PREPARED FOR:

COBBLESTONE HOMEOWNERS ASSOCIATION
INDIAN LAND, SC

MANAGED BY:
BRAESAEL MANAGEMENT COMPANY

SEPTEMBER 18, 2020

FULL RESERVE STUDY

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INTRODUCTIONS

Cobblestone Homeowners Association authorized Giles Flythe Engineers to perform a Full Reserve Study for Cobblestone community located in Indian Land, SC. 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 fiscal responsibility. 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

Cobblestone is a community comprised of 58 townhome units and 75 single family homes. Based on Lancaster county records and review of historical aerials, construction of the community began in approximately 2008. The community is located off of Streamhaven Drive in Indian Land, SC.

The association has responsibility for the common area site improvements including entrance signage, landscaping, site fencing, retaining walls, concrete flatwork, asphalt paved parking lot, and common area drainage systems including two storm water control devices (ponds). The most significant amenities include the swimming pool with clubhouse and associated equipment and furnishings. The sub-association for the townhomes maintains the exterior façade (roofing and siding) of the buildings including upper level balconies/decks and the nearby site improvements including asphalt paved private streets/parking with adjacent concrete curbing, concrete driveways/sidewalks, retaining walls and site fencing.

The buildings, common areas and grounds are generally in good to fair condition. Based on our evaluation, the current level of funding for 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. **Note that two separate reserve fund analyses have been completed as costs for the Master and Townhomes Associations are handled separately**. Our funding recommendations in summary are as follows:

Master:

- **Alternative 1:** In 2021, maintain the existing annual reserve contribution of $21,770. In 2022, begin increasing the annual reserve contribution by $3,000 every year for the next 5 years. This alternative is projected to maintain a positive balance through the term of this study.

- **Alternative 2:** In 2021, increase the annual reserve contribution to $26,000. In 2022, increase the annual reserve contribution by 7% every other year over the full term of the study. This alternative is projected to maintain a positive balance through the term of this study.

Townhomes:

- **Alternative 1:** In 2021, maintain the existing annual reserve contribution of $19,133. In 2022, begin increasing the annual reserve contribution by $10,000 every year for the next 10 years. This alternative is projected to maintain a positive balance through the term of this study.

- **Alternative 2:** In 2021, increase the annual reserve contribution to $45,000. In 2022, increase the annual reserve contribution by 8% every year over the full term of the study. 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 Appendices A and B. Some significant expenditures are expected over the term of the study. Some of the more notable examples are listed below:

- Repair, seal and resurface asphalt paved streets
- Replace building roofs
- Paint/repair building exterior surfaces
- Major repairs to the storm water control measures.

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 Cobblestone Homeowners 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 2020 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 recent 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 21, 2020.

Documents

The following documents were made available to us and reviewed:

- Lancaster County real estate records
- 2020 HOA budget, income statement, financials
- Association Governing Documents

Cost Estimates

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

DESCRIPTION

Cobblestone is a community comprised of 58 townhome units and 75 single family homes. Based on Lancaster county records and review of historical aerials, construction of the community began in approximately 2008. The community is located off of Streamhaven Drive in Indian Land, SC.

The association has responsibility for the common area site improvements including entrance signage, landscaping, site fencing, retaining walls, concrete flatwork, asphalt paved parking lot, and common area drainage systems including two storm water control devices (ponds). The most significant amenities include the swimming pool with clubhouse and associated equipment and furnishings. The sub-association for the townhomes maintains the exterior façade (roofing and siding) of the buildings including upper level balconies/decks and the nearby site improvements including asphalt paved private streets/parking with adjacent concrete curbing, concrete driveways/sidewalks, retaining walls and site fencing.

The clubhouse building is a 1-story structure constructed on a concrete slab on grade foundation. Exterior wall surfaces are predominately comprised of hardboard siding and trim with sections of stone veneer. The pitched roof surfaces on the building are predominately covered in asphaltic fiberglass, architectural grade shingles.

The townhomes generally consist of 2-story buildings constructed on concrete slab on grade foundations. Exterior surfaces on the townhome buildings are primarily comprised of vinyl siding and trim with sections of stone veneer and composite trim. The pitched roof surfaces on the townhome buildings are predominately covered in asphaltic fiberglass, 3-tab shingles.

Aluminum gutters and downspouts on the buildings discharge stormwater to grade. Site drainage is provided via landscaped swales and catch basins in the paved and landscaped areas. These systems direct water flow to the storm water control devices (ponds). Stormwater from these devices are diverted offsite.

OBSERVATIONS

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

Site and Grounds

The main entrance to the community incorporates masonry monuments/walls with stone veneer, precast concrete caps, and composite inlay signage. The entrance also incorporated a gatehouse structure, landscape irrigation, and lighting. The monuments, signage, and gate house were in good to fair condition. We have assumed minor repairs and routine cleaning of the masonry monuments would be funded from the annual maintenance budget. We have allocated funds to refurbish the entrance signage on a 15-year cycle beginning in 2023. Also, we have allocated funds for major repairs/upgrades to the lighting components on a 15-year cycle beginning in 2023. We have allocated funds to repair the gatehouse components in conjunction with amenity center building repairs (see the Common Building Exterior section below).

Landscape irrigation systems are installed adjacent to the entrances, surrounding the amenity center, and throughout the community with an irrigation well installed on the west side of Streamhaven near the stormwater pond outlet structure. These components were off at the time of the inspection and we did not test the function of the irrigation system. We have included funds to replace the controllers, timers, pumps, and make valve repairs as necessary every 15 years beginning in 2023. We have assumed minor repairs (irrigation head replacement, pipe repairs, etc.) would be funded from an annual maintenance budget.

The drive and parking area adjacent to the community clubhouse are asphalt paved and maintained by the Master association. The streets adjacent to the townhomes (Crown Vista Drive and Chasewater Drive) are asphalt paved and maintained by the Townhome association. The remaining streets providing access into the community and adjacent to the single-family homes are reportedly public and not maintained by the association. The paving generally appeared to be in relatively good condition with minor longitudinal/transverse cracks observed. Typically, we recommend the application of an oil resistant sealant to all asphalt paved surfaces on an approximate 7-year cycle. At this time, all cracks should be properly filled, patched, and sealed. We have allocated funds to seal all the paved surfaces (Townhome streets and clubhouse parking) beginning in 2023.

Assuming sealing and crack repairs occur in the interim, asphalt paving generally has an estimated useful life of approximately twenty years prior to full resurfacing. We have allocated funds to resurface (approximately 1-1½ inch thick overlay) the asphalt paving (Townhome streets and clubhouse parking) in 2031. To maintain adequate sheet flow and a consistent surface, note that resurfacing streets will likely require some milling prior to installing an additional overlay. The parking lot may require full milling to maintain adequate drainage.

The Master Association is responsible for maintaining the concrete flatwork surrounding the pool and sidewalks adjacent to the clubhouse. The Townhome Association is responsible for maintaining the concrete

sidewalks adjacent to private streets and sidewalks/driveways leading up to each unit. The concrete flatwork generally appeared to be in reasonably good condition with some cracking and displacement observed. We have allocated funds for periodic repairs and/or replacement of concrete surfaces as required and have assumed that 5% of the surfaces will require maintenance every 8 years beginning in 2025, for the Master Association, and 2024, for the Townhome Association.

The associations are also responsible for maintaining the concrete curbing surrounding the private streets and parking areas. The concrete curbing and flatwork generally appeared to be in good condition, with some cracking and displacement evident. We have allocated funds (in conjunction with the concrete flatwork repairs above) for periodic repairs and/or replacement of curbing as required and have assumed that 5% of the surfaces will require maintenance every 8 years.

Drainage systems include gutter downspouts that discharge to grade. Storm water on the site drains via surface flow or via landscaped swales toward catch basins in the paved and landscaped areas. Inlet grates in the roadway gutters and the grassed areas collect stormwater that flows to underground piping. The swales tend to accumulate sediment that settles out during storm events and will need to be periodically removed and re-graded. We noted areas of minor erosion on steep slopes surrounding the townhomes and displaced rip rap in the armored swale beyond the outlet structure for the pond along Streamhaven Drive. Also, it is likely that erosion concerns will develop over time and require repair. In addition, over time, small landscape drainage systems will likely need to be installed in flat areas of the community to address concerns. We have allocated funds to repair the drainage systems on a 5-year cycle beginning in 2024. We have assumed the Townhome Association is responsible to maintain the drainage areas surrounding the townhome buildings and the Master Association is responsible to maintain the other common areas including adjacent to the ponds. Repairs will likely include retrenching of swales to improve flow, adding/relocating rip rap or vegetation to stabilize steep slopes/swales, extending gutter downspouts to underground systems, repairing erosion concerns, repairing/cleaning underground piping, installing French drains or other types of minor drainage systems.

Storm water flows from the paving and site areas to curb inlet basins and catch basins in the paved/landscaped areas. The stormwater is generally routed to the two storm water control devices (ponds) in the community. The north most pond in the community is located near the southwest end of Crown Vista Drive. The south most pond is located near the intersection of Streamhaven Drive and Ridgeline Lane. The north most retention pond incorporated a concrete riser structure, rip rap armored HDPE inlet pipes, and a concrete emergency spillway. Large cracks and vertical displacement (up to 1-1/2”) of the concrete spillway were observed at the north most pond dam. The association should strongly consider inspection and evaluations of the spillway by a qualified geo-technical engineer to determine repairs required. The south most retention pond incorporated a concrete riser structure, rip rap armored HDPE inlet pipes, and a concrete headwall outlet structure with a rip rap armored swale on the west side of Streamhaven. Shoreline erosion was noted along the perimeter of the south pond and accumulated sediment/debris were observed adjacent to the riser and outlet structures. We have provided a moderate allocation to prepare for repair expenses in 2023. Repairs may include dredging, shoreline stabilization, spillway, and outlet repairs. We have not allocated funds for substantial repairs to the earthen dams, if required. Also, we strongly encourage the association to contract with a pond maintenance

company to provide routine inspections and maintenance of the pond to ensure they comply with all requirements and local regulations.

The ponds also incorporated fountains for aeration. We are unaware of the age of the fountains. These components typically have an estimated useful life of approximately 8-years. We have allocated funds to replace the fountain on an 8-year cycle beginning in 2025.

Aluminum fencing was installed around the pool area and adjacent to retaining walls throughout the community. Additionally, painted metal railings were installed leading up to the clubhouse entrance. The fencing/railings generally appeared to be in good to fair condition with faded color evident and minor damages observed. The aluminum fencing and metal railing has an expected useful life beyond the term of this study; however, will require periodic painting and minor repairs. We have allocated funding to paint and make minor repairs to the aluminum fencing on a 15-year cycle, beginning in 2023.

Vinyl (PVC) privacy fencing was installed in along the rear of townhome buildings generally between units. The fencing appeared to be in good condition with isolated areas of damage observed (melted components adjacent to grills). We have assumed minor repairs to the fence would be funded from an annual maintenance budget and have allocated funds for full replacement of the fence in 2040.

Multiple retaining walls were noted throughout the community. Retaining walls are installed in areas to address topographical change. Walls observed consisted of reinforced segmental block. The segmental block walls generally appeared to be in good condition with isolated areas of separation observed between the blocks. Provided the walls were installed with adequate reinforcement and drainage components, the segmental block retaining walls have an expected useful life beyond the term of this study. We recommend monitoring the retaining walls with separation between the blocks for additional movement. If additional movement is observed, further evaluation by a structural engineer should be conducted. We have assumed minor repairs to the segmental block wall will be funded from the annual maintenance budget and/or the drainage improvements allocation noted above.

Landscaping within the community consisted of medium to large sized trees, shrubbery, and small plantings. Reportedly, multiple trees were recently removed in the common areas of the community. Major landscaping work will be required periodically that may, at the discretion of the board, include pruning of overgrown brush or branches, large scale beautification projects, and removal of dead or damaged trees. We have allocated funds for major landscaping on a 5-year cycle beginning in 2024. We have assumed routine landscaping such as mulching, lawn trimming, or annual florals would be funded under the annual operation and maintenance budget.

Ornamental street signs (directional and informational) were noted throughout the community. The signs were in good condition. We have allocated funds to replace the street signs on a 20-year cycle beginning in 2028.

A mailbox center was observed adjacent to the northeast bend of Crown Vista Drive which served the townhome units. The mailbox center consisted metal kiosks housed in a covered framed structure which

consisted of predominately hardboard siding and trim with sections of stone veneer and the pitch roof was covered in 3-tab shingles. Given the mail kiosks are sheltered, the estimated useful life is beyond the term of this study. We have allocated funds to repair the mailbox structure components in conjunction the townhome building exteriors maintenance.

Common Building Exteriors

The predominant pitched roof surfaces over the clubhouse building are covered in asphaltic fiberglass, architectural grade shingles. Roof surfaces over the townhome buildings were covered in asphaltic fiberglass, 3-tab shingles. Roof surfacing is applied over roof sheathing and appears to be in good condition. Minor repairs over the term will likely include replacing vent boots, flashing and drip edge repairs, and gutter repairs. We have assumed these types of repairs would be funded from an annual maintenance budget.

If inspections and minor repairs occur in the interim, typical architectural grade shingle roofs will last approximately twenty-five years. Typical 3-tab shingles will last approximately twenty years. We have allocated funds to replace the townhome building roofs in three phases beginning in 2028, 2029, and 2030 (generally consistent with the age of construction of the buildings). We have allocated funds to replace the clubhouse roof in 2033. We have allocated funds to replace roofing on the gatehouse in conjunction with the clubhouse roofing. Additionally, we have allocated funds to replace the roofing on the mailbox center in conjunction with the townhomes. 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.

The buildings in the community are of wood framed construction. The clubhouse and gatehouse buildings are clad in hardboard siding and composite trim with sections of stone veneer. The townhome buildings incorporate vinyl siding with wood/composite trim and sections of stone veneer. The hardboard siding and trim components generally appeared to be in relatively good condition. Reportedly, the siding and trim on the clubhouse were painted in 2016. We have allocated funds to paint the clubhouse and gatehouse in on a 7-year cycle in 2024. The vinyl siding and trim on the townhomes appeared to be in good to fair condition with isolated areas of stained/damaged siding observed. We have allocated funds to paint the paintable surfaces on the townhome buildings in 2022 and continuing on a 7-year cycle thereafter. Painting cycles should include repairing sealants/caulking as needed, repairing siding and trim as needed, adequate surface preparations and the application of 2 coats of a high-quality exterior paint on all painted surfaces.

At the time of the site inspection, moisture infiltration was observed at the exterior clubhouse bathroom adjacent to the outside shower drain. We have allocated funds to repair the building flashing, siding, and damaged interior bathroom finishes in 2021.

While vinyl siding is sometimes projected to last beyond fifty years, it has been our experience that a shorter life span may 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. Although we do not anticipate that all the vinyl siding will require replacement during the term of this analysis, we have allocated funding to prepare for the replacement of approximately one half (1/2) of the townhome units at the end of the study. Additional funding will be required beyond the term of this study for the full replacement.

We would like to note that we do not anticipate any large-scale re-pointing projects of the veneer, based on our recent experience with similar communities in this area. If significant cracking in the mortar or displacement of the veneer was observed on multiple buildings during the inspection, or there is a history of veneer issues in a given community, funds would be included for this purpose. However, based on the inspection and the age of the structures, we do not feel that setting aside money for veneer repairs are warranted at this time.

The clubhouse building includes thermal pane wood framed windows and patio style entry doors. The doors and windows generally appeared to be in good condition. The windows and doors have an expected useful life of approximately 30 years and we have allocated funds for their replacement in 2038. Note that the townhome windows, entrance doors and garage doors are assumed to be the responsibility of the individual owners.

The townhome buildings incorporated exposed wood framed decks and balconies on the upper levels with wood decking and wood/composite handrails. Reportedly, the lower/ground level decks/patios are the responsibility of the individual unit owner. Limited areas of the upper decking and handrails were noted repaired. Several wood posts supporting the upper level balconies/decks were noted warped/out of plumb. We have allocated funds to replace the upper level decking and make minor repairs to the handrails/structures on a 12-year cycle, beginning in 2022. Exposed wood framed structures have an expected useful life of approximately 25 to 30-years. We have allocated funds to replace the deck/balcony structural components in 2034.

Common Building Interiors

The Association is responsible for maintaining the interior of the clubhouse building. The clubhouse interior walls are primarily smooth finished painted drywall with painted wood trim. To maintain a clean bright appearance the interior walls, trim and ceilings will require periodic painting and minor repairs. We have assumed interior painting work would be funded from an annual maintenance budget.

The clubhouse included men’s and women’s restrooms with toilets and vanity sinks with a combination of exposed concrete floors and ceramic tile (interior bathroom). We have allocated funds to replace the vanities and plumbing fixtures and paint the walls in the bathrooms on a 20-year cycle beginning in 2028.

The clubhouse incorporated a kitchen area which included wood cabinets with laminate countertops, plumbing fixtures, and appliances. The kitchen area was in good condition. We have allocated funds to refurbish the kitchen cabinetry/countertops and replace large appliances on a 20-year cycle, beginning in 2028.

The clubhouse includes an open area with miscellaneous furnishings including a chairs, tables, couches and artworks. We have allocated funds on an 8-year cycle to replace portions of the interior furnishings, beginning in 2026. This furniture allocation would include small kitchen appliances as needed.

Flooring in the clubhouse building interiors is predominately comprised of ceramic tile. The tile appeared to be in good condition and has an expected useful life of approximately 30 years. We have allocated funds to replace the flooring in the clubhouse buildings in 2038.

Mechanical

A water heater for the clubhouse is likely installed in the attic space. We have assumed the water heater tank is original to construction of the clubhouse (2008) and have allocated funds to replace the water heater on a 15-year cycle beginning in 2023.

The clubhouse and pool areas also incorporated security systems and/or access controls. Reportedly the security system was replaced in 2017. We have allocated funds for major repairs or upgrades to these components on an 8-year cycle, beginning in 2025.

Two water fountains were installed near the pool area. The estimated useful life of this type of system is approximately 15-years. We have allocated funds to replace the water fountains in 2023.

The Association is responsible for plumbing and electrical systems in the common area buildings/amenities, including wiring and piping leading to each facility. We have included a contingency for repairs of the plumbing/electrical systems at the amenity center on a 20-year cycle, beginning in 2028. The plumbing/electrical systems serving the townhomes should have an expected useful life beyond the term of this study; however, we have included a contingency for long term repairs of these systems at the end of the term of this study.

The clubhouse building is served by a heating ventilation and air conditioning (HVAC) system that includes a split system electric heat pump with fan coil units in the attic space. The system was manufactured by Goodman in 2019 with 2.5-tons of cooling capacity based on the model tag of the condenser unit. HVAC equipment has an average expected useful life of 15 years and we have allocated funds for replacement as such.

Amenities

Typically, pools will require draining and re-plastering on an approximately 12-year cycle. Reportedly, the pool was recently re-plastered (2020). We have allocated funds for the next resurfacing of the swimming pool in 2032. Resurfacing would include draining the pool, removing plastering, repairing concrete as needed, repairing/replacing tilework and re-plastering the pool surface with a quartz type plaster.

The pool pump and filtration equipment are located in the pool building. The equipment includes pumps, chlorinators, filter tanks, etc. Pool pump and filtration equipment components are typically replaced as they

fail. We have allocated funds to repair/replace components of the pump and filtration equipment servicing the pools on a 3-year cycle, beginning in 2023.

Pool and outdoor furnishings included aluminum framed chaise lounges, chairs, tables, umbrellas, and metal ladder rails. The furnishings were stored under the covered patio (attached to the clubhouse) at the time of the inspection but generally appeared to be in good condition. We have allocated funds for replacement of approximately 1/3rd of the furnishings on a 3-year cycle beginning in 2023.

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 and B. We have included tables and graphs depicting current funding levels along with recommended funding alternatives. **Note that two separate reserve fund analyses have been completed for the Master and Townhome Associations.**

The financial projections include an assumed inflation rate of 3.0% 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.

Appendices A and B 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. These pages include 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.

Note that based on our cash flow analysis, maintaining the current level of funding is not projected to maintain a positive balance over the term of the study.

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:

Master:

Current Reserve Funding Rate:	**$21,770 per year**
Current Reserve Balance:	**$128,380 (projected January 2021 starting balance)**

- **Alternative 1:** In 2021, maintain the existing annual reserve contribution of $21,770. In 2022, begin increasing the annual reserve contribution by $3,000 every year for the next 5 years. This alternative is projected to maintain a positive balance through the term of this study.

- **Alternative 2:** In 2021, increase the annual reserve contribution to $26,000. In 2022, increase the annual reserve contribution by 7% every other year over the full term of the study. This alternative is projected to maintain a positive balance through the term of this study.

Townhomes:

Current Reserve Funding Rate:	**$19,133 per year**
Current Reserve Balance:	**$141,449 (projected January 2021 starting balance)**

- **Alternative 1:** In 2021, maintain the existing annual reserve contribution of $19,133. In 2022, begin increasing the annual reserve contribution by $10,000 every year for the next 10 years. This alternative is projected to maintain a positive balance through the term of this study.

- **Alternative 2:** In 2021, increase the annual reserve contribution to $45,000. In 2022, increase the annual reserve contribution by 8% every year over the full term of the study. This alternative 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 2020 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 Appendices A and B.

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 Cobblestone Homeowners 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,

Tyler C. Hall, PE, MCE, RS
Engineering Manager
Giles Flythe Engineers, Inc.

APPENDIX A: MASTER ASSOCATION

RESERVE FUND PROJECTIONS

Cobblestone Master Association

City/state location:	Indian Land, SC
Date of inspection:	8/21/2020
Number of units:	133
Term of study (years):	20
Beginning Year of Term	2021
Estimated starting reserve account balance:	$128,380
Current annual reserve contribution rate:	$21,770
Assumed inflation rate:	3.00%
Assumed rate of return on invested funds:	1.50%
Total over term capital expenditure (un-inflated):	**$565,410**
Total over term capital expenditure with inflation:	**$766,847**
Recommended threshold reserve balance: (Average annual capital expenditure)	**$38,342**

GILES FLYTHE ENGINEERS

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Capital Item Description	Quantity	Unit	Unit Cost	Total Cost Per Cycle	Estimated Useful Life (years)	Estimated Remaining Life (years)	Notes
Site Improvements							
Refurbish entrance signs	1	LS	$6,000.00	$6,000	15	2	
Major repair/upgrade entrance lighting	1	LS	$12,000.00	$12,000	15	2	
Major repair/upgrade landscape irrigation	1	LS	$15,000.00	$15,000	15	2	
Crack fill, seal coat, stripe asphalt paving	1,500	SY	$2.00	$3,000	7	2	
Resurface asphalt paving	1,500	SY	$22.00	$33,000	20	10	
Repair sections of concrete curb and flatwork	1	LS	$7,000.00	$7,000	8	4	Approx. 5% every 8 years
Common area drainage improvements	1	LS	$7,500.00	$7,500	5	3	
Major repair/dredge stormwater ponds	2	EA	$12,500.00	$25,000	15	2	
Replace pond fountains	2	EA	$8,000.00	$16,000	8	4	
Paint/repair aluminum fence & metal handrails	520	LF	$15.00	$7,800	15	2	Pool & Site Fencing
Allocation for landscape overhaul/tree removal	1	LS	$15,000.00	$15,000	5	4	
Replace ornamental street signage	10	EA	$1,800.00	$18,000	20	7	
Building Exterior							
Replace clubhouse & gatehouse roof	45	SQ	$310.00	$13,950	25	12	
Paint/repair siding on clubhouse & gatehouse	1	LS	$8,500.00	$8,500	7	3	
Repair clubhouse wall flashing @ shower	1	LS	$3,500.00	$3,500	40	0	
Replace clubhouse windows	10	EA	$600.00	$6,000	30	17	
Replace clubhouse glazed doors	5	EA	$1,800.00	$9,000	30	17	
Replace gatehouse windows	2	EA	$750.00	$1,500	30	1	
Building Interior							
Refurbish restrooms, fixtures	3	EA	$4,500.00	$13,500	20	7	
Refurbish clubhouse kitchen	1	LS	$15,000.00	$15,000	20	7	
Upgrade clubhouse furnishings	1	LS	$8,000.00	$8,000	10	5	
Replace clubhouse tile flooring	800	SF	$12.00	$9,600	30	17	
Mechanical, Electrical, Plumbing Systems							
Replace water heater	1	LS	$2,000.00	$2,000	15	2	
Repair/upgrade access control system	1	LS	$7,500.00	$7,500	8	4	
Replace drinking water fountains	2	EA	$1,800.00	$3,600	15	2	
Allocation for electrical/plumbing system repairs	1	LS	$10,000.00	$10,000	20	7	
Replace clubhouse HVAC	1	LS	$7,000.00	$7,000	15	13	
Amenities							
Re-plaster swimming pool surface	1,920	SF	$18.00	$34,560	12	11	
Repair pool pump and filtration equipment	1	LS	$4,500.00	$4,500	3	2	
Replace portions of pool furniture	30	EA	$125.00	$3,750	3	2	Approx. 1/3rd every 3 years

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

Master Association

Description	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Site Improvements										
Refurbish entrance signs			$6,000							
Major repair/upgrade entrance lighting			$12,000							
Major repair/upgrade landscape irrigation			$15,000							
Crack fill, seal coat, stripe asphalt paving			$3,000							
Resurface asphalt paving										
Repair sections of concrete curb and flatwork					$7,000					
Common area drainage improvements				$7,500					$7,500	
Major repair/dredge stormwater ponds			$25,000							
Replace pond fountains					$16,000					
Paint/repair aluminum fence & metal handrails			$7,800							
Allocation for landscape overhaul/tree removal					$15,000					$15,000
Replace ornamental street signage								$18,000		
Building Exterior										
Replace clubhouse & gatehouse roof										
Paint/repair siding on clubhouse & gatehouse				$8,500						
Repair clubhouse wall flashing @ shower	$3,500									
Replace clubhouse windows										
Replace clubhouse glazed doors										
Replace gatehouse windows		$1,500								
Building Interior										
Refurbish restrooms, fixtures								$13,500		
Refurbish clubhouse kitchen								$15,000		
Upgrade clubhouse furnishings						$8,000				
Replace clubhouse tile flooring										
Mechanical, Electrical, Plumbing Systems										
Replace water heater			$2,000							
Repair/upgrade access control system					$7,500					
Replace drinking water fountains			$3,600							
Allocation for electrical/plumbing system repairs								$10,000		
Replace clubhouse HVAC										
Amenities										
Re-plaster swimming pool surface										
Repair pool pump and filtration equipment			$4,500			$4,500			$4,500	
Replace portions of pool furniture			$3,750			$3,750			$3,750	
Totals	**$3,500**	**$1,500**	**$82,650**	**$16,000**	**$45,500**	**$16,250**	**$0**	**$56,500**	**$15,750**	**$15,000**
Totals including inflation:	**$3,500**	**$1,545**	**$87,683**	**$17,484**	**$51,211**	**$18,838**	**$0**	**$69,488**	**$19,952**	**$19,572**

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ANNUAL EXPENSE PROJECTION

Master Association

Description	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Site Improvements										
Refurbish entrance signs								$6,000		
Major repair/upgrade entrance lighting								$12,000		
Major repair/upgrade landscape irrigation								$15,000		
Crack fill, seal coat, stripe asphalt paving							$3,000			
Resurface asphalt paving	$33,000									
Repair sections of concrete curb and flatwork			$7,000							
Common area drainage improvements				$7,500					$7,500	
Major repair/dredge stormwater ponds								$25,000		
Replace pond fountains			$16,000							
Paint/repair aluminum fence & metal handrails								$7,800		
Allocation for landscape overhaul/tree removal					$15,000					$15,000
Replace ornamental street signage										
Building Exterior										
Replace clubhouse & gatehouse roof			$13,950							
Paint/repair siding on clubhouse & gatehouse	$8,500							$8,500		
Repair clubhouse wall flashing @ shower										
Replace clubhouse windows								$6,000		
Replace clubhouse glazed doors								$9,000		
Replace gatehouse windows										
Building Interior										
Refurbish restrooms, fixtures										
Refurbish clubhouse kitchen										
Upgrade clubhouse furnishings						$8,000				
Replace clubhouse tile flooring								$9,600		
Mechanical, Electrical, Plumbing Systems										
Replace water heater								$2,000		
Repair/upgrade access control system			$7,500							
Replace drinking water fountains								$3,600		
Allocation for electrical/plumbing system repairs										
Replace clubhouse HVAC				$7,000						
Amenities										
Re-plaster swimming pool surface		$34,560								
Repair pool pump and filtration equipment		$4,500			$4,500			$4,500		
Replace portions of pool furniture		$3,750			$3,750			$3,750		
Totals	**$41,500**	**$42,810**	**$44,450**	**$14,500**	**$23,250**	**$8,000**	**$3,000**	**$112,750**	**$7,500**	**$15,000**
Totals including inflation:	**$55,773**	**$59,259**	**$63,375**	**$21,294**	**$35,168**	**$12,464**	**$4,814**	**$186,359**	**$12,768**	**$26,303**

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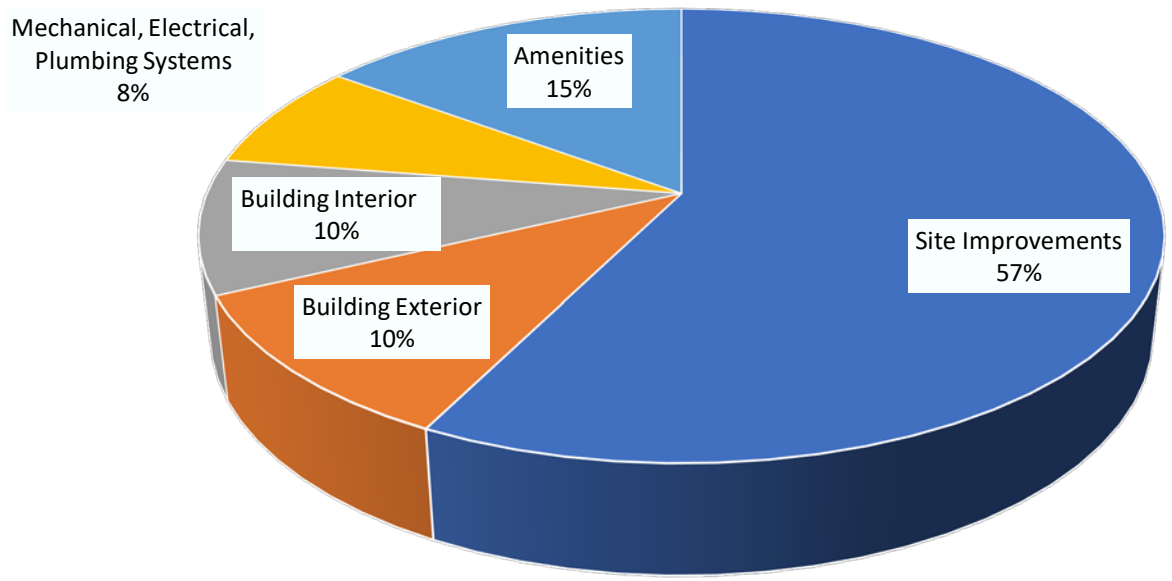
EXPENSE SUMMARY

Master Association

Total over term capital expenditure (un-inflated)	**$565,410**
Total over term capital expenditure with inflation:	**$766,847**
Average estimated annual capital expenditure with inflation:	**$38,342**
Current Reserve Account Balance	**$128,380**
Full Funding Balance	**$176,782**
Percent Funded	**72.62%**

Breakdown of Total Costs by Type



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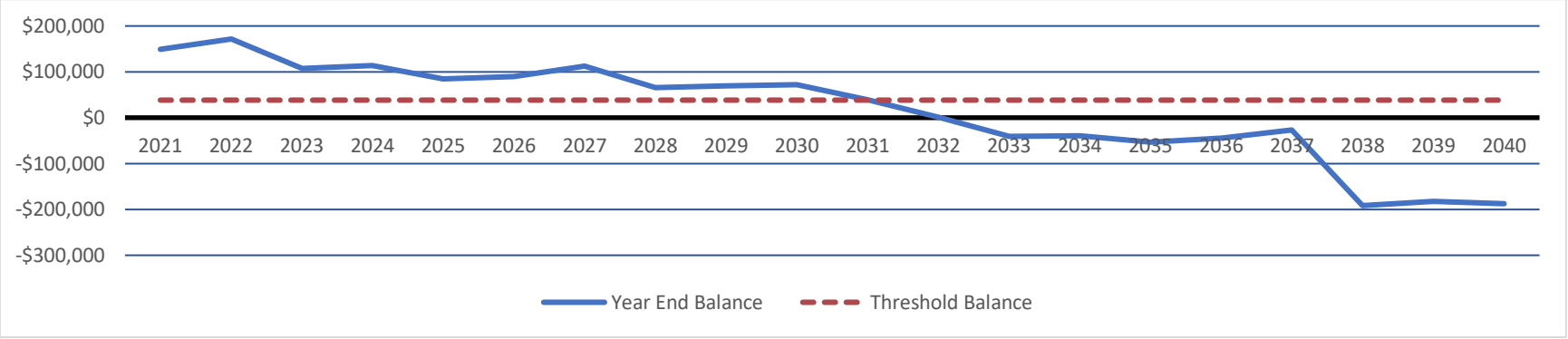
Current Funding Analysis

Master Association

Year	Starting Balance	Reserve Account Contribution	Average Per Unit/Month	Return on Investments	Repair Expenses	Special Assessments	Year End Balance
2021	$128,380	$21,770	$13.64	$2,200	$3,500	$0	$148,850
2022	$148,850	$21,770	$13.64	$2,536	$1,545	0	$171,611
2023	$171,611	$21,770	$13.64	$1,585	$87,683	0	$107,283
2024	$107,283	$21,770	$13.64	$1,674	$17,484	0	$113,243
2025	$113,243	$21,770	$13.64	$1,257	$51,211	0	$85,059
2026	$85,059	$21,770	$13.64	$1,320	$18,838	0	$89,311
2027	$89,311	$21,770	$13.64	$1,666	$0	0	$112,747
2028	$112,747	$21,770	$13.64	$975	$69,488	0	$66,005
2029	$66,005	$21,770	$13.64	$1,017	$19,952	0	$68,840
2030	$68,840	$21,770	$13.64	$1,066	$19,572	0	$72,104
2031	$72,104	$21,770	$13.64	$572	$55,773	0	$38,673
2032	$38,673	$21,770	$13.64	$18	$59,259	0	$1,202
2033	$1,202	$21,770	$13.64	$0	$63,375	0	-$40,403
2034	-$40,403	$21,770	$13.64	$0	$21,294	0	-$39,927
2035	-$39,927	$21,770	$13.64	$0	$35,168	0	-$53,324
2036	-$53,324	$21,770	$13.64	$0	$12,464	0	-$44,018
2037	-$44,018	$21,770	$13.64	$0	$4,814	0	-$27,062
2038	-$27,062	$21,770	$13.64	$0	$186,359	0	-$191,651
2039	-$191,651	$21,770	$13.64	$0	$12,768	0	-$182,649
2040	-$182,649	$21,770	$13.64	$0	$26,303	0	-$187,182



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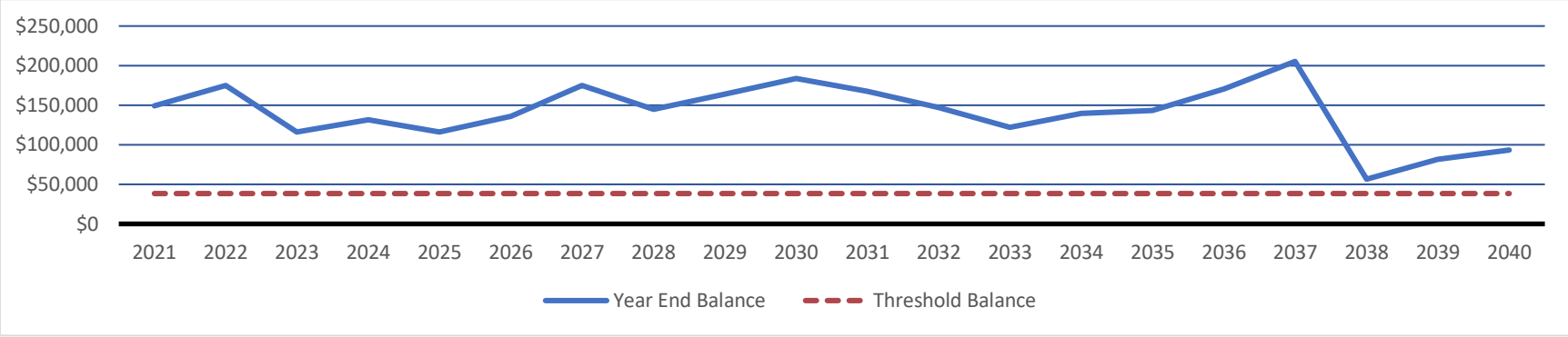
Funding Alternative #1

Master Association

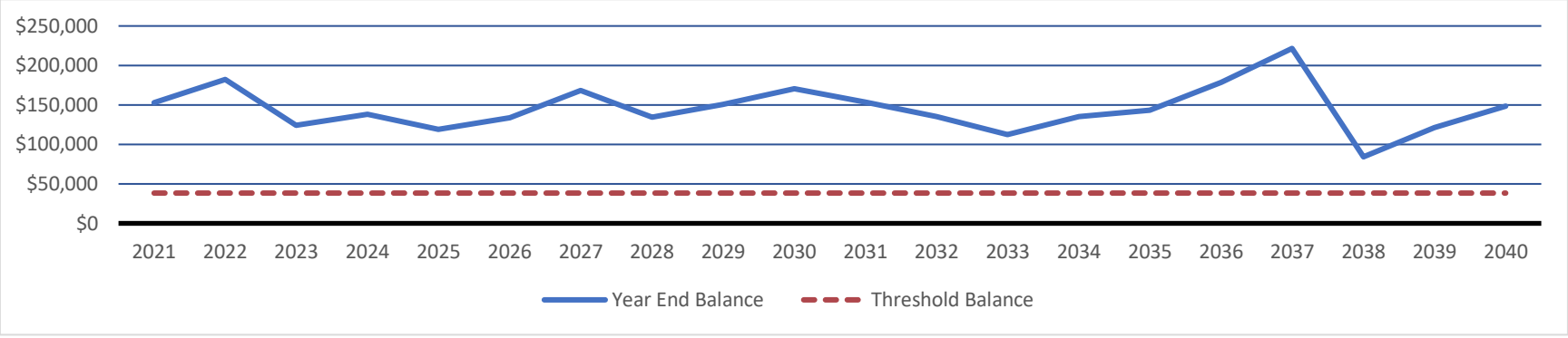
Year	Starting Balance	Reserve Account Contribution	Average Per Unit/Month	Return on Investments	Repair Expenses	Special Assessments	Year End Balance
2021	$128,380	$21,770	$13.64	$2,200	$3,500	$0	$148,850
2022	$148,850	$24,770	$15.52	$2,581	$1,545	$0	$174,656
2023	$174,656	$27,770	$17.40	$1,721	$87,683	$0	$116,464
2024	$116,464	$30,770	$19.28	$1,946	$17,484	$0	$131,696
2025	$131,696	$33,770	$21.16	$1,714	$51,211	$0	$115,969
2026	$115,969	$36,770	$23.04	$2,009	$18,838	$0	$135,910
2027	$135,910	$36,770	$23.04	$2,590	$0	$0	$175,270
2028	$175,270	$36,770	$23.04	$2,138	$69,488	$0	$144,690
2029	$144,690	$36,770	$23.04	$2,423	$19,952	$0	$163,931
2030	$163,931	$36,770	$23.04	$2,717	$19,572	$0	$183,847
2031	$183,847	$36,770	$23.04	$2,473	$55,773	$0	$167,317
2032	$167,317	$36,770	$23.04	$2,172	$59,259	$0	$147,000
2033	$147,000	$36,770	$23.04	$1,806	$63,375	$0	$122,201
2034	$122,201	$36,770	$23.04	$2,065	$21,294	$0	$139,742
2035	$139,742	$36,770	$23.04	$2,120	$35,168	$0	$143,465
2036	$143,465	$36,770	$23.04	$2,517	$12,464	$0	$170,288
2037	$170,288	$36,770	$23.04	$3,034	$4,814	$0	$205,277
2038	$205,277	$36,770	$23.04	$835	$186,359	$0	$56,524
2039	$56,524	$36,770	$23.04	$1,208	$12,768	$0	$81,734
2040	$81,734	$36,770	$23.04	$1,383	$26,303	$0	$93,584



Funding Alternative #2

Master Association

Year	Starting Balance	Reserve Account Contribution	Average Per Unit/Month	Return on Investments	Repair Expenses	Special Assessments	Year End Balance
2021	$128,380	$26,000	$16.29	$2,263	$3,500	$0	$153,143
2022	$153,143	$27,820	$17.43	$2,691	$1,545	$0	$182,109
2023	$182,109	$27,820	$17.43	$1,834	$87,683	$0	$124,080
2024	$124,080	$29,767	$18.65	$2,045	$17,484	$0	$138,409
2025	$138,409	$29,767	$18.65	$1,754	$51,211	$0	$118,720
2026	$118,720	$31,851	$19.96	$1,976	$18,838	$0	$133,709
2027	$133,709	$31,851	$19.96	$2,483	$0	$0	$168,044
2028	$168,044	$34,081	$21.35	$1,990	$69,488	$0	$134,626
2029	$134,626	$34,081	$21.35	$2,231	$19,952	$0	$150,986
2030	$150,986	$36,466	$22.85	$2,518	$19,572	$0	$170,399
2031	$170,399	$36,466	$22.85	$2,266	$55,773	$0	$153,360
2032	$153,360	$39,019	$24.45	$1,997	$59,259	$0	$135,116
2033	$135,116	$39,019	$24.45	$1,661	$63,375	$0	$112,422
2034	$112,422	$41,750	$26.16	$1,993	$21,294	$0	$134,871
2035	$134,871	$41,750	$26.16	$2,122	$35,168	$0	$143,576
2036	$143,576	$44,673	$27.99	$2,637	$12,464	$0	$178,422
2037	$178,422	$44,673	$27.99	$3,274	$4,814	$0	$221,555
2038	$221,555	$47,800	$29.95	$1,245	$186,359	$0	$84,241
2039	$84,241	$47,800	$29.95	$1,789	$12,768	$0	$121,062
2040	$121,062	$51,146	$32.05	$2,189	$26,303	$0	$148,094



APPENDIX B: TOWNHOMES ASSOCIATION

RESERVE FUND PROJECTIONS

The Townhomes at Cobblestone

City/state location:	Indian Land, SC
Date of inspection:	8/21/2020
Number of units:	58
Term of study (years):	20
Beginning Year of Term	2021
Estimated starting reserve account balance:	$141,449
Current annual reserve contribution rate:	$19,133
Assumed inflation rate:	3.00%
Assumed rate of return on invested funds:	1.50%
Total over term capital expenditure (un-inflated):	**$1,126,350**
Total over term capital expenditure with inflation:	**$1,593,778**
Recommended threshold reserve balance: (Average annual capital expenditure)	**$79,689**

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Capital Item Description	Quantity	Unit	Unit Cost	Total Cost Per Cycle	Estimated Useful Life (years)	Estimated Remaining Life (years)	Notes
Site Improvements							
Crack fill, seal coat, stripe asphalt paving	5,075	SY	$2.00	$10,150	7	2	
Resurface asphalt paving	5,075	SY	$18.00	$91,350	20	10	
Repair sections of concrete curb and gutter	190	LF	$45.00	$8,550	8	3	Approx. 5% every 8 years
Repair sections of concrete flatwork	130	SY	$125.00	$16,250	8	3	Approx. 5% every 8 years
Common area drainage improvements	1	LS	$7,500.00	$7,500	5	3	
Paint/repair aluminum fencing	1,200	LF	$15.00	$18,000	15	2	
Replace vinyl fencing	550	LF	$40.00	$22,000	35	19	
Building Exterior							
Replace building roofs phase 1	605	SQ	$310.00	$187,550	20	7	2008 buildings
Replace building roofs phase 2	460	SQ	$310.00	$142,600	20	8	2009 buildings
Replace building roofs phase 3	280	SQ	$310.00	$86,800	20	9	2010 buildings
Paint/repair siding, trim, and sealant	58	Unit	$550.00	$31,900	7	1	Includes mailbox kiosk
Allocation to replace vinyl siding	29	EA	$7,500.00	$217,500	35	19	Approx. 1/2
Upper balcony decking replacement & minor	1,200	SF	$15.00	$18,000	12	1	
Major repairs/replacement of upper balcony decks	1,200	SF	$30.00	$36,000	25	13	
Mechanical, Electrical, & Plumbing Systems							
Allocation for buried utilities	1	LS	$40,000.00	$40,000	40	19	

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

Townhomes Association

Description	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Site Improvements										
Crack fill, seal coat, stripe asphalt paving			$10,150							$10,150
Resurface asphalt paving										
Repair sections of concrete curb and gutter				$8,550						
Repair sections of concrete flatwork				$16,250						
Common area drainage improvements				$7,500					$7,500	
Paint/repair aluminum fencing			$18,000							
Replace vinyl fencing										
Building Exterior										
Replace building roofs phase 1								$187,550		
Replace building roofs phase 2									$142,600	
Replace building roofs phase 3										$86,800
Paint/repair siding, trim, and sealant		$31,900							$31,900	
Allocation to replace vinyl siding										
Upper balcony decking replacement & minor repairs		$18,000								
Major repairs/replacement of upper balcony decks										
Mechanical, Electrical, & Plumbing Systems										
Allocation for buried utilities										
Totals	**$0**	**$49,900**	**$28,150**	**$32,300**	**$0**	**$0**	**$0**	**$187,550**	**$182,000**	**$96,950**
Totals including inflation:	**$0**	**$51,397**	**$29,864**	**$35,295**	**$0**	**$0**	**$0**	**$230,663**	**$230,552**	**$126,498**

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Description	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Site Improvements										
Crack fill, seal coat, stripe asphalt paving							$10,150			
Resurface asphalt paving	$91,350									
Repair sections of concrete curb and gutter		$8,550								$8,550
Repair sections of concrete flatwork		$16,250								$16,250
Common area drainage improvements				$7,500					$7,500	
Paint/repair aluminum fencing								$18,000		
Replace vinyl fencing										$22,000
Building Exterior										
Replace building roofs phase 1										
Replace building roofs phase 2										
Replace building roofs phase 3										
Paint/repair siding, trim, and sealant						$31,900				
Allocation to replace vinyl siding										$217,500
Upper balcony decking replacement & minor repairs				$18,000						
Major repairs/replacement of upper balcony decks				$36,000						
Mechanical, Electrical, & Plumbing Systems										
Allocation for buried utilities										$40,000
Totals	**$91,350**	**$24,800**	**$0**	**$61,500**	**$0**	**$31,900**	**$10,150**	**$18,000**	**$7,500**	**$304,300**
Totals including inflation:	**$122,767**	**$34,329**	**$0**	**$90,315**	**$0**	**$49,699**	**$16,288**	**$29,751**	**$12,768**	**$533,592**

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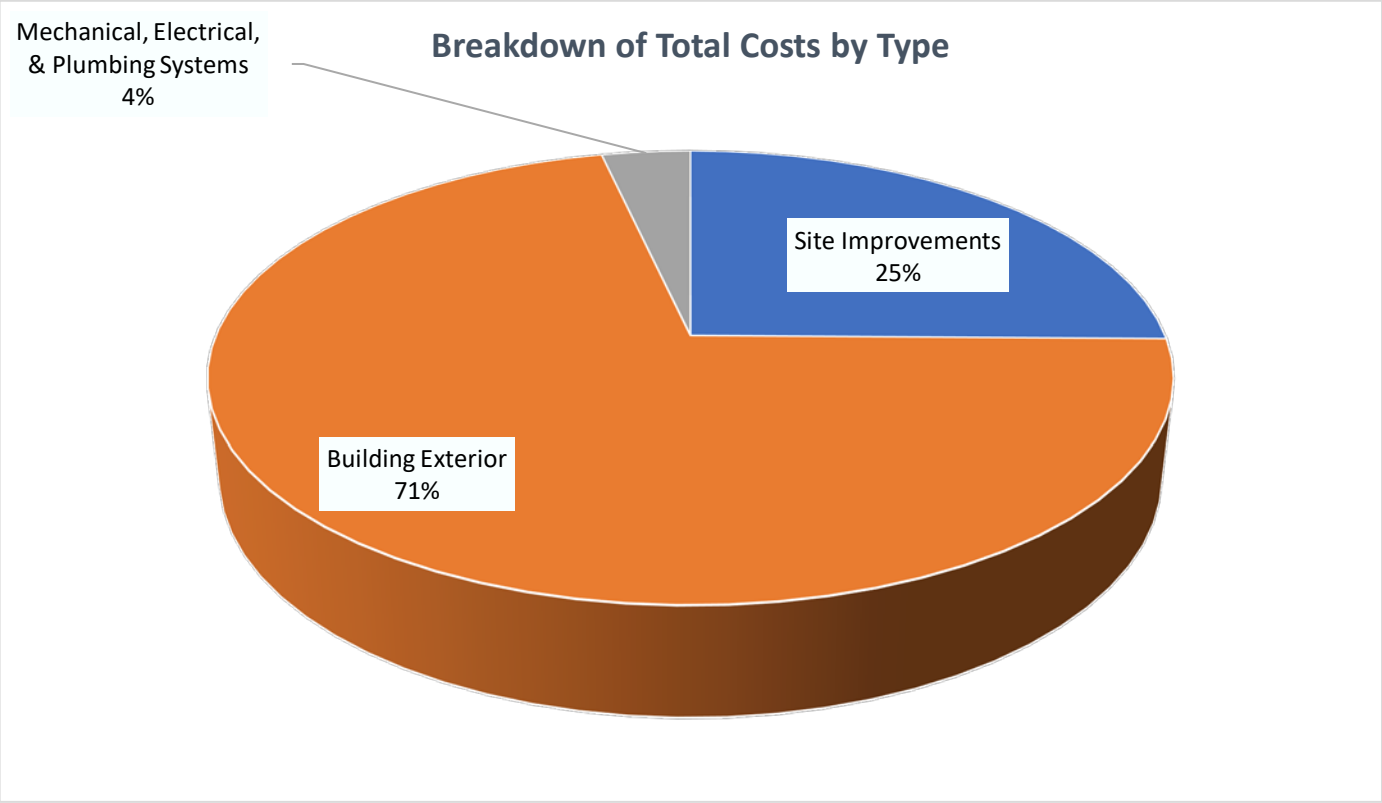
EXPENSE SUMMARY

Townhomes Association

Total over term capital expenditure (un-inflated)	**$1,126,350**
Total over term capital expenditure with inflation:	**$1,593,778**
Average estimated annual capital expenditure with inflation:	**$79,689**
Current Reserve Account Balance	**$141,449**
Full Funding Balance	**$400,541**
Percent Funded	**35.31%**



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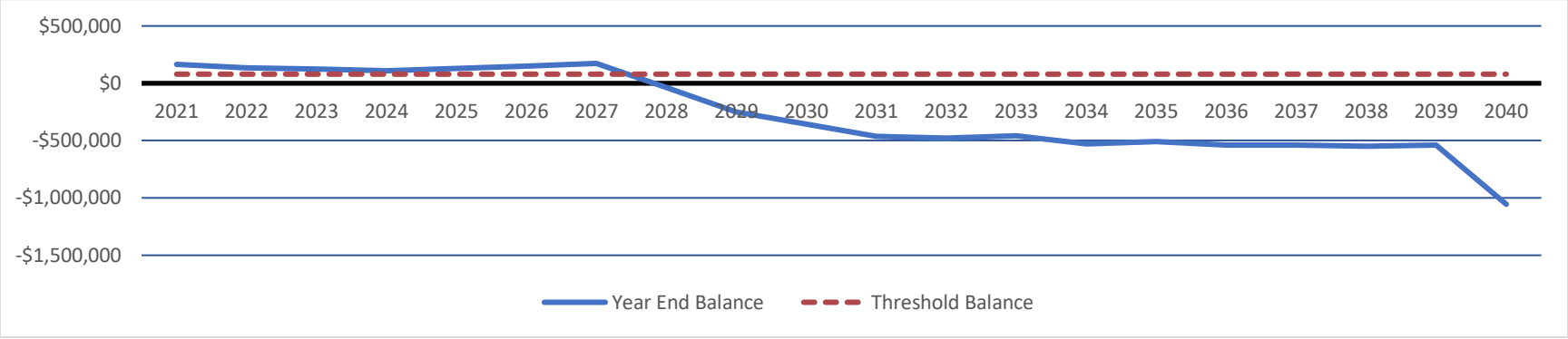
Current Funding Analysis

Townhomes Association

Year	Starting Balance	Reserve Account Contribution	Average Per Unit/Month	Return on Investments	Repair Expenses	Special Assessments	Year End Balance
2021	$141,449	$19,133	$27.49	$2,409	$0	$0	$162,991
2022	$162,991	$19,133	$27.49	$1,961	$51,397	0	$132,688
2023	$132,688	$19,133	$27.49	$1,829	$29,864	0	$123,786
2024	$123,786	$19,133	$27.49	$1,614	$35,295	0	$109,238
2025	$109,238	$19,133	$27.49	$1,926	$0	0	$130,296
2026	$130,296	$19,133	$27.49	$2,241	$0	0	$151,671
2027	$151,671	$19,133	$27.49	$2,562	$0	0	$173,366
2028	$173,366	$19,133	$27.49	$0	$230,663	0	-$38,164
2029	-$38,164	$19,133	$27.49	$0	$230,552	0	-$249,583
2030	-$249,583	$19,133	$27.49	$0	$126,498	0	-$356,948
2031	-$356,948	$19,133	$27.49	$0	$122,767	0	-$460,582
2032	-$460,582	$19,133	$27.49	$0	$34,329	0	-$475,778
2033	-$475,778	$19,133	$27.49	$0	$0	0	-$456,645
2034	-$456,645	$19,133	$27.49	$0	$90,315	0	-$527,826
2035	-$527,826	$19,133	$27.49	$0	$0	0	-$508,693
2036	-$508,693	$19,133	$27.49	$0	$49,699	0	-$539,260
2037	-$539,260	$19,133	$27.49	$0	$16,288	0	-$536,414
2038	-$536,414	$19,133	$27.49	$0	$29,751	0	-$547,033
2039	-$547,033	$19,133	$27.49	$0	$12,768	0	-$540,668
2040	-$540,668	$19,133	$27.49	$0	$533,592	0	-$1,055,127



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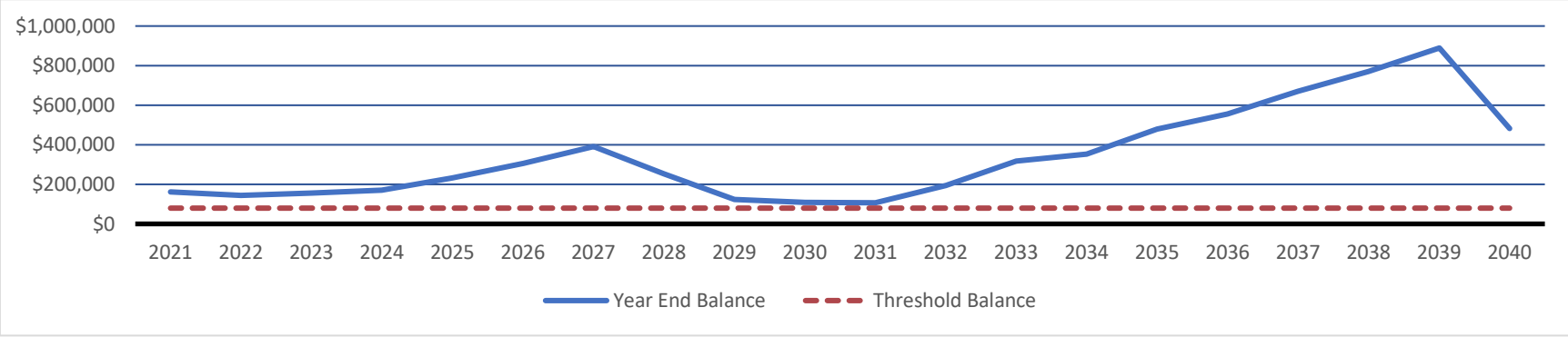
Funding Alternative #1

Townhomes Association

Year	Starting Balance	Reserve Account Contribution	Average Per Unit/Month	Return on Investments	Repair Expenses	Special Assessments	Year End Balance
2021	$141,449	$19,133	$27.49	$2,409	$0	$0	$162,991
2022	$162,991	$29,133	$41.86	$2,111	$51,397	$0	$142,838
2023	$142,838	$39,133	$56.23	$2,282	$29,864	$0	$154,388
2024	$154,388	$49,133	$70.59	$2,523	$35,295	$0	$170,749
2025	$170,749	$59,133	$84.96	$3,448	$0	$0	$233,330
2026	$233,330	$69,133	$99.33	$4,537	$0	$0	$307,000
2027	$307,000	$79,133	$113.70	$5,792	$0	$0	$391,925
2028	$391,925	$89,133	$128.06	$3,756	$230,663	$0	$254,151
2029	$254,151	$99,133	$142.43	$1,841	$230,552	$0	$124,573
2030	$124,573	$109,133	$156.80	$1,608	$126,498	$0	$108,817
2031	$108,817	$119,133	$171.17	$1,578	$122,767	$0	$106,761
2032	$106,761	$119,133	$171.17	$2,873	$34,329	$0	$194,438
2033	$194,438	$119,133	$171.17	$4,704	$0	$0	$318,275
2034	$318,275	$119,133	$171.17	$5,206	$90,315	$0	$352,299
2035	$352,299	$119,133	$171.17	$7,071	$0	$0	$478,504
2036	$478,504	$119,133	$171.17	$8,219	$49,699	$0	$556,157
2037	$556,157	$119,133	$171.17	$9,885	$16,288	$0	$668,887
2038	$668,887	$119,133	$171.17	$11,374	$29,751	$0	$769,643
2039	$769,643	$119,133	$171.17	$13,140	$12,768	$0	$889,148
2040	$889,148	$119,133	$171.17	$7,120	$533,592	$0	$481,809



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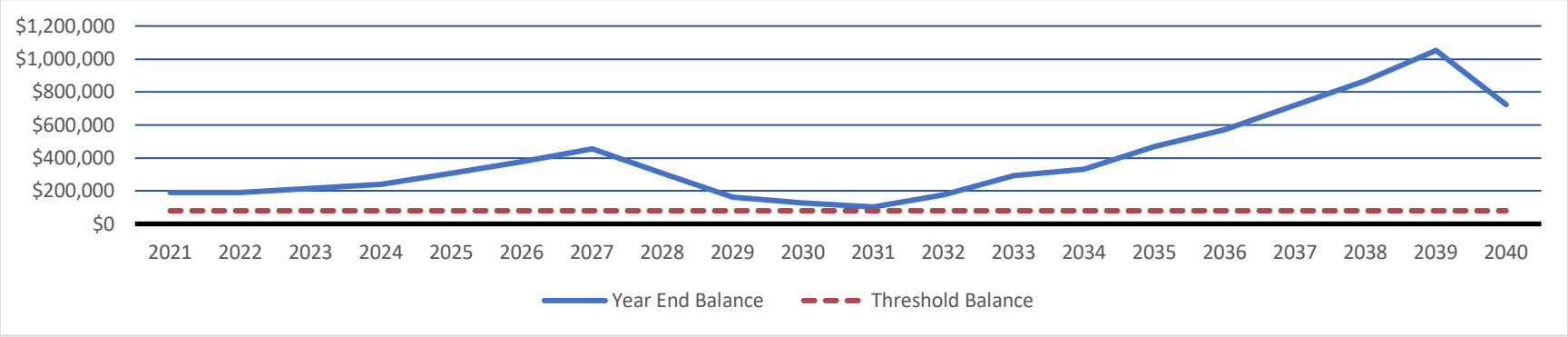
Year	Starting Balance	Reserve Account Contribution	Average Per Unit/Month	Return on Investments	Repair Expenses	Special Assessments	Year End Balance
2021	$141,449	$45,000	$64.66	$2,797	$0	$0	$189,246
2022	$189,246	$48,600	$69.83	$2,797	$51,397	$0	$189,245
2023	$189,245	$52,488	$75.41	$3,178	$29,864	$0	$215,047
2024	$215,047	$56,687	$81.45	$3,547	$35,295	$0	$239,986
2025	$239,986	$61,222	$87.96	$4,518	$0	$0	$305,726
2026	$305,726	$66,120	$95.00	$5,578	$0	$0	$377,423
2027	$377,423	$71,409	$102.60	$6,732	$0	$0	$455,565
2028	$455,565	$77,122	$110.81	$4,530	$230,663	$0	$306,555
2029	$306,555	$83,292	$119.67	$2,389	$230,552	$0	$161,684
2030	$161,684	$89,955	$129.25	$1,877	$126,498	$0	$127,018
2031	$127,018	$97,152	$139.59	$1,521	$122,767	$0	$102,924
2032	$102,924	$104,924	$150.75	$2,603	$34,329	$0	$176,122
2033	$176,122	$113,318	$162.81	$4,342	$0	$0	$293,781
2034	$293,781	$122,383	$175.84	$4,888	$90,315	$0	$330,737
2035	$330,737	$132,174	$189.90	$6,944	$0	$0	$469,854
2036	$469,854	$142,748	$205.10	$8,444	$49,699	$0	$571,346
2037	$571,346	$154,167	$221.50	$10,638	$16,288	$0	$719,865
2038	$719,865	$166,501	$239.23	$12,849	$29,751	$0	$869,463
2039	$869,463	$179,821	$258.36	$15,548	$12,768	$0	$1,052,064
2040	$1,052,064	$194,207	$279.03	$10,690	$533,592	$0	$723,368



APPENDIX C: PROJECT PHOTOGRAPHS

Description Entrance monument	
Photo No. **1**	

Description Gatehouse at entrance	
Photo No. **2**	

Description Typical landscape lighting at entrance	
Photo No. **3**	

Description Front elevation of clubhouse	
Photo No. **4**	

Description Rear elevation of clubhouse	
Photo No. **5**	

Description Typical aluminum fencing	
Photo No. **6**	

Description Swimming pool	
Photo No. **7**	

Description Pool filtration equipment	
Photo No. **8**	

Description Pool pump equipment	
Photo No. **9**	

Description Moisture infiltration area at clubhouse bathroom adjacent to shower	
Photo No. **10**	

Description Damaged bathroom finish materials at shower area infiltration	
Photo No. 11	

Description Typical clubhouse bathroom	
Photo No. 12	

Description Security system	
Photo No. **13**	

Description Typical interior view of clubhouse	
Photo No. **14**	

Description Clubhouse kitchen	
Photo No. **15**	

Description Clubhouse parking lot	
Photo No. **16**	

Description Asphalt paved drive at clubhouse	
Photo No. **17**	

Description Street view at townhome entry	
Photo No. **18**	

Description Typical asphalt paved parking area	
Photo No. **19**	

Description Mailbox kiosk	
Photo No. **20**	

Description Typical townhome building side elevation	
Photo No. **21**	

Description Typical townhome building front elevation	
Photo No. **22**	

Description Typical townhome building rear elevation	
Photo No. **23**	

Description Typical segmental block retaining wall with aluminum fencing	
Photo No. **24**	

Description Isolated separation of retaining wall blocks	
Photo No. **25**	

Description Typical townhome building roofing	
Photo No. **26**	

Description Typical isolated areas of stained siding observed	
Photo No. **27**	

Description Typical upper level balcony on townhome units	
Photo No. **28**	

Description Typical upper level balcony/deck on townhome units	
Photo No. **29**	

Description Typical segmental block retaining wall with fencing	
Photo No. **30**	

Description Isolated damaged fencing	
Photo No. **31**	

Description Typical concrete flatwork displacement	
Photo No. **32**	

Description Longitudinal/transverse cracks in asphalt paved streets at townhomes	
Photo No. **33**	

Description Stormwater control measure (pond) southwest of Crown Vista Drive	
Photo No. **34**	

Description Concrete spillway at pond southwest of Crown Vista Drive	
Photo No. **35**	

Description View of displaced area of concrete spillway	
Photo No. **36**	

Description Stormwater control measure (pond) near corner of Streamhaven Drive & Ridgeline Lane	
Photo No. 37	

Description Accumulated sediment near riser structure of pond near corner of Streamhaven Drive & Ridgeline Lane	
Photo No. 38	

Description Typical shoreline erosion adjacent to pond	
Photo No. **39**	

Description Segmental block retaining wall and fencing adjacent to pond near corner of Streamhaven Drive & Ridgeline Lane	
Photo No. **40**	

Description Accumulated sediment and debris at outlet structure of pond near corner of Streamhaven Drive & Ridgeline Lane	
Photo No. 41	

Description Rip rap reinforced swale downstream of pond outlet structure	
Photo No. 42	

Description Landscape irrigation well	
Photo No. **43**	

Description Landscape irrigation well equipment	
Photo No. **44**	