

PREPARED FOR:

**PICKETT PARK HOMEOWNERS'
ASSOCIATION, INC.**

DURHAM, NC

JANUARY 30, 2023

FULL RESERVE STUDY



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INTRODUCTIONS

Pickett Park Homeowners' Association, Inc. authorized Giles Flythe Engineers to perform a Full Reserve Study for Pickett Park townhome community located in Durham, 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 its entirety.

EXECUTIVE SUMMARY

Pickett Park Homeowners' Association, Inc. is a townhome community situated along a private street located at 2822 Pickett Road in Durham, NC. The townhome buildings were constructed between 2005 and 2009 according to Durham County GIS records, and the community includes a total of 51 townhome units located within 9 buildings.

The Association has responsibility for the townhome building exteriors and the common area site improvements. The most significant site improvements include the private asphalt paved streets, common area drainage systems, and concrete flatwork. The Association is also responsible for maintaining the exterior facades of the townhome buildings including the roofing, gutters, siding and trim. The Association is also responsible for maintenance and repair of the patios and decks at the rear of the buildings.

The townhome buildings are typically of wood frame construction on concrete slab-on-grade foundations. Exterior walls are clad with painted fiber cement siding and trim, and included limited sections of adhered stone veneer on the front elevations. The roofs are primarily covered with architectural grade asphaltic fiberglass shingles. Gutters are installed at the roof eaves, with downspouts that discharge to grade.

The buildings, common areas and site improvements are in variable condition. Based on our evaluation, maintaining the current level of funding over the term does **not** maintain a positive balance through the term of this study. We have provided a recommendation for an annual reserve contribution schedule that provides sufficient funding to meet capital expenditure requirements in the next twenty years, as follows:

- **Funding Alternative:** Maintain the budgeted funding level for the year 2023 (\$23,225). In 2024 and 2026, increase the annual reserve contribution by \$15,000. In 2028 and 2030, increase the annual reserve contribution by \$10,000. In addition to this step increase funding model, collect special assessments in the years 2023 and 2025. The 2023 special assessment should be \$255,000 (\$5,000 per unit), and the 2025 special assessment should be \$153,000 (\$3,000 per unit).

Each of these funding alternatives is projected to maintain a positive balance through the next twenty years. A more detailed analysis of the reserve fund has been provided in Appendix A. Some significant expenditures are expected over the term of the study. Some of the more notable examples are listed below:

- Repair and resurface asphalt pavements
- Replace townhome building roofs
- Paint and repair exterior siding and trim

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.

This study has been performed according to the scope as generally defined by Pickett Park Homeowners' Association, Inc., 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.

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.

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, and 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 2023 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 September 16, 2022.

Interviews

We interviewed the following people in connection with this study:

- Michelle Jaselskis, Pickett Park HOA Treasurer
- Graham Roper, Board Member

Documents

The following documents were made available to us and reviewed:

- Pickett Park Homeowners' Association, Inc. Governing Documents
- Association financial statements
- Recorded Plat Maps
- Our 2014 Reserve Fund Study for this community
- Pickett Park Itemized budget schedule provided by the HOA Board
- Roofing replacement quotes and summary of bids provided by the HOA Board

Cost Estimates

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

DESCRIPTION

Pickett Park Homeowners' Association, Inc. is a townhome community situated along a private street located at 2822 Pickett Road in Durham, NC. The townhome buildings were constructed between 2005 and 2009 according to Durham County GIS records, and the community includes a total of 51 townhome units located within 9 buildings.

The Association has responsibility for the townhome building exteriors and the common area site improvements. The most significant site improvements include the private asphalt paved streets, common area drainage systems, and concrete flatwork. The Association is also responsible for maintaining the exterior facades of the townhome buildings including the roofing, gutters, siding and trim. The Association is also responsible for maintenance and repair of the patios and decks at the rear of the buildings.

The townhome buildings are of typically of wood frame construction on concrete slab-on-grade foundations. Exterior walls are clad with painted fiber cement siding and trim, and included limited sections of adhered stone veneer on the front elevations. The roofs are primarily covered with architectural grade asphaltic fiberglass shingles. Gutters are installed at the roof eaves, with downspouts that discharge to grade.

The community is accessed by a private street off of Pickett Road, and the entrance is marked with a painted metal sign on a masonry monument wall.

Grade across the property generally slopes downward from south to north, and the more significant grade changes are captured via sections of masonry retaining walls, and by the building foundation walls. Stormwater drainage from the site flows via surface runoff into shallow grassed swales and inlets in the landscaped and paved areas. The catch basins lead to an underground piping network which discharges toward a stream basin within the northern portion of the property.

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 2014 Reserve Fund Study for this community, with modifications to ensure serviceability and function of specific components based on the most recent site inspection and discussions with the HOA Board.

Site Improvements

These streets and parking areas are asphalt paved and are original to site development. Several areas of fatigue cracking, depressions and slippage were observed within the northern section of the private street, generally north of unit 152. The southern portion from the entrance to the open space north of unit 149 is in better (fair) condition with some asphalt oxidation noted, but no major damages observed other than previously sealed cracks in proximity to the dumpster enclosure.

The fatigue cracking is symptomatic of a failure in the base course/subgrade material. Over time, as this condition advances, subgrade failure can result in expanding fatigue cracking, depressions and potholes. This type of failure typically requires full-depth patch repairs, which would involve saw-cutting and removing damaged areas of paving, repairing the subgrade as needed and installing a new asphalt patch to match the surrounding pavement. This can be performed as a standalone repair, or in combination with overall pavement resurfacing.

Per request from the Board, we have included funds to resurface all of the pavement in 2028. Resurfacing would include milling limited areas around curb and gutter to maintain an adequate drainage profile, full-depth repairs to the areas fatigue cracking/upheaval, and installing a new 1.5” to 2” thick layer of asphalt pavement over all of the existing paved areas. This project has been deferred to 2028 in favor of higher priority capital repairs discussed later in this report.

Typically, we recommend application of an oil resistant sealant to all asphalt paved surfaces on an approximate 7-year cycle. At this same time, all cracks should be properly filled, patched, and sealed. We understand the streets were previously sealcoated in 2020 and additional applications are not anticipated to be required until after the pavements are resurfaced. We have allocated funds for crack fill and seal coat applications beginning in 2035, corresponding to 7-years after the 2028 pavement resurfacing project as discussed above.

The private streets are lined with standard and valley concrete curb and gutter. We observed areas with cracking and spalling, as well as minor settlement across joints noted. It is likely that due to advancing cracking and differential settlement, sections of the curbing will require periodic replacement. This process typically includes 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 assumed

that approximately 2.5% of the curbing will require repair approximately every 8 years. We have included funds to begin replacement on the same schedule as asphalt resurfacing, in 2028.

The association is responsible for maintaining the concrete flatwork in the community, which includes the sidewalks adjacent to the streets, driveways and walkways in front the buildings, and rear patio slabs. The concrete flatwork appeared to be in generally fair condition, some cracking and upheaval observed in various locations. Some cracks in the driveway slabs have been previously sealed, but no major displacement or faults across the cracks were observed.

Portions of severely damaged, upheaved or depressed concrete flatwork will periodically require sectional replacement to restore the condition and mitigate potential trip hazards. We have allocated funds for periodic repairs and/or replacement of the concrete flatwork as required and have assumed that approximately 2.5% of the surfaces will require maintenance every 8 years, beginning in 2028 to correspond to pavement resurfacing and concrete curbing replacement. Note that minor interim repairs may be required to address potential trip hazards as they develop, which would likely be limited to gridding across uneven joints/cracks to create a uniform surface. These limited repairs should be funded from the general operating budget when needed.

Landscaping on the property is assumed to be maintained through a service contract with an outside servicing company. Seasonal lawn treatment and maintenance, annual plantings, and pruning should be addressed in a general operating/maintenance budget.

Grade across the site generally slopes downward from south to north. Storm water drains via surface flow toward catch basins in the paved and landscaped areas. The catch basins lead to an underground piping network which discharges into a stream basin which flows across the center of the property and discharges stormwater offsite.

The drainage systems in the community appear to be in good to fair condition at the time of the inspection, with no widespread or systemic issues observed (noting that the inspection was not conducted during or after a significant rain event). Overall, the grassed ground cover was healthy, with some bare spots observed. Saturated surface soils were noted in some areas behind buildings. We observed gravel washout from a trail to the south of unit 152; a riprap swale between units 163 & 167 is not functioning as intended, resulting in gravel washout from the adjacent walking trail steps. Some low spots were also observed, which may be susceptible to accumulating water during rain events. Note that this is not an exhaustive drainage evaluation; there may be additional areas of concern which also require attention as part of future drainage improvement projects.

Recurring drainage issues will require periodic improvements to control and re-direct the flow of stormwater towards the appropriate control devices and management systems. Landscaped swales tend to accumulate sediment that settles out during storm events and will need to be periodically removed and re-graded. Erosion concerns are likely to continue to develop in shaded areas and along steeper slopes which would require stabilization repair. In addition, over time, additional sections of small landscape drainage systems may need to be installed in low and flat areas of the community to address ponding concerns. We would also recommend having portions of the private drainage infrastructure in the streets periodically inspected with a video camera system, flushed, and repaired as necessary.

We have allocated funds for repairs to the drainage systems every 5 years beginning in 2023. Initial repairs would include corrections to rippapped swales, restoration of ground cover in bare/eroded areas, surface stabilization where required, and other erosion control efforts. Future drainage repairs and improvements would likely include the installation of small landscape drainage systems to address ponding concerns in flat or low areas, re-trenching and re-armoring landscaped swales, turf replenishment or riprap stabilization in eroded areas, repairing/hydro-getting buried common area stormwater piping and other drainage system improvements. Note that the funding allowances are intended to address the highest priority areas, but are not likely suitable for drainage overhaul at each unit or in all common areas during each cycle.

Many of the steeper topographical changes on the property are captured via segmental block masonry retaining walls. The retaining walls were in overall good to fair condition, with some evidence of minor displacement observed. The most notable example is the radius corner of the wall to the north of unit 136, with separations likely occurring as a result of the as-built construction (cut / modified blocks that do not fully interlock with the adjoining units). We recommend the Association monitor the conditions of the walls for indications of ongoing movement, noting that minor seasonal changes may occur. If these areas continue to exhibit movement or displacement, it is likely that partial reconstruction will be required.

The retaining walls should include geo-grid reinforcement extending behind the wall with french drain type system installed behind the wall to reduce hydrostatic pressure. Assuming these systems are in place and well maintained, the retaining walls should typically have an expected useful life well beyond the term of this study (40+ years); however, considering the evidence of previous displacement, we recommend budgeting for partial reconstruction as a moderate-term expense. We have included funds in 2033 for retaining wall repairs.

Wood slat privacy fencing is installed between the townhome units at the rears of the buildings, and along the top of the retaining wall behind units 126-136. Additional privacy fencing is planned to be installed at the rears of the end units, and we have included funds for this project in 2024 and 2025. Over time, as the wood slat panels age and weather, sectional replacement will be periodically required. Considering the age and minimal previous maintenance, much of the fencing will likely require replacement in the near term. We have included funds to replace all of the wood privacy fencing in two phases (approximately 50% per cycle), in the years 2024 and 2025 to correspond with the new installations. We have also included funds for future sectional replacement, approximately 25% of the total quantity every 5 years, resuming in 2030.

There are some retaining walls where fencing should be installed for fall protection, including the wall to the east of unit 114, and the wall to the north of unit 149. The Association may consider anodized aluminum fencing for these locations to not excessively shade the adjacent landscape areas. We have included funds in 2023 to install new aluminum fencing along the tops of retaining walls where needed for fall protection.

There are also limited sections of wood split rail fencing along the tops of the retaining walls behind buildings 153-163 and 167-177. Due to the relatively low cost of these components, we have assumed that repair expenses would be funded as an operational expense when needed.

Gravel-surfaced walkways are located in limited portions of the community, which include timber steps along sloped surfaces. We observed gravel washout in multiple locations, which can likely be mitigated with new timber bordering and drainage improvements as discussed above. Gravel replenishment should be performed when needed to restore the walking surface. We have assumed that this minor task would be funded as an operational expense when needed.

Two dumpster corrals are located on the property. The corrals include CMU (concrete masonry unit) enclosure walls with steel gates covered with wood slat panels. We observed minor damages to the CMU walls at the southern corral, which are unlikely to require significant funds to repair. The wood slat gate panels are aged and in need of replacement, and these quantities are included in the fence installations discussed above.

Mailbox pedestals are located near the front entrance to the community, and appeared to be in good condition. Due to frequent/daily use, mailbox hinges and locking mechanisms will begin to wear and will require replacement over term. These components have a useful life of approximately 20-30 years and we have included funds for replacement in 2034.

An entrance sign is installed at Pickett Road adjacent to the entrance drive, comprised of a stone veneer monument structure with a metal cabinet sign. We observed some peeling paint, but no major damages. We anticipate any repairs and touch-up painting would be funded as an operational expense. Considering the existing condition and durability of the metal and masonry components, we do not anticipate major repairs will be required in the near term; however, the Association may wish to complete upgrades as a moderate-term expense, and we have included a funding allocation in 2030 for this project.

The Association is responsible for the buried plumbing piping, sewer lines and drainage piping in the common areas and below the private streets. These buried components typically have an expected useful life of 40+ years, noting that any repairs needed are not easily predicted. Considering the age of the community (circa 2005-2009), it is possible that sections of the buried piping and other private utilities will begin to require replacement near the end of the term. We have included a contingency budget for repairs to sections of the buried common area water/gas supply piping, electrical conduit, sewer lines and other common utilities in the final year of the term (2042). Note that the funding allocation represents a per-unit contingency budget, and these repairs may not be required for all units at that time; however, repair needs will become more frequent as the components age. Any funds left over from initial repair projects should be kept in the reserve account for future larger-scale projects.

Pole-mounted area lights are installed along the streets throughout the community. The street lights are maintained by the local utility provider per the identification placards on each fixture, and are not part of HOA responsibility. However, as the light fixtures age, the Association may wish to upgrade to LED fixtures. The scope and cost of such a project can vary depending on quantity of components replaced (and new units installed), type of fixture, and possible changes to the electrical service provided to the fixtures. We have not included reserve funds for these components, and recommend consulting with the utility provider should the Association wish to upgrade during the term.

Common Building Exteriors

The Association is responsible for exterior maintenance of the townhome buildings, including the roofs, gutters and downspouts, exterior siding and trim. The Association is also responsible for the wood decks at the rears of townhome units 153-163 and 167-177.

The exterior walls of the buildings are clad with painted fiber cement siding, wood trim and sections of brick and stone veneer. The exterior surfaces appeared to be in overall good condition; however, some areas of staining and discolorations were noted. To maintain a clean, bright appearance, and to protect the wood components from advancing deterioration and rot due to moisture damage and exposure to the elements, we typically recommend re-painting all painted surfaces, re-caulking all deteriorated sealants, and performing wood trim repairs as needed, on an approximate 8-year schedule. Previous painting projects were completed between 2016-2018 per the information provided. We have included funds to continue exterior painting projects in three phases, resuming in the years 2024, 2025, and 2026, and repeating on a 7-year schedule.

The building roofs are clad in asphaltic fiberglass decorative three-tab shingles. Gutters and downspouts are installed, and discharge stormwater to grade. The roofs are majority original to construction, and we noted several areas of previous repairs. We understand the Association has identified six building roofs which will be replaced in 2023, and the remaining three buildings replaced in 2024. We have included funds for roof replacement in two phases to match this schedule.

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. Periodic minor repairs to the vent boots, flashing and gutters will likely be required in the interim, prior to full roof replacement. Minor repairs to correct roof leaks may also be required on an annual basis. We have assumed these types of minor repairs would be funded from the annual maintenance budget as needed.

Conventional asphalt shingle roofs have a useful life of approximately 20-25 years depending on quality of shingle and installation workmanship. Future roof replacement projects are not likely to be required during the term of this study; however, to help prepare for future replacement projects, we recommend maintaining a suitable threshold balance in the reserve account through the term, with increasing funds in the moderate to long-term to help prepare for this eventual expense.

Gutters and downspouts are installed on the townhome buildings, and appeared in overall good condition. We do not anticipate gutter replacement will be required in the near term, and have not included reserve funds for this project during the next 20 years. Future reserve study updates may include funds for gutter replacement depending on the existing conditions at that time.

Wood-framed deck structures are installed at the rears of the townhome units 153-163 and 167-177, which are the responsibility of the Association. The decks have been recently repaired, and stained, and the framing appeared to be in good condition. Due to the location of the decks with proximity to tree cover and in shaded areas, staining will likely be required on an approximate 3- to 5-year schedule. We have included funds for

future staining/sealing the decks on a 4-year schedule beginning in 2026. Re-staining may not be required at this frequent interval, and it may benefit the Association to extend the cycle if the stain coat remains in adequate condition at year 3. We have also included funds for a future large-scale replacement project in 2037, which will likely be a similar scope to the recent project.

Concrete patio slabs are installed at the rears of the townhome units. The funding allocation for concrete flatwork repairs (discussed under 'Site Improvements' above) includes the rear patio slabs, with sectional replacement every 8 years.

Lantern-style light fixtures are installed above the garage doors, and adjacent to the doors at the rear patios and decks at each unit. The fixtures were showing signs of age, and we understand the Association wishes to begin replacing. We have included funds to replace the light fixtures between 2024-2026, approximately 1/3 of the units each year.

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 0.5%. 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 includes the following:

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

Current Reserve Funding Rate: \$23,225 per year (2022 contribution)

Current Reserve Balance: \$216,321 (12/31/22 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 next 20 years. We have included a recommended funding alternative to your current reserve-funding program and recommend that the board adopt a funding model that best reflects the objectives of the community. Our funding recommendation is as follows:

- **Funding Alternative:** Maintain the budgeted funding level for the year 2023 (\$23,225). In 2024 and 2026, increase the annual reserve contribution by \$15,000. In 2028 and 2030, increase the annual reserve contribution by \$10,000. In addition to this step increase funding model, collect special assessments in the years 2023 and 2025. The 2023 special assessment should be \$255,000 (\$5,000 per unit), and the 2025 special assessment should be \$153,000 (\$3,000 per unit). This alternative is projected to maintain a positive balance through the term of this study.

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

Note that we typically do not endorse funding models which include special assessments; however, due to the current needs of the community, special assessments may be the most effective means of funding the planned near-term roofing replacement, pavement resurfacing, and other capital improvement projects.

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 2023 dollars. Our reserve study does include an adjustment for inflation and an assumed rate of return on invested funds.

CONCLUSION & LIMITATIONS

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

The physical analysis portion of this reserve study was completed through a limited visual inspection. The visual inspection was completed from ground level unless otherwise specified. The visual inspection is generally limited to readily accessible and visible common areas that would likely require capital repair activities over the term. 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 the Pickett Park Homeowners' Association, Inc. 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,

A handwritten signature in blue ink that reads "Andrew D. Crook". The signature is stylized and written in a cursive-like font.

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

APPENDIX A: RESERVE FUND PROJECTIONS



Pickett Park Homeowners' Association, Inc.

City/state location:	Durham, NC
Date of inspection:	9/16/2022
Number of units:	51
Term of study (years):	20
Beginning Year of Term	2023
Estimated starting reserve account balance:	\$216,321
Current annual reserve contribution rate:	\$23,225
Assumed inflation rate:	3.50%
Assumed rate of return on invested funds:	0.50%
Total over term capital expenditure (un-inflated):	\$1,397,610
Total over term capital expenditure with inflation:	\$1,842,908
Recommended threshold reserve balance: (Average annual capital expenditure)	\$92,145

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 pavement, including full-depth repairs where needed	4,300	SY	\$30.00	\$129,000	20	5	
Crack fill and sealcoat asphalt pavement	4,300	SY	\$2.00	\$8,600	7	12	Begin in 2035
Concrete curbing replacement	75	LF	\$50.00	\$3,750	8	5	Approx. 2.5% of total every 8 years
Concrete flatwork replacement (sidewalks, walkways, rear patio slabs)	150	SY	\$125.00	\$18,750	8	5	Approx. 5% of total every 8 years
Common area drainage repairs & improvements	1	LS	\$6,500.00	\$6,500	5	0	
Retaining wall repairs	400	SF	\$65.00	\$26,000	20	10	
Install new wood privacy fencing at TH end units	18	unit	\$320.00	\$5,760	40	1	2024 & 2025
Replace portions of wood slat privacy fencing & dumpster gates	2,000	LF	\$43.00	\$86,000	20	1	Approx. 50% per cycle, 2024 & 2025
Replace portions of wood slat privacy fencing	500	LF	\$43.00	\$21,500	5	7	Approx. 25% every 5 years
Install aluminum fencing	170	LF	\$45.00	\$7,650	40	0	Top sides of retaining walls, where req'd for fall protection
Replace mailbox kiosks	4	EA	\$1,800.00	\$7,200	30	7	
Entrance monument refurbishment / upgrades	1	LS	\$6,000.00	\$6,000	20	10	
Contingency for buried utility system repairs	51	unit	\$2,000.00	\$102,000	40	19	
Common Building Exteriors							
Paint & repair building exteriors, phase 1	16	unit	\$2,500.00	\$40,000	7	1	
Paint & repair building exteriors, phase 2	17	unit	\$2,500.00	\$42,500	7	2	
Paint & repair building exteriors, phase 3	18	unit	\$2,500.00	\$45,000	7	3	
Replace townhome building roofs, phase 1	570	SQ	\$400.00	\$228,000	20	0	6 buildings
Replace townhome building roofs, phase 2	285	SQ	\$400.00	\$114,000	20	1	3 buildings
Stain / seal rear decks	12	EA	\$1,000.00	\$12,000	4	3	
Repair / replace rear decks	12	EA	\$7,000.00	\$84,000	15	14	
Allocation for exterior light fixture replacement	17	unit	\$400.00	\$6,800	20	2	2024, 2025, 2026 -- 1/3 per year

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

ANNUAL EXPENSE PROJECTION



Description	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Site Improvements										
Resurface asphalt pavement, including full-depth repairs where needed						\$129,000				
Crack fill and sealcoat asphalt pavement										
Concrete curbing replacement						\$3,750				
Concrete flatwork replacement (sidewalks, walkways, rear patio slabs)						\$18,750				
Common area drainage repairs & improvements	\$6,500					\$6,500				
Retaining wall repairs										
Install new wood privacy fencing at TH end units		\$2,880	\$2,880							
Replace portions of wood slat privacy fencing & dumpster gates		\$43,000	\$43,000							
Replace portions of wood slat privacy fencing								\$21,500		
Install aluminum fencing	\$7,650									
Replace mailbox kiosks								\$7,200		
Entrance monument refurbishment / upgrades										
Contingency for buried utility system repairs										
Common Building Exteriors										
Paint & repair building exteriors, phase 1		\$40,000							\$40,000	
Paint & repair building exteriors, phase 2			\$42,500							\$42,500
Paint & repair building exteriors, phase 3				\$45,000						
Replace townhome building roofs, phase 1	\$228,000									
Replace townhome building roofs, phase 2		\$114,000								
Stain / seal rear decks				\$12,000				\$12,000		
Repair / replace rear decks										
Allocation for exterior light fixture replacement			\$6,800							
Totals	\$242,150	\$199,880	\$95,180	\$57,000	\$0	\$158,000	\$0	\$40,700	\$40,000	\$42,500
Totals including inflation:	\$242,150	\$206,876	\$101,959	\$63,197	\$0	\$187,654	\$0	\$51,782	\$52,672	\$57,923

ANNUAL EXPENSE PROJECTION



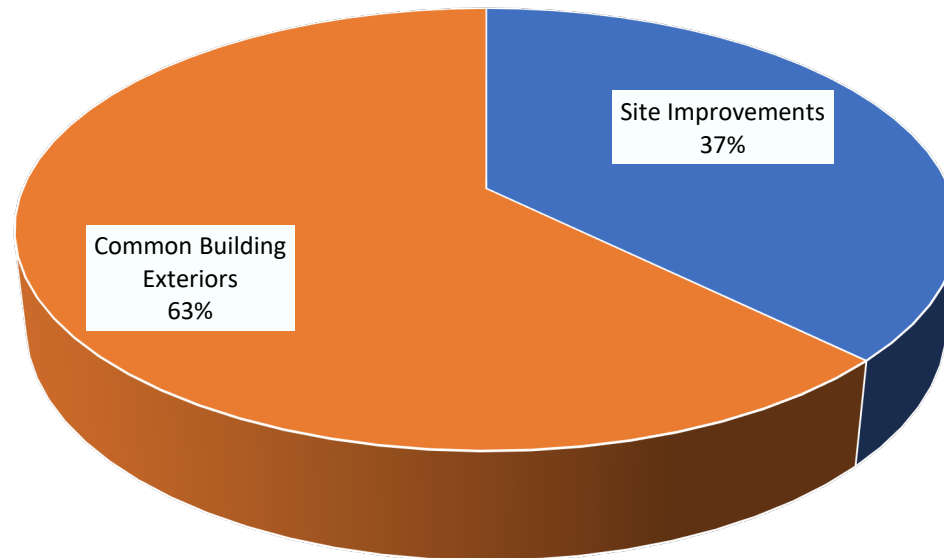
Description	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
Site Improvements										
Resurface asphalt pavement, including full-depth repairs where needed										
Crack fill and sealcoat asphalt pavement			\$8,600							\$8,600
Concrete curbing replacement				\$3,750						
Concrete flatwork replacement (sidewalks, walkways, rear patio slabs)				\$18,750						
Common area drainage repairs & improvements	\$6,500					\$6,500				
Retaining wall repairs	\$26,000									
Install new wood privacy fencing at TH end units										
Replace portions of wood slat privacy fencing & dumpster gates										
Replace portions of wood slat privacy fencing			\$21,500					\$21,500		
Install aluminum fencing										
Replace mailbox kiosks										
Entrance monument refurbishment / upgrades	\$6,000									
Contingency for buried utility system repairs										\$102,000
Common Building Exteriors										
Paint & repair building exteriors, phase 1						\$40,000				
Paint & repair building exteriors, phase 2							\$42,500			
Paint & repair building exteriors, phase 3	\$45,000							\$45,000		
Replace townhome building roofs, phase 1										
Replace townhome building roofs, phase 2										
Stain / seal rear decks		\$12,000				\$12,000				\$12,000
Repair / replace rear decks					\$84,000					
Allocation for exterior light fixture replacement										
Totals	\$83,500	\$12,000	\$30,100	\$22,500	\$84,000	\$58,500	\$42,500	\$66,500	\$0	\$122,600
Totals including inflation:	\$117,785	\$17,520	\$45,483	\$35,189	\$135,970	\$98,008	\$73,694	\$119,346	\$0	\$235,699

EXPENSE SUMMARY



Total over term capital expenditure (un-inflated)	\$1,397,610
Total over term capital expenditure with inflation:	\$1,842,908
Average estimated annual capital expenditure with inflation:	\$92,145
Current Reserve Account Balance	\$216,321
Full Funding Balance	\$723,101
Percent Funded	29.92%

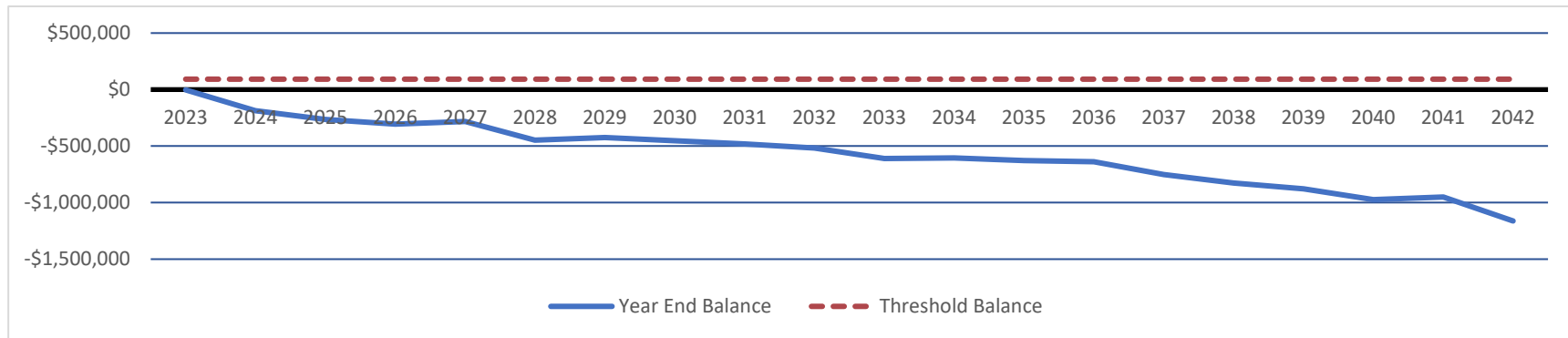
Breakdown of Total Costs by Type





Current Funding Analysis

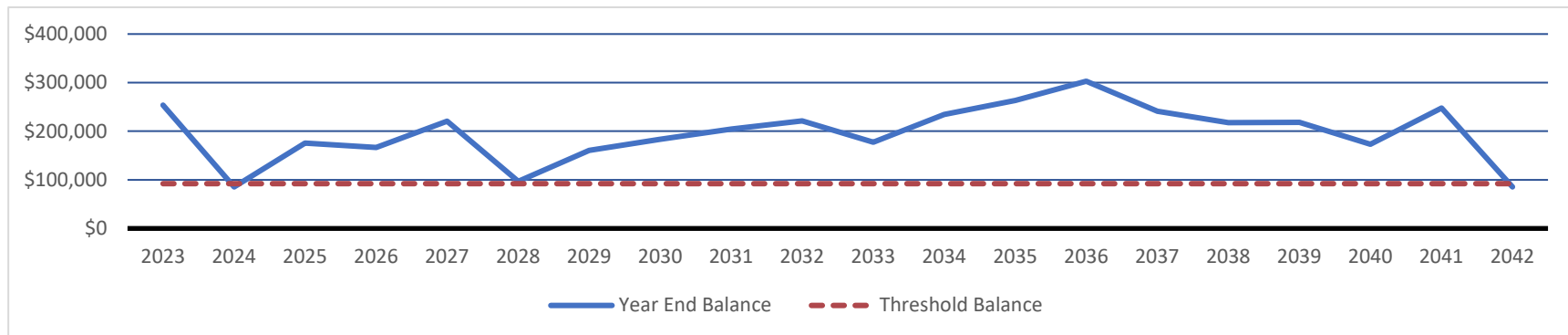
Year	Starting Balance	Reserve Account Contribution	Average Per Unit/Month	Return on Investments	Repair Expenses	Special Assessments	Year End Balance
2023	\$216,321	\$23,225	\$37.95	\$0	\$242,150	\$0	-\$2,604
2024	-\$2,604	\$23,225	\$37.95	\$0	\$206,876	0	-\$186,255
2025	-\$186,255	\$23,225	\$37.95	\$0	\$101,959	0	-\$264,989
2026	-\$264,989	\$23,225	\$37.95	\$0	\$63,197	0	-\$304,961
2027	-\$304,961	\$23,225	\$37.95	\$0	\$0	0	-\$281,736
2028	-\$281,736	\$23,225	\$37.95	\$0	\$187,654	0	-\$446,165
2029	-\$446,165	\$23,225	\$37.95	\$0	\$0	0	-\$422,940
2030	-\$422,940	\$23,225	\$37.95	\$0	\$51,782	0	-\$451,497
2031	-\$451,497	\$23,225	\$37.95	\$0	\$52,672	0	-\$480,944
2032	-\$480,944	\$23,225	\$37.95	\$0	\$57,923	0	-\$515,643
2033	-\$515,643	\$23,225	\$37.95	\$0	\$117,785	0	-\$610,203
2034	-\$610,203	\$23,225	\$37.95	\$0	\$17,520	0	-\$604,497
2035	-\$604,497	\$23,225	\$37.95	\$0	\$45,483	0	-\$626,755
2036	-\$626,755	\$23,225	\$37.95	\$0	\$35,189	0	-\$638,719
2037	-\$638,719	\$23,225	\$37.95	\$0	\$135,970	0	-\$751,465
2038	-\$751,465	\$23,225	\$37.95	\$0	\$98,008	0	-\$826,248
2039	-\$826,248	\$23,225	\$37.95	\$0	\$73,694	0	-\$876,717
2040	-\$876,717	\$23,225	\$37.95	\$0	\$119,346	0	-\$972,838
2041	-\$972,838	\$23,225	\$37.95	\$0	\$0	0	-\$949,613
2042	-\$949,613	\$23,225	\$37.95	\$0	\$235,699	0	-\$1,162,087





Funding Alternative

Year	Starting Balance	Reserve Account Contribution	Average Per Unit/Month	Return on Investments	Repair Expenses	Special Assessments	Year End Balance
2023	\$216,321	\$23,225	\$37.95	\$1,262	\$242,150	\$255,000	\$253,658
2024	\$253,658	\$38,225	\$62.46	\$425	\$206,876	\$0	\$85,432
2025	\$85,432	\$38,225	\$62.46	\$873	\$101,959	\$153,000	\$175,572
2026	\$175,572	\$53,225	\$86.97	\$828	\$63,197	\$0	\$166,428
2027	\$166,428	\$53,225	\$86.97	\$1,098	\$0	\$0	\$220,751
2028	\$220,751	\$63,225	\$103.31	\$482	\$187,654	\$0	\$96,803
2029	\$96,803	\$63,225	\$103.31	\$800	\$0	\$0	\$160,828
2030	\$160,828	\$73,225	\$119.65	\$911	\$51,782	\$0	\$183,183
2031	\$183,183	\$73,225	\$119.65	\$1,019	\$52,672	\$0	\$204,754
2032	\$204,754	\$73,225	\$119.65	\$1,100	\$57,923	\$0	\$221,156
2033	\$221,156	\$73,225	\$119.65	\$883	\$117,785	\$0	\$177,479
2034	\$177,479	\$73,225	\$119.65	\$1,166	\$17,520	\$0	\$234,350
2035	\$234,350	\$73,225	\$119.65	\$1,310	\$45,483	\$0	\$263,403
2036	\$263,403	\$73,225	\$119.65	\$1,507	\$35,189	\$0	\$302,946
2037	\$302,946	\$73,225	\$119.65	\$1,201	\$135,970	\$0	\$241,402
2038	\$241,402	\$73,225	\$119.65	\$1,083	\$98,008	\$0	\$217,702
2039	\$217,702	\$73,225	\$119.65	\$1,086	\$73,694	\$0	\$218,319
2040	\$218,319	\$73,225	\$119.65	\$861	\$119,346	\$0	\$173,059
2041	\$173,059	\$73,225	\$119.65	\$1,231	\$0	\$0	\$247,515
2042	\$247,515	\$73,225	\$119.65	\$425	\$235,699	\$0	\$85,467



APPENDIX B: PROJECT PHOTOGRAPHS

Description
Entrance monument sign at Pickett Road
Photo No. 1




Description
General view within the community
Photo No. 2



Description	
Asphalt-paved private street, concrete driveways in front of townhome units	
Photo No. 3	

Description	
Asphalt pavement	
Photo No. 4	


Description	
Previous crack fill in pavement	
Photo No. 5	

Description	
Fatigue cracking in northern portion of private street	
Photo No. 6	


Description	
Fatigue cracking	
Photo No. 7	

Description	
Partial previous sealcoat at side street	
Photo No. 8	

Description	 A photograph showing a concrete sidewalk that has been displaced or upheaved. The concrete slabs are uneven and tilted upwards. The surrounding area is covered with dry pine needles and has several trees in the background.
Concrete sidewalk upheaval	
Photo No. 9	

Description	 A close-up photograph of a concrete driveway. The concrete is light-colored and shows several prominent, irregular cracks that run across the surface. The cracks are deep and appear to be structural.
Cracks in concrete driveway	
Photo No. 10	

Description	
Cracks and spalls in concrete curbing	
Photo No. 11	

Description	
Typical common area open space with grassed ground cover and retaining wall	
Photo No. 12	

Description
Gravel washout from timber stair at walking path adjacent to riprap drainage swale
Photo No. 13



Description
Damaged ground cover and water-softened surface soils behind townhome building
Photo No. 14



Description	
Typical landscape drainage infrastructure	
Photo No. 15	

Description	
Missing ground cover at recent landscaping repair	
Photo No. 16	

Description
Gravel washout from walking path
Photo No. 17



Description
Segmental block masonry retaining wall
Photo No. 18



Description
Minor separation developing at radius corner of retaining wall, north of unit 136
Photo No. 19



Description
Retaining wall east of unit 114, with no fall protection fencing adjacent to street
Photo No. 20



Description	
Mailbox kiosks	
Photo No. 21	

Description	
Dumpster enclosure with wood slat panels over gates	
Photo No. 22	

Description	
Minor damage at dumpster enclosure masonry walls	
Photo No. 23	

Description	
Weathered wood slat fence panels at dumpster gates	
Photo No. 24	

Description
Typical townhome building front exteriors
Photo No. 25



Description
Typical townhome building rear exteriors
Photo No. 26




Description	
Painted fiber cement siding	
Photo No. 27	

Description	
Minor discolorations in exterior siding	
Photo No. 28	

Description	
Peeling paint at rear door trim (minor, isolated occurrence)	
Photo No. 29	

Description	
Typical painted exterior surfaces	
Photo No. 30	

Description	
Roof shingles	
Photo No. 31	

Description	
Roof shingles	
Photo No. 32	

Description
Previous roof repair
Photo No. 33



Description
Rear decks
Photo No. 34



Description
Rear decks have been recently repaired
Photo No. 35



Description
Exterior light fixtures at townhome buildings
Photo No. 36

