PREPARED FOR:

CEDAR POINTE CONDOMINIUM ASSOCIATION

CARY, NC

MANAGED BY:
ELITE MANAGEMENT PROFESSIONALS, INC.

FULL RESERVE STUDY UPDATE

SEPTEMBER 15, 2022

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TABLE OF CONTENTS

INTRODUCTIONS

The Cedar Pointe Condominium Association authorized Giles Flythe Engineers to perform a Full Reserve Study for the Cedar Pointe condominium community located in Cary, NC. 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 twenty 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 including providing sufficient funds required, a stable reserve contribution rate over the term, an equitable contribution rate over the term and fiscally responsible. 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 it is entirety.

EXECUTIVE SUMMARY

The Cedar Pointe Condominium Association is a community with a total of 96 condominium units contained within six three-story buildings situated along Springfork Drive off of Edgehill Parkway in Cary, NC. Construction of the community occurred between 1986 and 1997 according to Wake County Tax Records.

The Association has responsibility for the condominium building exteriors and common area site improvements. The most significant site improvements include the asphalt-paved private streets and parking lots, concrete walkways, retaining walls, and drainage systems.

The condominium buildings are of wood frame construction on slab-on-grade foundations. The roofs are primarily comprised of asphaltic fiberglass shingles. Exterior walls are primarily clad with vinyl siding and trim with some aluminum and wood trim components. The upper levels at each building are accessed by wood-framed breezeways.

The buildings, common areas and site improvements are in overall good to fair condition. Based on our evaluation, maintaining the current funding level is **not** projected to maintain a positive balance through the term of this study. We have provided recommendations for annual reserve contribution schedules that provide sufficient funding to meet capital expenditure requirements in the next twenty years, summarized below:

- **Alternative 1:** Beginning in 2023, increase the annual reserve contribution by $15,000 every other year until 2029. This step increase funding model is projected to maintain a positive balance through the term of this study.

- **Alternative 2:** Beginning in 2023, increase the annual reserve contribution by 8% each year until 2029. This escalating funding model is projected to maintain a positive balance through the term of this study.

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

- Replace condominium building roofs
- Maintenance and repair of asphalt-paved private streets and parking lots
- Replacement of the building roofs
- Replacement of timber retaining walls

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 twenty 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 Cedar Pointe Condominium Association, 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 2022 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 resent 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 August 9, 2022

Interviews

We interviewed the following people in connection with this study:

- Audra Brown, Association Manager – Elite Management Professionals, Inc.
- Board members during pre-inspection meeting

Documents

The following documents were made available to us and reviewed:

- Wake County tax records
- Cedar Pointe Condominium Association Governing Documents
- Association financial statements
- "Reserve Study Update with Site Inspection" report dated May 3, 2019

Cost Estimates

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

DESCRIPTION

The Cedar Pointe Condominium Association is a community with a total of 96 condominium units contained within six three-story buildings situated along Springfork Drive off of Edgehill Parkway in Cary, NC. Construction of the community occurred between 1986 and 1997 according to Wake County Tax Records.

The Association has responsibility for the condominium building exteriors and common area site improvements. The most significant site improvements include the asphalt-paved private streets and parking lots, concrete walkways, retaining walls, and drainage systems.

The condominium buildings are of wood frame construction on slab-on-grade foundations. The roofs are primarily comprised of asphaltic fiberglass shingles. Exterior walls are primarily clad with vinyl siding and trim with some aluminum and wood trim components. The upper levels at each building are accessed by wood-framed breezeways.

The condominium buildings are of wood frame construction on concrete slab-on-grade foundations. Exterior surfaces are primarily comprised of vinyl siding and trim with sections of brick veneer on the ground levels. Two of the buildings are clad in wood siding. Buildings 100, 300, 600 and 700 each contain 18 condominium units. Buildings 500 and 900 each contain 12 condominium units. The buildings are all three stories in height. Buildings 500, 700 and 900 were originally constructed in 1986/87 and buildings 100, 300 and 600 were constructed in 1997 according to Wake County Tax Records.

Stormwater on the site is generally controlled via surface flow from the paved and landscaped areas, into curb inlets and landscape catch basins which lead to an underground piping network that discharges into the adjacent pond to the east.

There are ongoing retaining wall replacement projects, and several of the original timber retaining walls have been recently replaced with segmental block masonry components. This phased replacement is in progress, and additional replacements (as well as new installations) are planned over the next few years.

We also understand there is a proposed plan to install a new section of driveway to connect the northern parking lot to the main access drive, which will ease vehicle flow through this area.

A clubhouse with swimming pool is located in proximity to the condominium buildings; however, this facility is maintained by the Edgehill Farm master association and is not the responsibility of Cedar Pointe.

OBSERVATIONS

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

Note that the repair schedules discussed herein generally correspond to the schedules outlined in our 2019 reserve study for this community, with modifications to ensure serviceability and function of specific components based on the most recent site inspection, HOA priorities, and discussions with the HOA Board and management team.

Site Improvements

The association is responsible for maintaining the asphalt paved parking and drive aisles within the community. The drive aisles within the southern portion of the community have been recently re-paved, however this did not include the parking spaces in proximity to buildings 900, 700 and 500. Limited fatigue cracking and damages were observed in the adjacent parking spaces. The pavements within the northern portion of the community have not been recently resurfaced, and we observed various cracking, surface erosion and other age-related wear throughout. Except for isolated locations of damages, no major fatigue cracking or extensive deterioration was observed in these areas. We anticipate the pavements will have a remaining useful life of approximately 5-7 years prior to full resurfacing.

We have allocated funds to resurface the asphalt paving in 2028. Resurfacing would include milling limited areas around curbing and other pavement transitions to maintain an adequate drainage profile, repairing areas of fatigue cracking/upheaval as needed (to include subgrade repairs), and installing a new 1.5" to 2" thick layer of asphalt pavement over the existing paved areas. Note that the quantities shown in the cash flow analysis exclude the recently re-paved drive aisles within the southern portion of the community, and we assume the transitions between old and new will be milled down to create a uniform surface.

Typically, we recommend the application of an oil resistant sealant to all asphalt paved surfaces on an approximate 5- to 7-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 2033 (approximately 5 years after the resurfacing project described above).

We understand there are current/ongoing concerns with vehicle egress from the parking lot adjacent to building 100, and the Association is proposing to install a short drive aisle to connect the south end of that parking lot to Springfork Drive. This will include relocating some parking spaces and converting the drive aisle to a one-way loop. We note that this new pavement will reduce the amount of permeable surface, which may increase costs for design and permitting. We have included a contingency budget in 2024 for this pavement work.

The Association is responsible for the concrete flatwork and curb/gutter lining around the streets and parking areas throughout the community. The concrete curbing appeared in overall fair condition, with some areas

of cracking and upheaval noted. Some settled areas were also observed adjacent to storm drain inlets. Over time, additional distress due to cracking and settlement is likely to develop, which would require periodic repairs. Repairs would typically include saw-cutting and removing damaged areas, repairing base course and pouring and finishing new curbing. We have allocated funds for periodic repairs to sections of the concrete curbing and have assumed that approximately 5% of the curbing will require repair every 8 years beginning in 2024.

Flatwork in the community includes concrete sidewalks lining the parking areas, walkways leading to the building entrances, and the concrete-paved dumpster pads. The concrete flatwork generally appears to be in fair to good condition, however there were some areas of settlement across cracks which have resulted in trip hazards. We also observed minor to moderate cracking and surface scaling in multiple locations, and some sections which have been recently replaced. We have allocated funds for continued periodic replacement of damaged concrete surfaces every 8 years beginning in 2024, approximately 5% of the total during each cycle. Repairs to concrete flatwork would typically include sawcut removal of the damaged area (to the nearest control joint for larger affected areas, or to a new clean line sawcut joint for smaller areas), re-compacting and preparing the soil subgrade, and placement of fresh concrete to match existing.

A short section of worn walking path connects the main drive aisle to the parking lot near the new dumpster corral, and we understand there is a plan to install a new concrete stair at this location, to include a handrail. We have included funds for this project to be performed in 2024.

Retaining walls are installed along the western side of the parking lots to accommodate topographical changes. The walls were formerly of timber construction, and phased replacement with segmental block masonry is in progress. The two northern retaining walls have been completed, and a third section (north of building 600) is also scheduled to be replaced in 2022. The southern-most retaining wall (south of building 600, west of building 900) will be replaced in 2023. We also understand there is a plan to install a new retaining wall to the east of building 300 within the next five years. We have included funds to complete the retaining wall installation projects in 2023 (phase 4, south of bldg. 600), and 2025 (east of bldg. 300).

Stormwater from the site flows via surface runoff from the paved and landscaped areas into curb inlets and catch basins that discharge through buried piping into the pond to the east of the property. The drainage systems appeared to be in good working condition at the time of the inspection. No significant erosion concerns, scouring, ponded water or other issues were evident. Over time, drainage concerns are likely to develop and require repairs to address erosion and ponding concerns. We understand the ‘drainage repairs’ funding allocation in the 2019 reserve study was excessive and those funds are better allocated toward other expenses. We have included a lesser fund for drainage repairs, on a 5-year schedule beginning in 2027. This funding allocation should be suitable to perform minor repairs/corrections as needed, but may not be suitable for large-scale repairs if major concerns develop. Minor drainage improvements may include retrenching of swales to improve flow, adding rip rap or vegetation to stabilize exposed or steep areas, extending gutter downspouts to shallow underground systems, and repairing erosion concerns as they develop. We note that the allocated funds are intended to address the highest priority areas as they develop, and are not likely suitable for extensive drainage overhaul projects at each building.

Landscaping on the property appeared to be in overall good condition, and we understand the Board has extensively worked to improve the common area landscaping over the past few years. Landscaping on the site is typically maintained through a service contract with an outside servicing company. Seasonal lawn treatment and maintenance, annual plantings, pruning, and selective replacement of declining vegetation should be addressed in a general operating/maintenance budget. We have not included funds for major landscaping projects in the current reserve analysis.

Mailbox inserts are installed in kiosk structures and in the breezeways of the buildings. The mailbox inserts generally appeared to be in good to fair condition and we have assumed repairs/replacement would be funded from an annual maintenance budget.

Limited sections of painted white wood fencing and wood split rail fencing are installed above sections of the retaining walls in the community. We have assumed maintaining this limited amount of fencing would be funded form an annual maintenance budget. We have allocated funds to replace the fencing with PVC fencing in 2025.

A dumpster corral is located in the parking lot to the east of building 300, and was recently installed. The corral is framed with steel posts supporting metal gates with composite slats, and vinyl screening panels around the backs and sides. Due to regular use, the gates and enclosure fencing will require periodic repair. However, this is not anticipated to be a major expense, and we have assumed will be funded from the annual maintenance budget when needed.

Common Building Exteriors

The condominium buildings are of wood-framed construction on concrete slab-on-grade foundations. Exterior walls are clad with vinyl siding and trim (buildings 100, 300, 600 & 900), and with wood siding (buildings 500 & 700). The roofs are covered with architectural grade asphalt composition shingles. Exterior doors are of fiberglass and metal skin construction. Painted wood deck bands and railings were observed at the rear balconies and breezeways on the buildings.

The exterior siding and trim components generally appeared to be in good to fair condition. Various minor damages to the vinyl siding were observed, typically small punctures and rusting exposed fasteners. We also observed some discolorations, primarily in the vinyl soffits over the breezeways in some locations.

Considering the age of the buildings, it is likely that siding replacement projects will begin to be required near the end of the term. While vinyl siding is often projected to last up to fifty years, it has been our experience that a shorter life span should be expected of this material. As the siding ages, the colors begin to lose their color density and show signs of oxidation, the components become unsightly from neglect and impact damage, mold and mildew growth occurs, and replacement sections made necessary by periodic repairs become evident as colors and styles no longer match. It is prudent that the Association be prepared for the eventual cost of large-scale siding replacement which may be required around the final year of the term. We have included a contingency budget at the end of the term to help prepare for future large-scale siding

replacement projects. Note that sections of vinyl siding which are partially protected from the elements (shaded by the covered breezeways) may have an extended service life compared to those which are exposed to sun and weather.

Routine maintenance including power washing the siding will also be required on a regular basis to maintain the color of the siding. Additionally, any minor repairs to siding damaged in the next 20 years should be funded from the Maintenance budget, or as part of exterior painting/maintenance projects described below.

Exterior caulking/sealant will require periodic repairs and we anticipate minor periodic repairs to vinyl siding and trim components. Exterior painting would include a thorough cleaning of the exterior surfaces, repairing sealant/caulking as needed, repairing wood rot as needed and painting all painted surfaces (balcony railings, wood windows, wood trim, metal/fiberglass doors, shutters, etc.). Exterior painting/repair cycles should also include repairing areas of vinyl siding material as needed. We have allocated funds for future exterior trim painting projects in 2026, and on a 5-year cycle thereafter.

Buildings 500 and 700 were originally constructed in 1986/87, and are clad with wood siding and trim. These buildings are routinely painted, and we understand the Association intends to complete one more exterior painting project prior to replacing with new vinyl siding. We have included funds to re-paint buildings 500 and 700 in 2026, and to replace the wood siding with vinyl in 2031.

The roofs are all relatively new, with building 900 previously replaced in 2019 and the remaining roofs replaced in 2016. This type of shingled roof has an expected useful life of approximately 20-25 years, and replacement will likely be required near the end of the term. We have included funds to replace the roofs in 2036 (bldgs. 100-700), and 2039 (bldg. 900).

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.

Note that it is likely that minor repairs to the roofing, vent boots and flashing will be required in the interim. We have assumed these items would be funded from an annual maintenance budget.

Gutters and downspouts are in generally good condition and should not require replacement until the time of roof replacement, as this component typically provides twenty years of relatively trouble-free service. The funding allocation for roof replacement assumes partial replacement of gutters and downspouts as needed.

Fabric awnings on aluminum frame structures are installed at the entrances to each building. The fabric awnings generally appeared to be in good condition with no significant fading or deterioration visible. We estimate the awnings will remain serviceable for another 5+ years, and we have included funds for replacement in 2027.

Wood framed decking and stairs are installed in the covered breezeway corridors of each building providing access to the units. The decking includes wood railings. The decking is under roof and generally appeared to be in fair overall condition, with some minor age-related deterioration observed. We understand minor repairs and touch-up painting will be funded as an annual maintenance expense until replacing with composite material in 2029, further discussed below.

We understand the Association intends to replace the wood decking and railings with composite material (Trex or similar), and we have included funds for this project in 2029. Future breezeway maintenance projects will not require re-staining the decking (assuming replacement with composite material); assuming the railings are also replaced with a composite or PVC-type material, we do not anticipate significant reserve funds will be required for future maintenance of these components.

Based on our review of governing documents and recorded plat maps, it appears that the individual unit owners are responsible for maintaining the patios and decks serving individual units. We have not included funds for repairs or maintenance of these components. Considering the age of the deck structures, the decks should be routinely inspected for concerns and repaired as needed.

We did not observe significant deterioration or damage to the brick veneer and do not anticipate any capital repairs will be required to maintain the veneer. Minor repointing projects should be funded as an operational expense when needed.

Mechanical Systems

The association is responsible for maintaining the mechanical equipment that serves the common areas of the buildings including the fire alarm/suppression systems, plumbing and electrical equipment.

Exterior wall and ceiling mounted light fixtures are installed at the rear patio/balcony of each unit and in the breezeways. Many of the fixtures at the rear balconies are dissimilar and we anticipate replacement is performed when needed, and funded as an operational expense (or replaced by the individual unit owners). The common light fixtures in the breezeways appeared to be in generally good condition. We have included funds for common area light fixture replacement on a 15-year schedule beginning in 2034.

The buildings are each served by wet fire suppression system with riser in a small mechanical room at street level or contained in an insulated enclosure in the ground floor courtyard area of each building. It is likely that significant repairs to the valves, gauges and common area sprinkler heads will be periodically required. We have provided a funding allocation for repairs to the fire suppression system equipment on an 8-year cycle beginning in 2027.

The fire alarm/life safety system includes a fire alarm system with alarm located in the common area breezeway of each building. We did not locate a fire alarm control panel with communicator for the buildings. However, the small fire suppression rooms adjacent to the Fire Department Connections were locked and

inaccessible during the inspection. We have provided a funding allocation for repairs to the fire alarm system components on a 5-year cycle beginning in 2024.

The association is responsible for common area plumbing and electrical systems, including plumbing supply and sewer piping leading to each unit from Town of Cary maintained systems. This includes a backflow preventer located in an insulated enclosure adjacent to each building. The association is likely also responsible for buried stormwater piping and sewer piping below the private streets and within the common areas. Buried plumbing components typically have an expected useful life of 40+ years. However, it is possible that sections of the piping will begin to require repair/replacement during the term, necessitated by pipe freezing, root infiltration, 'bellying' or other degradation. We have allocated funds to repair or replace the backflow preventers in 2030. We have also allocated funds for common area buried utility repairs on a 10-year cycle beginning in 2024. The association may consider video borescope inspections of a sample of sections to the piping to determine condition and better predict repair needs.

We understand the Association wishes to install electric vehicle charging stations to accommodate the increase in use of electric vehicles. We have included a budget to install new charging stations in 2023 and 2025 (one per year) at the request of the Board.

There are other proposed improvement projects including new attic insulation (top level units only), and replacement of deteriorating A/C ducts, both of which are proposed to be performed in 2025. The governing documents indicate expenses which benefit select units shall be collectively assessed against said units, and not as a common expense (Articles XX & XXI). Further, air conditioning and heating equipment is the responsibility of the individual unit owners as specified in Article XXI. We have not included reserve funds for these proposed projects.

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 of 3.5% and an assumed average return on invested funds of 1.5%. 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 include 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.

Cedar Pointe Condominium Association

Current Reserve Funding Rate: $110,440/year (budgeted 2022 contribution)

Current Reserve Balance: $142,860 (projected 2023 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 2023, increase the annual reserve contribution by $15,000 every other year until 2029. This step increase funding model is projected to maintain a positive balance through the term of this study.

- **Alternative 2:** Beginning in 2023, increase the annual reserve contribution by 8% each year until 2029. This escalating funding model is projected to maintain a positive balance through the term of this study.

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 2022 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 analyses 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. 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 Cedar Pointe Condominium Association 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.

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. 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.

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.

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,

Andrew D. Crook, PE, RS
Project Manager
Giles Flythe Engineers, Inc.

APPENDIX A: RESERVE FUND PROJECTIONS

PROJECT SUMMARY

Cedar Pointe	
City/state location:	Cary, NC
Date of inspection:	8/9/2022
Number of units:	96
Term of study (years):	20
Beginning Year of Term	2023
Estimated starting reserve account balance:	$142,860
Current annual reserve contribution rate:	$110,440
Assumed inflation rate:	3.50%
Assumed rate of return on invested funds:	1.50%
Total over term capital expenditure (un-inflated):	**$2,237,150**
Total over term capital expenditure with inflation:	**$3,236,324**
Recommended threshold reserve balance: (Average annual capital expenditure)	**$161,816**

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EXPENSE ESTIMATES

Capital Item Description	Quantity	Unit	Unit Cost	Total Cost Per Cycle	Estimated Useful Life (years)	Estimated Remaining Life (years)	Notes
Site Improvements							
Resurface asphalt paving	7,000	SY	$ 24.00	$168,000	20	5	qty excludes recent full-depth repair areas
Crack fill, sealcoat, re-stripe asphalt paving	8,900	SY	$ 2.00	$17,800	5	10	Begin 5 years after resurfacing
Install new driveway from parking lot to main drive	1	LS	$ 7,500.00	$7,500	50	1	West of bldgs 100 & 300
Concrete curbing repairs	230	LF	$ 50.00	$11,500	8	1	Approx. 5% every 8 years
Concrete flatwork repairs	80	SY	$ 125.00	$10,000	8	1	Approx. 5% every 8 years
Install new concrete stair at walking path	1	LS	$ 1,200.00	$1,200	50	1	From main drive to new dumpster
Retaining wall replacement - phase 4	1,500	SF	$ 65.00	$97,500	50	0	west of bldgs 600 & 900
Install new retaining wall behind bldg 300	1,100	SF	$ 65.00	$71,500	50	2	
Drainage repairs & improvements	1	LS	$ 10,000.00	$10,000	5	4	
Replace wood fencing with PVC fencing	600	LF	$ 40.00	$24,000	30	2	
Common Building Exteriors							
Contingency for vinyl siding replacement	65,000	SF	$ 7.00	$455,000	40	19	End-of-term contingency; excludes bldgs 500 & 700
Paint/repair trim on all buildings	1	LS	$ 35,000.00	$35,000	5	3	
Replace siding on bldgs 500 & 700 with vinyl	1	LS	$ 200,000.00	$200,000	40	8	
Replace roofs, bldgs 100, 300, 500, 600, 700	780	SQ	$ 350.00	$273,000	20	13	
Replace roof, bldg 900	115	SQ	$ 350.00	$40,250	20	16	
Replace fabric awnings	550	SF	$ 22.00	$12,100	15	4	
Paint / repair wood siding, bldgs 500 & 700	1	LS	$ 40,000.00	$40,000	5	3	2026 only
Replace breezeway decking	10,350	SF	$ 22.00	$227,700	25	6	Replacement with composite
Replace breezeway railings	3,100	LF	$ 32.00	$99,200	25	6	Replacement with composite
Mechanical, Electrical, Plumbing Systems							
Common area light fixture replacement	160	EA	$ 150.00	$24,000	15	11	
Fire suppression system repairs	1	LS	$ 30,000.00	$30,000	8	4	
Fire alarm system repairs	1	LS	$ 15,000.00	$15,000	5	1	
Repair/replace backflow preventers	6	EA	$ 4,000.00	$24,000	30	7	
Allocation for buried utility repairs	1	LS	$ 20,000.00	$20,000	10	2	
Install electric vehicle charging stations	2	EA	$ 10,000.00	$20,000	20	0	2023 & 2025

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

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ANNUAL EXPENSE PROJECTION

Description	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Site Improvements										
Resurface asphalt paving						$168,000				
Crack fill, sealcoat, re-stripe asphalt paving										
Install new driveway from bldg 100 parking lot to main drive		$7,500								
Concrete curbing repairs		$11,500								$11,500
Concrete flatwork repairs		$10,000								$10,000
Install new concrete stair at walking path		$1,200								
Retaining wall replacement - phase 4	$97,500									
Install new retaining wall behind bldg 300			$71,500							
Drainage repairs & improvements					$10,000					$10,000
Replace wood fencing with PVC fencing			$24,000							
Common Building Exteriors										
Contingency for vinyl siding replacement										
Paint/repair trim on all buildings				$35,000					$35,000	
Replace siding on bldgs 500 & 700 with vinyl									$200,000	
Replace roofs, bldgs 100, 300, 500, 600, 700										
Replace roof, bldg 900										
Replace fabric awnings					$12,100					
Paint/repair wood siding, bldgs 500 & 700				$40,000						
Replace breezeway decking							$227,700			
Replace breezeway railings							$99,200			
Mechanical, Electrical, Plumbing Systems										
Common area light fixture replacement										
Fire suppression system repairs					$30,000					
Fire alarm system repairs		$15,000					$15,000			
Repair/replace backflow preventers								$24,000		
Allocation for buried utility repairs			$20,000							
Install electric vehicle charging stations	$10,000		$10,000							
Totals	**$107,500**	**$45,200**	**$125,500**	**$75,000**	**$52,100**	**$168,000**	**$341,900**	**$24,000**	**$235,000**	**$31,500**
Totals including inflation:	**$107,500**	**$46,782**	**$134,439**	**$83,154**	**$59,786**	**$199,531**	**$420,282**	**$30,535**	**$309,450**	**$42,931**

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ANNUAL EXPENSE PROJECTION

Description	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
Site Improvements										
Resurface asphalt paving										
Crack fill, sealcoat, re-stripe asphalt paving	$17,800					$17,800				
Install new driveway from bldg 100 parking lot to main drive										
Concrete curbing repairs								$11,500		
Concrete flatwork repairs								$10,000		
Install new concrete stair at walking path										
Retaining wall replacement - phase 4										
Install new retaining wall behind bldg 300										
Drainage repairs & improvements					$10,000					$10,000
Replace wood fencing with PVC fencing										
Common Building Exteriors										
Contingency for vinyl siding replacement										$455,000
Paint/repair trim on all buildings				$35,000					$35,000	
Replace siding on bldgs 500 & 700 with vinyl										
Replace roofs, bldgs 100, 300, 500, 600, 700				$273,000						
Replace roof, bldg 900							$40,250			
Replace fabric awnings										$12,100
Paint/repair wood siding, bldgs 500 & 700										
Replace breezeway decking										
Replace breezeway railings										
Mechanical, Electrical, Plumbing Systems										
Common area light fixture replacement		$24,000								
Fire suppression system repairs			$30,000							
Fire alarm system repairs		$15,000					$15,000			
Repair/replace backflow preventers										
Allocation for buried utility repairs			$20,000							
Install electric vehicle charging stations										
Totals	**$17,800**	**$39,000**	**$50,000**	**$308,000**	**$10,000**	**$17,800**	**$55,250**	**$21,500**	**$35,000**	**$477,100**
Totals including inflation:	**$25,109**	**$56,939**	**$75,553**	**$481,698**	**$16,187**	**$29,821**	**$95,803**	**$38,586**	**$65,012**	**$917,225**

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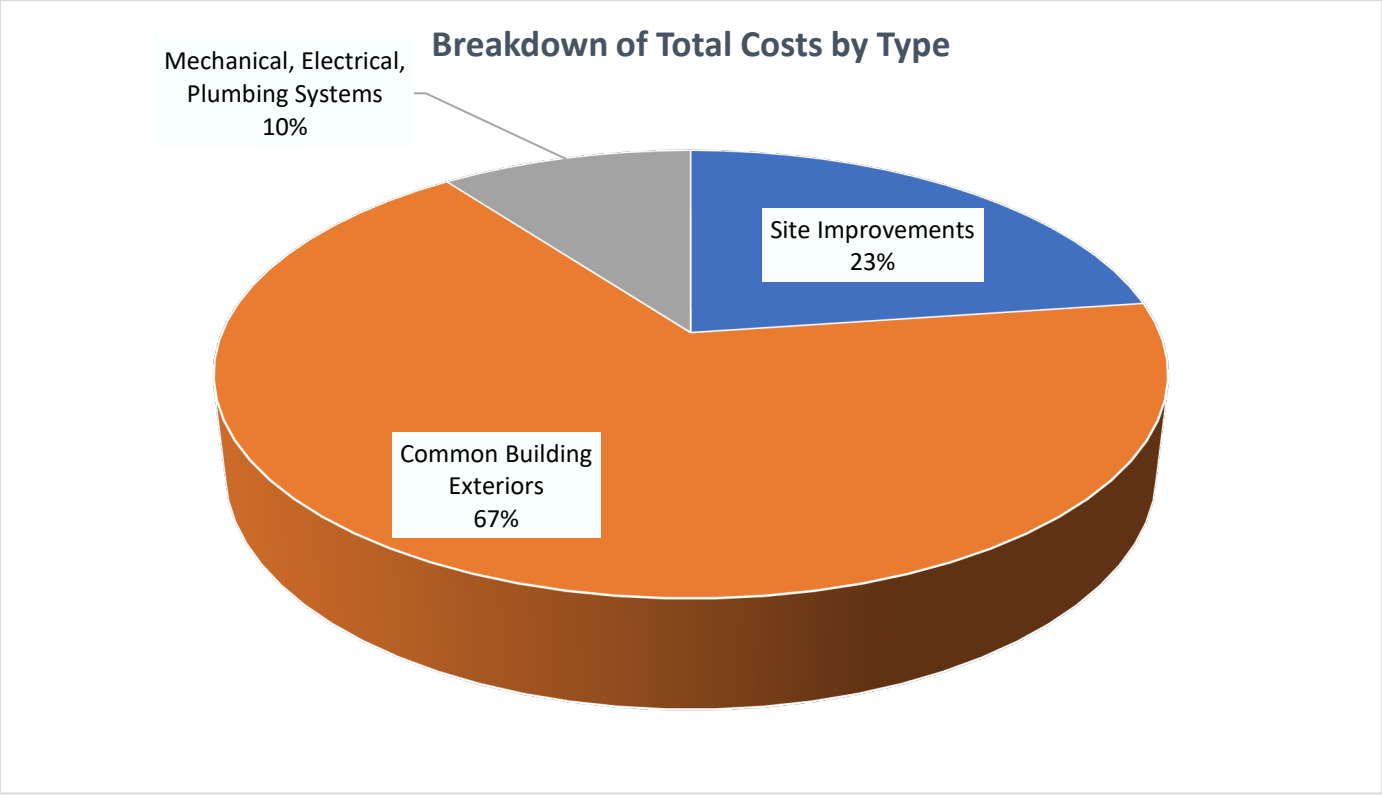
EXPENSE SUMMARY

Total over term capital expenditure (un-inflated)	**$2,237,150**
Total over term capital expenditure with inflation:	**$3,236,324**
Average estimated annual capital expenditure with inflation:	**$161,816**
Current Reserve Account Balance	**$142,860**
Full Funding Balance	**$1,221,471**
Percent Funded	**11.70%**



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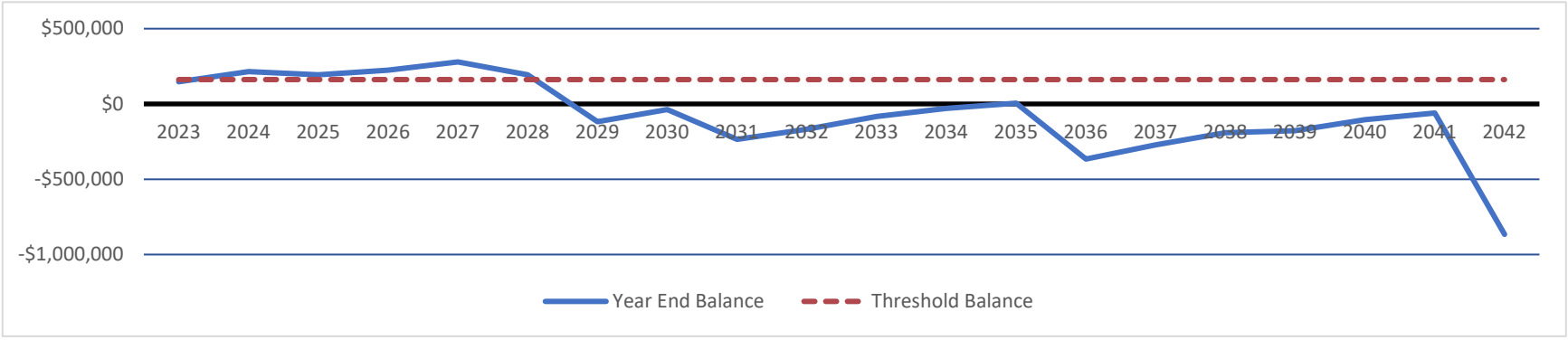
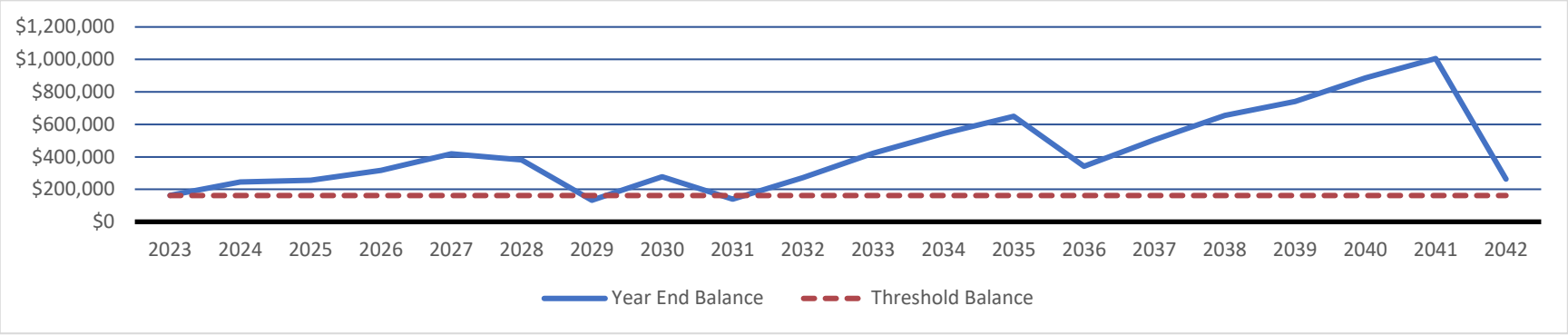
Current Funding Analysis

Year	Starting Balance	Reserve Account Contribution	Average Per Unit/Month	Return on Investments	Repair Expenses	Special Assessments	Year End Balance
2023	$142,860	$110,440	$95.87	$2,187	$107,500	$0	$147,987
2024	$147,987	$110,440	$95.87	$3,175	$46,782	0	$214,820
2025	$214,820	$110,440	$95.87	$2,862	$134,439	0	$193,683
2026	$193,683	$110,440	$95.87	$3,315	$83,154	0	$224,284
2027	$224,284	$110,440	$95.87	$4,124	$59,786	0	$279,062
2028	$279,062	$110,440	$95.87	$2,850	$199,531	0	$192,820
2029	$192,820	$110,440	$95.87	$0	$420,282	0	-$117,022
2030	-$117,022	$110,440	$95.87	$0	$30,535	0	-$37,117
2031	-$37,117	$110,440	$95.87	$0	$309,450	0	-$236,127
2032	-$236,127	$110,440	$95.87	$0	$42,931	0	-$168,618
2033	-$168,618	$110,440	$95.87	$0	$25,109	0	-$83,287
2034	-$83,287	$110,440	$95.87	$0	$56,939	0	-$29,786
2035	-$29,786	$110,440	$95.87	$77	$75,553	0	$5,177
2036	$5,177	$110,440	$95.87	$0	$481,698	0	-$366,081
2037	-$366,081	$110,440	$95.87	$0	$16,187	0	-$271,828
2038	-$271,828	$110,440	$95.87	$0	$29,821	0	-$191,209
2039	-$191,209	$110,440	$95.87	$0	$95,803	0	-$176,572
2040	-$176,572	$110,440	$95.87	$0	$38,586	0	-$104,717
2041	-$104,717	$110,440	$95.87	$0	$65,012	0	-$59,290
2042	-$59,290	$110,440	$95.87	$0	$917,225	0	-$866,075



Funding Alternative 1 - Increase by $15,000 every other year

Year	Starting Balance	Reserve Account Contribution	Average Per Unit/Month	Return on Investments	Repair Expenses	Special Assessments	Year End Balance
2023	$142,860	$125,440	$108.89	$2,412	$107,500	$0	$163,212
2024	$163,212	$125,440	$108.89	$3,628	$46,782	$0	$245,498
2025	$245,498	$140,440	$121.91	$3,772	$134,439	$0	$255,272
2026	$255,272	$140,440	$121.91	$4,688	$83,154	$0	$317,246
2027	$317,246	$155,440	$134.93	$6,194	$59,786	$0	$419,094
2028	$419,094	$155,440	$134.93	$5,625	$199,531	$0	$380,628
2029	$380,628	$170,440	$147.95	$1,962	$420,282	$0	$132,747
2030	$132,747	$170,440	$147.95	$4,090	$30,535	$0	$276,742
2031	$276,742	$170,440	$147.95	$2,066	$309,450	$0	$139,798
2032	$139,798	$170,440	$147.95	$4,010	$42,931	$0	$271,316
2033	$271,316	$170,440	$147.95	$6,250	$25,109	$0	$422,897
2034	$422,897	$170,440	$147.95	$8,046	$56,939	$0	$544,444
2035	$544,444	$170,440	$147.95	$9,590	$75,553	$0	$648,921
2036	$648,921	$170,440	$147.95	$5,065	$481,698	$0	$342,728
2037	$342,728	$170,440	$147.95	$7,455	$16,187	$0	$504,435
2038	$504,435	$170,440	$147.95	$9,676	$29,821	$0	$654,730
2039	$654,730	$170,440	$147.95	$10,941	$95,803	$0	$740,308
2040	$740,308	$170,440	$147.95	$13,082	$38,586	$0	$885,245
2041	$885,245	$170,440	$147.95	$14,860	$65,012	$0	$1,005,533
2042	$1,005,533	$170,440	$147.95	$3,881	$917,225	$0	$262,628



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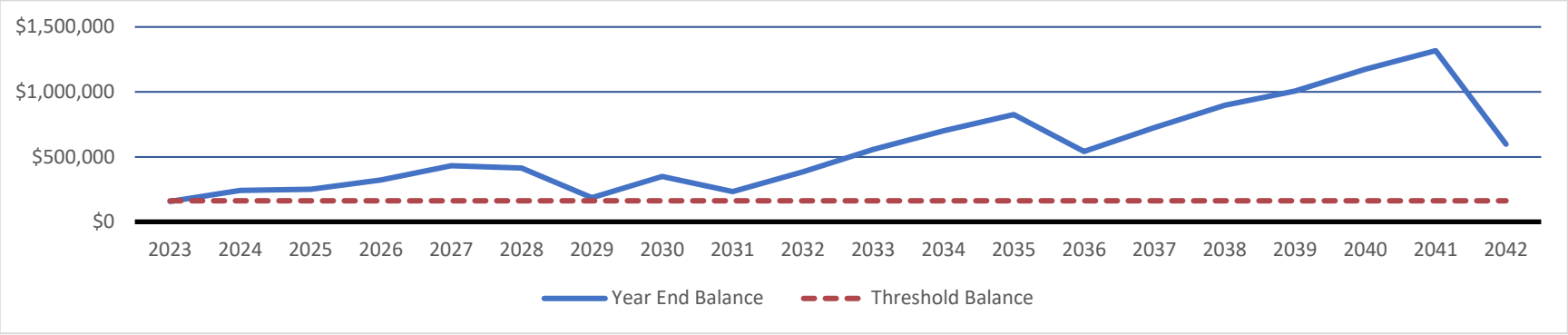
Funding Alternative 2 - Increase by 8% per year

Year	Starting Balance	Reserve Account Contribution	Average Per Unit/Month	Return on Investments	Repair Expenses	Special Assessments	Year End Balance
2023	$142,860	$119,275	$103.54	$2,320	$107,500	$0	$156,955
2024	$156,955	$128,817	$111.82	$3,585	$46,782	$0	$242,575
2025	$242,575	$139,123	$120.77	$3,709	$134,439	$0	$250,968
2026	$250,968	$150,252	$130.43	$4,771	$83,154	$0	$322,837
2027	$322,837	$162,273	$140.86	$6,380	$59,786	$0	$431,704
2028	$431,704	$175,254	$152.13	$6,111	$199,531	$0	$413,538
2029	$413,538	$189,275	$164.30	$2,738	$420,282	$0	$185,268
2030	$185,268	$189,275	$164.30	$5,160	$30,535	$0	$349,169
2031	$349,169	$189,275	$164.30	$3,435	$309,450	$0	$232,428
2032	$232,428	$189,275	$164.30	$5,682	$42,931	$0	$384,453
2033	$384,453	$189,275	$164.30	$8,229	$25,109	$0	$556,849
2034	$556,849	$189,275	$164.30	$10,338	$56,939	$0	$699,522
2035	$699,522	$189,275	$164.30	$12,199	$75,553	$0	$825,442
2036	$825,442	$189,275	$164.30	$7,995	$481,698	$0	$541,014
2037	$541,014	$189,275	$164.30	$10,712	$16,187	$0	$724,813
2038	$724,813	$189,275	$164.30	$13,264	$29,821	$0	$897,531
2039	$897,531	$189,275	$164.30	$14,865	$95,803	$0	$1,005,868
2040	$1,005,868	$189,275	$164.30	$17,348	$38,586	$0	$1,173,905
2041	$1,173,905	$189,275	$164.30	$19,473	$65,012	$0	$1,317,640
2042	$1,317,640	$189,275	$164.30	$8,845	$917,225	$0	$598,535



APPENDIX B: PROJECT PHOTOGRAPHS

Description	
Front exterior view of subject building from the north	
Photo No. 1	

Description	
General view within the community	
Photo No. 2	

Description	
Typical asphalt paved private street	
Photo No. 3	

Description	
Asphalt pavement, transition at original pavement and recent repair area	
Photo No. 4	

Description	
Some areas of fatigue cracking remain at parking areas	
Photo No. 5	

Description	
Some settlement at concrete flatwork and curbing adjacent to storm drain inlet	
Photo No. 6	

Description	
Previous repair area at concrete sidewalk	
Photo No. 7	

Description	
Minor surface scaling in concrete	
Photo No. 8	

Description	
Area of proposed driveway extension, west of buildings 100 & 300	
Photo No. 9	

Description	
Area of proposed concrete stair to provide access to the dumpster area	
Photo No. 10	

Description	
Segmental block masonry retaining wall (Phase 1 of repair schedule)	
Photo No. 11	

Description	
Segmental block masonry retaining wall (Phase 2)	
Photo No. 12	

Description	
Timber retaining wall, Phase 3 of proposed replacement (2022)	
Photo No. 13	

Description	
Timber retaining wall, phase 4 of proposed replacement (2023)	
Photo No. 14	

Description	
Location of proposed retaining wall behind building 300	
Photo No. 15	

Description	
Typical condominium building front exterior	
Photo No. 16	

Description	
Typical condominium building rear exterior	
Photo No. 17	

Description	
Typical breezeway decking and railings	
Photo No. 18	

Description	
Breezeway structure	
Photo No. 19	

Description	
Wood siding	
Photo No. 20	

Description	
Vinyl siding	
Photo No. 21	

Description	
Minor damages / punctures in vinyl siding	
Photo No. 22	

Description	
Minor discolorations in vinyl soffit	
Photo No. 23	

Description	
Ground level courtyard area	
Photo No. 24	

Description	
Fire alarm components	
Photo No. 25	

Description	
Fire riser assembly in insulated enclosure	
Photo No. 26	