned Reserves	$842.78
Useful Life	1		
Adjustment	6	Monthly Assessment	$26.82
Replacement Year	2013	Interest Contribution	$0.32
Remaining Life	4	Reserve Allocation	$27.15

Funding for the periodic repainting of interior unit entry doors. This expense is equally

Interior Paint - Unit Entry Doors continued...

allocated over the seven year lifecycle of the component and is included in the ongoing maintenance painting schedule. Funding for this expense will be available beginning in 2013.

Condition: Good

Remaining Life: 4 years

Useful Life: 7 years

Corrective Action Required: No

AIRO Page No: 39-41

Painting cost estimates were obtained from Geoff Edmonds of Classic Painting, Inc. (CCB# 78686), 503-449-4789.

Interior Paint - Walls/Ceiling - Stairwells - 2021

		12,000 Each	@ $1.50
Asset ID	1069	Asset Cost	$1,530.00
	Non-Capital	Percent Replacement	8.5%
	Interior Painting	Future Cost	$2,355.18
Placed in Service	July 2006	Assigned Reserves	*none*
Useful Life	15		
		Monthly Assessment	$14.23
Replacement Year	2021	Interest Contribution	$0.17
Remaining Life	12	Reserve Allocation	$14.40

Funding for the periodic repainting of interior stairwells in building 1. This expense is equally allocated over the 12 year lifecycle of the component and is included in the ongoing maintenance painting schedule. Funding for this expense will be available beginning in 2021.

Condition: Good

Remaining Life: 12 years

Useful Life: 15 years

Corrective Action Required: No

AIRO Page No: 39-41

Painting cost estimates were obtained from Geoff Edmonds of Classic Painting, Inc. (CCB# 78686), 503-449-4789

Interior Paint - Walls/Ceiling/Trim - 1st Floor Lobby - 2014

		1 Total	@ $3,000.00
Asset ID	1065	Asset Cost	$3,000.00
	Non-Capital	Percent Replacement	100%
	Interior Painting	Future Cost	$3,590.68
Placed in Service	July 2006	Assigned Reserves	$1,125.00
Useful Life	7		
Adjustment	1	Monthly Assessment	$36.68
Replacement Year	2014	Interest Contribution	$0.45
Remaining Life	5	Reserve Allocation	$37.13

Funding allowance for the periodic repainting of interior walls, ceiling and trim in the 1st floor lobby of building 1.

Condition: Good

Remaining Life: 5 years

Useful Life: 7 years

Corrective Action Required: No

AIRO Page No: 39-41

Painting cost estimates were obtained from Geoff Edmonds of Classic Painting, Inc. (CCB# 78686), 503-449-4789

Interior Paint - Walls/Ceiling/Trim - Association Room - 2013

		1 Total	@ $1,000.00
Asset ID	1066	Asset Cost	$1,000.00
	Non-Capital	Percent Replacement	100%
	Interior Painting	Future Cost	$1,154.63
Placed in Service	July 2006	Assigned Reserves	$428.57
Useful Life	7		
		Monthly Assessment	$13.64
Replacement Year	2013	Interest Contribution	$0.16
Remaining Life	4	Reserve Allocation	$13.80

Funding allowance for the periodic repainting of interior walls, ceiling and trim in the association meeting room.

Condition: Good

Remaining Life: 5 years

Useful Life: 7 years

Corrective Action Required: No

Interior Paint - Walls/Ceiling/Trim - Association Room continued...

AIRO Page No: 39-41

Painting cost estimates were obtained from Geoff Edmonds of Classic Painting, Inc. (CCB# 78686), 503-449-4789

Interior Paint - Walls/Ceiling/Trim - Corridors - 2013

		24 Total	@ $2,250.00
Asset ID	1064	Asset Cost	$7,711.20
	Non-Capital	Percent Replacement	14.28%
	Interior Painting	Future Cost	$8,903.62
Placed in Service	July 2006	Assigned Reserves	$3,304.80
Useful Life	1		
Adjustment	6	Monthly Assessment	$105.18
Replacement Year	2013	Interest Contribution	$1.29
Remaining Life	4	Reserve Allocation	$106.47

Funding allowance for the periodic repainting of interior walls, ceiling and trim in the upper level corridors of building 1. This expense is equally allocated over the seven year lifecycle of the component and is included in the ongoing maintenance painting schedule. Funding for this expense will be available beginning in 2013.

Condition: Good

Remaining Life: 4 years

Useful Life: 7 years

Corrective Action Required: No

AIRO Page No: 39-41

Painting cost estimates were obtained from Geoff Edmonds of Classic Painting, Inc. (CCB# 78686), 503-449-4789

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Interior Painting - Total Current Cost	**$22,125**
Assigned Reserves	**$6,617**
Fully Funded Reserves	**$7,879**

Trash Chute Doors - Replacement - 2016

		25 Each	@ $1,500.00
Asset ID	1083	Asset Cost	$37,500.00
	Capital	Percent Replacement	100%
	Trash & Recycling Facilities	Future Cost	$48,229.15
Placed in Service	July 1965	Assigned Reserves	*none*
Useful Life	30		
Adjustment	21	Monthly Assessment	$529.67
Replacement Year	2016	Interest Contribution	$6.49
Remaining Life	7	Reserve Allocation	$536.17

Funding for replacement of the fire-rated trash chute doors at each floor level of building 1. Based on the recommendations of Pielow Fair Associates, LLC in the assessment summary dated May 27, 2005.

Condition: Fair

Remaining Life: 7 years

Useful Life: 30 years

Corrective Action Required: No

AIRO Page No: N/A

Components costs were obtained from the Pielow Fair Associates, LLC assessment summary dated May 27, 2005; a copy of which is included in the Appendix.

Trash Compactor - Disinfectant System - Upgrade - 2009

		1 Total	@ $5,000.00
Asset ID	1084	Asset Cost	$5,000.00
	Capital	Percent Replacement	100%
	Trash & Recycling Facilities	Future Cost	$5,000.00
Placed in Service	July 2009	Assigned Reserves	$5,000.00
Useful Life	20		
		Monthly Assessment	$33.82
Replacement Year	2009	Interest Contribution	$0.41
Remaining Life	0	Reserve Allocation	$34.24

Funding contingency for upgrading the waste disposal system by installing a disinfectant system

Condition: Good

Remaining Life: 17 years

Useful Life: 20 years

Trash Compactor - Disinfectant System - Upgrade continued...

Corrective Action Required: Yes

AIRO Page No: 43

Components costs were obtained from PCI, Inc: 503-777-5548.

Trash Compactor - Replacement - 2019

		1 Total	@ $21,000.00
Asset ID	1071	Asset Cost	$21,000.00
	Capital	Percent Replacement	100%
	Trash & Recycling Facilities	Future Cost	$30,083.70
Placed in Service	July 2006	Assigned Reserves	*none*
Useful Life	20		
Adjustment	-7	Monthly Assessment	$223.36
Replacement Year	2019	Interest Contribution	$2.74
Remaining Life	10	Reserve Allocation	$226.10

Funding contingency for replacement of the solid waste compactor located in building 1. Replacement costs do not include replacement of the trash chute.

Condition: Good

Remaining Life: 10 years

Useful Life: 20 years

Corrective Action Required: Yes

AIRO Page No: 43

Components costs were obtained from PCI, Inc: 503-777-5548.

Trash & Recycling Facilities - Total Current Cost	**$63,500**
Assigned Reserves	**$5,000**
Fully Funded Reserves	**$42,199**

Flooring Replacement/Carpet - Association Room - 2014

		70 SY	@ $36.00
Asset ID	1075	Asset Cost	$2,520.00
	Capital	Percent Replacement	100%
	Flooring	Future Cost	$3,016.17
Placed in Service	July 2006	Assigned Reserves	$945.00
Useful Life	7		
Adjustment	1	Monthly Assessment	$30.81
Replacement Year	2014	Interest Contribution	$0.37
Remaining Life	5	Reserve Allocation	$31.19

Funding for the periodic replacement of the carpet in the association meeting room on the 1st floor.

Condition: Good

Remaining Life: 5 years

Useful Life: 7 years

Corrective Action Required: No

AIRO Page No: 19-26

Components costs were obtained from Building Construction Cost Data-Western Edition, 2007 (RS Means).

Flooring Replacement/Carpet - Upper Floor Corridors - 2016

		1,800 SY	@ $48.00
Asset ID	1076	Asset Cost	$86,400.00
	Capital	Percent Replacement	100%
	Flooring	Future Cost	$111,119.98
Placed in Service	July 2006	Assigned Reserves	*none*
Useful Life	10		
		Monthly Assessment	$1,220.36
Replacement Year	2016	Interest Contribution	$14.97
Remaining Life	7	Reserve Allocation	$1,235.34

Funding for the periodic replacement of the carpet in the common area corridors on the upper floors of building1.

Condition: Good

Remaining Life: 5 years

Useful Life: 7 years

Corrective Action Required: No

Flooring Replacement/Carpet - Upper Floor Corridors continued...

AIRO Page No: 19-26

Components costs were obtained from Building Construction Cost Data-Western Edition, 2007 (RS Means).

Flooring Replacement/Vinyl - Association Room - 2022

		1 Total	@ $2,000.00
Asset ID	1074	Asset Cost	$2,000.00
	Capital	Percent Replacement	100%
	Flooring	Future Cost	$3,191.35
Placed in Service	July 2006	Assigned Reserves	*none*
Useful Life	15		
Adjustment	1	Monthly Assessment	$17.59
Replacement Year	2022	Interest Contribution	$0.21
Remaining Life	13	Reserve Allocation	$17.81

Funding for the periodic replacement of the vinyl flooring in the association meeting room.

Condition: Good

Remaining Life: 13 years

Useful Life: 15 years

Corrective Action Required: No

AIRO Page No: 19-26

Components costs were obtained from Building Construction Cost Data-Western Edition, 2007 (RS Means).

Flooring Replacement/Vinyl - Laundry Room - 2016

		60 SY	@ $55.00
Asset ID	1088	Asset Cost	$3,300.00
	Capital	Percent Replacement	100%
	Flooring	Future Cost	$4,244.16
Placed in Service	July 2006	Assigned Reserves	*none*
Useful Life	10		
		Monthly Assessment	$46.61
Replacement Year	2016	Interest Contribution	$0.57
Remaining Life	7	Reserve Allocation	$47.18

Funding for the periodic replacement of the vinyl flooring in the laundry room.

Condition: Good

Flooring Replacement/Vinyl - Laundry Room continued...

Remaining Life: 13 years

Useful Life: 15 years

Corrective Action Required: No

AIRO Page No:

Components costs were obtained from Building Construction Cost Data-Western Edition, 2007 (RS Means).

Flooring Replacement/Woven Vinyl - Breezeways - 2021

		2 Each	@ $3,000.00
Asset ID	1077	Asset Cost	$6,000.00
	Capital	Percent Replacement	100%
	Flooring	Future Cost	$9,236.03
Placed in Service	July 2006	Assigned Reserves	*none*
Useful Life	15		
		Monthly Assessment	$55.82
Replacement Year	2021	Interest Contribution	$0.68
Remaining Life	12	Reserve Allocation	$56.50

Funding for the periodic replacement of the woven vinyl flooring located in the 1st floor breezeways of building 1.

Condition: Good

Remaining Life: 13 years

Useful Life: 15 years

Corrective Action Required: No

AIRO Page No: N/A

Components costs were obtained from Building Construction Cost Data-Western Edition, 2007 (RS Means).

Flooring - Total Current Cost	**$100,220**
Assigned Reserves	**$945**
Fully Funded Reserves	**$29,430**

Electrical Wiring & Metering Systems - Replacement

		196 Total	@ $5,000.00
Asset ID	1124	Asset Cost	$980,000.00
	Capital	Percent Replacement	100%
	Electrical System Components	Future Cost	$1,455,289.26
Placed in Service	July 1965	Assigned Reserves	*none*
Useful Life	35		
Adjustment	20		
Replacement Year	2020	*No Future Assessments*	
Remaining Life	11		

Funding contingency for replacement of electrical system components, including, but not limited to branch wiring, switchgear, meter equipment and unit sub-panels.

Condition: Good

Remaining Life: 7 years

Useful Life: 35 years

Corrective Action Required: No

AIRO Page No: 49-50

Components costs were obtained from Building Construction Cost Data-Western Edition, 2007 (RS Means).

Emergency Power Generator - Replacement - 2024

		1 Total	@ $36,000.00
Asset ID	1118	Asset Cost	$36,000.00
	Capital	Percent Replacement	100%
	Electrical System Components	Future Cost	$61,726.34
Placed in Service	July 1965	Assigned Reserves	*none*
Useful Life	35		
Adjustment	24	Monthly Assessment	$288.08
Replacement Year	2024	Interest Contribution	$3.53
Remaining Life	15	Reserve Allocation	$291.61

Funding contingency for replacement of the Onan water cooled diesel generator and control systems. This generator provides emergency electrical power in the event electrical service to building 1 is interrupted.

Condition: Good

Remaining Life: 15 years

Emergency Power Generator - Replacement continued...

Useful Life: 40 years

Corrective Action Required: No

AIRO Page No: 49-50

Components costs were obtained from Cummins Northwest, Inc; the maintenance contractor who services the existing equipment.

Emergency Power Generator/Fuel Tank - Replacement - 2024

		1 Total	@ $3,200.00
Asset ID	1119	Asset Cost	$3,200.00
	Capital	Percent Replacement	100%
	Electrical System Components	Future Cost	$5,486.78
Placed in Service	July 1995	Assigned Reserves	*none*
Useful Life	25		
Adjustment	4	Monthly Assessment	$25.60
Replacement Year	2024	Interest Contribution	$0.31
Remaining Life	15	Reserve Allocation	$25.92

Replacement funding for the diesel fuel storage tank located in the parking garage. This tank provides fuel storage for the emergency power generator.

Condition: Good

Remaining Life: 15 years

Useful Life: 25 years

Corrective Action Required: No

AIRO Page No: 49-50

Components costs were obtained from Building Construction Cost Data-Western Edition, 2007 (RS Means).

Electrical System Components - Total Current Cost	**$39,200**
Assigned Reserves	**$0**
Fully Funded Reserves	**$28,392**

Electronic Equipment/Computers - Replacement - 2009

		1 Total	@ $2,000.00
Asset ID	1114	Asset Cost	$2,000.00
	Capital	Percent Replacement	100%
	Tools & Equipment	Future Cost	$2,000.00
Placed in Service	July 2006	Assigned Reserves	$2,000.00
Useful Life	7		
Adjustment	-4	Monthly Assessment	$28.24
Replacement Year	2009	Interest Contribution	$0.34
Remaining Life	0	Reserve Allocation	$28.59

Funding allowance for maintenance department computer equipment. The maintenance department computer is scheduled for replacement in 2009

Condition: Poor

Remaining Life: 7 years after replacement in 2009.

Useful Life: 7 years

Corrective Action Required: Yes

AIRO Page No: 19-26

NOTE: Maintenance department personnel should be provided with an updated computer system and internet access to assist in the performance their duties.

Electronic Equipment/Televisions - Replacement - 2014

		1 Total	@ $1,500.00
Asset ID	1115	Asset Cost	$1,500.00
	Capital	Percent Replacement	100%
	Tools & Equipment	Future Cost	$1,795.34
Placed in Service	July 2006	Assigned Reserves	$562.50
Useful Life	8		
		Monthly Assessment	$18.34
Replacement Year	2014	Interest Contribution	$0.22
Remaining Life	5	Reserve Allocation	$18.56

Replacement funding for the flat panel television located in the laundry room.

Condition: Good

Remaining Life: 5 years

Useful Life: 8 years

Corrective Action Required: No

Electronic Equipment/Televisions - Replacement continued...

AIRO Page No: N/A

Tools & Equipment - Total Current Cost	**$3,500**
Assigned Reserves	**$2,562**
Fully Funded Reserves	**$2,562**

Passenger Elevators - Renovations & Upgrades - 2026

		3 Each	@ $150,000.00
Asset ID	1089	Asset Cost	$450,000.00
	Capital	Percent Replacement	100%
	Elevators & Vertical Lift Equipment	Future Cost	$829,092.50
Placed in Service	July 2006	Assigned Reserves	*none*
Useful Life	20		
		Monthly Assessment	$3,333.84
Replacement Year	2026	Interest Contribution	$40.91
Remaining Life	17	Reserve Allocation	$3,374.75

Funding allowance for the renovation and updating of three passenger elevators located in building 1.

Condition: Good

Remaining Life: 17 years

Useful Life: 20 years

Corrective Action Required: No

AIRO Page No: 41-43

Components costs and remaining life estimates were obtained from Thyssen/Krupp Elevators, the service contractor who maintains the elevators at this time.

The vendor indicates the freight elevator was recently renovated and the remaining life should exceed thirty years.

Elevators & Vertical Lift Equipment - Total Current Cost	**$450,000**
Assigned Reserves	**$0**
Fully Funded Reserves	**$67,500**

Detail Report Summary

Total of All Assets

Assigned Reserves	$468,991.00
Monthly Contribution	$31,895.17
Monthly Interest	$1,214.97
Monthly Allocation	$33,110.14

Grand Total

Assigned Reserves	$468,991.00
Monthly Contribution	$31,895.17
Monthly Interest	$1,214.97
Monthly Allocation	$33,110.14

Inflation, Interest & Income Taxes

The funding projections contained in this reserve study will be affected by inflation, interest earned on reserve deposits and income taxes paid on Association earnings (primarily interest earnings).

Due to the relatively long period of time covered by this study (30 years), assumptions made today concerning these factors will necessarily be reviewed on a regular basis and adjustments made based on current data at the time the review is performed.

Inflation-

Inflation will affect the cost of future capital expenditures planned for in this study, particularly items such as roofing, asphalt and painting which are impacted by the cost of energy or petroleum prices.

The Association should therefore, maintain a policy of monitoring and revising the figures used in the study to ensure adequate funds are being contributed to reserves to pay for these expenditures when they occur.

The inflation figure used in this study is based on the current inflation rate as published by the website www.inflationdata.com.

The current inflation rate used in this study as of November 19, 2008 was 3.66%.

Interest-

Interest on reserve deposits may have a significant impact on Association funding requirements, particularly when large reserves are being held on deposit and interest rate yields are relatively high.

Associations may choose different investment vehicles for the funds they hold in reserve and these decisions are beyond the scope of this study. Therefore, assumptions regarding interest rates are based on yields available for insured deposits with recognized financial institutions. Should the Association achieve yields beyond those assumed in this study the interest rate factor may be revised to reflect the true rate of return on reserve deposits.

The interest rate figure used in this study is based on the average yield for a 1-year certificate of deposit in the Portland, OR area as determined by the website www.bankrate.com.

The current interest rate used in this study as of November 18, 2008 was 2.25%.

Income Taxes-

This study does not include an income tax factor when calculating funding requirements for the Association's reserve fund.

Reserve Study Updates

This reserve study attempts to project the maintenance, repair and replacement costs and life cycles for common area components which are the responsibility of Harrison West Condominiums Owners Association to maintain, repair and replace.

With changing material technologies and maintenance procedures it is reasonable to assume some of the replacement schedules, cost estimates and maintenance recommendations described in this study may change over the next 30 years.

This reserve study must be updated annually under Oregon law. Annual updates may or may not include a new condition assessment at the discretion of the Board of Directors and the reserve study provider.

Glossary

Abbreviations

SF - Square foot

TSF - Total square feet

LF - Lineal foot

SY - Square yard

CY - Cubic yard

EA - Each, indicating the unit price of each item in the quantity count

Yr or yr - Year

Btu - British thermal unit

CFM - Cubic feet per minute

GPM - Gallons per minute

Lbs or lbs - Pounds

Definition of Key Reserve Study Terms

Cash Flow Funding Method - A funding approach designed to offset the variable annual expenditures from the reserve fund by establishing a schedule of reserve spending requirements where different funding plans are tested against the anticipated funding schedule until the desired funding goal is achieved. In general, a reserve funding schedule that utilizes the cash flow funding method will result in a higher level of reserve contributions from year to year and therefore is considered a more conservative approach to funding the association's reserves.

When funding a reserve account with a cash flow funding model current association members will typically pay a larger share of the future cost for repair and replacement of common area components than they would under a less conservative funding approach.

Component Funding Method - Similar in some respects to cash flow funding, component funding accumulates funds in the association's reserves in an amount equal to the sum of the individual component replacement expenses included in the replacement reserve schedule.

Component funding is generally considered the most conservative approach to reserve funding. While it may be considered a fiscally responsible funding philosophy, it often leads to over-funding of the association's reserves, particularly with newer communities in which many components will have a significant remaining useful life before replacement is scheduled to occur.

Component - When used in the context of a reserve study, a component is one or more items that comprise a common area asset. Components may be thought of as objects: as in the case of roofing or

guttering, and they may be thought of as a repair or replacement process: as in the case of painting. A component may refer to a fixed part of the building or grounds: such as an elevator or fencing; but it is also used in the context of loose physical assets: such as common area furnishings, exercise equipment, etc.

When used in the context of a reserve study, a component will typically have a readily identifiable useful life which is generally accepted as a fixed period of time. The maximum useful life or remaining life of any component included in a reserve study will be 30 years from the current date of the reserve study, unless other criteria have been established by the parties involved in the reserve study process.

The replacement cost of components included in a reserve funding schedule will generally be set at a minimum dollar amount by mutual agreement of the parties to the reserve study. A typical minimum dollar amount for a small association is $1,000.00.

In the state of Oregon all common area painting expenses are required to be included in the reserve funding schedule regardless of the cost of the individual repair.

General Common Area Components or General Common Elements - Refers to assets commonly owned and used by all association members and will be maintained, repaired and replaced at the association's expense.

Component Inventory - A list of all common area components included in the replacement reserve funding schedule, when developing a reserve study for a common interest development.

Condition Assessment - A physical inspection of the association's common area components to determine the present condition of the assets and the likelihood they will achieve their useful life expectancy based on current levels of use and ongoing maintenance.

Given that the majority of major common area components in a typical community will have an architecturally related application, it is advisable to retain the services of a consulting architect or engineer to prepare the condition assessment and provide an estimate of the remaining life for common area components.

A comprehensive condition assessment will also include recommendations for the immediate repair or replacement of damaged or defective components and will contain recommendations for maintenance of common area components.

Effective Age - Refers to the difference between the useful life expectancy and remaining useful life of an existing component. Not always equivalent to the chronological age of the component due to the tendency for similar components to age at differing rates, and because of unique the characteristics of individual components.

Limited Common Area Components or Limited Common Elements - Components appurtenant to one or more individual units, but not ALL units are typically classified as Limited Common Elements (LCE) or Limited Common Area Components.

Depending on the language in the declaration, the association may or may not be responsible for management of the repair or replacement process. In some cases the association may be responsible for the cost of repair or replacement of LCEs and will include the cost in the reserve funding schedule. In some instances the individual unit owner is responsible for the repair or replacement cost and is assessed the cost of repair at the time it occurs.

Percent Funded Level - The percent funded level is a measure of total accumulated depreciation versus the total projected replacement cost for all common area components included in the replacement reserve funding schedule.

It illustrates the level of reserves (percent funded figure) compared to the total dollar value of the accumulated depreciation for all common assets included in the replacement funding schedule. So, if the accumulated depreciation is $100,000 and the association has $50,000 in reserves, the fund is said to be 50% funded.

Theoretically if a reserve fund is 100% funded, accumulated depreciation should equal accumulated reserves. Eventually when all components have been depreciated to zero dollar value, the association's reserves should be 100% funded in order to have adequate funds to replace all components included in the replacement schedule.

Due to the fact that all components are not likely to require replacement at the exact same time it is not uncommon for the reserve account to be less than fully funded.

Remaining Life (RL) - The remaining life expectancy for common area components in service prior to the date the analysis was performed and therefore are not expected to have a remaining service life equal to that of a new component.

Replacement Reserves - Replacement reserves are funds collected from association members that will be used to pay for repair and replacement of common area components according to the repair and replacement schedules contained in this reserve study. These funds should be held in a separate account and not co-mingled with operating funds.

Statutory Funding - Funding of the reserve account in an amount that is required by local or state statutes which may govern the association's financial practices.

Threshold Funding Method (TFM) - This funding approach establishes a minimum balance for the association's reserve account and creates a funding projection which results in the fund balance never dropping below the predetermined minimum balance. While this results in lower reserve assessments for association members it will also result in underfunding if major component expenditures are required prior to the year the expense is scheduled to occur. This situation could require a special assessment to maintain the threshold funding balance and keep the remaining reserve funding schedule in line with projections.

If the TFM continues to be used by the association, it is imperative that proper maintenance and repair procedures are followed so common area components can be expected to achieve the maximum useful life assumed in this study.

Transition Inspection - The inspection of association property at or near the time period when control of the Board of Directors passes from the developer to a board comprised of unit owners other than the original declarant. The transition inspection is an extremely important process that should be undertaken by a qualified architect or engineer to ensure the interests of the community are best served.

The statute of limitations concerning construction defects varies from one jurisdiction to another. The association's right to legal recourse for defective products and installations may be compromised if they fail to document the current condition of their property during this transitional period. In addition,

warranties that may be in effect could be impacted by the failure to perform timely inspections of components under warranty.

Building technology professionals experienced in the inspection process and the preparation of a written narrative of their findings should be retained to perform such an inspection. Reserve studies which may have been prepared prior to this time should be updated in conjunction with the completion of a transition inspection.

Useful Life (UL) - The estimated life expectancy of a common area component from the time it is placed into service as a new component. A component that is not new and therefore cannot be expected to have a remaining service life equal to a new component is said to have a "remaining life" or "remaining useful life."

Useful life projections incorporated into HOA Services Group, LLC reserve studies are based on industry standards and the opinion of vendors, architects and engineers associated with this project. It is assumed common area components will be maintained according to manufacturer's recommendations and/or the maintenance guidelines detailed in the accompanying maintenance program.

Estimates of useful life for common elements are typically based on accepted industry standards for component life spans derived from sources such as RS Means Construction Publishers & Consultants, the Federal National Mortgage Association and The Department of Housing and Urban Development.

Harrison West Condominiums
Component Index

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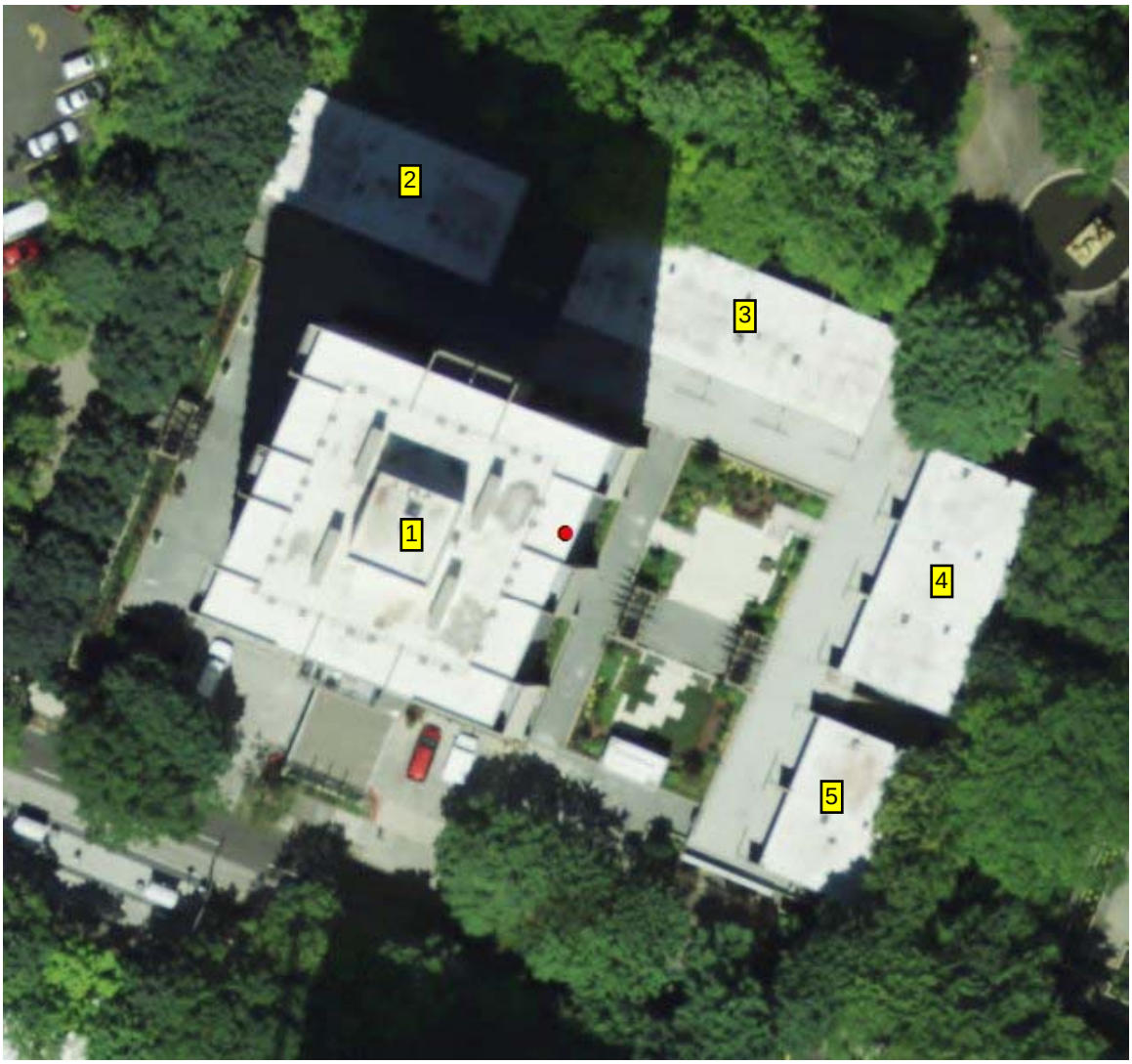
Total Funded Assets	73
Total Unfunded Assets	2
Total Assets	75



Harrison West Condominiums

Building Numbering Sequence

PFA **Pielow Fair Associates**

Wells Fargo Center 999 Third Avenue Suite 3800
Seattle, Washington 98104
(206) 224-6209
Fax 224-6211
rpielow@prodigy.net

May 27, 2005

Jana Hanford
Marx / Okubo Associates
1809 7th Avenue
Suite 309
Seattle, WA 98101

RE: Portland Center – Portland, Oregon

Dear Jana:

This letter summarizes our findings and opinions of the code issues relating to the Portland Center apartment development located in Portland, Oregon. Our opinions are based upon our review of the drawings and site visit.

Codes

The Portland Center was permitted and constructed under the provisions of the Building Code for the State of Oregon and the City of Portland at the time of original construction. The codes in effect at that time were an amended version of the Uniform Building Code (UBC)® as promulgated by the International Conference of Building Officials, Whittier, California. The building code is enforced by the City of Portland, Bureau of Development Services and the Portland Fire Department.

The State of Oregon and the City of Portland Bureau of Development Services adopted a new building code in 2004. The new version is an amended version of the 2003 International Building Code (IBC)® as promulgated by the International Code Council, Falls Church, Virginia.

Existing Buildings

The Portland Center consists of four existing buildings under the provision of Chapter 34 of the code. The three residential towers are classified as high rise structures with the highest floor level for occupancy located more than 75 feet above the lowest level of access afforded to the Portland Fire Department. The existing commercial building is not a high rise. Dedicated parking is provided under two of the high rise residential towers. High rise residential Building 222 is not provided with dedicated parking under its footprint and shares parking located beneath the commercial component of the development. It appears that the townhouse units were considered as a part of the building that shares the common parking structure below. The primary uses of the building include apartment dwelling units, common lobby and amenity areas, storage, resident central laundries and parking. The buildings are not provided with an open

atrium as defined by the code. The roofs are not normally accessible to the residential tenants and are not normally occupied.

Chapter 34 generally allows existing buildings to continue their use unless the building or fire officials identify a condition that creates an unacceptable hazard to life. The building should be able to continue its current use based upon the relative new age of the building. A check with the City of Portland, Oregon, Bureau of Development Services found no significant code provisions that would affect existing buildings unless the occupancy is changed. The following compares the existing Portland Center life safety system with the provisions for new high rise construction:

Code Requirement	Portland Center	New Construction
Sprinklers	Sprinklers in parking and service levels only with a single non-approved head above the entry door to each dwelling unit.	Sprinklers throughout.
Standpipes	1½ outlet with hose in each corridor. 2½ outlet for fire department use in firefighter's access stair.	Combined standpipe system.
Dwelling unit smoke detectors	Battery operated single station units.	Single station units that are 110v operated with battery back up. All detectors within an individual dwelling unit required to be interconnected.
Smoke Detectors	At elevator lobbies only.	Required at elevator lobbies and in all mechanical, electrical and telephone rooms.
Audible alarm	Two speakers in each corridor.	Speakers provided throughout so as to be audible in all areas, including dwelling units.
Visual alarms	Strobes at each speaker in corridor.	Strobes at each speaker with ability to provide strobes within individual dwelling units that have occupants not capable of hearing the audible alarms.
Stairway pressurization	Modified smoke proof enclosures.	Pressurized stairways required.

Elevator protection	None.	Elevator lobby separated from corridor with one hour construction or pressurization approved as an alternate.
Floor by floor smoke control	Not provided.	Not required in IBC based codes.
Secondary water supply	Not provided.	Required in new construction. Specifically not required in existing buildings.
Fire command center	Small room on first floor of each residential tower.	Fire command center required.
Emergency power	Provided.	Required for all emergency systems.
Firefighter's two way communication system	Not provided.	Required.

Construction

The permit drawings indicate that the Portland Center is constructed in accordance with the provisions for Uniform Building Code Type I Fire Resistive Construction. The code allows residential buildings of this type of construction to be unlimited height and area. The existing construction type is appropriate for the building. This construction type is also acceptable under the new IBC based codes where the minimum construction classification is Type 1-B.

Building Separation

The three towers and the commercial building that comprise the Portland Center are separated on all sides with clear space as required by the code. The separation provided eliminates any provisions in the code for fire exposure from adjacent properties.

Fire Suppression Systems

The Portland Center is protected with dry type, pipe schedule automatic sprinkler systems in the parking levels and wet type pipe schedule systems on the storage levels only. A high pressure domestic water pump provides water to a supervised sprinkler loop on each residential floor. A single sprinkler is provided in each dwelling unit above the entry door from the corridor. This partial, domestically served sprinkler system is provided with a monitored control valve and sprinkler flow switch for each floor. These devices are original and several were noted to be in need of repair or replacement. The level of testing and maintenance on the fire sprinkler components connected to the fire alarm system does not appear to be in conformance with generally acceptable procedures. Routine testing and maintenance would identify alarm devices in need of repair or replacement. I recommend that the entire fire alarm system, including all components of the fire sprinkler system connected to the fire alarm system, be fully tested in accordance with NFPA 72, National Fire Alarm Code. This level of testing will identify all components in need of repair or replacement. The opinion of probable cost for each flow or tamper switch in need of repair or replacement would be approximately $ 500.00. The age of

these devices will make repair parts difficult to secure and will necessitate replacement as they fail.

The dwelling room system is not installed in accordance with the provisions of NFPA 13, Standard for the Installation of Automatic Sprinkler Systems as promulgated by the National Fire Protection Association, Quincy, Massachusetts. The City of Portland accepted this design approach at the time of original construction. Ideally, all sprinkler systems are installed in accordance with NFPA 13. However, since this system was accepted and approved by the City of Portland, it should be able to remain in service. 1-½ inch fire hose outlets with occupant use hose are located on each floor and are also supplied by the high pressure domestic pump. Approved fire pumps are not provided in the Portland Center.

It appears the life safety concept was to contain a fire within an individual dwelling unit through a combination of a one hour fire resistive rated separation between individual units and between the dwelling units and the corridor and the sprinkler head over the entry door to the dwelling unit.

The building does not meet the requirements of newly constructed high rise buildings. All high rise building constructed nationwide since approximately 1976 require automatic sprinkler protection throughout. The City of Portland, Bureau of Development Services, reports no code provisions to retroactively require automatic sprinklers in existing high rise buildings. However, cities around the nation have been aggressively passing such retrofit ordinances requiring all existing high rise buildings to have sprinkler protection throughout. It is possible Portland may eventually adopt such an ordinance thereby requiring the Portland Center to be fully sprinklered. The opinion of probable cost to provide automatic sprinkler protection in accordance with NFPA 13 with coverage afforded for the entire building as required by the current building code, or a potential high rise retrofit code, is between $ 2.50 and $ 3.00 per square foot.

Standpipe outlets for fire department use are provided on each floor inside the dedicated firefighter's access stair as required by the code.

The sprinkler and standpipe systems are served by a single connection per building to the city water supply as was allowed by the code at that time. Revisions to the code now require a secondary onsite water storage tank. However, the new code also specifies that the secondary water storage tank is not required for an existing building. I do not anticipate that the City of Portland would change the code to require a secondary water storage tank in existing buildings.

Fire Alarm System

The three high rise residential buildings are protected with individual Firevac fire alarm system. The original systems were replaced in approximately 1997 with the new systems. The commercial building is not provided with a fire alarm system. The three fire alarm systems are in good condition and repair and replacement parts are still readily available.

Smoke detectors are provided in the corridor. Smoke detectors are not provided in electrical closets, telephone rooms and in main mechanical spaces where required by the current code. These were apparently not required by the City of Portland when the systems were replaced. Manual pull stations are provided at the entrance to each smoke proof enclosure as required. Single station smoke detectors are provided in each dwelling unit. These detectors are battery powered. They are not 110v powered as required for new construction and not powered or monitored through the fire alarm system.

The system provides audible voice and alarm messaging in the corridors only. Two speakers are located in the opposite corners of the corridor. It is unlikely that the required audibility is provided throughout the dwelling units with only two speakers in the corridor. The City of Portland accepted this limitation when the new fire alarm systems were installed. It is not likely that the City would require additional upgrades at this time to meet NFPA 72, The National Fire Alarm Code. The opinion of probable cost of voluntarily adding additional fire alarm speaks to each floor so that the required audibility is afforded in each unit is approximately $300.00 per dwelling unit plus $12,000.00 per building to upsize the amplifiers to accommodate the additional speakers. Visual strobes for persons with hearing disabilities are provided at each of the two corridor speakers. No visual alarms are provided within the dwelling units. Alarm bells that were the notification appliances for the original fire alarm system are not connected to the new system and do not operate.

A two way firefighter's communication system consisting of phone jacks and hand sets is not provided. New high rise buildings require a firefighter's communication system with control provided in the Fire Command Center and jacks located at the entrance to each stair enclosure and in main mechanical and electrical spaces.

The existing fire alarm panels are in mail rooms on the first floor of each tower. New high rise construction requires a dedicated fire command center.

Smoke Control

The building is not provided with smoke control consistent with current requirements.

The elevator hoistways are not pressurized and the elevator lobbies are not separated from the fire resistive rated corridors.

The current code requires that stairways in high rise buildings be mechanically pressurized to maintain an egress path that is free from smoke. The two exit stairs in each residential tower are connected to a common vented tower. The code approach when the buildings were constructed was to provide smoke proof enclosures for occupant evacuation. This typically consisted of a vestibule between the corridor and the stair enclosure that was vented to the outside. This was the approach utilized in the three high rise towers within the Portland Center. The two exit stair enclosures in each high rise residential tower share a common vented shaft. The code typically required that each stair be provided with its own vented shaft. However, it appears that a single shaft was allowed based upon a firefighter's stair that was provided within the vented shaft. The code approach appears to have been to provide a separate vented access to each floor for fire

department use. That way, the fire department could access the fire floor through their dedicated stair without having to work around persons exiting down the two required exit stairs.

Emergency Generators

Each of the three high rise residential towers is provided with a 175 kw emergency generator located in the parking level of each building. Double wall tanks were recently added for storage of diesel fuel for the generators. The generator is capable of returning all elevators to the first floor and then selectively operating one elevator under emergency power.

Egress

The egress from the Portland Center is generally in conformance with the requirements of the UBC based codes under which it was built and the current IBC based codes.

Each high rise residential floor is served by two enclosed, "smoke proof" exit stairways. The stairs are 44 inches in width. Both stairs discharge directly to the outside as required by the code at the time of construction. The "smoke proof" nature of the stairways was discussed earlier in this analysis under "smoke control".

The low rise Portland Center commercial building is provided with means of egress in compliance with the code both in terms of total egress capacity and number of egress route provide.

Trash Chutes

Each of the three high rise residential towers is provided with a trash chute for resident use. The chute is accessed from each floor in a dedicated room. The chute access room is not separated from the fire resistive rated corridor as required. The chute doors that separate the trash chute from the individual floor trash room are not separated by fire resistive rated construction. The typical trash chute is provided with an automatic sprinkler at the top and bottom only. They are not protected with automatic sprinklers as required by current standards. The trash chutes are provided with venting to the outside at the roof level.

The trash chutes discharge into receiving rooms on the parking level. The doors separating the receiving rooms from the parking areas have been removed and replaced with a rolling type door. A fire resistive rated separation is not provided between the parking areas and the trash chute receiving room. Therefore, an unprotected vertical opening exists between the parking levels and all residential floors. This would allow the smoke from a fire in the parking garage to spread throughout the building. In addition, a fire on any individual residential floor would allow smoke spread through the other floors through the trash chute.

The receiving area of the trash chute is provided with a local smoke detector connected to a solenoid valve that releases water through open sprinkler heads in the receiving area. This "deluge" type system is intended to prevent a fire within the receiving area from spreading up the trash chute. This system is not installed in accordance with current NFPA 13 standards. In addition, the systems are in poor condition from lack of maintenance and would likely fail in the

event of a fire. The minimum system in place at the time of original construction should be restored to service, including the deluge sprinkler system and the fire resistive rated room. Consideration should also be given to providing sprinklers inside the trash chutes and replacing the existing chute doors with doors that provide a fire resistive rating.

The opinion of probable cost to provide sprinkler protection inside the trash chutes in accordance with current code requirements is approximately $10,000.00 per trash chute. Replacing the existing chute doors with fire resistive rated doors would likely cost on the order of approximately $1,500.00 per door. The opinion of probable cost to restore the deluge system into service at the chute discharge room is approximately $2,500.00 per room. This would establish protection at the level when the buildings were originally constructed. Providing protection in full compliance with NFPA 13 would not be possible without upgrades to the incoming fire protection water service.

Summary

In general, it is my opinion that the Portland Center three high rise residential towers and the low rise commercial building in Portland, Oregon will be allowed to continue their current use as existing buildings without the City of Portland requiring major upgrades. However, the risk of a retrofit ordinance in the future exists, especially if a fire incident raises the public awareness of fire safety issues in existing high rise building.

Any expansion or a significant renovation of the building could include a requirement to upgrade the sprinkler and life safety components of the buildings to current standards.

The buildings provide a level of safety to the public that is consistent with the intent of the code at the time or original construction. Their lack of systems required in new construction is consistent with other residential buildings of its period. The three residential towers do not meet the level of life safety established by current codes, or even codes typically in effect since 1976.

Please contact me if you have any questions or comments.

Sincerely:
Pielow Fair Associates, LLC

Robert J. Pielow, P.E.
RJP/ms

Project Bid

Proposal # NFNW-08009

DRAFT FOR RESERVE STUDY ONLY

FORMAL BID TO BE DELIVERED TO DARRYL ANDREWS 11/20/2008

Date: November 19th 2008

Project: **Harrison West Condominiums**

255 SW Harrison St.
Portland, OR 97201

Owner's Representative: **Mara Davis**
Portfolio Manager
BPM Condominium Management

Principal Contractor:
("Contractor") Nu Flow America Inc.
18005 NE 68th St, Suite A110
Redmond, WA 98052-8506
Zach Collett (425) 861-9590

Project Bid Price: **$1,840,425.00** plus Oregon State Sales Tax (if applicable)

Temporary water (tempered 110F) will be added at $350/unit, if nec.

Additional Isolation Valves added at $500/each, if requested

Nu Flow America Inc. 18005 NE 68th Ave, Suite A-110 ■ Redmond, Washington 98052
1.888.FIXFLOW ■ Fax 425.867.9592 ■ **www.NUFLOWTECH.com**

SCOPE OF WORK

The Owner represents the Scope of the project as follows, which serves as the basis of the bid:

Site Description. The Subject Property is a 25 story building with 184 tower living units and 12 patio townhouses built in 1964 located at 255 SW Harrison St, Portland, Oregon 97201.

Piping System Description. The potable drinking system is comprised of galvanized iron pipes which are experiencing low flow and minor failures due to the effects of water corrosion.

Plumbing Fixture Inventory Based upon the Mechanical Design Drawings, Sheets M1 – M10 (stamped May 11, 1964 Portland Center Apartment Building, Skidmore, Owings & Merrill Architects). We have identified a total of 2500 plumbing connections. We have excluded the cold water domestic low and high pressure main piping in the basement.

THE WORK

General Process Description. The Contractor will drain the isolated portion of the piping system and the piping system will be dried. The pipes will then be cleaned and coated with a barrier coating material meeting ANSI/NSF Standard 61, consistent with ANSI/AWWA C210-97 Standards, adopted by IAPMO and listed in the UPC.

Specific Exclusions: Specifically excluded from the Scope of Work are asbestos and lead paint abatement, cutting, patching and painting of wall and/or floor covering replacement, re-plumbing of cancelled lining, any fire suppression system, asbestos, lead, or other hazardous material abatement, restoration of “dead leg” pipes and hammer arrestors, replacement of in-line valves that Owner has not specifically indicated are to be isolated to remain functional, restoration of any hot water tanks or any heating or cooling system, waste, vent, and/or storm drain piping. Tile repair at shower for access to pipes, but a new factory steel escutcheon plate will be installed or a new white panel cover furnished and installed over the back side of the shower mixing valve. Should Owner wish a separate bid on any of these items to be completed in conjunction with the pipe restoration, Contractor would be glad to provide such a quote whenever possible. Moving of appliances, furniture and personal amenities from cabinets, closets or garage are excluded.

CONTRACT PRICE AND PAYMENT TERMS

The Contract Price is: $1,840,425.00 plus OSST, if applicable

The Contract Price is normally to be paid on the following terms:

A 25% mobilization payment will be due upon the signing of the Contract.

The remainder will be due in payments invoiced every 2 weeks of the project, and will be based upon the amount of work completed the prior 2 weeks.

Payment will be due 7 days after invoicing.

The pricing provided herein shall be valid for a period of 30 days from the date reflected in this Bid Proposal.

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The above pricing does not include the cost of any permits and inspections, should they be necessary.

10 – Year Warranty and daily cleanup is provided. ***A Financing Program Is Available For Consideration.***

TIME OF COMPLETION AND SCHEDULE

The following timeline assumes one commercial set of equipment and one work crew on the site, with 1 commercial compressor during the restoration.

- The project will be completed over 50 weeks (250 days) of work during regular business hours per building.
- As with any process unforeseen events, such as hidden or nonconforming plumbing conditions, can affect this time frame. However we will make every effort to stay with in the estimate given.

ASBESTOS AND ENVIRONMENTAL ISSUES

In order for Contractor to complete the Work, all fittings and shutoff valves must be accessed in order to isolate sections of the piping system.

- Owner must disclose to Contractor the presence of, or suspected presence of, asbestos, lead, or other hazardous materials contained in the Subject Property, and will provide a copy of any asbestos, lead, or other related hazardous material reports to Contractor prior to final bid preparation.
- Should the reports disclose asbestos, lead, or other related hazardous material, prior to work start-up, a certified hazardous materials consultant must inspect any valves, connections or joints that may be covered with friable asbestos, as well as work areas such as attics, crawl spaces and pipe chases. If removal of such valves and fittings disturbs asbestos and creates a hazard, or the work areas are contaminated with such hazardous materials, Owner, through their designated representative, will arrange with a state-certified contractor or in-house personnel to perform asbestos abatement procedures on those work areas, pipe sections and fittings requiring access and determined to be hazardous.
- During the course of the Work if the Contractor discovers undisclosed hazardous materials, Contractor shall notify Owner of the discovery of such materials. Owner, through their designated representative, will arrange with a state-certified contractor or in-house personnel to perform asbestos abatement procedures on those work areas, pipe sections and fittings requiring access and determined to be hazardous.
- The pricing provided herein assumes that no such asbestos, lead, or other hazardous materials are contained in the Subject Property, and if later disclosed or discovered may cause adjustments to the project pricing.

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CHANGES IN WORK

Contractor shall not make changes in the Work unless so required or approved in writing by the Principal, Owner, or Owner Representative through a Change Order.

INSURANCE

The Contractor maintains the following insurance coverages:

- Workmen's Compensation and Occupational Disease Act (or Equivalent)
- Comprehensive General Liability
- Commercial Automobile Insurance

SPECIAL PROVISIONS

The Owner shall provide adequate parking spaces to accommodate the following:

- 1 commercial compressor unit measuring 25 feet x 8 feet x 8 feet, compressor will remain on-site for the duration of the project.
- 1 Truck measuring approx. 25 feet.
- 1 Standard sized work truck

Owner to facilitate and provide all inspections, permits, access to pipe and equipment, and any other manner of logistical support that Nu Flow will need to accomplish the work. The compressor unit will be located no more than 150 feet from the active work segment.
Prices provided assume that our crew members will be able to coat the plumbing systems for the building, and that the plumbing systems are in a condition, and adequately functional, that allows for lining to take place. If our team finds that the plumbing systems cannot be coated, due to the modifications that have been made over time due to their leak history. Then there may be an additional cost associated with extra, traditional plumbing work that would be necessary at that time. All changes will be submitted by change order and approved by management prior to the work being completed. The re-plumbing of cancelled or modified plumbing is not included in this bid.

The Harrison West Condominium Association understands that our epoxy coating process is a barrier coating to prevent further corrosion of the pipe, and is not a structural solution to inadequate pipe strength. The association understands that if portions of the pipe are compromised or leaking the pipe needs to be given adequate structural strength (i.e. by clamping or spot repair) for its intended purpose, prior to our lining process.

ACCEPTANCE OF BID

Upon acceptance of this bid we will proceed to the completion of our Contract.

_____
Print Name

_____ _____
Signature Date

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