

FULL RESERVE STUDY

***CENTENNIAL PARK
RALEIGH, NC***

Prepared for:
***CENTENNIAL PARK TOWNHOME ASSOCIATION, INC.
RALEIGH, NC***

Prepared by:
***CRITERIUM – GILES ENGINEERS
1150 SE MAYNARD ROAD, SUITE 220
CARY, NC 27511
(919) 465-3801
NC Lic. No. C-2871***



SEPTEMBER 29, 2014

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1.0 INTRODUCTION

The Centennial Park Townhome Association, Inc. authorized Criterium–Giles Engineers to conduct a Reserve Fund Study for the Centennial Park community located in Raleigh, North Carolina. Studies of this nature are important to ensure a community has sufficient funds for long-term, periodic capital expenditure requirements. Anticipating large expenditures over an extended period of time through a structured analysis and scheduling process assists the Association in meeting financial requirements without increasing the service fees above permitted maximums, borrowing the funds, or levying special financial assessments to the home owners.

Typically, a community association has two broad cash requirements: the general operating reserves and the capital repair and replacement reserves. In this report, we will focus on those items falling under the capital repair and replacement reserve criteria. We have projected a capital repair and replacement reserve for twenty (20) years. The first ten years are the most reliable. Such a study should be updated every five years.

This report is structured to analyze components of the community for which the Association is responsible and to assess a useful expected life and useful remaining life to those components. The anticipated scheduled repair or replacement of the component and the anticipated expense for the activity are then analyzed in conjunction with the current capital reserves funding program for the community. Funding program recommendations are made with the objective of limiting substantial cash excesses while minimizing financial burdens that can result from significant cash inadequacies.

This report is intended to be used as a tool to determine reserve fund allocation requirements for the community, to manage future Association obligations, and to inform the community of future financial needs in general. The report that follows has been prepared from the perspective of what an owner of this property would benefit from knowing. Some items, beyond those of immediate concern, may be discussed. Therefore, the report should be read in its entirety in order to fully understand all of the information that has been obtained.

2.0 EXECUTIVE SUMMARY

Centennial Park is currently comprised of 29 individually owned townhomes within 4 buildings. According to Wake County Real Estate records, the buildings were constructed in 2013.

The association has responsibility for the exterior maintenance of the building and façade including the roof shingles and gutters, siding and trim, exterior decks, and various site improvements. It is assumed that door and window replacement is the responsibility of the individual homeowner. The most significant site improvements include asphalt paved private streets and parking areas, concrete sidewalks and patios, curb and gutter, two mailbox kiosks, retaining walls and fencing, and the drainage systems.

The buildings, common areas and grounds are generally in good condition. Based on our evaluation, the current level of funding does not 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. 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, seal and resurface asphalt pavements
- Replace building roofs and gutters
- Repair concrete flatwork

There are, of course, other capital expenditures to be expected over the next twenty years. Those items that will require attention are discussed later in this report. For your convenience, we have prepared the following summary of the condition of the major systems of the property.

| PROPERTY SUMMARY | | | |
|-----------------------------|-----------|-------------------------|------------------------------|
| SYSTEM | CONDITION | ACTIVITY REQUIRED | ANTICIPATED YEAR OF ACTIVITY |
| SITE | | | |
| Asphalt paved areas | G | repair/reseal/resurface | 2018-2033 |
| Concrete flatwork & curbing | G | repair sections | 2023-2031 |
| BUILDING EXTERIOR | | | |
| Roof shingles and gutters | G | replace | 2033 |
| AMENITIES | | | |
| N/A | | | |

Table 2.1 Property Summary

3.0 PURPOSE & SCOPE

3.1 Purpose

The purpose of this study is to perform a reserve fund analysis and to determine a capital needs plan. It is intended to be used as a tool for the Centennial Park Townhome Association, Inc. in determining the allocation requirements into the reserve fund in order to meet future anticipated capital expenditures for the community.

This report forecasts obligations for the community twenty years into the future. It should be noted that events might occur that could have an effect on the underlying component or system useful life assumptions used in this study. Likewise, inevitable market fluctuations can have an impact on component or system replacement and repair costs. Therefore, a study such as this should be updated from time to time, usually on a three to five-year cycle, in order to reflect the most accurate needs and obligations of the community.

3.2 Scope

This study has been performed according to the scope as generally defined by the Centennial Park Townhome Association, Inc., Criterium-Giles 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 an investigation of the buildings and site.

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 a "Baseline Funding" goal by maintaining a positive balance for the term of the study.

The guidelines used to determine which physical components within the community are to be included in the component inventory are based on the following general criteria:

1. The component must be a common element, or otherwise noted to be the responsibility of the Association to replace.
2. The component must have an estimated remaining useful life of twenty years or less. As the site ages, additional components may need to be added.
3. The funding for replacement should be from one source only, not funded from another area of the budget or through a maintenance contract.
4. The cost of replacement should be high enough to make it financially unsound to fund it from the operating budget.

Our reserve study analysis included evaluating the following association property:

- **Buildings:** The HOA is responsible for maintenance and replacement of the roofing shingles and gutters and exterior facade of the townhome buildings. Per the covenants, the homeowner is responsible for the doors and windows.

- **Mechanical Systems:** The Association is not responsible for the individual townhome HVAC units.
- **Site and Grounds:** The HOA is responsible for the private roads, curb and gutter, sidewalks, driveways, drainage systems, and two mailbox kiosks.

The above list was obtained from the site inspection and discussions with the management firm prior to the inspection.

This study estimates the funding levels required for maintaining the long-term viability of the facility. Our approach involves:

1. Examining association managed equipment, building and site facilities.
2. Predicting their remaining service life and, approximating how frequently they will require repair or replacement.
3. Estimating repair or replacement costs (in 2014 dollars) for each capital item.
4. Using data developed in Steps 1, 2 and 3 to project Capital Reserve balances for Years 1 through 20.

The statements in this report are opinions about the present condition of the subject community. They are based on visual evidence available during a diligent investigation of all reasonably accessible areas falling under the responsibility of the Association. We did not remove any surface materials, perform any destructive testing, or move any furnishings. This study is not an exhaustive technical evaluation. Such an evaluation would entail a significantly larger scope than this effort. For additional limitations, see Section 8.0.

3.3 Sources of Information

Onsite inspections of the property occurred on the following date:

- August 28, 2014

The following people were interviewed during our study:

- Sammy Stephens

The following documents were made available to us and reviewed:

- Wake County tax records
- 2014 HOA budget and financials

We based our cost estimates on some or all of the following:

- R.S. Means
- Our data files on similar projects
- Local contractor estimates

For your reference, the following definitions may be helpful:

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 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. Present condition could contribute to or cause the deterioration of other adjoining elements or systems. Repair or replacement is required.

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

All ratings are determined by comparison to other buildings of similar age and construction type. Further, some details of workmanship and materials will be examined more closely in higher quality buildings where such details typically become more relevant.

All directions (left, right, rear, etc.), when used, are taken from the viewpoint of an observer standing in front of a building and facing it.

Repair/Replacement Reserves - Non-annual maintenance items that will require significant expenditure over the life of the buildings. Included are items that will reach the end of their estimated useful life during the course of this forecast, or, in the opinion of the investigator, will require attention during that time.

4.0 DESCRIPTION

Centennial Park is currently comprised of 29 individually owned townhomes within 4 buildings. According to Wake County Real Estate records, the buildings were constructed in 2013.

The association has responsibility for the exterior maintenance of the building and façade including the roof shingles and gutters, siding and trim, exterior decks, and various site improvements. It is assumed that door and window replacement is the responsibility of the individual homeowner. The most significant site improvements include asphalt paved private streets and parking areas, concrete sidewalks and patios,

curb and gutter, two mailbox kiosks, retaining walls and fencing, and the drainage systems.

The buildings are of wood frame construction on poured concrete slab foundations. Exterior surfaces are primarily comprised of stone veneer with sections of fiber cement siding and trim, with limited sections of aluminum and wood trim. Vinyl shutters are located adjacent to the windows along the front façade of 4 units.

The building roofs are shingled with asphaltic fiberglass 3-tab shingles. Aluminum gutters and downspouts discharge stormwater to grade or underground drainage systems.

Site drainage is provided via landscaped swales and catch basins in the paved and landscaped areas. These systems direct water flow off site through the adjacent swales.

5.0 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 roads and parking areas at Centennial Park community are private, asphalt paved streets lined with standard curb and gutter and concrete sidewalks. Overall, the pavement structure is in good condition, and was installed within the last year. Typically, we recommend the application of an oil resistant sealant to all asphalt paved surfaces on an approximately 7 year cycle. At this same time, all cracks and potholes should be properly filled, patched, and sealed. We have included funds to for the first application in 2018, continuing on a 7 year cycle thereafter.

If crack repairs are accomplished in the interim, we anticipate the asphalt paving in the community to have an estimated useful life of approximately 20-25 years. We have allocated funds to resurface the asphalt paving in 2033.

Similar to the asphalt paving, the Association has responsibility for concrete curb and gutter around the private streets. The concrete curbing generally appear to be in good condition. There are limited sections of minor cracking but no major displacement along the curb. It is likely that due to differential settlement, cracking will continue to develop and sections of the concrete curb will require repair on an approximately 8 year cycle. We have allocated funds to repair roughly 5% of the total amount of concrete curbing every 8 years, beginning in 2023.

Flatwork in the community consists of concrete sidewalks along the roadways as well as the rear patios. The concrete flatwork generally appears to be in good condition. Over time, water will infiltrate below the flatwork and soften the subgrade leading to upheaval or settlement. We have allocated funds for periodic replacement of concrete surfaces as required and have assumed that 5% of the surfaces will require improvement every 8 years beginning in 2023.

Drainage systems in the community consist of standard concrete catch basins and pipe networks in the private roads and from open areas, and HDPE (high density polyethylene) piping networks in the landscaped areas behind units 623-633. Grass swales direct flow into the catch basins which direct the flow downstream. Overall, the systems appear to be functioning as intended, with no evidence of standing water or saturated soil conditions during the time of inspection. However, the small pipes used for landscaped drainage systems have a tendency to clog, and sedimentation can reduce the effectiveness of the grass swales. We expect the swale behind Units 623-633 will require minor re-grading, and the downspouts behind Units 600-608 will likely require piping to below the retaining wall. We have allocated funds to repair/improve the drainage systems on a 5 year cycle beginning in 2017. Repairs will likely include retrenching of swales to improve flow, extending gutter downspouts to underground systems, installation and repair of rip rap pads, installing french drains or other types of subsurface drainage systems. While the pipe networks in the private streets have a useful life far exceeding the term of this study, we have included funds to inspect and maintain these systems to ensure a long useful life. Maintenance should include a camera inspection of a section of piping and pressure-jet any accumulated silts or debris.

Private utilities in the right of way have a useful life that extends beyond the term of this study. Any repairs are not easily predicted, and should be funded out of a general operating budget.

Limited sections of segmental block retaining walls were observed in the community. The walls appear to be in good condition with no leaning noted, and if properly constructed, should last beyond the term of this study. However, it is likely that over time, landscape maintenance equipment could damage portions of the wall or the cap units could become dislodged. We have included funds for contingency purposes every 20 years beginning in 2034.

There are two exterior mail kiosks in centralized locations. Because the units are exposed to the elements, the kiosks the expected useful life is approximately 30 years. We have included funds to the structures beginning in 2043.

The 4-foot aluminum fence in the community has a typical useful life that exceeds the term of this study. However, sections of fencing will be damaged, and the fence will need to be re-painted due to fading and corrosion. We have included funds to paint the fence every 15 years beginning in 2028 and replace limited sections of damaged fence, as necessary.

The dumpster enclosure at the rear of the site is covered with fiber cement siding on the exterior, with painted plywood panels on the interior. Painting and repair of the siding and plywood should be expected on a 5 year cycle, with funds provided beginning in 2018.

Common Building Exteriors

The Association is responsible for exterior maintenance of the townhome units, including roofing, siding and trim, gutters and downspouts. Window and door replacement are assumed to be the responsibility of the individual homeowner.

The predominant pitched roof surfaces over the buildings are covered in asphaltic fiberglass 3-tab shingles. Roof surfacing is applied over plywood roof sheathing, and appears to be in good condition. Typically, this type of roofing surface will last approximately twenty to twenty-five years. We strongly recommend that any re-roofing project closely follow procedures outlined by the National Roofing Contractors Association's *Roofing and Waterproofing Manual*, Fourth Edition. 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. Re-roofing of the existing buildings is projected to be completed in 2033.

Gutters and downspouts are in generally good condition and should not require replacement until the time of roof replacement, as this component typically provides twenty years of relatively trouble free service.

It is likely that minor roofing repairs will be required in the interim. Repairs would likely include replacing exhaust vent boots and flashing repairs. We have assumed that these minor repairs would be funded from a general operating budget.

The buildings in the community are of wood framed construction and are primarily clad in stone veneer with sections of fiber cement siding. Limited sections of wood and aluminum trim are also present. Though full re-pointing of the stone veneer is not anticipated during the term, limited stone repairs and painting of the siding and trim is expected on a 7-year cycle beginning in 2020.

We noted 5 units (600-608) which are provided with rear wooden decks. The expected useful life of a wooden deck without periodic staining is approximately 20 years. We have included funds to replace the 5 decks in 2033.

6.0 RESERVE FUND ANALYSIS

Using software developed by Criterium Engineers and KPMG Peat Marwick, we have analyzed capital reserves draw-down for the projected capital expenditures to determine the amount needed. The following is a projected reserve fund analysis for non-annual items as discussed in the report. This projection takes into consideration a reasonable return on invested moneys and inflation. Please review this thoroughly and let us know of any changes that may be desired.

The intent of this reserve fund projection is to help the Association develop a reserve fund to provide for anticipated repair or replacements of various system components during the next twenty years.

The capital items listed are those that are typically the responsibility of the Association and are derived from a list provided the Association with

several items added as a result of the inspection. However, association by-laws vary, and therefore, which components are the responsibilities of the owner and which are the responsibilities of the Association can vary. The Association should confirm that the items listed should be financed by the reserve fund.

This projection provides the following:

- An input sheet that defines all the criteria used for the financial alternatives, including the assumed inflation rate of 3% annually and rate of return on deposited reserve funds of 1.0% annually.
- A table that lists anticipated replacement and/or repair items complete with estimated remaining life expectancies, projected costs of replacement and/or repair, a frequency in years of when these items require replacement and/or repair, and a projection based on this frequency.
- A table and graph that represent end of year balances versus capital expenditures based on your current funding program and reserve balances, and alternatives to your current program. The provided graphs illustrate what effects the funding methods will have over the presented twenty-year period versus the anticipated capital expenditures.
- Note that based on our developed list of capital items and taking inflation into account, the current funding level is not adequate.
- The Association should bear in mind that unanticipated expenditures can always arise and maintenance of a significant reserve fund balance can be viewed as a way to avoid special assessments.
- A projected reserve balance that includes assumes any proposed contributions to reserves will be transferred prior to the end of the fiscal year, and no expenditures other than outlined above will occur.

We have included alternatives to your current reserve funding program and recommend that the board adopt an alternative that best reflects the objectives of the community. In summary they are as follows:

Current Reserve Funding Rate: \$0

Current Reserve Balance: \$10,000 (per discussion with Board member)

- **Alternative 1:** In 2015, begin annual contributions to capital reserves at \$6,960 (\$20.00/unit/month). Then, increase the annual contribution as a step function every other year for the next 12 years. The amount of the step increase should be \$2,436 (\$7.00/unit/month). This alternative is projected to maintain a positive balance through the term of this study.
- **Alternative 2:** In 2015, begin annual contributions to capital reserves at \$8,700 (\$25.00/unit/month). Then, increase the annual contribution by 9.0% every year for the next 10 years. This alternative is projected to maintain a positive balance through the term of this study.
- **Alternative 3:** We have not provided an alternative that includes special assessments as they are not a preferred method for funding reserves. By utilizing one of the above alternatives, the Association

should have adequate funds for to make the repairs as anticipated in the report.

Please note that the reserve fund study does not include typical annual maintenance items. Our assumption is that you already have an annual operating budget that provides for these typical, repetitive items. This includes miscellaneous repairs, lawn and grounds maintenance, routine minor painting, etc. We have focused on those significant, non-annual items where careful financial planning is important.

Finally, please note that the estimates we have developed are based on 2014 dollars for a fiscal year of January 1-December 1, 2014. Our reserve fund study does adjust for an estimated annual inflation and a given return on investment assuming that the indicated fund balances are maintained.

7.0 CONCLUSION

The alternatives provided above will provide sufficient funding to meet estimated capital expenditures during the next twenty years. Further detail of the reserve fund analysis is provided in Appendix A.

8.0 LIMITATIONS

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 Centennial Park Townhome Association, Inc.. Criterium-Giles Engineers Inc. does not intend any other individual or party to rely upon this study without our express written consent. If another individual or party relies on this study, they shall indemnify and hold Criterium-Giles Engineers Inc. harmless for any damages, losses, or expenses they may incur as a result of its use.

This study is limited to the visual observations made during our inspection. We did not remove surface materials, conduct any destructive or invasive testing, move furnishings or equipment, or undertake any digging or excavation. Accordingly, we cannot comment on the condition of systems that we could not see, such as buried structures and utilities, nor are we responsible for conditions that could not be seen or were not within the scope of our services at the time of the investigation. We did not undertake to completely assess the stability of the buildings or the underlying foundation soil since this effort would require excavation and destructive testing. Likewise, this is not a seismic assessment.

We did not investigate the following areas:

- Buried utilities or infrastructure
- Concealed structural members or systems
- Unit interiors

We do not render an opinion on uninvestigated portions of the community.

We did not perform any computations or other engineering analysis as part of this evaluation, nor did we conduct a comprehensive code compliance investigation. 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 Criterium-Giles Engineers team working on this reserve study are not members of, or otherwise associated with the association. Criterium-Giles Engineers has disclosed any other involvement with the association that could result in conflicts of interest.

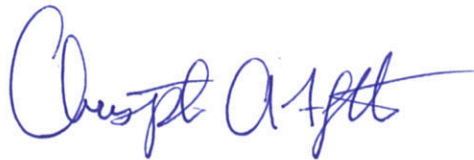
Information provided by the official representative of the association regarding financial, physical, quantity, or historical issues, will be deemed reliable by Criterium-Giles Engineers. The reserve balance presented in the Reserve Study is based upon information provided and was not audited. Information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

In our Reserve Fund Analysis, we have provided estimated costs. These costs are based on our general knowledge of building systems and the contracting and construction industry. When appropriate, we have relied on standard sources, such as Means Building Construction Cost Data, to develop estimates. However, for items that we have developed costs (e.g.: structural repairs), no standard guide for developing such costs exists. Actual costs can vary significantly, based on the availability of qualified contractors to do the work, as well as many other variables. We cannot be responsible for the specific cost estimates provided.

We have performed no design work as part of this study, nor have we obtained competitive quotations or estimates from contractors as this also is beyond the scope of the project. The actual cost to remedy deficiencies and deferred maintenance items that we have identified may vary significantly from estimates and competitive quotations from contractors.

If you have any questions about this study or the reserve fund analysis, please feel free to contact us. Thank-you for the opportunity to be of assistance to you.

Respectfully submitted,



Christopher A. Flythe, PE, RS
Project Engineer
Criterium-Giles Engineers, Inc.

Appendix A: RESERVE FUND PROJECTIONS

Itemized Worksheet

| Capital Item To Be Replaced | Quantity | Unit cost | Reserve Requirement (*) | Beginning Balance | Frequency (yrs**) | Remaining Life (yrs) | Reserve Funding Monthly | Required Annual | Full Funding Balance | Information Source |
|---|----------|-----------|----------------------------|----------------------|----------------------|-------------------------|----------------------------|--------------------|----------------------------|--------------------|
| Site | | | | | | | | | | |
| seal and stripe asphalt paving | 3,000 | SY | \$1.75 | \$5,250.00 | | 7 | \$108.67 | \$1,304.05 | \$3,000.00 | |
| resurface asphalt paving | 3,000 | SY | \$10.75 | \$32,250.00 | | 20 | \$142.65 | \$1,711.77 | \$3,225.00 | |
| replace sections of concrete curb and gutter | 90 | LF | \$40.00 | \$3,600.00 | | 8 | \$37.50 | \$450.00 | \$0.00 | 5% every 8 years |
| concrete flatwork repairs | 95 | SY | \$20.00 | \$1,900.00 | | 8 | \$19.79 | \$237.50 | \$0.00 | 5% every 8 years |
| drainage system repairs/improvements | 1 | LS | \$4,000.00 | \$4,000.00 | | 5 | \$122.07 | \$1,464.86 | \$2,400.00 | |
| retaining wall repairs | 1 | contin | \$3,500.00 | \$3,500.00 | | 20 | \$15.01 | \$180.10 | \$175.00 | |
| replace mailbox kiosks | 2 | EA | \$1,600.00 | \$3,200.00 | | 30 | \$9.24 | \$110.89 | \$213.33 | |
| paint and repair aluminum fencing | 100 | LF | \$9.00 | \$900.00 | | 15 | \$5.43 | \$65.11 | \$120.00 | |
| opaint and repair dumpster enclosure | 1 | LS | \$700.00 | \$700.00 | | 5 | \$15.98 | \$191.71 | \$280.00 | |
| Building Exterior | | | | | | | | | | |
| replace building roofs and gutters | 250 | SQ | \$255.00 | \$63,750.00 | | 20 | \$281.98 | \$3,383.73 | \$6,375.00 | |
| paint and repair siding, trim, and stone veneer | 29 | unit | \$650.00 | \$18,850.00 | | 7 | \$274.14 | \$3,289.65 | \$5,385.71 | |
| replace rear wood decks | 5 | unit | \$2,500.00 | \$12,500.00 | | 20 | \$55.29 | \$663.48 | \$1,250.00 | |
| Building Interior | | | | | | | | | | |
| Mechanical | | | | | | | | | | |
| Amenities | | | | | | | | | | |
| Other | | | | | | | | | | |
| | | | Totals | \$150,400.00 | \$10,000.00 | | \$1,087.74 | \$13,052.84 | \$22,424.05 | |
| | | | Total Over Term | \$211,800.00 | | | | | | |

* Costs are typically 10%±

** Reserve study is based on a 20 year projection of non-annual maintenance

Reserve Study Worksheet

General Information:

- 1 Organization: **Centennial Park Townhomes**
 2 Address: **Centennial View Lane**
Raleigh, NC

| | | |
|----|--|------------------------|
| 3 | Number of Units | 29 |
| 4 | Age of Building (in years) | 1 |
| 5a | Study Period (in years) | 20 |
| 5b | Normal Fiscal Year starts: | January 1, 2015 |
| 5c | Partial Fiscal Year starts: | January 1, 2015 |
| 5d | Partial Year Length: | 12 months |
| 6 | Site Inspection Date | August 27, 2014 |
| 7 | Reserve Funds at start | \$10,000 |
| 8 | Rate of Return on invested Reserve Funds (%) | 1.0% |
| 9 | Inflation Rate (%) | 3.0% |

10 Current Funding Levels

| Existing Funding Levels | | | | |
|---|--------------------|---------------------|-----------------|---------------|
| | Total/Month | Total Annual | Per Unit/Month | Per Unit/Year |
| Reserve Fund Contribution | \$0 | \$0 | \$0.00 | \$0.00 |
| | Years Out | Total Annual | Per Unit | |
| Planned Special Assessment | 0 | \$0 | \$0 | |
| Balance Computed | (\$326,306) | | | |

11 Alternative Reserve Fund Contribution

| Alternative 1 Level Funding with Steps | | | | |
|---|------------------|-------------------|-----------------|-----------------|
| | Total/Month | Total Annual | Per Unit/Month | Per Unit/Year |
| Monthly Amount, (First Year) | \$580 | \$6,960 | \$20.00 | \$240.00 |
| Monthly Amount, (Last Year) | \$1,798 | \$21,576 | \$62.00 | \$744.00 |
| Balance Required Final Year | \$16,828 | | | |
| Special Assessments: | Years Out | Total/Year | Per Unit | |
| First Assessment | 0 | \$0 | \$0 | |
| Second Assessment | 0 | \$0 | \$0 | |
| Balance Computed | \$19,466 | | | |

| Alternative 2 Escalating Funding at 9% per Year | | | | |
|---|------------------|-------------------|-----------------|-----------------|
| | Total/Month | Total Annual | Per Unit/Month | Per Unit/Year |
| Monthly Amount, (First Year) | \$725 | \$8,700 | \$25.00 | \$300.00 |
| Monthly Amount, (Last Year) | \$1,716 | \$20,596 | \$59.18 | \$710.21 |
| Balance Required Final Year | \$16,828 | | | |
| Base Escalation % | 9.00% | | | |
| Special Assessments: | Years Out | Total/Year | Per Unit | |
| First Assessment | 0 | \$0 | \$0 | |
| Second Assessment | 0 | \$0 | \$0 | |
| Balance Computed | \$30,697 | | | |

| Alternative 3 Not Used | | | | |
|---|--------------------|-------------------|-----------------|---------------|
| | Total/Month | Total Annual | Per Unit/Month | Per Unit/Year |
| Monthly Amount, (First Year) | \$0 | \$0 | \$0.00 | \$0.00 |
| Monthly Amount, (Last Year) | \$0 | \$0 | \$0.00 | \$0.00 |
| Balance Required Final Year | \$16,828 | | | |
| Base Escalation % | 0.00% | | | |
| Special Assessments: | Years Out | Total/Year | Per Unit | |
| First Assessment | 0 | \$0 | \$0 | |
| Second Assessment | 0 | \$0 | \$0 | |
| Balance Computed | (\$326,306) | | | |

Reserve Fund Worksheet

Fiscal Years:

| | | | | | | | | | | | | | | | | |
|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Normal: Jan 2015 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 |
| Partial: Jan 2015 (12 months) | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |

Existing Funding Levels

| | | | | | | | | | | | | | | | | |
|---------------------------------|----------|----------|----------|---------|---------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Beginning Reserve Fund Balance: | \$10,000 | \$10,100 | \$10,201 | \$6,017 | (\$485) | (\$485) | (\$22,337) | (\$22,337) | (\$27,257) | (\$35,111) | (\$35,111) | (\$42,166) | (\$42,166) | (\$74,745) | (\$77,094) | (\$77,094) |
| Revenue: | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Special Assessments: | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Investment Earnings: | \$100 | \$101 | \$60 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Capital Expenditures: | \$0 | \$0 | \$4,244 | \$6,502 | \$0 | \$21,852 | \$0 | \$4,919 | \$7,854 | \$0 | \$7,056 | \$0 | \$32,579 | \$2,350 | \$0 | \$0 |
| Ending Reserve Balance: | \$10,100 | \$10,201 | \$6,017 | (\$485) | (\$485) | (\$22,337) | (\$22,337) | (\$27,257) | (\$35,111) | (\$35,111) | (\$42,166) | (\$42,166) | (\$74,745) | (\$77,094) | (\$77,094) | (\$77,094) |

Alternative 1, Level Funding with Steps

Average Cap. Expenditure \$16,828

| | | | | | | | | | | | | | | | | |
|---------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Beginning Reserve Fund Balance: | \$10,000 | \$17,130 | \$24,330 | \$29,778 | \$32,999 | \$45,279 | \$35,611 | \$50,378 | \$60,324 | \$69,866 | \$87,435 | \$100,515 | \$120,852 | \$110,947 | \$131,475 | \$154,582 |
| Revenue: | \$6,960 | \$6,960 | \$9,396 | \$9,396 | \$11,832 | \$11,832 | \$14,268 | \$14,268 | \$16,704 | \$16,704 | \$19,140 | \$19,140 | \$21,576 | \$21,576 | \$21,576 | \$21,576 |
| Special Assessment #1: | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Special Assessment #2: | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Investment Earnings: | \$170 | \$241 | \$295 | \$327 | \$448 | \$353 | \$499 | \$597 | \$692 | \$866 | \$995 | \$1,197 | \$1,098 | \$1,302 | \$1,531 | \$1,762 |
| Capital Expenditures: | \$0 | \$0 | \$4,244 | \$6,502 | \$0 | \$21,852 | \$0 | \$4,919 | \$7,854 | \$0 | \$7,056 | \$0 | \$32,579 | \$2,350 | \$0 | \$0 |
| Ending Reserve Balance: | \$17,130 | \$24,330 | \$29,778 | \$32,999 | \$45,279 | \$35,611 | \$50,378 | \$60,324 | \$69,866 | \$87,435 | \$100,515 | \$120,852 | \$110,947 | \$131,475 | \$154,582 | \$177,920 |

Alternative 2, Escalating Funding at 9% per Year

| | | | | | | | | | | | | | | | | |
|---------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Beginning Reserve Fund Balance: | \$10,000 | \$18,887 | \$28,654 | \$35,094 | \$40,258 | \$53,064 | \$45,043 | \$60,231 | \$71,927 | \$82,223 | \$102,129 | \$116,826 | \$138,797 | \$128,082 | \$147,792 | \$170,072 |
| Revenue: | \$8,700 | \$9,483 | \$10,336 | \$11,267 | \$12,281 | \$13,386 | \$14,591 | \$15,904 | \$17,335 | \$18,895 | \$20,596 | \$20,596 | \$20,596 | \$20,596 | \$20,596 | \$20,596 |
| Special Assessment #1: | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Special Assessment #2: | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Investment Earnings: | \$187 | \$284 | \$347 | \$399 | \$525 | \$446 | \$596 | \$712 | \$814 | \$1,011 | \$1,157 | \$1,374 | \$1,268 | \$1,463 | \$1,684 | \$1,907 |
| Capital Expenditures: | \$0 | \$0 | \$4,244 | \$6,502 | \$0 | \$21,852 | \$0 | \$4,919 | \$7,854 | \$0 | \$7,056 | \$0 | \$32,579 | \$2,350 | \$0 | \$0 |
| Ending Reserve Balance: | \$18,887 | \$28,654 | \$35,094 | \$40,258 | \$53,064 | \$45,043 | \$60,231 | \$71,927 | \$82,223 | \$102,129 | \$116,826 | \$138,797 | \$128,082 | \$147,792 | \$170,072 | \$192,575 |

Alternative 3, Not Used

| | | | | | | | | | | | | | | | | |
|---------------------------------|----------|----------|----------|---------|---------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Beginning Reserve Fund Balance: | \$10,000 | \$10,100 | \$10,201 | \$6,017 | (\$485) | (\$485) | (\$22,337) | (\$22,337) | (\$27,257) | (\$35,111) | (\$35,111) | (\$42,166) | (\$42,166) | (\$74,745) | (\$77,094) | (\$77,094) |
| Revenue: | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Special Assessment #1: | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Special Assessment #2: | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Investment Earnings: | \$100 | \$101 | \$60 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Capital Expenditures: | \$0 | \$0 | \$4,244 | \$6,502 | \$0 | \$21,852 | \$0 | \$4,919 | \$7,854 | \$0 | \$7,056 | \$0 | \$32,579 | \$2,350 | \$0 | \$0 |
| Ending Reserve Balance: | \$10,100 | \$10,201 | \$6,017 | (\$485) | (\$485) | (\$22,337) | (\$22,337) | (\$27,257) | (\$35,111) | (\$35,111) | (\$42,166) | (\$42,166) | (\$74,745) | (\$77,094) | (\$77,094) | (\$77,094) |

Reserve Fund Worksheet

| | | | | |
|-------------------------------|------|------|------|------|
| Fiscal Years: | | | | |
| Normal: Jan 2015 | 2031 | 2032 | 2033 | 2034 |
| Partial: Jan 2015 (12 months) | 17 | 18 | 19 | 20 |

Existing Funding Levels

| | | | | |
|---------------------------------|------------|-------------|-------------|-------------|
| Beginning Reserve Fund Balance: | (\$77,094) | (\$85,920) | (\$101,209) | (\$287,115) |
| Revenue: | \$0 | \$0 | \$0 | \$0 |
| Special Assessments: | \$0 | \$0 | \$0 | \$0 |
| Investment Earnings: | \$0 | \$0 | \$0 | \$0 |
| Capital Expenditures: | \$8,826 | \$15,289 | \$185,906 | \$39,191 |
| Ending Reserve Balance: | (\$85,920) | (\$101,209) | (\$287,115) | (\$326,306) |

Alternative 1, Level Funding w

| | | | | |
|---------------------------------|-----------|-----------|-----------|----------|
| Beginning Reserve Fund Balance: | \$177,920 | \$192,576 | \$200,852 | \$36,888 |
| Revenue: | \$21,576 | \$21,576 | \$21,576 | \$21,576 |
| Special Assessment #1: | \$0 | \$0 | \$0 | \$0 |
| Special Assessment #2: | \$0 | \$0 | \$0 | \$0 |
| Investment Earnings: | \$1,907 | \$1,989 | \$365 | \$193 |
| Capital Expenditures: | \$8,826 | \$15,289 | \$185,906 | \$39,191 |
| Ending Reserve Balance: | \$192,576 | \$200,852 | \$36,888 | \$19,466 |

Alternative 2, Escalating Fundi

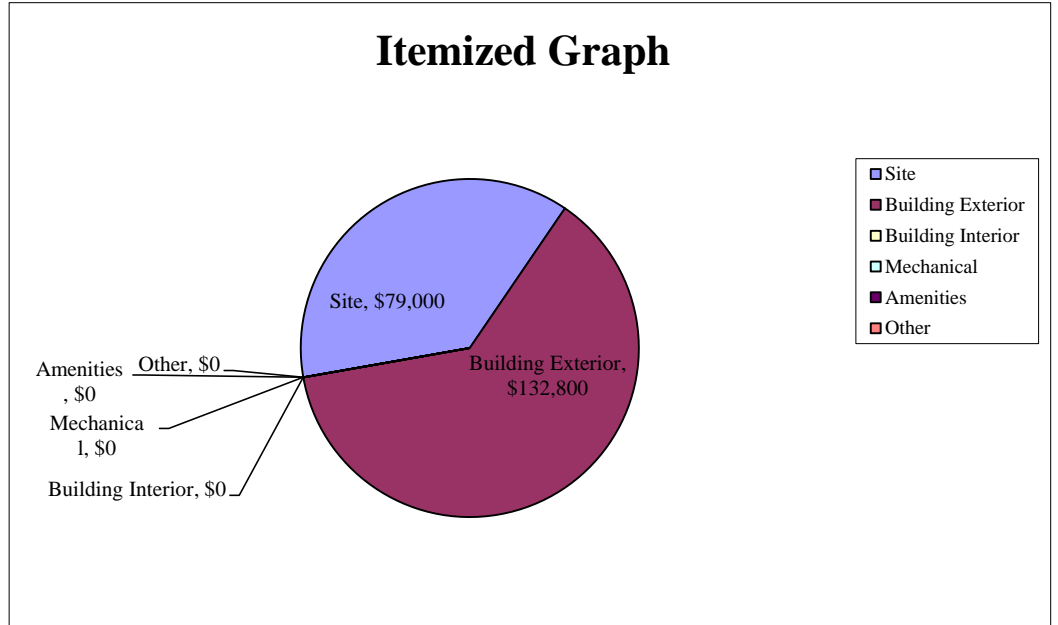
| | | | | |
|---------------------------------|-----------|-----------|-----------|----------|
| Beginning Reserve Fund Balance: | \$192,575 | \$206,388 | \$213,813 | \$48,988 |
| Revenue: | \$20,596 | \$20,596 | \$20,596 | \$20,596 |
| Special Assessment #1: | \$0 | \$0 | \$0 | \$0 |
| Special Assessment #2: | \$0 | \$0 | \$0 | \$0 |
| Investment Earnings: | \$2,043 | \$2,117 | \$485 | \$304 |
| Capital Expenditures: | \$8,826 | \$15,289 | \$185,906 | \$39,191 |
| Ending Reserve Balance: | \$206,388 | \$213,813 | \$48,988 | \$30,697 |

Alternative 3, Not Used

| | | | | |
|---------------------------------|------------|-------------|-------------|-------------|
| Beginning Reserve Fund Balance: | (\$77,094) | (\$85,920) | (\$101,209) | (\$287,115) |
| Revenue: | \$0 | \$0 | \$0 | \$0 |
| Special Assessment #1: | \$0 | \$0 | \$0 | \$0 |
| Special Assessment #2: | \$0 | \$0 | \$0 | \$0 |
| Investment Earnings: | \$0 | \$0 | \$0 | \$0 |
| Capital Expenditures: | \$8,826 | \$15,289 | \$185,906 | \$39,191 |
| Ending Reserve Balance: | (\$85,920) | (\$101,209) | (\$287,115) | (\$326,306) |

Itemized Graph

| Categories | Totals |
|-------------------|------------------|
| Site | \$79,000 |
| Building Exterior | \$132,800 |
| Building Interior | \$0 |
| Mechanical | \$0 |
| Amenities | \$0 |
| Other | \$0 |
| Total | \$211,800 |



Itemized Funding



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| Categories | Reserve Requirement | Beginning Balance | Balance Requiring Funding | Monthly Reserve Funding Required | Annual Reserve Funding Required | Full Funding Balance | Percent Funded |
|-------------------|---------------------|-------------------|---------------------------|----------------------------------|---------------------------------|----------------------|----------------|
| Site | \$79,000 | \$4,198 | \$74,802 | \$476 | \$5,716 | \$9,413 | |
| Building Exterior | \$132,800 | \$5,802 | \$126,998 | \$611 | \$7,337 | \$13,011 | |
| Building Interior | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | |
| Mechanical | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | |
| Amenities | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | |
| Other | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | |
| Totals | \$211,800 | \$10,000 | \$201,800 | \$1,088 | \$13,053 | \$22,424 | 44.6% |

Annual Expense By Year

| | Year: | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 |
|---|--------------|----------|----------|--------------|--------------|----------|---------------|----------|--------------|--------------|----------|--------------|----------|---------------|--------------|----------|----------|
| | Year Number: | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| Site | | | | | | | | | | | | | | | | | |
| seal and stripe asphalt paving | | 0 | 0 | 0 | 5,250 | 0 | 0 | 0 | 0 | 0 | 0 | 5,250 | 0 | 0 | 0 | 0 | 0 |
| resurface asphalt paving | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| replace sections of concrete curb and gutter | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,600 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| concrete flatwork repairs | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,900 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| drainage system repairs/improvements | | 0 | 0 | 4,000 | 0 | 0 | 0 | 0 | 4,000 | 0 | 0 | 0 | 0 | 4,000 | 0 | 0 | 0 |
| retaining wall repairs | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| replace mailbox kiosks | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| paint and repair aluminum fencing | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 900 | 0 | 0 |
| opaint and repair dumpster enclosure | | 0 | 0 | 0 | 700 | 0 | 0 | 0 | 0 | 700 | 0 | 0 | 0 | 0 | 700 | 0 | 0 |
| Building Exterior | | | | | | | | | | | | | | | | | |
| replace building roofs and gutters | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| paint and repair siding, trim, and stone veneer | | 0 | 0 | 0 | 0 | 0 | 18,850 | 0 | 0 | 0 | 0 | 0 | 0 | 18,850 | 0 | 0 | 0 |
| replace rear wood decks | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Building Interior | | | | | | | | | | | | | | | | | |
| Mechanical | | | | | | | | | | | | | | | | | |
| Amenities | | | | | | | | | | | | | | | | | |
| Other | | | | | | | | | | | | | | | | | |
| Total Costs | | 0 | 0 | 4,000 | 5,950 | 0 | 18,850 | 0 | 4,000 | 6,200 | 0 | 5,250 | 0 | 22,850 | 1,600 | 0 | 0 |
| Total Costs Adjusted For 3% Inflation | | 0 | 0 | 4,244 | 6,502 | 0 | 21,852 | 0 | 4,919 | 7,854 | 0 | 7,056 | 0 | 32,579 | 2,350 | 0 | 0 |

Annual Expense By Year

| | Year: | 2031 | 2032 | 2033 | 2034 |
|---|--------------|--------------|---------------|----------------|---------------|
| | Year Number: | 17 | 18 | 19 | 20 |
| Site | | | | | |
| seal and stripe asphalt paving | | 0 | 5,250 | 0 | 0 |
| resurface asphalt paving | | 0 | 0 | 32,250 | 0 |
| replace sections of concrete curb and gutter | | 3,600 | 0 | 0 | 0 |
| concrete flatwork repairs | | 1,900 | 0 | 0 | 0 |
| drainage system repairs/improvements | | 0 | 4,000 | 0 | 0 |
| retaining wall repairs | | 0 | 0 | 0 | 3,500 |
| replace mailbox kiosks | | 0 | 0 | 0 | 0 |
| paint and repair aluminum fencing | | 0 | 0 | 0 | 0 |
| opaint and repair dumpster enclosure | | 0 | 0 | 700 | 0 |
| Building Exterior | | | | | |
| replace building roofs and gutters | | 0 | 0 | 63,750 | 0 |
| paint and repair siding, trim, and stone veneer | | 0 | 0 | 0 | 18,850 |
| replace rear wood decks | | 0 | 0 | 12,500 | 0 |
| Building Interior | | | | | |
| Mechanical | | | | | |
| Amenities | | | | | |
| Other | | | | | |
| Total Costs | | 5,500 | 9,250 | 109,200 | 22,350 |
| Total Costs Adjusted For 3% Inflation | | 8,826 | 15,289 | 185,906 | 39,191 |

Existing Funding Levels

| Year | Year Number | Beginning Reserve Fund Balance | Fee Revenue | Special Assessments | Investment Earnings | Capital Expenditures | Ending Balance |
|------|-------------|--------------------------------|-------------|---------------------|---------------------|----------------------|----------------|
| 2015 | 1 | \$10,000 | \$0 | \$0 | \$100 | \$0 | \$10,100 |
| 2016 | 2 | \$10,100 | \$0 | \$0 | \$101 | \$0 | \$10,201 |
| 2017 | 3 | \$10,201 | \$0 | \$0 | \$60 | \$4,244 | \$6,017 |
| 2018 | 4 | \$6,017 | \$0 | \$0 | \$0 | \$6,502 | (\$485) |
| 2019 | 5 | (\$485) | \$0 | \$0 | \$0 | \$0 | (\$485) |
| 2020 | 6 | (\$485) | \$0 | \$0 | \$0 | \$21,852 | (\$22,337) |
| 2021 | 7 | (\$22,337) | \$0 | \$0 | \$0 | \$0 | (\$22,337) |
| 2022 | 8 | (\$22,337) | \$0 | \$0 | \$0 | \$4,919 | (\$27,257) |
| 2023 | 9 | (\$27,257) | \$0 | \$0 | \$0 | \$7,854 | (\$35,111) |
| 2024 | 10 | (\$35,111) | \$0 | \$0 | \$0 | \$0 | (\$35,111) |
| 2025 | 11 | (\$35,111) | \$0 | \$0 | \$0 | \$7,056 | (\$42,166) |
| 2026 | 12 | (\$42,166) | \$0 | \$0 | \$0 | \$0 | (\$42,166) |
| 2027 | 13 | (\$42,166) | \$0 | \$0 | \$0 | \$32,579 | (\$74,745) |
| 2028 | 14 | (\$74,745) | \$0 | \$0 | \$0 | \$2,350 | (\$77,094) |
| 2029 | 15 | (\$77,094) | \$0 | \$0 | \$0 | \$0 | (\$77,094) |
| 2030 | 16 | (\$77,094) | \$0 | \$0 | \$0 | \$0 | (\$77,094) |
| 2031 | 17 | (\$77,094) | \$0 | \$0 | \$0 | \$8,826 | (\$85,920) |
| 2032 | 18 | (\$85,920) | \$0 | \$0 | \$0 | \$15,289 | (\$101,209) |
| 2033 | 19 | (\$101,209) | \$0 | \$0 | \$0 | \$185,906 | (\$287,115) |
| 2034 | 20 | (\$287,115) | \$0 | \$0 | \$0 | \$39,191 | (\$326,306) |

Existing Funding Levels

Beginning Balance as of start of year beginning Jan 2015: \$10,000

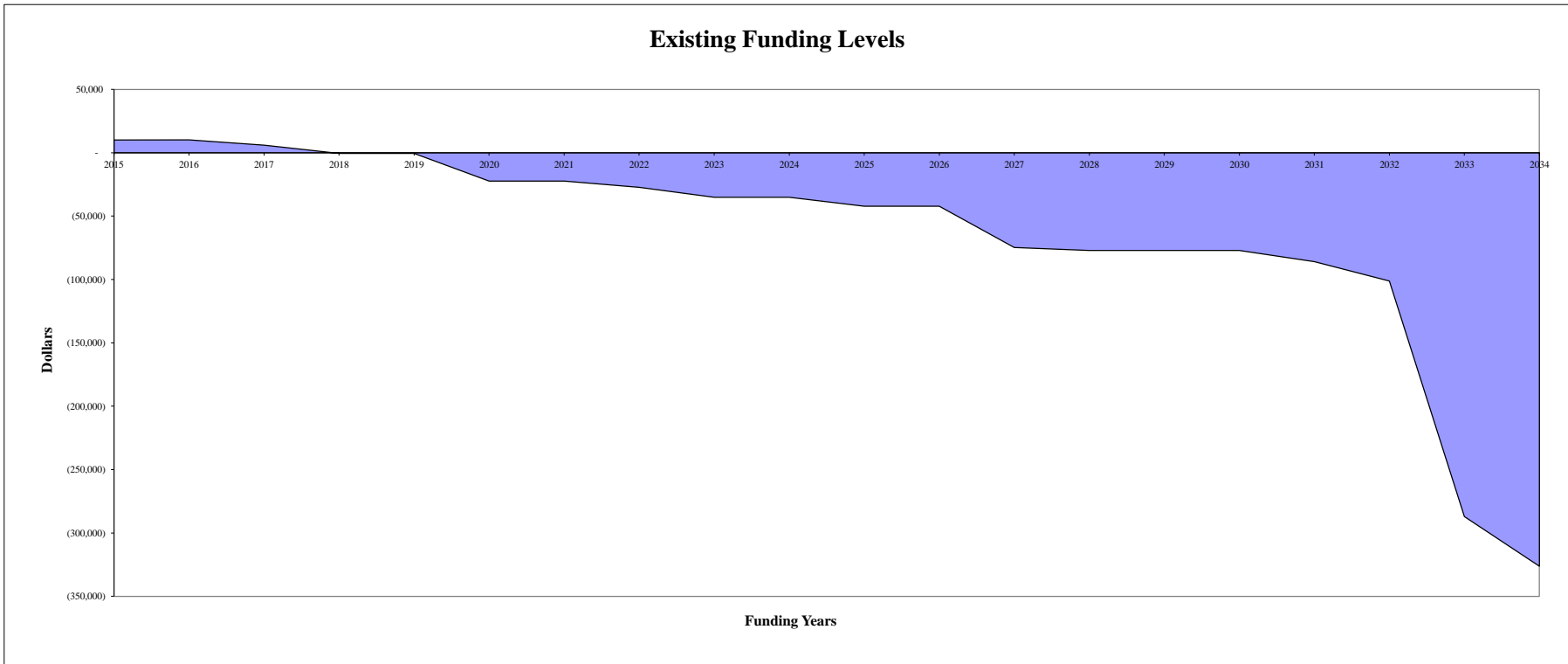
| CONTRIBUTIONS | |
|---------------|--------------------|
| AMOUNT | |
| \$0.00 | per year |
| \$0.00 | per unit per year |
| \$0.00 | per month |
| \$0.00 | per unit per month |

| SPECIAL ASSESSMENTS | | | |
|---------------------|-----|----------|-----|
| Totals | | | |
| Per Year | \$0 | Per Unit | \$0 |
| | | | |

Projected Annual Funding and Expenditures:

| Year: | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 |
|----------------------------------|--------|--------|-------|-------|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Year Number: | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| End of Year Reserve Fund Balance | 10,100 | 10,201 | 6,017 | (485) | (485) | (22,337) | (22,337) | (27,257) | (35,111) | (35,111) | (42,166) | (42,166) | (74,745) | (77,094) | (77,094) |
| Capital Expenditures: | - | - | 4,244 | 6,502 | - | 21,852 | - | 4,919 | 7,854 | - | 7,056 | - | 32,579 | 2,350 | - |
| Total Revenue (all sources) | 100 | 101 | 60 | - | - | - | - | - | - | - | - | - | - | - | - |

| Year: | 2030 | 2031 | 2032 | 2033 | 2034 |
|----------------------------------|----------|----------|-----------|-----------|-----------|
| Year Number: | 16 | 17 | 18 | 19 | 20 |
| End of Year Reserve Fund Balance | (77,094) | (85,920) | (101,209) | (287,115) | (326,306) |
| Capital Expenditures: | - | 8,826 | 15,289 | 185,906 | 39,191 |
| Total Revenue (all sources) | - | - | - | - | - |



Alternative 1: Level Funding with Steps



| Year | Year Number | Beginning Reserve Fund Balance | Fee Revenue | Special Assessments 1 | Special Assessments 2 | Investment Earnings | Capital Expenditures | Ending Balance |
|-------------|--------------------|---------------------------------------|--------------------|------------------------------|------------------------------|----------------------------|-----------------------------|-----------------------|
| 2015 | 1 | \$10,000 | \$6,960 | \$0 | \$0 | \$170 | \$0 | \$17,130 |
| 2016 | 2 | \$17,130 | \$6,960 | \$0 | \$0 | \$241 | \$0 | \$24,330 |
| 2017 | 3 | \$24,330 | \$9,396 | \$0 | \$0 | \$295 | \$4,244 | \$29,778 |
| 2018 | 4 | \$29,778 | \$9,396 | \$0 | \$0 | \$327 | \$6,502 | \$32,999 |
| 2019 | 5 | \$32,999 | \$11,832 | \$0 | \$0 | \$448 | \$0 | \$45,279 |
| 2020 | 6 | \$45,279 | \$11,832 | \$0 | \$0 | \$353 | \$21,852 | \$35,611 |
| 2021 | 7 | \$35,611 | \$14,268 | \$0 | \$0 | \$499 | \$0 | \$50,378 |
| 2022 | 8 | \$50,378 | \$14,268 | \$0 | \$0 | \$597 | \$4,919 | \$60,324 |
| 2023 | 9 | \$60,324 | \$16,704 | \$0 | \$0 | \$692 | \$7,854 | \$69,866 |
| 2024 | 10 | \$69,866 | \$16,704 | \$0 | \$0 | \$866 | \$0 | \$87,435 |
| 2025 | 11 | \$87,435 | \$19,140 | \$0 | \$0 | \$995 | \$7,056 | \$100,515 |
| 2026 | 12 | \$100,515 | \$19,140 | \$0 | \$0 | \$1,197 | \$0 | \$120,852 |
| 2027 | 13 | \$120,852 | \$21,576 | \$0 | \$0 | \$1,098 | \$32,579 | \$110,947 |
| 2028 | 14 | \$110,947 | \$21,576 | \$0 | \$0 | \$1,302 | \$2,350 | \$131,475 |
| 2029 | 15 | \$131,475 | \$21,576 | \$0 | \$0 | \$1,531 | \$0 | \$154,582 |
| 2030 | 16 | \$154,582 | \$21,576 | \$0 | \$0 | \$1,762 | \$0 | \$177,920 |
| 2031 | 17 | \$177,920 | \$21,576 | \$0 | \$0 | \$1,907 | \$8,826 | \$192,576 |
| 2032 | 18 | \$192,576 | \$21,576 | \$0 | \$0 | \$1,989 | \$15,289 | \$200,852 |
| 2033 | 19 | \$200,852 | \$21,576 | \$0 | \$0 | \$365 | \$185,906 | \$36,888 |
| 2034 | 20 | \$36,888 | \$21,576 | \$0 | \$0 | \$193 | \$39,191 | \$19,466 |

Alternative 1: Level Funding with Steps

Beginning Balance as of start of year beginning Jan 2015: \$10,000

| CONTRIBUTIONS | |
|---------------|-------------|
| FIRST YR | LAST YR |
| \$6,960.00 | \$21,576.00 |
| \$240.00 | \$744.00 |
| \$580.00 | \$1,798.00 |
| \$20.00 | \$62.00 |

per year
per unit per year
per month
per unit per month

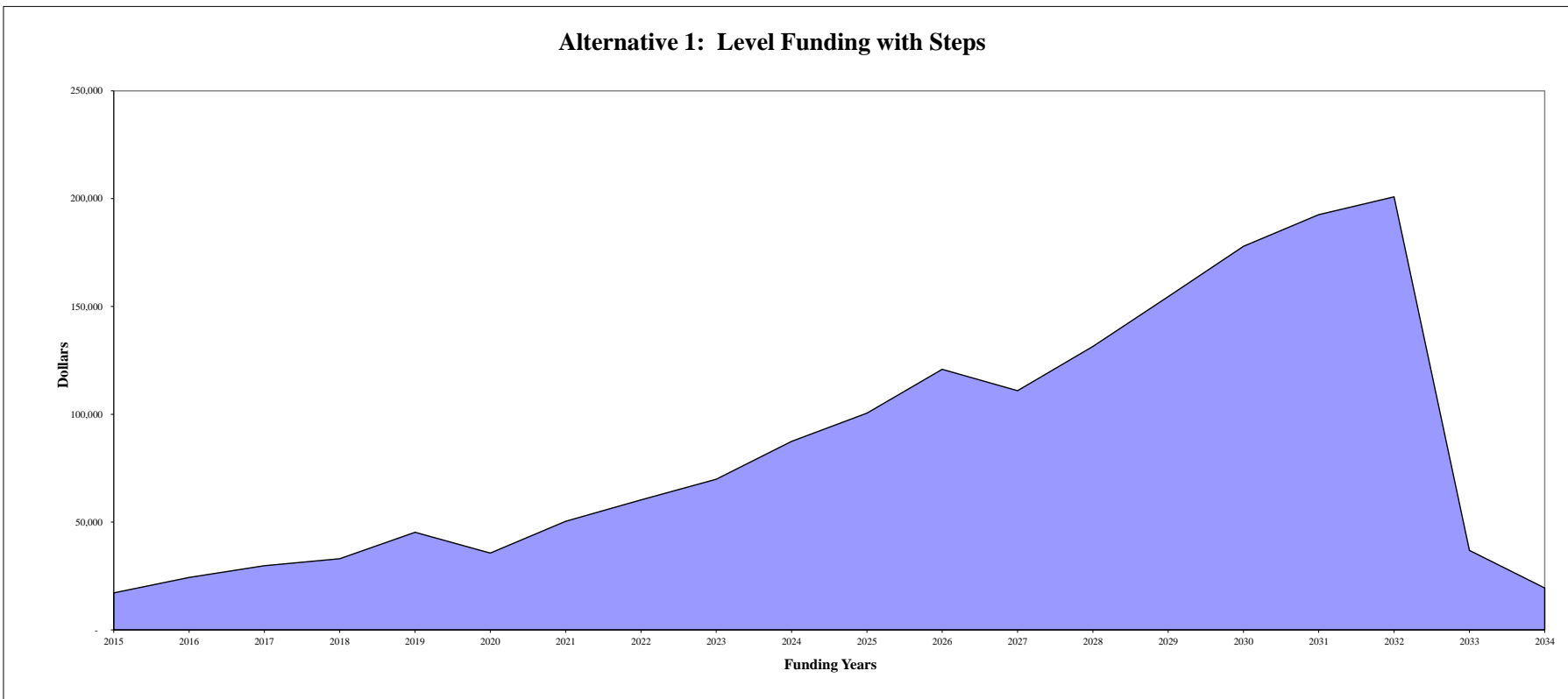
| SPECIAL ASSESSMENTS | | | |
|---------------------|----------------------|------------|----------------------|
| First Second | Per Year Per Year | Totals | |
| | | \$0 \$0 | Per Unit Per Unit |
| | | \$0 | \$0 |
| | | \$0 | \$0 |

| SETTINGS (analyzed by year) | | | |
|-----------------------------|-----|------|--|
| Starting amount (\$): | 580 | | |
| Increment by (\$): | 203 | | |
| Every | 2 | year | |
| Frequency: | 6 | time | |

Projected Annual Funding and Expenditures:

| Year: | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 |
|----------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|
| Year Number: | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| End of Year Reserve Fund Balance | 17,130 | 24,330 | 29,778 | 32,999 | 45,279 | 35,611 | 50,378 | 60,324 | 69,866 | 87,435 | 100,515 | 120,852 | 110,947 | 131,475 | 154,582 |
| Capital Expenditures: | - | - | 4,244 | 6,502 | - | 21,852 | - | 4,919 | 7,854 | - | 7,056 | - | 32,579 | 2,350 | - |
| Total Revenue (all sources) | 7,130 | 7,201 | 9,691 | 9,723 | 12,280 | 12,185 | 14,767 | 14,865 | 17,396 | 17,570 | 20,135 | 20,337 | 22,674 | 22,878 | 23,107 |

| Year: | 2030 | 2031 | 2032 | 2033 | 2034 |
|----------------------------------|---------|---------|---------|---------|--------|
| Year Number: | 16 | 17 | 18 | 19 | 20 |
| End of Year Reserve Fund Balance | 177,920 | 192,576 | 200,852 | 36,888 | 19,466 |
| Capital Expenditures: | - | 8,826 | 15,289 | 185,906 | 39,191 |
| Total Revenue (all sources) | 23,338 | 23,483 | 23,565 | 21,941 | 21,769 |



Alternative 2: Escalating Funding at 9% per Year

| Year | Year Number | Beginning Reserve Fund Balance | Fee Revenue | Special Assessments 1 | Special Assessments 2 | Investment Earnings | Capital Expenditures | Ending Balance |
|-------------|--------------------|---------------------------------------|--------------------|------------------------------|------------------------------|----------------------------|-----------------------------|-----------------------|
| 2015 | 1 | \$10,000 | \$8,700 | \$0 | \$0 | \$187 | \$0 | \$18,887 |
| 2016 | 2 | \$18,887 | \$9,483 | \$0 | \$0 | \$284 | \$0 | \$28,654 |
| 2017 | 3 | \$28,654 | \$10,336 | \$0 | \$0 | \$347 | \$4,244 | \$35,094 |
| 2018 | 4 | \$35,094 | \$11,267 | \$0 | \$0 | \$399 | \$6,502 | \$40,258 |
| 2019 | 5 | \$40,258 | \$12,281 | \$0 | \$0 | \$525 | \$0 | \$53,064 |
| 2020 | 6 | \$53,064 | \$13,386 | \$0 | \$0 | \$446 | \$21,852 | \$45,043 |
| 2021 | 7 | \$45,043 | \$14,591 | \$0 | \$0 | \$596 | \$0 | \$60,231 |
| 2022 | 8 | \$60,231 | \$15,904 | \$0 | \$0 | \$712 | \$4,919 | \$71,927 |
| 2023 | 9 | \$71,927 | \$17,335 | \$0 | \$0 | \$814 | \$7,854 | \$82,223 |
| 2024 | 10 | \$82,223 | \$18,895 | \$0 | \$0 | \$1,011 | \$0 | \$102,129 |
| 2025 | 11 | \$102,129 | \$20,596 | \$0 | \$0 | \$1,157 | \$7,056 | \$116,826 |
| 2026 | 12 | \$116,826 | \$20,596 | \$0 | \$0 | \$1,374 | \$0 | \$138,797 |
| 2027 | 13 | \$138,797 | \$20,596 | \$0 | \$0 | \$1,268 | \$32,579 | \$128,082 |
| 2028 | 14 | \$128,082 | \$20,596 | \$0 | \$0 | \$1,463 | \$2,350 | \$147,792 |
| 2029 | 15 | \$147,792 | \$20,596 | \$0 | \$0 | \$1,684 | \$0 | \$170,072 |
| 2030 | 16 | \$170,072 | \$20,596 | \$0 | \$0 | \$1,907 | \$0 | \$192,575 |
| 2031 | 17 | \$192,575 | \$20,596 | \$0 | \$0 | \$2,043 | \$8,826 | \$206,388 |
| 2032 | 18 | \$206,388 | \$20,596 | \$0 | \$0 | \$2,117 | \$15,289 | \$213,813 |
| 2033 | 19 | \$213,813 | \$20,596 | \$0 | \$0 | \$485 | \$185,906 | \$48,988 |
| 2034 | 20 | \$48,988 | \$20,596 | \$0 | \$0 | \$304 | \$39,191 | \$30,697 |

Alternative 2: Escalating Funding at 9% per Year

Beginning Balance as of start of year beginning Jan 2015: \$10,000

| CONTRIBUTIONS | |
|---------------|-------------|
| FIRST YR | LAST YR |
| \$8,700.00 | \$20,596.06 |
| \$300.00 | \$710.21 |
| \$725.00 | \$1,716.34 |
| \$25.00 | \$59.18 |

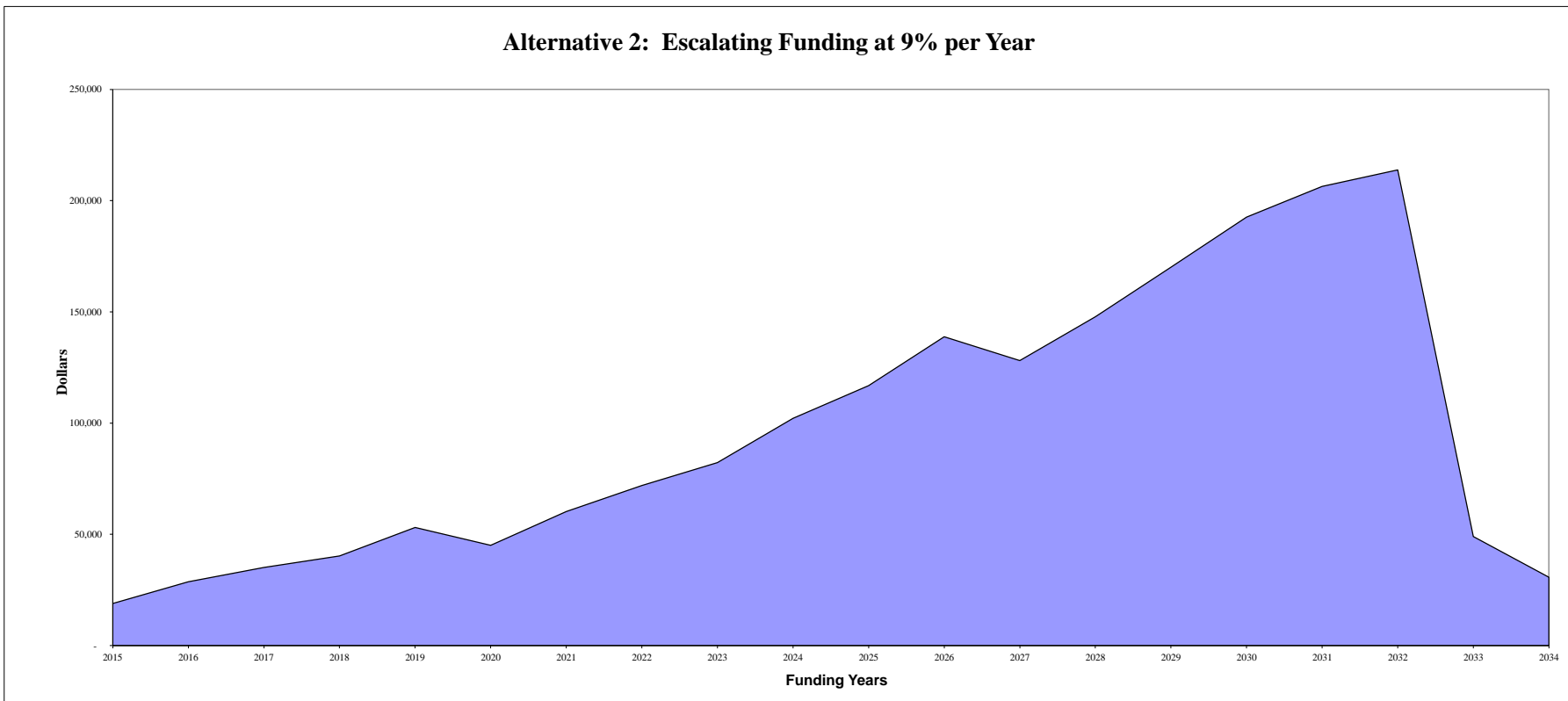
per year
per unit per year
per month
per unit per month

| SPECIAL ASSESSMENTS | | | | |
|---------------------|--------|----------|----------|-----|
| | | Totals | | |
| First | Second | Per Year | Per Unit | \$0 |
| | | \$0 | \$0 | \$0 |

| SETTINGS (analyzed by year) | | | |
|-----------------------------|-----|------|--|
| Starting amount (\$): | 725 | | |
| Increment by (%): | 9 | | |
| Step (%): | | | |
| Every | 1 | year | |
| Frequency: | 10 | time | |

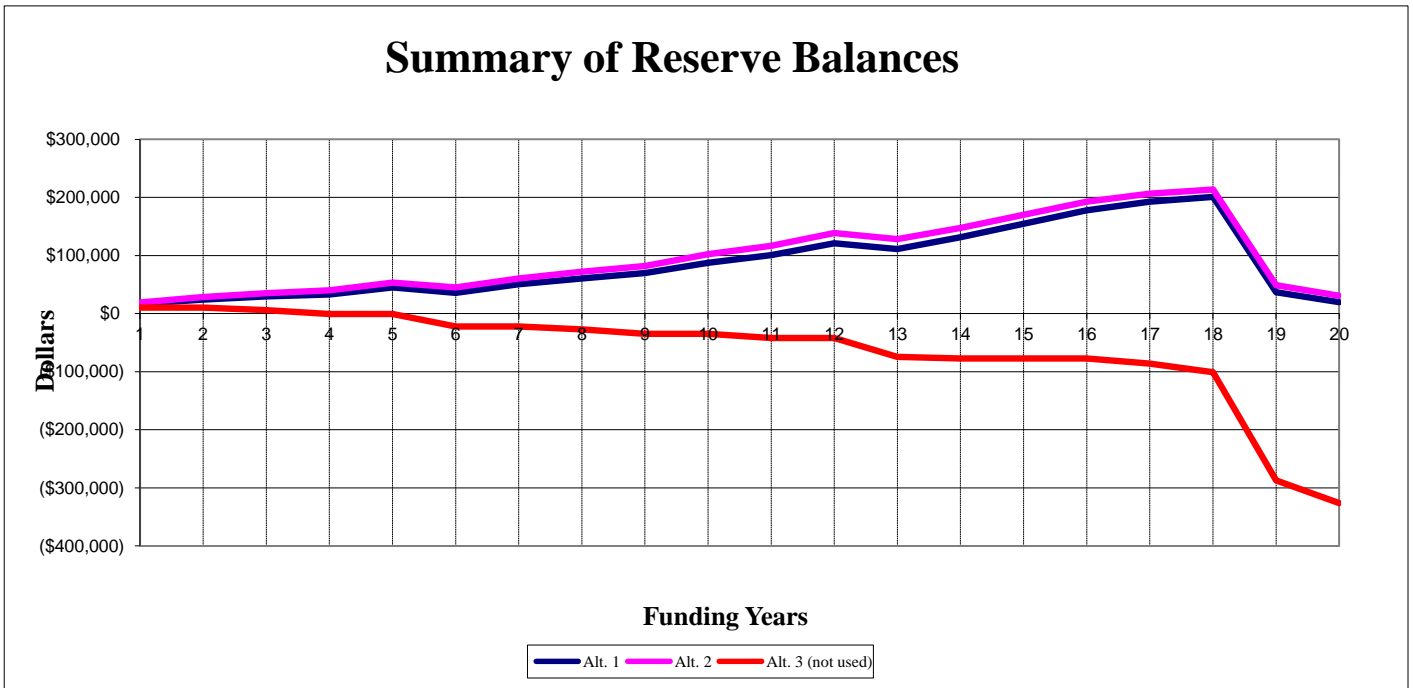
Projected Annual Funding and Expenditures:

| | | | | | | | | | | | | | | | |
|----------------------------------|---------|---------|---------|---------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|
| Year: | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 |
| Year Number: | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| End of Year Reserve Fund Balance | 18,887 | 28,654 | 35,094 | 40,258 | 53,064 | 45,043 | 60,231 | 71,927 | 82,223 | 102,129 | 116,826 | 138,797 | 128,082 | 147,792 | 170,072 |
| Capital Expenditures: | - | - | 4,244 | 6,502 | - | 21,852 | - | 4,919 | 7,854 | - | 7,056 | - | 32,579 | 2,350 | - |
| Total Revenue (all sources) | 8,887 | 9,767 | 10,684 | 11,665 | 12,806 | 13,832 | 15,187 | 16,616 | 18,149 | 19,907 | 21,753 | 21,970 | 21,864 | 22,059 | 22,280 |
| Year: | 2030 | 2031 | 2032 | 2033 | 2034 | | | | | | | | | | |
| Year Number: | 16 | 17 | 18 | 19 | 20 | | | | | | | | | | |
| End of Year Reserve Fund Balance | 192,575 | 206,388 | 213,813 | 48,988 | 30,697 | | | | | | | | | | |
| Capital Expenditures: | - | 8,826 | 15,289 | 185,906 | 39,191 | | | | | | | | | | |
| Total Revenue (all sources) | 22,503 | 22,640 | 22,713 | 21,081 | 20,900 | | | | | | | | | | |



Summary of Reserve Balances

| <u>Year</u> | <u>Year Number</u> | <u>Yearly Expenditures</u> | <u>Alt. 1</u> | <u>Alt. 2</u> | <u>Alt. 3 (not used)</u> |
|-------------|--------------------|----------------------------|---------------|---------------|--------------------------|
| 2015 | 1 | \$0 | \$17,130 | \$18,887 | \$10,100 |
| 2016 | 2 | \$0 | \$24,330 | \$28,654 | \$10,201 |
| 2017 | 3 | \$4,244 | \$29,778 | \$35,094 | \$6,017 |
| 2018 | 4 | \$6,502 | \$32,999 | \$40,258 | (\$485) |
| 2019 | 5 | \$0 | \$45,279 | \$53,064 | (\$485) |
| 2020 | 6 | \$21,852 | \$35,611 | \$45,043 | (\$2,337) |
| 2021 | 7 | \$0 | \$50,378 | \$60,231 | (\$22,337) |
| 2022 | 8 | \$4,919 | \$60,324 | \$71,927 | (\$27,257) |
| 2023 | 9 | \$7,854 | \$69,866 | \$82,223 | (\$35,111) |
| 2024 | 10 | \$0 | \$87,435 | \$102,129 | (\$35,111) |
| 2025 | 11 | \$7,056 | \$100,515 | \$116,826 | (\$42,166) |
| 2026 | 12 | \$0 | \$120,852 | \$138,797 | (\$42,166) |
| 2027 | 13 | \$32,579 | \$110,947 | \$128,082 | (\$74,745) |
| 2028 | 14 | \$2,350 | \$131,475 | \$147,792 | (\$77,094) |
| 2029 | 15 | \$0 | \$154,582 | \$170,072 | (\$77,094) |
| 2030 | 16 | \$0 | \$177,920 | \$192,575 | (\$77,094) |
| 2031 | 17 | \$8,826 | \$192,576 | \$206,388 | (\$85,920) |
| 2032 | 18 | \$15,289 | \$200,852 | \$213,813 | (\$101,209) |
| 2033 | 19 | \$185,906 | \$36,888 | \$48,988 | (\$287,115) |
| 2034 | 20 | \$39,191 | \$19,466 | \$30,697 | (\$326,306) |



Appendix B: PROJECT PHOTOGRAPHS

Location:
Centennail Park Townhomes
Raleigh, NC

Photo Taken by:
Christopher A. Flythe, PE

Date:
August 27, 2014



Description:
General view of
community.

Photo Number
1



Description:

Photo Number
2

Location:
Centennail Park Townhomes
Raleigh, NC

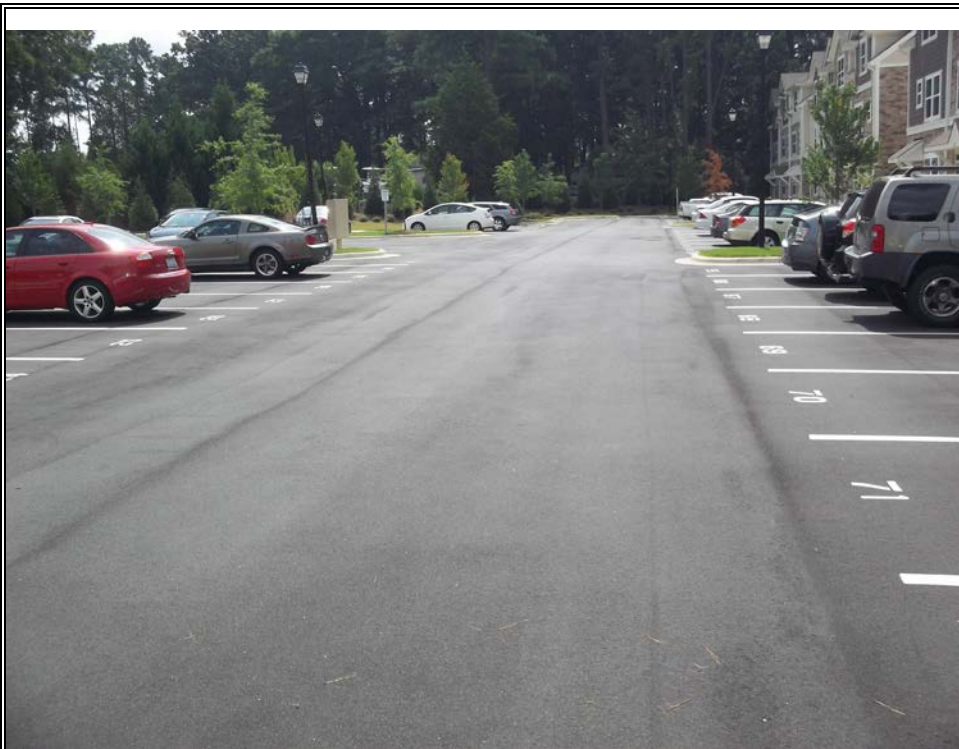
Photo Taken by:
Christopher A. Flythe, PE

Date:
August 27, 2014



Description:

Photo Number
3



Description:
Asphalt paving

Photo Number
4

Location:
Centennail Park Townhomes
Raleigh, NC

Photo Taken by:
Christopher A. Flythe, PE

Date:
August 27, 2014



Description:
Typical mail kiosk

Photo Number
5



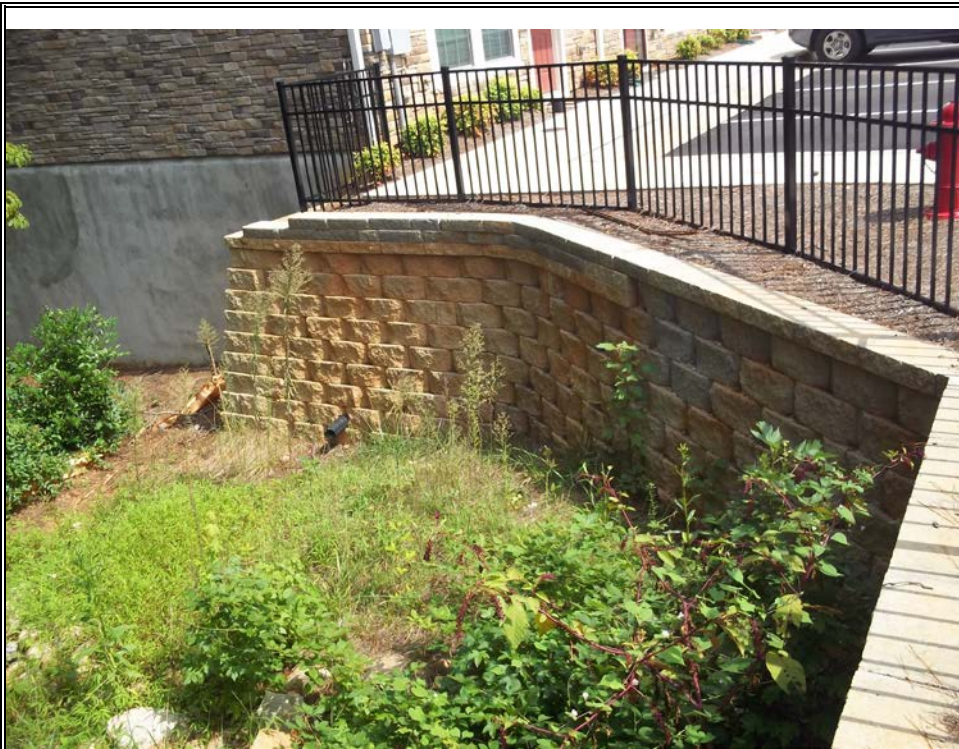
Description:
Catch basin in
landscaped area

Photo Number
6

Location:
Centennail Park Townhomes
Raleigh, NC

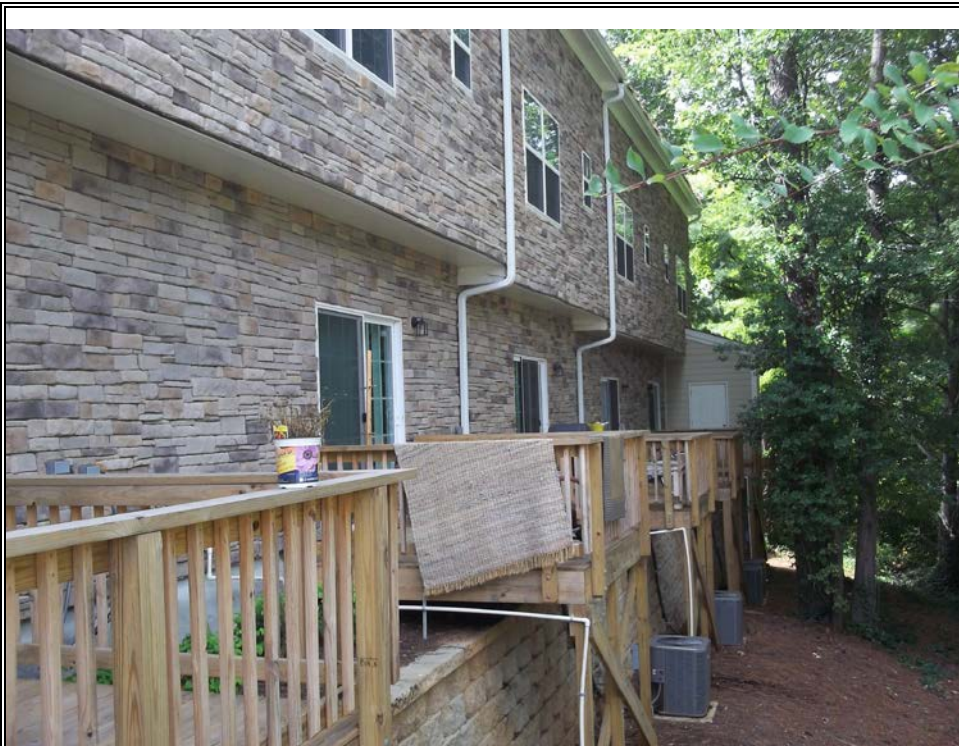
Photo Taken by:
Christopher A. Flythe, PE

Date:
August 27, 2014



Description:
Retaining wall and
aluminum fencing

Photo Number
7



Description:
Units with rear
wooden decks

Photo Number
8

Location:
Centennail Park Townhomes
Raleigh, NC

Photo Taken by:
Christopher A. Flythe, PE

Date:
August 27, 2014



Description:
Rear of units with
concrete patios

Photo Number
9



Description:
Shallow swale
behind units 623-
633

Photo Number
10

Location:
Centennail Park Townhomes
Raleigh, NC

Photo Taken by:
Christopher A. Flythe, PE

Date:
August 27, 2014



Description:
Landscape drain
partially clogged

Photo Number
11



Description:
Dumpster
enclosure

Photo Number
12

Location:
Centennail Park Townhomes
Raleigh, NC

Photo Taken by:
Christopher A. Flythe, PE

Date:
August 27, 2014



Description:
Minor cracking in
concrete curbing

Photo Number
13



Description:
Rear of units

Photo Number
14

Location:
Centennail Park Townhomes
Raleigh, NC

Photo Taken by:
Christopher A. Flythe, PE

Date:
August 27, 2014



Description:
Side elevation

Photo Number
15



Description:
Downspouts
discharging at top
of wall

Photo Number
16