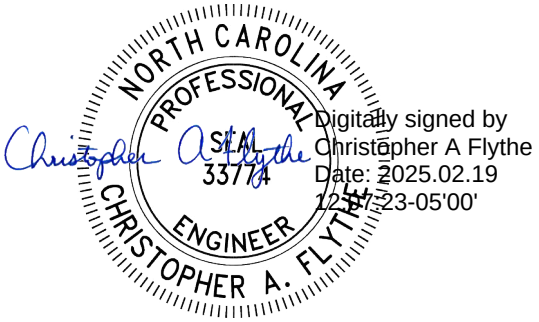
**PREPARED FOR:**

# OLDE RALEIGH VILLAS CONDOS RALEIGH, NC

**MANAGED BY:**
**GRANDCHESTER MEADOWS, INC.**

**DATE:**
**FEBRUARY 18, 2025**

# RESERVE STUDY UPDATE with Site Inspection

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GILES FLYTHE
ENGINEERS

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# INTRODUCTIONS

Olde Raleigh Villas Condos authorized Giles Flythe Engineers to perform a Reserve Study Update with Site Inspection for the Olde Raleigh Villas Condominiums community located in Raleigh, NC. We previously performed a full reserve study for the community dated May 14, 2020. The purpose of the reserve study is to assist the association in planning for future capital repair expenses. A reserve study is an important tool for an association to adequately fund capital reserve accounts through regular annual reserve contributions. Adequately funded capital reserve accounts reduce the need to defer capital repairs, collect special assessments or borrow funds for capital repair projects.

A community association typically has certain responsibilities as described in the association governing documents. These responsibilities often include maintaining common areas and other components. An association, as a non-profit organization, will typically have two general asset cash accounts including an operating account and a reserve account. The operating account is funded from regular budgeted assessments and is used to fund routine operating expenses that occur on a predictable cycle, typically monthly or up to annually. The reserve account is funded from regular contributions and is primarily used to fund non-annual capital repair expenses.

The focus of the reserve study is on the reserve account. We have projected capital repair expenses over a term of thirty years. The capital repair expenses are limited to those components for which the association is responsible for maintaining. Capital repair expense estimates include an expected useful life and remaining useful life of the components to develop a projected schedule for capital repairs over the term. After developing a schedule of capital repairs over the term, we completed a cash flow analysis forecasting reserve account balances over the term and provided funding recommendations as needed. Capital repair expense estimates and funding estimates are most reliable in the first portion of the term. Updating a reserve study every three to five years will mitigate the impacts of variation in repair costs, component wear, inflation and reserve funding over time.

Capital reserve funding recommendations are provided to address funding principles such as providing a sufficient amount of funds, a stable reserve contribution rate over the term, an equitable contribution rate over the term, and a fiscally responsible approach to funding. The reserve study is intended to assist the association in developing budgeted reserve contributions.

The report includes a narrative section which describes the scope of the reserve study, a discussion of observations and capital repair allocations, a general description of capital repairs and a description of our cash flow analysis and funding recommendations. The report appendices include the capital reserve analysis with tables detailing an itemized list of capital repair expenses, an itemized list of expenses by year and our cash flow analysis. A photo log is provided and includes a representative sample of our observations. The report includes multiple sections with information presented in various forms and should, therefore, be read in its entirety.

# EXECUTIVE SUMMARY

Olde Raleigh Villas Condominiums is a condominium community situated along Baron Cooper Pass in Raleigh, NC. The community includes a total of 40 units within two condominium buildings. The buildings were constructed in 2000 (Building 3701) and 2002 (Building 3700) according to Wake County Tax Records.

The Association has responsibility for the exterior facades, parking garages, and interior common areas of the condominium buildings, as well as the common area mechanical, electrical, and plumbing systems servicing the buildings. The Association is also responsible for maintaining the common area site improvements including the asphalt paved parking lots, concrete-paved access drives, concrete and brick paver flatwork, landscaping, and drainage systems.

The buildings, common areas, and site improvements are generally in good condition. Note that based on our cash flow analysis, maintaining the current funding level is **not** projected to maintain a positive balance over the term. We have provided alternative recommendations for annual reserve contribution schedules that provide a healthy balance to meet capital expenditure requirements in the next thirty years, in summary as follows:

- **Alternative 1**: Beginning in 2025, increase the annual reserve contribution by $6,200 every year for 15 years. This alternative is projected to maintain a positive balance through the term of this study.
- **Alternative 2**: Beginning in 2025, increase the annual reserve contribution by 5.5% every year for 13 years. This alternative is projected to maintain a positive balance through the term of this study.

A more detailed analysis of the reserve fund has been provided in Appendix A.

Some significant expenditures are expected over the term of the study. Some of the more notable examples are listed below:

- Replace building roofs
- Exterior painting of the buildings

Additional, less significant, capital expenditures are anticipated over the term of this study. Those items that will require repair or replacement are discussed later in this report.

# PURPOSE & SCOPE

We have completed this study to estimate capital repair expenses the association is responsible for over the term of the study and provide a cash flow analysis and capital reserve funding plan. This study is intended to assist the association in determining the allocation requirements into the reserve fund which are projected to meet future anticipated capital expenditures for the community.

This report estimates capital repair expenses for the community thirty years into the future. Variations in capital repair expense forecasts due to the quality of maintenance, weather and other events may occur. Over time, age, premature deterioration, or other factors may necessitate the addition of assets into the reserve study. Additionally, fluctuations in material and labor costs beyond assumed inflation rates may also affect the accuracy of the forecasts. Therefore, a reserve study should be routinely updated, typically on a three to five-year cycle to provide the most accurate assessment of needs and financial obligations of the community.

**What is a reserve study?**

A reserve study is a long-term capital budget planning tool which compares the current reserve fund of an organization to future capital repairs and replacements.

A reserve study is a tool to help identify and prepare for major repair and replacement projects for a community.

It is recommended that a reserve study be performed every five years to ensure that communities are saving the necessary funds for capital repairs and improvements.

This study has been performed according to the scope as generally defined by Olde Raleigh Villas Condos, Giles Flythe Engineers Inc., and the standards of the Community Associations Institute. The findings and recommendations are based on interviews with the community's management personnel; a review of available documents; and a limited visual inspection of the components maintained by the association.

The Cash Flow Method of calculating reserves has been utilized, whereby contributions to the reserve fund are designed to offset the variable annual expenditures. Funding alternates are recommended which are designed to achieve at minimum a Baseline Funding goal by maintaining a positive balance for the term of the study. We have also included a threshold funding goal which provides a minimum reserve account over the term. The minimum balance is typically calculated by determining the total over term forecasted expenses and dividing by the length of the term in years. This minimum threshold balance will help offset the risk of fluctuations in labor and material costs and component wear.

To determine which components should be included in this analysis, we used the following guidelines:

- The component must be maintained by the association.
- The component must have an estimated remaining useful life within the term of this study.
- The funding for the repair should be from the reserve account, not through an annual operating budget or other maintenance contracts.
- The cost of the capital repair must be significant enough to not be reasonably funded from an annual operating budget.

Our process for completing the reserve study includes:

1. Reviewing information provided including governing documents, association financial statements, and information on previous or planned capital repairs.
2. Reviewing available information on the property as needed. This may include plat maps, tax records, historical aerial photographs, available site, and building plans.
3. Conducting a visual inspection of the property. This may include interviewing association representatives during the inspection.
4. Developing an inventory of components to be included in the reserve study.
5. Predicting their remaining service life and approximating how frequently they will require repair or replacement.
6. Estimating repair or replacement costs (in 2024 dollars) for each capital item.
7. Develop a cash flow analysis adjusting for inflation and return on invested monies to determine the adequacy of current reserve funding plans.
8. Develop funding recommendations with specific reserve contribution recommendations for each year of the term.

The statements in this report are opinions about the present condition of the areas inspected within the community. Our inspection is limited to a visual ground level inspection and we did not remove any surface materials, perform any testing, or move any furnishings. This study is not an exhaustive technical evaluation or building code compliance review. For additional limitations, see Conclusion and Limitations.

## Standards of Reference

The following definitions are provided as a standard of reference:

*Excellent:* Component or system is in "as new" condition, requiring no rehabilitation and should perform in accordance with expected performance.

*Good:* Component or system is sound and performing its function, although it may show signs of normal wear and tear. Some minor rehabilitation work may be required.

*Fair:* Component or system falls into one or more of the following categories: a) Evidence of previous repairs not in compliance with commonly accepted practice, b) Workmanship not in compliance with commonly accepted standards, c) Component or system is obsolete, d) Component or system approaching the end of expected performance. Repair or replacement is required to prevent further deterioration or to prolong expected life.

*Poor:* Component or system has either failed or cannot be relied upon to continue performing its original function as a result of having exceeded its expected performance, excessive deferred maintenance, or state of disrepair. The present condition could contribute to or cause the deterioration of other adjoining elements or systems. Repair or replacement is required.

*Adequate:* A component or system is of a capacity that is defined as enough for what is required, sufficient, suitable, and/or conforms to standard construction practices.

# SOURCES OF INFORMATION

## Date of Inspection

Onsite inspection of the property occurred on May 20, 2024.

## Persons Interviewed

The following persons were interviewed in connection with this study:

- Samantha DeBel, Community Manager – Grandchester Meadows, Inc.
- Paul Braun – Board member on site

## Documents

The following documents were made available to us and reviewed:

- Wake County Tax Records
- Association Governing Documents
- Association financial statements
- Historical aerial photographs

## Cost Estimates

- Our internal data files on similar projects
- Local contractor estimates for similar projects
- R.S. Means Construction Cost Estimating Data

# DESCRIPTION

Olde Raleigh Villas Condominiums is a condominium community situated along Baron Cooper Pass in Raleigh, NC. The community includes a total of 40 units within two condominium buildings. The buildings were constructed in 2000 (Building 3701) and 2002 (Building 3700) according to Wake County Tax Records.

The Association has responsibility for the exterior facades, parking garages, and interior common areas of the condominium buildings, as well as the common area mechanical, electrical, and plumbing systems servicing the buildings. The Association is also responsible for maintaining the common area site improvements including the asphalt paved parking lots, concrete-paved access drives, concrete and brick paver flatwork, landscaping, and drainage systems.

The community is accessed via Baron Cooper Pass off of Burnell Rollins Circle. A brick masonry monument structure with entrance signage is installed at the entrance, and incorporates monument uplighting and an irrigation system servicing the landscaping features. An extensive irrigation system is installed throughout the grassed and landscaped areas within the community.

Stormwater on the site is routed via gutters and downspouts which direct discharge to grade. Site drainage flows towards catch basins in the curb and landscape areas which discharge through an outlet to the northwest of the parking lot, which directs stormwater offsite into systems managed by the local municipality.

The condominium buildings are predominately clad in brick veneer with sections of vinyl siding with limited wood trim and accent components around the front entrances. The roof surfaces are covered with heavy-grade asphaltic fiberglass shingles, and each building incorporates a section of standing seam metal roofing over the front entrance. The buildings are constructed over concrete-framed parking garages.

Interior common areas include corridors, stairwells, and lobby areas. The interior finishes are primarily comprised of smooth finished drywall and wood trim components. Interior corridor flooring is primarily covered in carpet.

# OBSERVATIONS

The following key observations were made about the current condition of the more significant and costly common elements of the property.

## Site Improvements

Baron Cooper Pass incorporates parking areas and an access drive leading to the parking garage entrances to each building. The asphalt paved street and parking areas generally appeared to be in good to fair condition, with minor longitudinal and fatigue cracking noted. Typically, we recommend the application of an oil resistant sealant to all asphalt paved surfaces on an approximate 5- to 8-year cycle. At this same time, all cracks should be properly filled, patched, and sealed. We have allocated funds for crack repairs and to seal the pavement every 5 years, beginning in 2026.

Assuming seal coating and crack repairs are performed in the interim, we anticipate the asphalt paving to have an estimated useful life of approximately twenty to twenty-five years prior to full resurfacing. We have allocated funds to resurface asphalt paving in 2034. Resurfacing would include milling limited areas around curb and gutter to maintain an adequate drainage profile, repairing areas of fatigue cracking/upheaval as needed and installing a new 1.5” to 2” thick layer of asphalt pavement over the existing paved areas.

The parking area and drives are surrounded by concrete curb and gutter. The concrete curbing generally appeared to be in good condition with some limited cracking observed. Over time it is likely that due to differential settlement cracking will develop in sections of the concrete curb and gutter. We have allocated funds to repair approximately 5% of the concrete curb and gutter on an 8-year cycle beginning in 2025.

Flatwork in the community includes concrete sidewalks in the common areas and concrete drive slabs extending from the asphalt pavement into the parking garages. The parking garages are comprised of concrete pavement. The concrete access drive leading to the Building 3701 garage entrance is in poor condition, with severe scaling/spalling resulting in a deteriorating surface. We also observed some areas of settled and upheaved concrete sidewalk, some of which are trip hazards. We have allocated funds to repairs approximately 5% of the concrete flatwork on an 8-year cycle beginning in 2025.

Drainage systems include inlet grates and catch basins in the paved and landscaped areas and roof downspouts are connected to buried plastic piping. The stormwater is routed to underground stormwater piping which discharges into the city storm sewer system. Per the board, saturated soil has been observed behind the 3701 Building after significant rain events. We have allocated funds to repair the drainage systems on a 5-year cycle beginning in 2025. Repairs will likely include repairing underground stormwater piping, limited retrenching of swales, installing a french drain or other types of drainage improvement systems.

A landscaping irrigation system has been installed in the landscaped areas, and the grass cover and shrubbery appeared healthy and well-maintained. Considering the extent of buried piping and quantity of components, we anticipate periodic large-scale repairs to the irrigation system will be required, including replacement of

sections of sprinkler system piping and head replacement, as well as timers, controllers, valves, and transformers as needed. We have included funds for major repairs every 15 years beginning in 2032. Note that minor and routine repairs should be funded from the Maintenance budget.

The landscaping includes small trees, shrubberies and other small plantings within mulched beddings, as well as grassed ground cover which appeared in good, healthy condition. Per the previous reserve study (2020), we understand several landscaping projects have been performed. To maintain a desirable appearance, we anticipate additional periodic upgrades to the site landscaping will be required, and we have included an allowance for major landscaping upgrades in 2028 and on a 5-year cycle.

We noted sections of segmental block retaining walls at the rear of both buildings. These wall sections appeared to be in good condition and we do not anticipate replacement of these walls will be required in the near future. Assuming these walls were properly constructed and well maintained, they should have an expected life well beyond the term of this study.

The main entrance to the community includes a brick masonry monument with composite signage on each side bearing the name of the community. The monument includes landscape uplighting. The monument appeared in generally good condition; however, the signage was aged and a portion had partially detached from the monument. We have included funds to refurbish the entrance monument and replace both composite signs in 2026. We have assumed any minor repairs, such as repointing of brick mortar, would be funded through the annual maintenance budget.

There is a brick walkway that leads from the parking area to the entrance to the 3701 building and brick just outside the entrance to the 3700 building. The walkways appeared to be in good condition and we have included funds to repair them as needed on an 8-year cycle beginning in 2030.

We also observed several benches at the outside entrances to the buildings. Some of these benches have been dedicated and we have assumed bench repair/replacement will be funded from the annual maintenance budget.

## Building Exteriors

Exterior surfaces are primarily comprised of brick veneer and vinyl siding/trim with limited wood trim including the front building entrances. Painted metal railings are installed on the balconies of each unit and periodically throughout the parking garage.

The pitched roofing surfaces over the buildings are covered with architectural-grade asphaltic fiberglass shingles. Per the board member on site, the 3701 building roof was recently replaced in 2023 and the 3700 building is planned to be re-roofed in 2024. These shingles typically have an expected useful life of approximately 20-25 years, assuming minor repairs are completed as needed in the interim. We strongly recommend that any re-roofing project closely follow procedures outlined by the National Roofing Contractors Association's *Roofing and Waterproofing Manual*. A re-roofing sequence should include removal of the existing roofing material, replacement of any inadequate roof sheathing, replacement of any

damaged flashing, and replacement of drip edge components. We have allocated funds for re-roofing project in 2044 for Building 3700 and 2043 for building 3701. We have also included funds to replace gutters and downspouts at the time of the second re-roofing project for each building.

Note that minor repairs to flashing, replacement of vent boots and other transitions may be required in the interim. We have assumed these repairs would be funded from the annual maintenance budget. The small sections of standing seam metal roofing should not require replacement during the term of this assessment.

The front of each building includes fiberglass skin doors. Each entrance includes two doors, two inoperable fixed doors, and four transom windows. We have allocated funds to replace these doors on a 30-year cycle beginning in 2035.

The railing on the balcony of each unit and in the parking garage appeared to be in good condition. We have allocated funds to paint the railings, as well as the walls, ceilings, and columns in the parking garages on a 10-year cycle beginning in 2032.

The brick veneer and vinyl siding generally appear to be in good to fair condition, with fading noted on the vinyl siding, and we do not anticipate that significant repairs will be required over the term of this study. The limited areas of wood and paintable surfaces on the exterior of each building will require minor repairs and repainting. We have allocated funds to caulk, repair and paint the exterior surfaces and doorframes every 7 years beginning in 2027. This also includes funds to replace vertical sealant/caulking in building joints and sealant/caulking around windows. Note that minor spot painting should be funded from the annual maintenance budget.

## Building Interiors

The association is responsible for maintaining the interior common areas in the building. These include entrance lobbies, elevator and mechanical/electrical rooms, stairwells and hallways. Routine painting of owner storage rooms adjacent to the parking garage are the responsibility of the individual owners.

The flooring of the interior corridors and stairwell areas is covered in carpet. A limited area of the entrance lobbies is covered in ceramic tile. Although the corridor carpeting has never been replaced in either building the carpeting appeared to be in relatively good condition. We were advised that the installed carpet was a very high quality and the use of the corridors is not subject to high wear rates. The carpeting in the stairwells was also in relatively good condition. We have allocated funds to replace the carpeting in the corridors on a 15-year cycle beginning in 2027 (Bldg. 3701) and 2029 (Bldg. 3700) and in the stairwells in 2033 (Bldg. 3701) and 2035 (Bldg. 3700). We have also included funds to replace the ceramic tile flooring in both buildings every 25 years beginning in 2030.

The interior wall surfaces in the corridors are primarily comprised of smooth finished drywall (some wood and wallpaper noted in the lobbies). To maintain a clean bright appearance, the walls and trim in the corridors will require periodic repainting. We have allocated funds to repaint the interior of the buildings on a 10-year

cycle beginning with Building 3700 in 2034 and Building 3701 in 2035. The walls in the stairwells will also require periodic painting; although these areas are not used as frequently and not as visible. We have allocated funds to paint the stairways wall and trim on a 25-year cycle beginning in 2034 and 2035, as listed above. We have assumed that periodic touchup painting of these areas would be funded from the annual maintenance budget.

Various pieces of artwork and furnishings are located in the building lobbies. We have allocated funds to upgrade the lobby walls/ceilings and replace lobby furnishings on a 10-year cycle, starting with Building 3700 in 2025. Updated to the Building 3701 lobby began recently and we have included funds to complete the upgrade in 2026.

There is also limited artwork and furniture in each corridor just outside of the elevator. We have included funds to upgrade elements of these furnishings every 2 years (alternating buildings) beginning in 2027.

The interiors of the elevator cabs are covered with carpet, wallpaper, and wood trim. We have allocated funds to refurbish the elevator cabs on a 15-year cycle beginning in 2032.

## Mechanical, Electrical and Plumbing Systems

The association is responsible for maintaining the mechanical equipment that serves the interior common areas of the condominium buildings, including elevator controls, electrical and lighting systems, HVAC components, fire suppression systems, and plumbing systems.

The common areas of each building are served by a single Otis/ThyssenKrupp hydraulic elevator with motor and control panel located in an elevator equipment room within the parking garage on the ground floor. The elevators appeared to be operating smoothly and inspections were current. We have allocated funds for major upgrades to controls or other elevator equipment beginning in 2030.

Elevator systems typically require full refurbishment and modernization every 30 to 40 years. This would include replacing the control systems and motor starters, replacing the leveling systems, limit switched, hoistway wiring, door interlocks, hall and cab stations/lights, door tracks, and new hydraulic power units. We have included funds for an elevator modernization project to be completed in 2034 for both buildings.

Reportedly, the Association plans to complete upgrades to the elevator doors mechanisms in the near term. Per the Otis service and repair order provided by the community manager, these upgrades include new door operators, emergency return units, entrance protection devices, and processor boards. We have allocated funds to complete the upgrades to the elevator door mechanisms in both buildings in 2025 and on a 25-year cycle thereafter.

The building is served by a wet fire suppression system that serves the interior spaces of both buildings and the parking garages. The system is routinely inspected and maintained and the inspections appeared to be current. It is likely that the fire suppression system valves and gauges will require occasional

repairs/replacement. The fire alarm system includes a Faraday MPC-1500 fire alarm control panel (FACP) in the building lobbies. Per the board member on site, the fire alarm control panel was recently replaced in Building 3701. We have allocated funds to upgrade the fire suppression system and replace FACPs every 20 years beginning with Building 3700 in 2028 and Building 3701 in 2044.

Fire alarm system fixtures include smoke detectors, annunciators and strobes. The fixtures have an expected useful life of approximately 20 years; we have allocated funds for their replacement in 2028. We have also included funds to replace all fire suppression sprinklers beginning with Building 3701 in 2040 and Building 3700 in 2042. The association has also taken responsibility for replacing all smoke detectors in the buildings. We have allocated funds for this activity beginning in 2026.

The National Fire Protection Agency (NFPA) requires that a fire sprinkler test be conducted every 5 years to ensure that there are no significant blockages in the sprinkler piping. We have included funds for this test on a 5-year cycle beginning in 2025.

Electric heat pumps with corresponding fan coil units serve different floors/zones of the common areas in each building. A total of four systems serves each building. HVAC equipment typically has an expected useful life of approximately 15 years. Based on the equipment manufacture dates, we have provided an allocation of funds to replace components of these systems every 5 years beginning in 2025. It should be noted that the true equipment replacement timeframes will likely depend on the actual failure of the compressors or other major components.

The building includes controlled access systems in the lobbies with call boxes. The access control systems have an expected useful life of approximately 10-12 years. We have allocated funds to replace/upgrade these access control systems beginning in 2031. Additionally, three security cameras and a DVR surveillance system have been installed in each building for additional security. We have allocated funds in 2031 and on a 10-year cycle to replace this equipment.

A Munters HC-300 commercial dehumidifier has been installed in the owner storage room area of each building. These dehumidifiers reduce humidity levels in most storage rooms; however, it was previously noted that one unit required a small residential dehumidifier to better control humidity and mold within the single storage unit. We have assumed that the addition of any small dehumidifiers to any of the individual storage units would be funded from an annual maintenance budget. We have included funds to replace the large Munters dehumidifiers on a 15-year cycle beginning in 2029 (Bldg. 3701) and 2030 (Bldg. 3700).

Interior light fixtures (approximately 11 fixtures per floor) are located in the building corridors. These fixtures were generally operable during the time of inspection, but the fixtures will become outdated. We have allocated funds to replace the all the corridor lighting on a 20-year cycle beginning in 2027. Maintenance of other interior, exterior, and site lighting that is the responsibility of the Association should be funded from the maintenance budget.

The association is responsible for common area plumbing and electrical systems at the condominium buildings, including wiring and piping leading to each unit. While these common area systems should have

an expected useful life beyond the term of this study, repairs may be required in the interim. We have provided an allowance for major plumbing and electrical system repairs on a 30-year cycle beginning in 2035.

# PREVENTATIVE MAINTENANCE

Preventative maintenance is a critical aspect affecting a property's life cycle costs and structural safety. It is encouraged that every property owner have a preventative maintenance plan in place. The reserve study is not to be considered a preventative maintenance plan. A preventative maintenance plan should incorporate all applicable common elements, not just those components included within the reserve study.

Any information provided by the client regarding ongoing maintenance or repair being performed with any component has been noted within the notes for that component. We can only be aware of preventative maintenance plans or programs that have been disclosed by the client. Note that an audit or evaluation of any maintenance plan or maintenance contract is outside the scope of the services of this project.

In some states and municipalities, periodic structural inspection reports are required for certain types of buildings. This periodic inspection report is critical to assist the reserve study provider in incorporating necessary corrective maintenance costs and timing. We recommend the association complete any and all required structural inspections and reports and have assumed these reports would be made available for our review during the reserve study.

We have assumed repairs under a dollar value of approximately $1,000 would be funded as part of an annual maintenance budget. These repairs were not included in the funding allocations of this reserve study unless otherwise noted. We have assumed other component repairs/replacements would be funded from an annual maintenance budget as noted in the report.

# RESERVE FUND ANALYSIS

We have performed a cash flow analysis projecting balances in the reserve account over the term of this study. We have included estimated capital repair expenses detailed in the first several pages of Appendix A. We have included tables and graphs depicting current funding levels along with recommended funding alternatives.

The financial projections include an assumed inflation rate and an assumed average return on invested funds as noted on the Project Summary page in the Appendix. The inflation rate adjustment is noted at the bottom of the annual expense page and the return on invested funds is noted in the existing funding level and funding alternative cash flow tables.

The software utilized to analyze the reserve funds was developed by Giles Flythe Engineers, Inc. in cooperation with a technology consultancy. The software and our analysis system have been extensively reviewed by leading community association and non-profit certified public accountants.

The capital repairs listed were derived from the initial request for proposal, discussions with association representatives, our informal review of governing documents and our site inspection. The association should confirm that the items listed are, in fact, the responsibility of the association and appropriate to fund from the reserve account.

Appendix A includes the following:

1. The Project Summary page that lists pertinent details specific to the association, the terms of the analysis and summarizes total over term expenses and recommended threshold balance.
2. The Expense Projection page that itemizes the capital repairs by category, illustrates our cost estimating by unit and provides estimated useful life and remaining useful life of each item.
3. The Annual Expense Projection pages that populate the capital repairs over the term of the study. This page includes a total adjusted for inflation at the bottom of the pages.
4. The Itemized Funding Analysis page provides a summary of the capital expenditures over the term and a graph breaking down the portion of the capital repairs into each category – Site Improvements, Building Exterior, Building Interior, Mechanical/Electrical/Plumbing Systems and Amenities.
5. The Current Funding Projection page provides a table and graph illustrating our cash flow analysis assuming the association maintains the current level of reserve contributions over the term of this study. The table includes projected reserve account balances, contributions, return on invested funds and capital repair expenses for each year of the term of this study.
6. The Funding Alternative pages each provide a table and graph illustrating our cash flow analysis assuming the association implements one of our funding recommendations detailed below.

| | |
|---|---|
| **Current Reserve Funding Rate:** | **$93,677 per year** |
| **Current Reserve Balance:** | **$241,912 (projected 2025 starting balance)** |

Note that based on our cash flow analysis, maintaining the current funding level is **not** projected to maintain a positive/healthy balance over the term. We have included recommended funding alternatives to your current reserve-funding program and recommend that the board adopt an alternative that best reflects the objectives of the community. Our funding recommendations are as follows:

- **Alternative 1**: Beginning in 2025, increase the annual reserve contribution by $6,200 every year for 15 years. This alternative is projected to maintain a positive balance through the term of this study.
- **Alternative 2**: Beginning in 2025, increase the annual reserve contribution by 5.5% every year for 13 years. This alternative is projected to maintain a positive balance through the term of this study.

A more detailed analysis of the reserve fund has been provided in Appendix A.

The reserve study is focused on the capital reserve account and budgeted contributions to reserves. The recommendations above are solely attributed to the annual reserve contributions. The association likely has many line items in the annual operating budget that should also be periodically adjusted as part of an annual budgeting process.

The capital repair/replacement cost estimates we have developed are based on 2024 dollars. Our reserve study does include an adjustment for inflation and an assumed rate of return on invested funds.

# CONCLUSION & LIMITATIONS

We have provided reserve funding recommendations based on our analysis of the association-maintained components, estimated capital repair costs over the term and the current funding levels. Further detail of the reserve fund analysis is provided in Appendix A.

The physical analysis portion of this reserve study was completed through a limited visual inspection. The visual inspection was completed from ground level unless otherwise specified. The visual inspection is generally limited to readily accessible and visible common areas that would likely require capital repair activities over the term. However, in some instances a representative sample inspection may be performed. Measurement of components is completed by a combination of field measurements, aerial imagery measuring tools and take-offs from construction drawings as available. Unless specifically noted, the components included in this study have an anticipated remaining useful life within thirty years from the time the field observations used in preparing the study were performed.

Note that this inspection does not include removing surface materials, excavation or any testing. The inspection does not include riparian buffers or other protected common areas. Buried utility components and other concealed components were not inspected as part of this analysis and we cannot be responsible for the condition of components not inspected.

The observations described in this study are valid on the date of the investigation and have been made under the conditions noted in the report. We prepared this study for the exclusive use of Olde Raleigh Villas Condos. No other party should rely on the information in this report without consent. If another individual or party relies on this study, they shall indemnify and hold Giles Flythe Engineers Inc. harmless for any damages, losses, or expenses they may incur as a result of its use. This study is not to be considered a warranty of condition, and no warranty is implied. The appendices are an integral part of this report and must be included in any review. The Reserve Specialist shall incur no civil liability for performing the physical or financial portions of a reserve study performed in accordance with CAI standards.

Members of the Giles Flythe Engineers team working on this reserve study are not members of, or otherwise associated with, the association. Giles Flythe Engineers has disclosed any other involvement with the association that could result in conflicts of interest.

Information provided by the representatives of the association regarding financial, physical, quantity, or historical issues, will be deemed reliable by Giles Flythe Engineers. The reserve balance presented in the Reserve Study is based upon information provided and was not audited. Information provided about reserve projects will be considered reliable. Any on-site inspection should not be considered a project audit or quality inspection. Giles Flythe Engineers is not aware of any additional material issues which, if not disclosed, would cause a distortion of the association's situation.

This reserve study is partially a reflection of information provided to us. The reserve study is assembled for the association's use and is not intended to be used for the purpose of performing an audit, quality/forensic analyses or background checks of historical records. Structural integrity evaluations are not included in the

reserve study unless otherwise noted. The financial information provided, including starting balances and budgeted contribution rates are deemed reliable and have not been audited. Further, this study should not be considered a building code compliance analysis. The purpose of this study is to provide the association with a financial tool and is not to be considered an exhaustive technical or engineering evaluation which would consist of a broader scope of work. Except as noted in the report, we have not relied on the validity of prior reserve studies performed by other firms.

We have provided estimated costs of capital repairs. These costs are based on our general knowledge of the construction industry. We have relied on standard sources as needed, such as Means Building Construction Cost Data and estimates reviewed by Giles Flythe Engineers on similar projects. We have performed no design work or other engineering analysis as part of this study, nor have we obtained competitive quotations or estimates from contractors. Actual repair costs can vary due to a variety of factors. We cannot be responsible for the specific cost estimates provided.

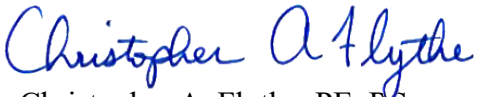
This report has been prepared and reviewed by a professional engineer (PE) and reserve specialist (RS) on our staff.

If you have any questions about this reserve study, please feel free to contact us. Thank you for the opportunity to serve you.

Respectfully submitted,

Heather Hancock, EI
Project Engineer
Giles Flythe Engineers, Inc.

Kevin R. Giles, RS
Project Manager
Giles Flythe Engineers, Inc.



Christopher A. Flythe, PE, RS
Principal Engineer
Giles Flythe Engineers, Inc.

# APPENDIX A: RESERVE FUND PROJECTIONS

# 2024 Reserve Study Update

| | |
|---|---|
| **Client Name:** | Olde Raleigh Villas Condominiums |
| **Service:** | 2024 Reserve Study Update |
| **Number of Units:** | 40 |
| **Location:** | Apex, NC |
| **Date of Inspection:** | May 20, 2024 |
| **Term of Study in Years:** | 30 |
| **Beginning Year:** | 2025 |
| **Estimated Starting Reserve:** | $241,912 |
| **Current Annual Contribution:** | $93,677 |
| **Annual Inflation Rate:** | 4.00% |
| **Assumed Rate of Return on Reserve Funds:** | 1.50% |
| **Total Over Term Capital Expenditure with Inflation:** | $5,082,567 |
| **Recommended Threshold Reserve Balance:**<br>**(Average Annual Capital Expenditure with Inflation)** | $169,419 |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# Expense Estimates

| Description | Quantity | Unit of Measure | Unit Cost | Total Cost per Cycle | Years of Useful Life | Years Remaining | Notes |
|---|---|---|---|---|---|---|---|
| **Site Improvements** | | | | | | | |
| Crack fill, seal coat, stripe asphalt paving | 1,400 | SY | $3.00 | $4,200 | 5 | 1 | |
| Resurface asphalt parking lot | 1,400 | SY | $35.00 | $49,000 | 20 | 9 | |
| Concrete curbing repairs | 60 | LF | $60.00 | $3,600 | 8 | 0 | Approx. 5% every 8 years |
| Concrete flatwork repairs | 265 | SY | $150.00 | $39,750 | 8 | 0 | Approx. 5% every 8 years |
| Drainage system repairs/improvements | 1 | LS | $12,000.00 | $12,000 | 5 | 0 | |
| Landscape irrigation system repairs | 1 | LS | $10,000.00 | $10,000 | 15 | 7 | |
| Landscape overhaul | 1 | LS | $20,000.00 | $20,000 | 5 | 3 | |
| Repair/refurbish entrance monuments | 1 | LS | $5,000.00 | $5,000 | 10 | 1 | |
| Repair brick walkways | 1 | LS | $2,000.00 | $2,000 | 8 | 5 | |
| **Building Exteriors** | | | | | | | |
| Replace Building Roof - 3700 | 285 | SQ | $425.00 | $121,125 | 20 | 19 | CTI proposal in 2024 |
| Replace Building Roof - 3701 | 285 | SQ | $425.00 | $121,125 | 20 | 18 | |
| Replace gutters and downspouts - 3700 | 1,650 | LF | $13.50 | $22,275 | 40 | 19 | |
| Replace gutters and downspouts - 3701 | 1,650 | LF | $13.50 | $22,275 | 40 | 18 | |
| Replace building front doors | 8 | EA | $2,000.00 | $16,000 | 30 | 10 | |
| Paint/repair railings and garage columns, walls, ceilings | 2 | EA | $35,000.00 | $70,000 | 10 | 7 | |
| Paint columns, trim, doors, replace sealant/caulking | 2 | EA | $30,000.00 | $60,000 | 7 | 2 | |
| **Building Interiors** | | | | | | | |
| Replace corridor carpet - 3700 | 3,500 | SF | $8.00 | $28,000 | 15 | 4 | |
| Replace corridor carpet - 3701 | 3,500 | SF | $8.00 | $28,000 | 15 | 2 | |
| Replace stairwell carpet - 3700 | 1,200 | SF | $5.00 | $6,000 | 15 | 10 | |
| Replace stairwell carpet - 3701 | 1,200 | SF | $5.00 | $6,000 | 15 | 8 | |
| Replace tile flooring (both buildings) | 750 | SF | $18.00 | $13,500 | 25 | 5 | |
| Interior painting - 3700 | 1 | LS | $25,000.00 | $25,000 | 10 | 9 | |
| Interior painting - 3701 | 1 | LS | $25,000.00 | $25,000 | 10 | 8 | |
| Paint stairway walls - 3700 | 2 | EA | $5,000.00 | $10,000 | 25 | 9 | |
| Paint stairway walls - 3701 | 2 | EA | $5,000.00 | $10,000 | 25 | 8 | |
| Upgrade lobby - 3700 | 1 | LS | $11,000.00 | $11,000 | 10 | 0 | |
| Upgrade lobby - 3701 | 1 | LS | $11,000.00 | $11,000 | 10 | 1 | |
| Update furniture and art (alternate buildings) | 1 | EA | $3,000.00 | $3,000 | 2 | 2 | |
| Refurbish elevator cabs | 2 | EA | $15,000.00 | $30,000 | 15 | 7 | |

| Description | Quantity | Unit of Measure | Unit Cost | Total Cost per Cycle | Years of Useful Life | Years Remaining | Notes |
|---|---|---|---|---|---|---|---|
| **Mechanical/Electrical/Plumbing** | | | | | | | |
| Upgrade elevator controls/equipment (both buildings) | 2 | EA | $15,000.00 | $30,000 | 10 | 5 | |
| Elevator modernization (both buildings) | 2 | EA | $90,000.00 | $180,000 | 30 | 9 | |
| Elevator door mechanism upgrades (both buildings) | 2 | EA | $55,000.00 | $110,000 | 25 | 0 | |
| Upgrade fire suppression system (include FACP) - 3700 | 1 | LS | $20,000.00 | $20,000 | 20 | 3 | |
| Upgrade fire suppression system (include FACP) - 3701 | 1 | LS | $20,000.00 | $20,000 | 20 | 19 | |
| Replace life safety fixtures (excluding sprinklers) - 3700 | 100 | EA | $250.00 | $25,000 | 20 | 3 | |
| Replace life safety fixtures (excluding sprinklers) - 3701 | 100 | EA | $250.00 | $25,000 | 20 | 3 | |
| Replace fire suppression sprinklers - 3700 | 120 | EA | $105.00 | $12,600 | 40 | 17 | |
| Replace fire suppression sprinklers - 3701 | 120 | EA | $105.00 | $12,600 | 40 | 15 | |
| Replace smoke detectors | 1 | LS | $5,000.00 | $5,000 | 10 | 1 | |
| Fire suppression system - 5 year test | 1 | LS | $5,000.00 | $5,000 | 5 | 1 | |
| Allocation to replace components of common area HVAC | 1 | LS | $22,000.00 | $22,000 | 5 | 0 | |
| Replace lobby intercoms (both buildings) | 2 | EA | $3,000.00 | $6,000 | 10 | 6 | |
| Replace security cameras/surveillance equipment | 2 | EA | $5,500.00 | $11,000 | 10 | 6 | |
| Replace storage unit dehumidifier - 3700 | 1 | LS | $5,000.00 | $5,000 | 15 | 5 | |
| Replace storage unit dehumidifier - 3701 | 1 | LS | $5,000.00 | $5,000 | 15 | 4 | |
| Replace light fixtures - 3700 | 33 | EA | $300.00 | $9,900 | 20 | 2 | |
| Replace light fixtures - 3701 | 33 | EA | $300.00 | $9,900 | 20 | 2 | |
| Allocation for common area utilities | 1 | LS | $40,000.00 | $40,000 | 30 | 10 | |

**SY:** Square Yard, **SF:** Square Feet, **LF:** Linear Feet, **SQ:** Roofing Square, **EA:** Each, **LS:** Lump Sum, **SYS:** System

# Annual Expense By Year With Inflation

| Description | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Site Improvements** | | | | | | | | | | |
| Crack fill, seal coat, stripe asphalt paving | | $4,368 | | | | | $5,314 | | | |
| Resurface asphalt parking lot | | | | | | | | | | $69,742 |
| Concrete curbing repairs | $3,600 | | | | | | | | $4,927 | |
| Concrete flatwork repairs | $39,750 | | | | | | | | $54,401 | |
| Drainage system repairs/improvements | $12,000 | | | | | $14,600 | | | | |
| Landscape irrigation system repairs | | | | | | | | $13,159 | | |
| Landscape overhaul | | | | $22,497 | | | | | $27,371 | |
| Repair/refurbish entrance monuments | | $5,200 | | | | | | | | |
| Repair brick walkways | | | | | | $2,433 | | | | |
| **Building Exteriors** | | | | | | | | | | |
| Replace Building Roof - 3700 | | | | | | | | | | |
| Replace Building Roof - 3701 | | | | | | | | | | |
| Replace gutters and downspouts - 3700 | | | | | | | | | | |
| Replace gutters and downspouts - 3701 | | | | | | | | | | |
| Replace building front doors | | | | | | | | | | |
| Paint/repair railings and garage columns, walls, ceilings | | | | | | | | $92,115 | | |
| Paint columns, trim, doors, replace sealant/caulking | | | $64,896 | | | | | | | $85,399 |
| **Building Interiors** | | | | | | | | | | |
| Replace corridor carpet - 3700 | | | | | $32,756 | | | | | |
| Replace corridor carpet - 3701 | | | $30,285 | | | | | | | |
| Replace stairwell carpet - 3700 | | | | | | | | | | |
| Replace stairwell carpet - 3701 | | | | | | | | | $8,211 | |
| Replace tile flooring (both buildings) | | | | | | $16,425 | | | | |
| Interior painting - 3700 | | | | | | | | | | $35,583 |
| Interior painting - 3701 | | | | | | | | | $34,214 | |
| Paint stairway walls - 3700 | | | | | | | | | | $14,233 |
| Paint stairway walls - 3701 | | | | | | | | | $13,686 | |
| Upgrade lobby - 3700 | $11,000 | | | | | | | | | |
| Upgrade lobby - 3701 | | $11,440 | | | | | | | | |
| Update furniture and art (alternate buildings) | | | $3,245 | | $3,510 | | $3,796 | | $4,106 | |
| Refurbish elevator cabs | | | | | | | | $39,478 | | |

| Description | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Mechanical/Electrical/Plumbing** | | | | | | | | | | |
| Upgrade elevator controls/equipment (both buildings) | | | | | | $36,500 | | | | |
| Elevator modernization (both buildings) | | | | | | | | | | $256,196 |
| Elevator door mechanism upgrades (both buildings) | $110,000 | | | | | | | | | |
| Upgrade fire suppression system (include FACP) - 3700 | | | | $22,497 | | | | | | |
| Upgrade fire suppression system (include FACP) - 3701 | | | | | | | | | | |
| Replace life safety fixtures (excluding sprinklers) - 3700 | | | | $28,122 | | | | | | |
| Replace life safety fixtures (excluding sprinklers) - 3701 | | | | $28,122 | | | | | | |
| Replace fire suppression sprinklers - 3700 | | | | | | | | | | |
| Replace fire suppression sprinklers - 3701 | | | | | | | | | | |
| Replace smoke detectors | | $5,200 | | | | | | | | |
| Fire suppression system - 5 year test | | $5,200 | | | | | $6,327 | | | |
| Allocation to replace components of common area HVAC | $22,000 | | | | | $26,766 | | | | |
| Replace lobby intercoms (both buildings) | | | | | | | $7,592 | | | |
| Replace security cameras/surveillance equipment | | | | | | | $13,919 | | | |
| Replace storage unit dehumidifier - 3700 | | | | | | $6,083 | | | | |
| Replace storage unit dehumidifier - 3701 | | | | | $5,849 | | | | | |
| Replace light fixtures - 3700 | | | $10,708 | | | | | | | |
| Replace light fixtures - 3701 | | | $10,708 | | | | | | | |
| Allocation for common area utilities | | | | | | | | | | |
| **Total** | **$198,350** | **$31,408** | **$119,841** | **$101,238** | **$42,115** | **$102,807** | **$36,947** | **$144,752** | **$146,916** | **$461,153** |

# Annual Expense By Year With Inflation

| Description | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Site Improvements** | | | | | | | | | | |
| Crack fill, seal coat, stripe asphalt paving | | $6,466 | | | | | $7,867 | | | |
| Resurface asphalt parking lot | | | | | | | | | | |
| Concrete curbing repairs | | | | | | | $6,743 | | | |
| Concrete flatwork repairs | | | | | | | $74,451 | | | |
| Drainage system repairs/improvements | $17,763 | | | | | $21,611 | | | | |
| Landscape irrigation system repairs | | | | | | | | | | |
| Landscape overhaul | | | | $33,301 | | | | | $40,516 | |
| Repair/refurbish entrance monuments | | $7,697 | | | | | | | | |
| Repair brick walkways | | | | $3,330 | | | | | | |
| **Building Exteriors** | | | | | | | | | | |
| Replace Building Roof - 3700 | | | | | | | | | | $255,192 |
| Replace Building Roof - 3701 | | | | | | | | | $245,377 | |
| Replace gutters and downspouts - 3700 | | | | | | | | | | $46,930 |
| Replace gutters and downspouts - 3701 | | | | | | | | | $45,125 | |
| Replace building front doors | $23,684 | | | | | | | | | |
| Paint/repair railings and garage columns, walls, ceilings | | | | | | | | $136,353 | | |
| Paint columns, trim, doors, replace sealant/caulking | | | | | | | $112,379 | | | |
| **Building Interiors** | | | | | | | | | | |
| Replace corridor carpet - 3700 | | | | | | | | | | $58,992 |
| Replace corridor carpet - 3701 | | | | | | | | $54,541 | | |
| Replace stairwell carpet - 3700 | $8,881 | | | | | | | | | |
| Replace stairwell carpet - 3701 | | | | | | | | | | |
| Replace tile flooring (both buildings) | | | | | | | | | | |
| Interior painting - 3700 | | | | | | | | | | $52,671 |
| Interior painting - 3701 | | | | | | | | | $50,645 | |
| Paint stairway walls - 3700 | | | | | | | | | | |
| Paint stairway walls - 3701 | | | | | | | | | | |
| Upgrade lobby - 3700 | $16,283 | | | | | | | | | |
| Upgrade lobby - 3701 | | $16,934 | | | | | | | | |
| Update furniture and art (alternate buildings) | $4,441 | | $4,803 | | $5,195 | | $5,619 | | $6,077 | |
| Refurbish elevator cabs | | | | | | | | | | |

| Description | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Mechanical/Electrical/Plumbing** | | | | | | | | | | |
| Upgrade elevator controls/equipment (both buildings) | | | | | | $54,028 | | | | |
| Elevator modernization (both buildings) | | | | | | | | | | |
| Elevator door mechanism upgrades (both buildings) | | | | | | | | | | |
| Upgrade fire suppression system (include FACP) - 3700 | | | | | | | | | | |
| Upgrade fire suppression system (include FACP) - 3701 | | | | | | | | | | $42,137 |
| Replace life safety fixtures (excluding sprinklers) - 3700 | | | | | | | | | | |
| Replace life safety fixtures (excluding sprinklers) - 3701 | | | | | | | | | | |
| Replace fire suppression sprinklers - 3700 | | | | | | | | $24,544 | | |
| Replace fire suppression sprinklers - 3701 | | | | | | $22,692 | | | | |
| Replace smoke detectors | | $7,697 | | | | | | | | |
| Fire suppression system - 5 year test | | $7,697 | | | | | $9,365 | | | |
| Allocation to replace components of common area HVAC | $32,565 | | | | | $39,621 | | | | |
| Replace lobby intercoms (both buildings) | | | | | | | $11,238 | | | |
| Replace security cameras/surveillance equipment | | | | | | | $20,603 | | | |
| Replace storage unit dehumidifier - 3700 | | | | | | | | | | |
| Replace storage unit dehumidifier - 3701 | | | | | | | | | | $10,534 |
| Replace light fixtures - 3700 | | | | | | | | | | |
| Replace light fixtures - 3701 | | | | | | | | | | |
| Allocation for common area utilities | $59,210 | | | | | | | | | |
| **Total** | **$162,827** | **$46,492** | **$4,803** | **$36,632** | **$5,195** | **$137,952** | **$248,264** | **$215,438** | **$387,741** | **$466,456** |

# Annual Expense By Year With Inflation

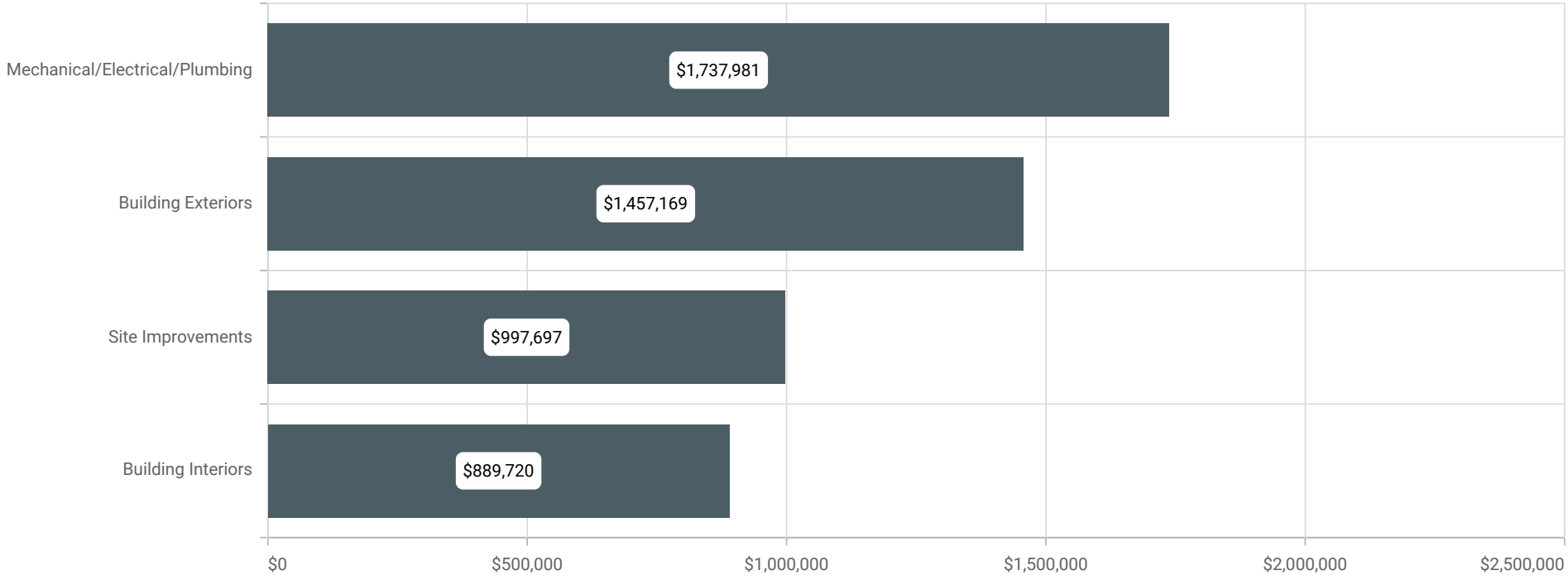
| Description | 2045 | 2046 | 2047 | 2048 | 2049 | 2050 | 2051 | 2052 | 2053 | 2054 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Site Improvements** | | | | | | | | | | |
| Crack fill, seal coat, stripe asphalt paving | | $9,571 | | | | | $11,644 | | | |
| Resurface asphalt parking lot | | | | | | | | | | $152,814 |
| Concrete curbing repairs | | | | | $9,228 | | | | | |
| Concrete flatwork repairs | | | | | $101,891 | | | | | |
| Drainage system repairs/improvements | $26,293 | | | | | $31,990 | | | | |
| Landscape irrigation system repairs | | | $23,699 | | | | | | | |
| Landscape overhaul | | | | $49,294 | | | | | $59,974 | |
| Repair/refurbish entrance monuments | | $11,394 | | | | | | | | |
| Repair brick walkways | | $4,558 | | | | | | | | $6,237 |
| **Building Exteriors** | | | | | | | | | | |
| Replace Building Roof - 3700 | | | | | | | | | | |
| Replace Building Roof - 3701 | | | | | | | | | | |
| Replace gutters and downspouts - 3700 | | | | | | | | | | |
| Replace gutters and downspouts - 3701 | | | | | | | | | | |
| Replace building front doors | | | | | | | | | | |
| Paint/repair railings and garage columns, walls, ceilings | | | | | | | | $201,836 | | |
| Paint columns, trim, doors, replace sealant/caulking | | | | $147,883 | | | | | | |
| **Building Interiors** | | | | | | | | | | |
| Replace corridor carpet - 3700 | | | | | | | | | | |
| Replace corridor carpet - 3701 | | | | | | | | | | |
| Replace stairwell carpet - 3700 | | | | | | $15,995 | | | | |
| Replace stairwell carpet - 3701 | | | | $14,788 | | | | | | |
| Replace tile flooring (both buildings) | | | | | | | | | | |
| Interior painting - 3700 | | | | | | | | | | $77,966 |
| Interior painting - 3701 | | | | | | | | | $74,968 | |
| Paint stairway walls - 3700 | | | | | | | | | | |
| Paint stairway walls - 3701 | | | | | | | | | | |
| Upgrade lobby - 3700 | $24,102 | | | | | | | | | |
| Upgrade lobby - 3701 | | $25,066 | | | | | | | | |
| Update furniture and art (alternate buildings) | $6,573 | | $7,110 | | $7,690 | | $8,317 | | $8,996 | |
| Refurbish elevator cabs | | | $71,098 | | | | | | | |

| Description | 2045 | 2046 | 2047 | 2048 | 2049 | 2050 | 2051 | 2052 | 2053 | 2054 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Mechanical/Electrical/Plumbing** | | | | | | | | | | |
| Upgrade elevator controls/equipment (both buildings) | | | | | | $79,975 | | | | |
| Elevator modernization (both buildings) | | | | | | | | | | |
| Elevator door mechanism upgrades (both buildings) | | | | | | $293,242 | | | | |
| Upgrade fire suppression system (include FACP) - 3700 | | | | $49,294 | | | | | | |
| Upgrade fire suppression system (include FACP) - 3701 | | | | | | | | | | |
| Replace life safety fixtures (excluding sprinklers) - 3700 | | | | $61,618 | | | | | | |
| Replace life safety fixtures (excluding sprinklers) - 3701 | | | | $61,618 | | | | | | |
| Replace fire suppression sprinklers - 3700 | | | | | | | | | | |
| Replace fire suppression sprinklers - 3701 | | | | | | | | | | |
| Replace smoke detectors | | $11,394 | | | | | | | | |
| Fire suppression system - 5 year test | | $11,394 | | | | | $13,862 | | | |
| Allocation to replace components of common area HVAC | $48,205 | | | | | $58,648 | | | | |
| Replace lobby intercoms (both buildings) | | | | | | | $16,635 | | | |
| Replace security cameras/surveillance equipment | | | | | | | $30,497 | | | |
| Replace storage unit dehumidifier - 3700 | $10,956 | | | | | | | | | |
| Replace storage unit dehumidifier - 3701 | | | | | | | | | | |
| Replace light fixtures - 3700 | | | $23,462 | | | | | | | |
| Replace light fixtures - 3701 | | | $23,462 | | | | | | | |
| Allocation for common area utilities | | | | | | | | | | |
| **Total** | **$116,130** | **$73,376** | **$148,831** | **$384,496** | **$118,809** | **$479,851** | **$80,956** | **$201,836** | **$143,938** | **$237,018** |

# Expense Summary

| | |
|---|---|
| **Total Over Term Capital Expenditure with Inflation:** | $5,082,567 |
| **Average Estimated Annual Capital Expenditure with Inflation:** | $169,419 |
| **Current Reserve Account Balance:** | $241,912 |
| **Full Funding Balance:** | $754,288 |
| **Percent Funded:** | 32.07% |

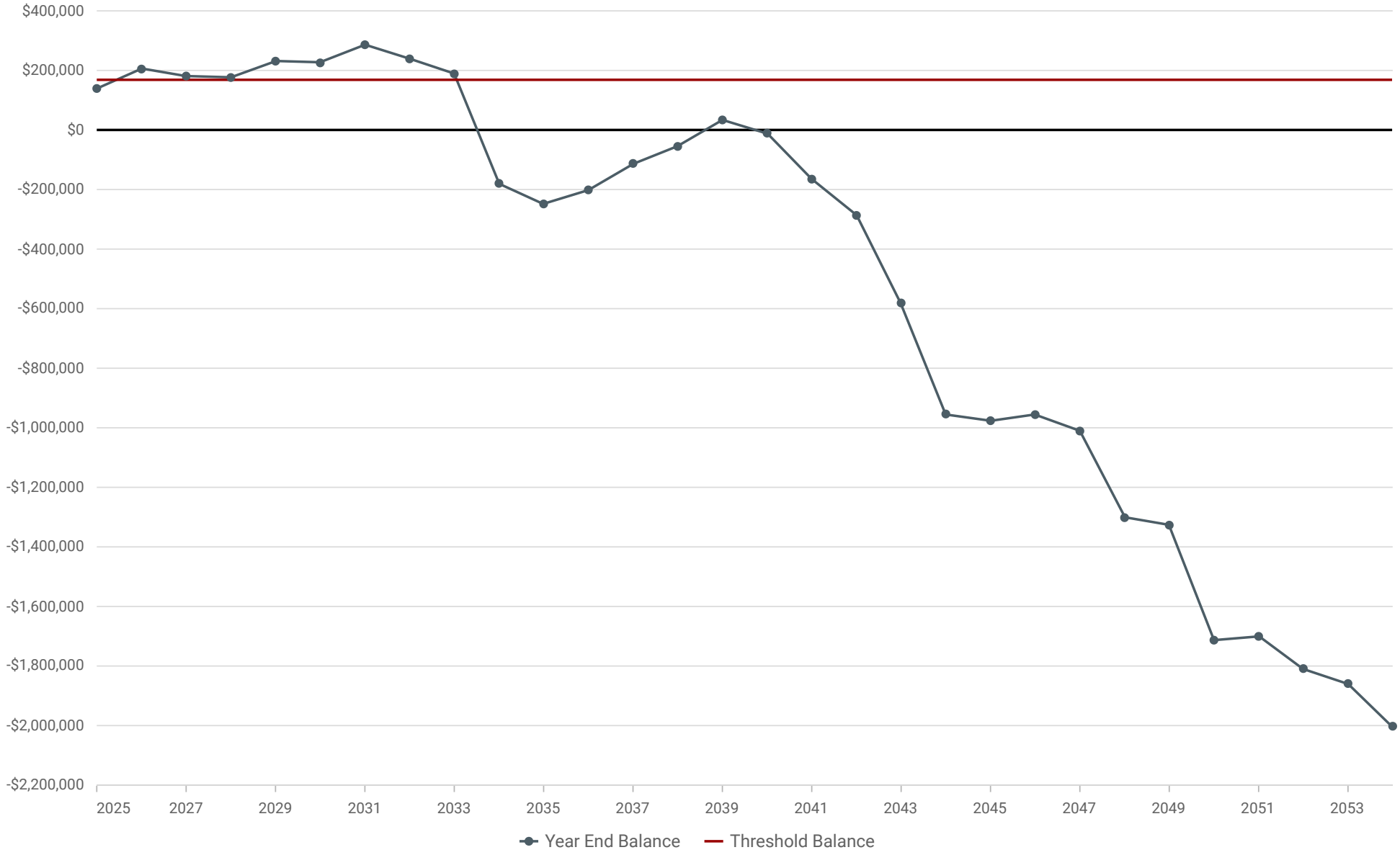
## Breakdown of Total Costs by Type



# Current Funding: Year End Balance Projection

| Year | Starting Balance | Reserve Contribution | Average Per Unit Per Month | Return on Investment | Repair Expenses | Special Assessments | Year End Balance |
|---|---|---|---|---|---|---|---|
| 2025 | $241,912 | $93,677 | $195.16 | $2,059 | $198,350 | | $139,297 |
| 2026 | $139,297 | $93,677 | $195.16 | $3,023 | $31,408 | | $204,589 |
| 2027 | $204,589 | $93,677 | $195.16 | $2,676 | $119,841 | | $181,101 |
| 2028 | $181,101 | $93,677 | $195.16 | $2,603 | $101,238 | | $176,143 |
| 2029 | $176,143 | $93,677 | $195.16 | $3,416 | $42,115 | | $231,120 |
| 2030 | $231,120 | $93,677 | $195.16 | $3,330 | $102,807 | | $225,320 |
| 2031 | $225,320 | $93,677 | $195.16 | $4,231 | $36,947 | | $286,280 |
| 2032 | $286,280 | $93,677 | $195.16 | $3,528 | $144,752 | | $238,732 |
| 2033 | $238,732 | $93,677 | $195.16 | $2,782 | $146,916 | | $188,275 |
| 2034 | $188,275 | $93,677 | $195.16 | $0 | $461,153 | | -$179,201 |
| 2035 | -$179,201 | $93,677 | $195.16 | $0 | $162,827 | | -$248,351 |
| 2036 | -$248,351 | $93,677 | $195.16 | $0 | $46,492 | | -$201,166 |
| 2037 | -$201,166 | $93,677 | $195.16 | $0 | $4,803 | | -$112,293 |
| 2038 | -$112,293 | $93,677 | $195.16 | $0 | $36,632 | | -$55,247 |
| 2039 | -$55,247 | $93,677 | $195.16 | $499 | $5,195 | | $33,733 |
| 2040 | $33,733 | $93,677 | $195.16 | $0 | $137,952 | | -$10,543 |
| 2041 | -$10,543 | $93,677 | $195.16 | $0 | $248,264 | | -$165,130 |
| 2042 | -$165,130 | $93,677 | $195.16 | $0 | $215,438 | | -$286,891 |
| 2043 | -$286,891 | $93,677 | $195.16 | $0 | $387,741 | | -$580,956 |
| 2044 | -$580,956 | $93,677 | $195.16 | $0 | $466,456 | | -$953,735 |
| 2045 | -$953,735 | $93,677 | $195.16 | $0 | $116,130 | | -$976,188 |
| 2046 | -$976,188 | $93,677 | $195.16 | $0 | $73,376 | | -$955,888 |
| 2047 | -$955,888 | $93,677 | $195.16 | $0 | $148,831 | | -$1,011,042 |
| 2048 | -$1,011,042 | $93,677 | $195.16 | $0 | $384,496 | | -$1,301,861 |
| 2049 | -$1,301,861 | $93,677 | $195.16 | $0 | $118,809 | | -$1,326,993 |
| 2050 | -$1,326,993 | $93,677 | $195.16 | $0 | $479,851 | | -$1,713,167 |
| 2051 | -$1,713,167 | $93,677 | $195.16 | $0 | $80,956 | | -$1,700,447 |
| 2052 | -$1,700,447 | $93,677 | $195.16 | $0 | $201,836 | | -$1,808,606 |
| 2053 | -$1,808,606 | $93,677 | $195.16 | $0 | $143,938 | | -$1,858,867 |
| 2054 | -$1,858,867 | $93,677 | $195.16 | $0 | $237,018 | | -$2,002,207 |

# Current Funding: Year End Balance Projection

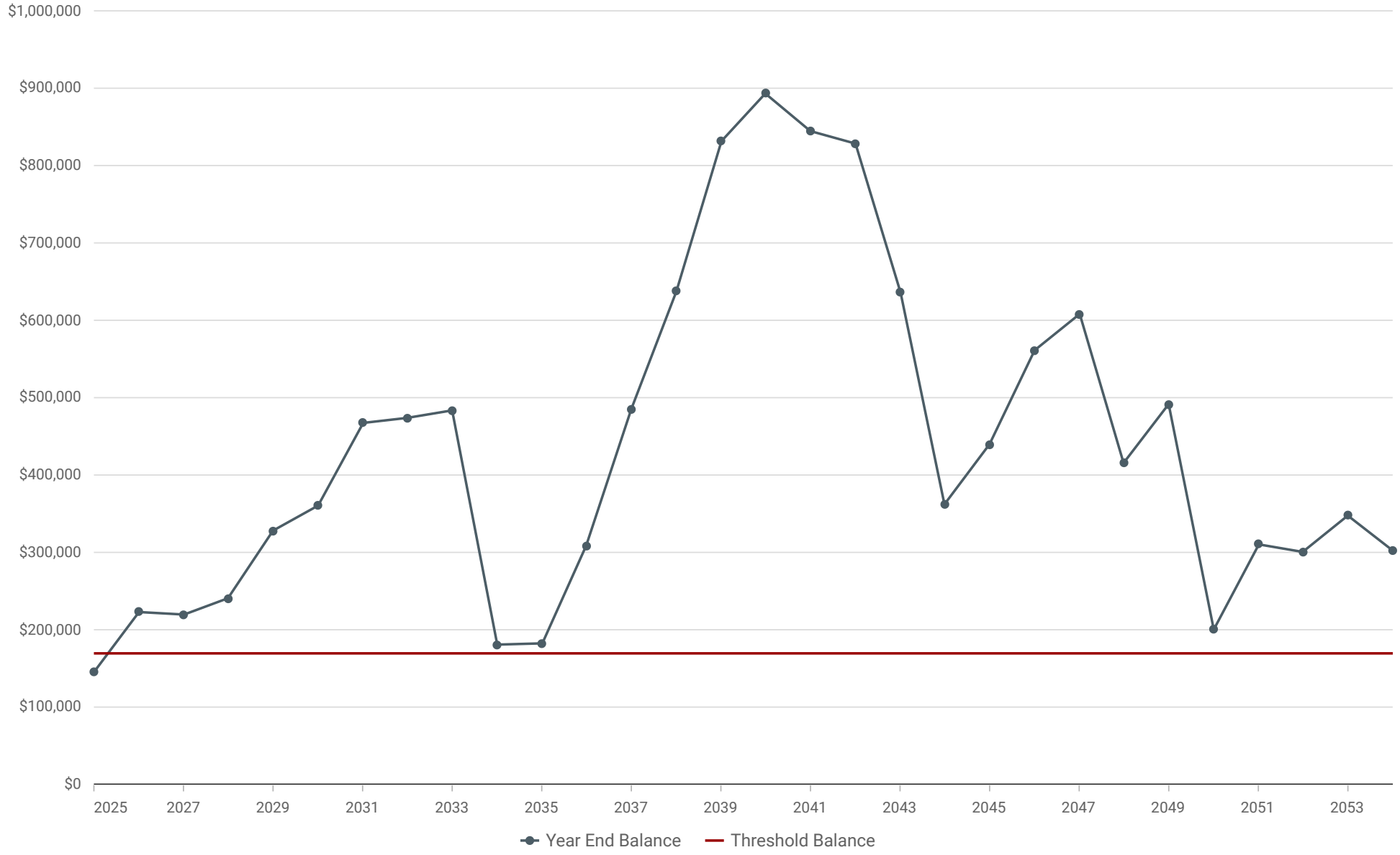


# Funding Alternative 1: Year End Balance Projection

## Beginning in 2025, increase by $6,200 every year for 15 years.

| Year | Starting Balance | Reserve Contribution | Average Per Unit Per Month | Return on Investment | Repair Expenses | Special Assessments | Year End Balance |
|---|---|---|---|---|---|---|---|
| 2025 | $241,912 | $99,877 | $208.08 | $2,152 | $198,350 | | $145,590 |
| 2026 | $145,590 | $106,077 | $220.99 | $3,304 | $31,408 | | $223,562 |
| 2027 | $223,562 | $112,277 | $233.91 | $3,240 | $119,841 | | $219,238 |
| 2028 | $219,238 | $118,477 | $246.83 | $3,547 | $101,238 | | $240,024 |
| 2029 | $240,024 | $124,677 | $259.74 | $4,839 | $42,115 | | $327,424 |
| 2030 | $327,424 | $130,877 | $272.66 | $5,332 | $102,807 | | $360,826 |
| 2031 | $360,826 | $137,077 | $285.58 | $6,914 | $36,947 | | $467,870 |
| 2032 | $467,870 | $143,277 | $298.49 | $6,996 | $144,752 | | $473,390 |
| 2033 | $473,390 | $149,477 | $311.41 | $7,139 | $146,916 | | $483,090 |
| 2034 | $483,090 | $155,677 | $324.33 | $2,664 | $461,153 | | $180,278 |
| 2035 | $180,278 | $161,877 | $337.24 | $2,690 | $162,827 | | $182,018 |
| 2036 | $182,018 | $168,077 | $350.16 | $4,554 | $46,492 | | $308,157 |
| 2037 | $308,157 | $174,277 | $363.08 | $7,164 | $4,803 | | $484,795 |
| 2038 | $484,795 | $180,477 | $375.99 | $9,430 | $36,632 | | $638,070 |
| 2039 | $638,070 | $186,677 | $388.91 | $12,293 | $5,195 | | $831,845 |
| 2040 | $831,845 | $186,677 | $388.91 | $13,209 | $137,952 | | $893,778 |
| 2041 | $893,778 | $186,677 | $388.91 | $12,483 | $248,264 | | $844,674 |
| 2042 | $844,674 | $186,677 | $388.91 | $12,239 | $215,438 | | $828,151 |
| 2043 | $828,151 | $186,677 | $388.91 | $9,406 | $387,741 | | $636,493 |
| 2044 | $636,493 | $186,677 | $388.91 | $5,351 | $466,456 | | $362,064 |
| 2045 | $362,064 | $186,677 | $388.91 | $6,489 | $116,130 | | $439,100 |
| 2046 | $439,100 | $186,677 | $388.91 | $8,286 | $73,376 | | $560,687 |
| 2047 | $560,687 | $186,677 | $388.91 | $8,978 | $148,831 | | $607,511 |
| 2048 | $607,511 | $186,677 | $388.91 | $6,145 | $384,496 | | $415,837 |
| 2049 | $415,837 | $186,677 | $388.91 | $7,256 | $118,809 | | $490,960 |
| 2050 | $490,960 | $186,677 | $388.91 | $2,967 | $479,851 | | $200,753 |
| 2051 | $200,753 | $186,677 | $388.91 | $4,597 | $80,956 | | $311,071 |
| 2052 | $311,071 | $186,677 | $388.91 | $4,439 | $201,836 | | $300,350 |
| 2053 | $300,350 | $186,677 | $388.91 | $5,146 | $143,938 | | $348,236 |
| 2054 | $348,236 | $186,677 | $388.91 | $4,468 | $237,018 | | $302,363 |

# Funding Alternative 1: Year End Balance Projection



# Funding Alternative 2: Year End Balance Projection

## Beginning in 2025 increase by 5.5% every year for 13 years.

| Year | Starting Balance | Reserve Contribution | Average Per Unit Per Month | Return on Investment | Repair Expenses | Special Assessments | Year End Balance |
|---|---|---|---|---|---|---|---|
| 2025 | $241,912 | $98,829 | $205.89 | $2,136 | $198,350 | | $144,526 |
| 2026 | $144,526 | $104,265 | $217.22 | $3,261 | $31,408 | | $220,644 |
| 2027 | $220,644 | $109,999 | $229.16 | $3,162 | $119,841 | | $213,963 |
| 2028 | $213,963 | $116,049 | $241.77 | $3,432 | $101,238 | | $232,206 |
| 2029 | $232,206 | $122,432 | $255.07 | $4,688 | $42,115 | | $317,211 |
| 2030 | $317,211 | $129,165 | $269.09 | $5,154 | $102,807 | | $348,723 |
| 2031 | $348,723 | $136,270 | $283.89 | $6,721 | $36,947 | | $454,766 |
| 2032 | $454,766 | $143,764 | $299.51 | $6,807 | $144,752 | | $460,584 |
| 2033 | $460,584 | $151,671 | $315.98 | $6,980 | $146,916 | | $472,320 |
| 2034 | $472,320 | $160,013 | $333.36 | $2,568 | $461,153 | | $173,748 |
| 2035 | $173,748 | $168,814 | $351.70 | $2,696 | $162,827 | | $182,431 |
| 2036 | $182,431 | $178,099 | $371.04 | $4,711 | $46,492 | | $318,749 |
| 2037 | $318,749 | $187,894 | $391.45 | $7,528 | $4,803 | | $509,368 |
| 2038 | $509,368 | $187,894 | $391.45 | $9,909 | $36,632 | | $670,540 |
| 2039 | $670,540 | $187,894 | $391.45 | $12,799 | $5,195 | | $866,038 |
| 2040 | $866,038 | $187,894 | $391.45 | $13,740 | $137,952 | | $929,719 |
| 2041 | $929,719 | $187,894 | $391.45 | $13,040 | $248,264 | | $882,390 |
| 2042 | $882,390 | $187,894 | $391.45 | $12,823 | $215,438 | | $867,669 |
| 2043 | $867,669 | $187,894 | $391.45 | $10,017 | $387,741 | | $677,840 |
| 2044 | $677,840 | $187,894 | $391.45 | $5,989 | $466,456 | | $405,267 |
| 2045 | $405,267 | $187,894 | $391.45 | $7,155 | $116,130 | | $484,187 |
| 2046 | $484,187 | $187,894 | $391.45 | $8,981 | $73,376 | | $607,685 |
| 2047 | $607,685 | $187,894 | $391.45 | $9,701 | $148,831 | | $656,450 |
| 2048 | $656,450 | $187,894 | $391.45 | $6,898 | $384,496 | | $466,746 |
| 2049 | $466,746 | $187,894 | $391.45 | $8,037 | $118,809 | | $543,869 |
| 2050 | $543,869 | $187,894 | $391.45 | $3,779 | $479,851 | | $255,691 |
| 2051 | $255,691 | $187,894 | $391.45 | $5,439 | $80,956 | | $368,069 |
| 2052 | $368,069 | $187,894 | $391.45 | $5,312 | $201,836 | | $359,439 |
| 2053 | $359,439 | $187,894 | $391.45 | $6,051 | $143,938 | | $409,447 |
| 2054 | $409,447 | $187,894 | $391.45 | $5,405 | $237,018 | | $365,729 |

# Funding Alternative 2: Year End Balance Projection

# APPENDIX B: PROJECT PHOTOGRAPHS

| Description | |
|---|---|
| Minor longitudinal cracking in asphalt paving |  |
| Photo No. 1 | |

| Description | |
|---|---|
| Minor fatigue cracking and faded striping in asphalt parking area |  |
| Photo No. 2 | |

| Description | |
|---|---|
| Settled concrete sidewalk (trip hazard) outside 3701 |  |
| Photo No. 3 | |

| Description | |
|---|---|
| Minor cracking in concrete flatwork |  |
| Photo No. 4 | |

| Description | |
|---|---|
| Deterioration in concrete flatwork |  |
| Photo No. 5 | |

| Description | |
|---|---|
| Site drainage at the rear of 3701 |  |
| Photo No. 6 | |

| Description | |
|---|---|
| General view of the entrance monument |  |
| Photo No. 7 | |



| Description | |
|---|---|
| Trim falling off composite site |  |
| Photo No. 8 | |

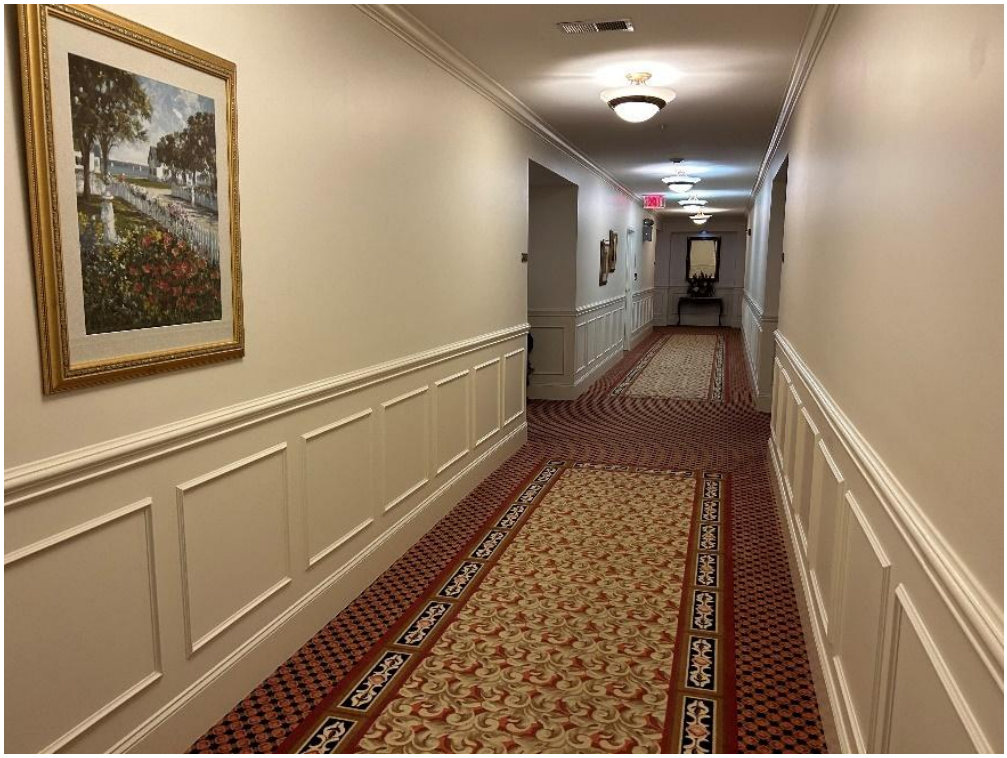
| Description | |
|---|---|
| Brick walkway leading to 3701 |  |
| Photo No. 9 | |

| Description | |
|---|---|
| General view of building front door and cover |  |
| Photo No. 10 | |

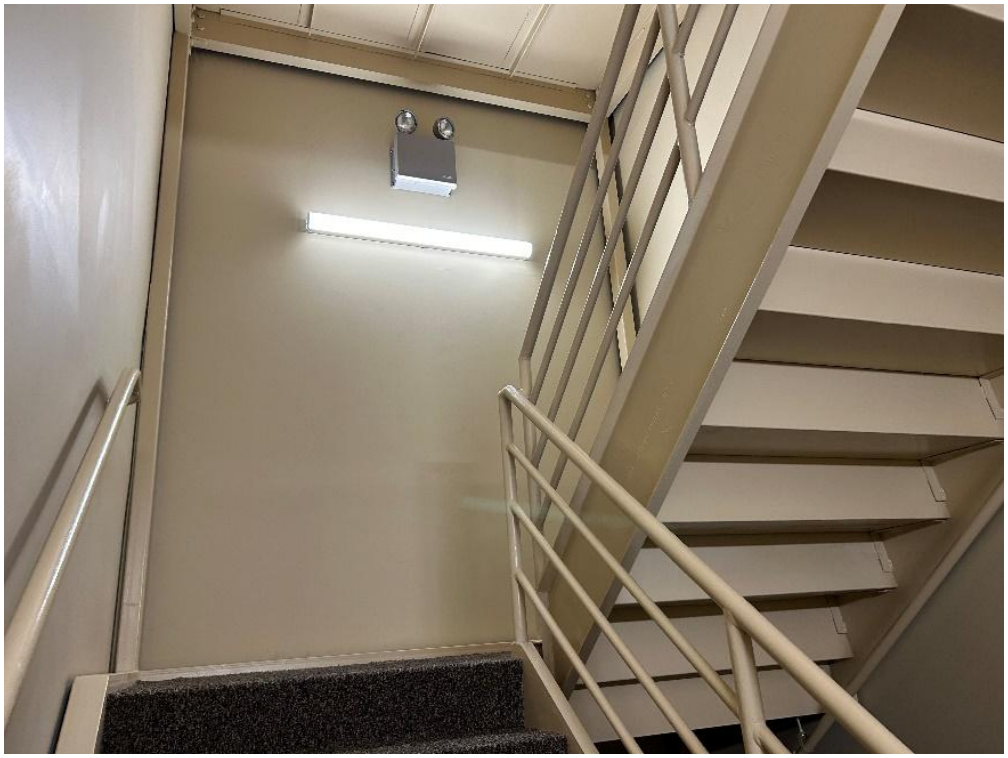
| Description | |
|---|---|
| General view of building entry with vinyl siding and painted trim components |  |
| Photo No. 11 | |

| Description | |
|---|---|
| Painted fencing on front and back of buildings |  |
| Photo No. 12 | |

| Description | |
|---|---|
| Painted trim components showing deterioration |  |
| Photo No. 13 | |

| Description | |
|---|---|
| General view of building corridor (painting, carpet, light fixtures, art) |  |
| Photo No. 14 | |

| Description | |
|---|---|
| Carpet in building stairways |  |
| Photo No. 15 | |

| Description | |
|---|---|
| Stairway painting, lighting, and emergency light fixtures |  |
| Photo No. 16 | |

| Description | |
|---|---|
| Building 3700 lobby |  |
| Photo No. 17 | |

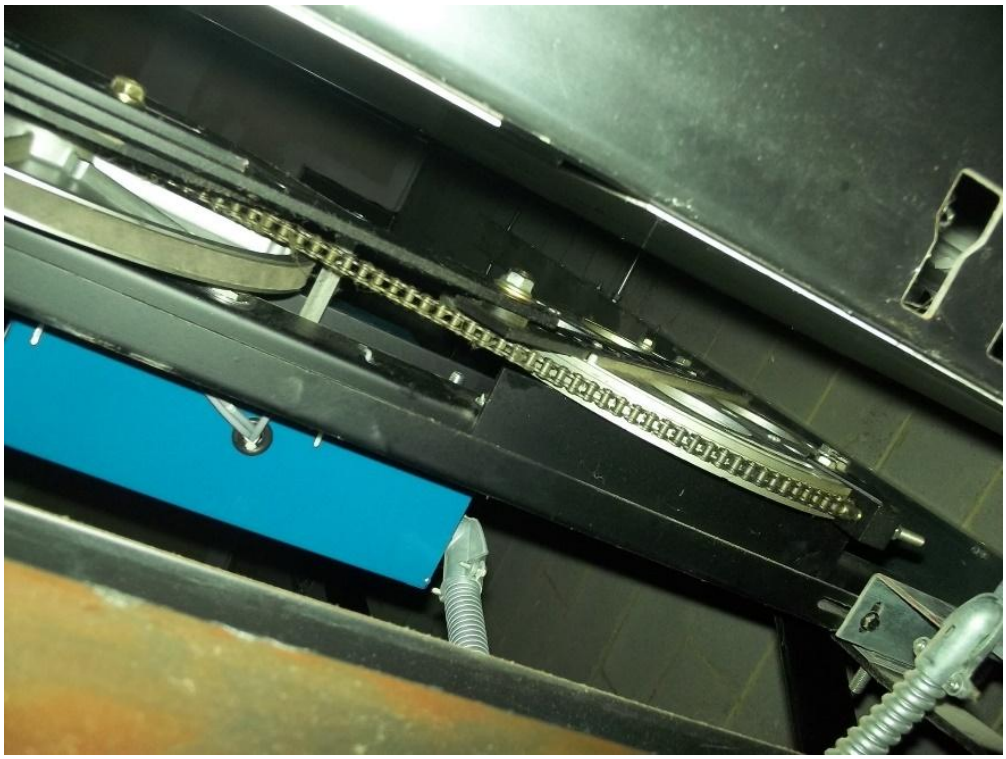
| Description | |
|---|---|
| Building 3701 lobby |  |
| Photo No. 18 | |

| Description | |
|---|---|
| Typical corridor furnishings |  |
| Photo No. 19 | |

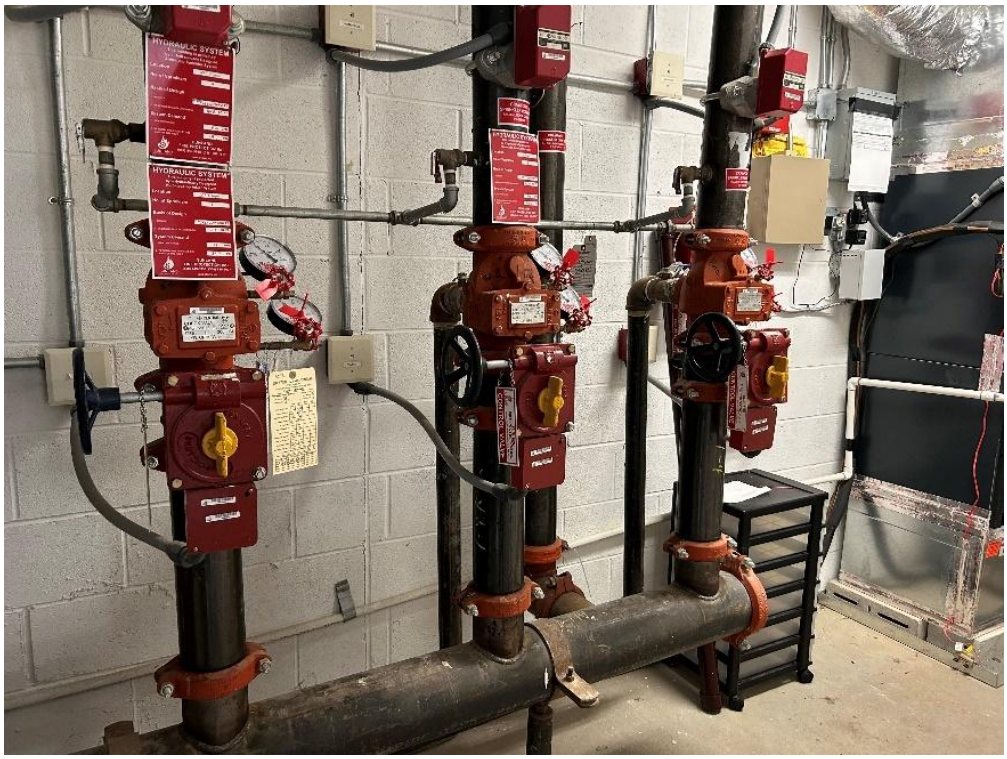
| Description | |
|---|---|
| Typical elevator cab interior |  |
| Photo No. 20 | |

| Description | |
|---|---|
| Tile flooring in lobby and outside elevator |  |
| Photo No. 21 | |

| Description | |
|---|---|
| Typical elevator equipment room |  |
| Photo No. 22 | |

| Description | |
|---|---|
| General view of elevator assembly |  |
| Photo No. 23 | |

| Description | |
|---|---|
| Typical fire access control panel in building lobby |   |
| Photo No. 24 | |

| Description | |
|---|---|
| Typical fire suppression riser setup |  |
| Photo No. 25 | |

| Description | |
|---|---|
| Fire suppression riser in building stairway |  |
| Photo No. 26 | |

| Description | |
|---|---|
| Typical common area HVAC unit |  |
| Photo No. 27 | |

| Description | |
|---|---|
| Surveillance equipment in mechanical room |   |
| Photo No. 28 | |

| Description | |
|---|---|
| Lobby intercom system |  |
| Photo No. 29 | |

| Description | |
|---|---|
| Storage room dehumidifier |   |
| Photo No. 30 | |