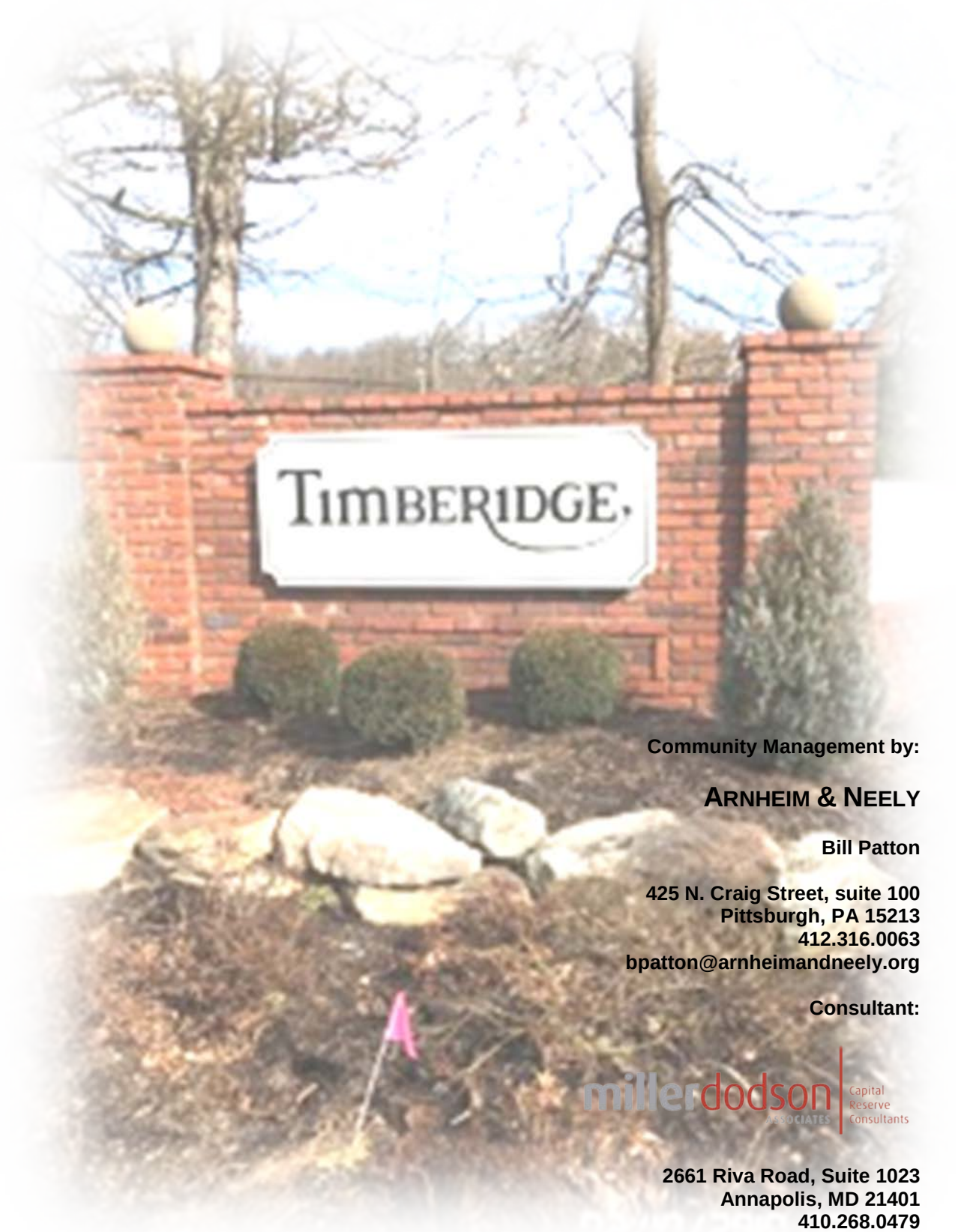
REPLACEMENT RESERVE REPORT FY 2017
TIMBERIDGE



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REPLACEMENT RESERVE REPORT FY 2017
TIMBERIDGE

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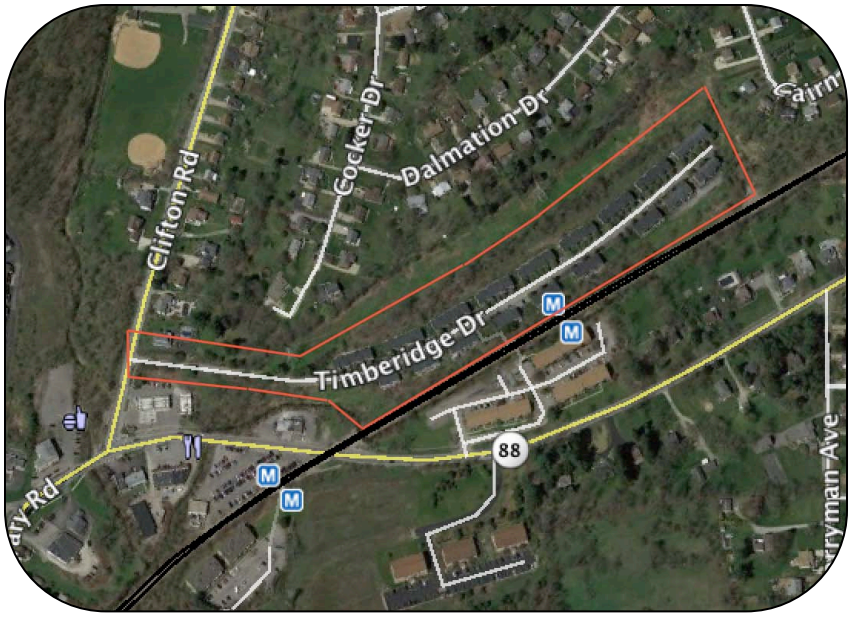
REPLACEMENT RESERVE REPORT

TIMBERIDGE

BETHEL PARK, PENNSYLVANIA



Description. Timberidge is a condominium located in Bethel Park, Pennsylvania. Constructed in 1982, the community consists of 18 townhouse building containing 121 units. The survey examined the common elements of the property, including:

- Asphalt drive and parking.
- Concrete sidewalks, steps, and curb and gutter.
- Retaining walls, fencing, and railings.
- Building exteriors and common interior areas.

Level of Service. This study has been performed as a Level 2 Update with Site Visit/On-Site Review as defined under the National Reserve Study Standards that have been adopted by the Community Associations Institute. As such, the component inventory is based on the study that was performed in 2011 by Miller - Dodson Associates. The inventory was adjusted to reflect changes as provided by the Community Manager or adjustments were made based on the site visit and visual inspection performed by the Analyst. The included fund status and funding plan have been developed from analysis of the adjusted inventory.

To aid in the understanding of this report and its concepts and practices, on our web site, we have developed videos addressing frequently asked topics. In addition, there are posted links covering a variety of subjects under the resources page of our web site at mdareserves.com.

Purpose. The purpose of this Replacement Reserve Study is to provide Timberidge (hereinafter called the Association) with an inventory of the common community facilities and infrastructure components that require periodic replacement. The Study includes a general view of the condition of these items and an effective financial plan to fund projected periodic replacements.

- **Inventory of Items Owned by the Association.** Section B lists the Projected Replacements of the commonly owned items that require periodic replacement using funding from Replacement Reserves. The Replacement Reserve Inventory also provides information about excluded items, which are items whose replacements are not scheduled for funding from Replacement Reserves.

- **Condition of Items Owned by the Association.** Section B includes our estimates of the normal economic life and the remaining economic life for the projected replacements. Section C provides a year-by-year listing of the projected replacements. Section D provides additional detail for items that are unique or deserving of attention because of their condition or the manner in which they have been treated in this study.

- **Financial Plan.** The Association has a fiduciary responsibility to protect the appearance, value, and safety of the property and it is therefore essential the Association have a financial plan that provides funding for the projected replacements. In conformance with American Institute of Certified Public Accountant guidelines, Section A, Replacement Reserve Analysis evaluates the current funding of Replacement Reserves as reported by the Association and recommends annual funding of Replacement Reserves by the Cash Flow Method. Section A, Replacement Reserve Analysis includes graphic and tabular presentations of the Association's current funding and the recommended funding based on the Cash Flow Method. An Executive Summary of these calculations is provided on Page A1. The alternative Component Method of funding is provided in the Appendix.

Basis. The data contained in this Replacement Reserve Study is based upon the following:

- The Request for Proposal submitted and executed by the Association.

- Miller - Dodson performed a visual evaluation on February 17, 2017 to determine a remaining useful life and replacement cost for the commonly owned elements of this facility.

- This study contains additional recommendations to address inflation for the Cash Flow Method only. For this recommendation, Miller - Dodson uses the Producers Price Index (PPI), which gauges inflation in manufacturing and construction. Please see page A5 for further details.

To-Scale Drawings. Site and building plans were used in the development of this study. We recommend the Association assemble and maintain a library of site and building plans of the entire facility. Record drawings should be scanned into an electronic format for safe storage and ease of distribution. Upon request for a nominal fee, Miller - Dodson can provide scanning services.

Current Funding. This reserve study has been prepared for Fiscal Year 2017 covering the period from January 1, 2017 to December 31, 2017. The Replacement Reserves on deposit as of January 1, 2017 are reported to be $90,801. The planned contribution for the fiscal year is $77,716.

The balance and contribution figures have been supplied by the managing agent and confirmation or audit of these figures is beyond the scope of the study. For the purposes of this study, it is assumed that the annual contribution will be deposited at the end of each month.

Acknowledgement. Miller - Dodson Associates would like to acknowledge the assistance and input of the Community Manager, Mr. Bill Patton who provided very helpful insight into the current operations of

the property.

Analyst's Credentials. Mr. Mark Haase has earned the Reserve Specialist designation from Community Associations Institute. Mr. Haase holds a Bachelor's Degree in Economics from the State University of New York at Fredonia and an Associate's degree in Civil Engineering from Northern Virginia Community College. Mr. Haase has experience in all phases of construction project design, initiation, administration, and inspection of facilities. As a project manager, he has managed all phases of commercial construction. He is currently a Reserve Specialist for Miller - Dodson Associates.

Respectfully submitted,

millerdodson ASSOCIATES | Capital Reserve Consultants

Mark Haase
Reserve Specialist

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EXECUTIVE SUMMARY

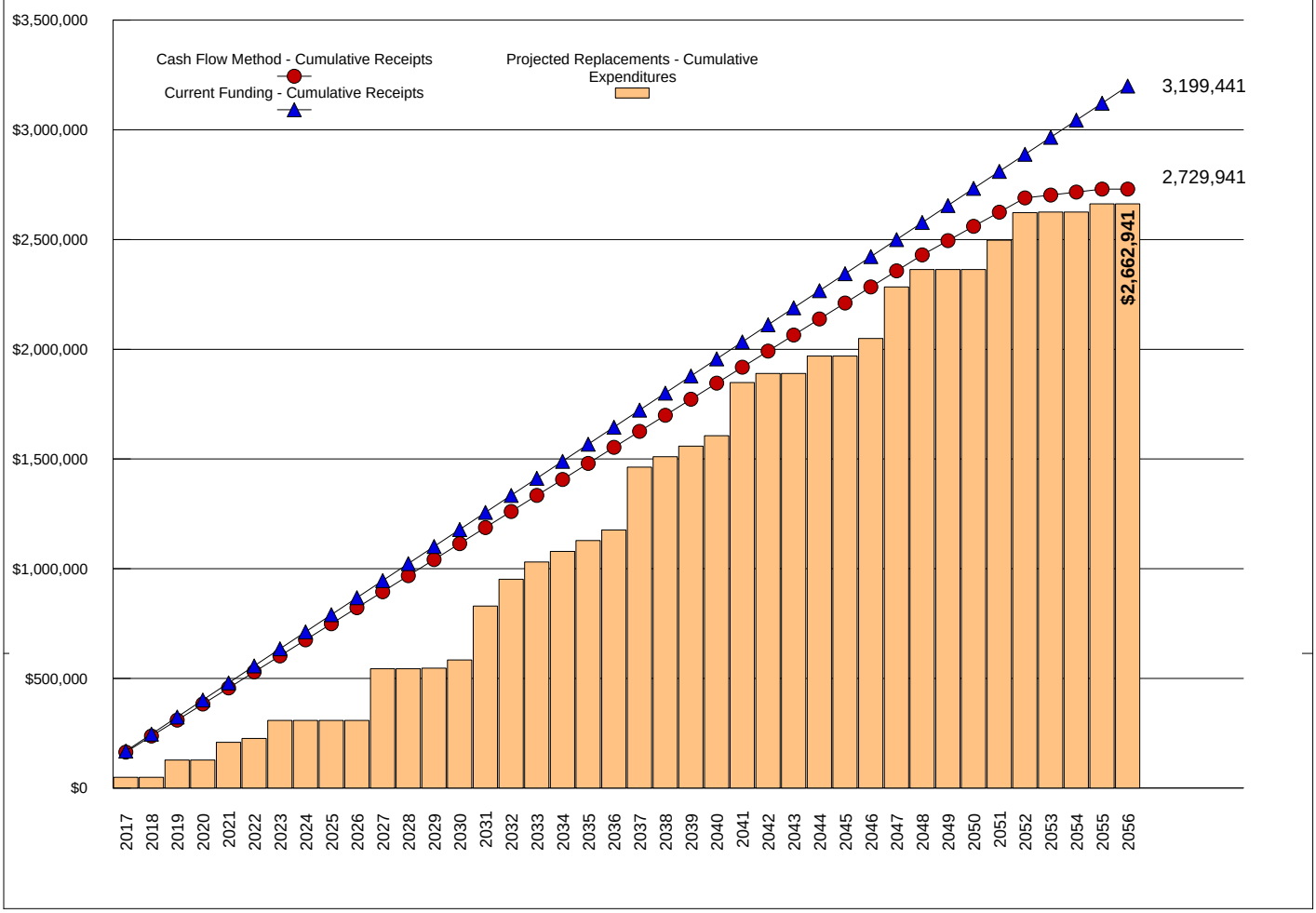
The Timberidge Replacement Reserve Analysis uses the Cash Flow Method (CFM) to calculate Replacement Reserve funding for the periodic replacement of the 67 Projected Replacements identified in the Replacement Reserve Inventory.

$73,111 **RECOMMENDED REPLACEMENT RESERVE FUNDING FOR THE STUDY YEAR, 2017**
$50.35 Per unit (average), minimum monthly funding of Replacement Reserves

We recommend the Association adopt a Replacement Reserve Funding Plan based on the annual funding recommendation above. Inflation adjusted funding for subsequent years is shown on Page A5.

Timberidge reports a Starting Balance of $90,801 and Annual Funding totaling $77,716.
Current funding is adequate to fund the $2,662,941 of Projected Replacements scheduled in the Replacement Reserve Inventory over the 40-year Study Period. See Page A3 for a more detailed evaluation.

#1 - Cumulative Replacement Reserve Funding and Expenditures Graph



The Current Funding Objective as calculated by the Component Method (Fully Funded) is $444,981 making the reserve account 20.4% funded. See the Appendix for more information on this method.

REPLACEMENT RESERVE ANALYSIS - GENERAL INFORMATION

The Timberidge Replacement Reserve Analysis calculations of recommended funding of Replacement Reserves by the Cash Flow Method and the evaluation of the Current Funding are based upon the same Study Year, Study Period, Beginning Balance, Replacement Reserve Inventory and Level of Service.

2017 | **STUDY YEAR**

The Association reports that their accounting year begins on January 1, and the Study Year, the first year evaluated by the Replacement Reserve Analysis, begins on January 1, 2017.

40 Years | **STUDY PERIOD**

The Replacement Reserve Analysis evaluates the funding of Replacement Reserves over a 40-year Study Period.

$90,801 | **STARTING BALANCE**

The Association reports Replacement Reserves on Deposit totaling $90,801 at the start of the Study Year.

Level Two | **LEVEL OF SERVICE**

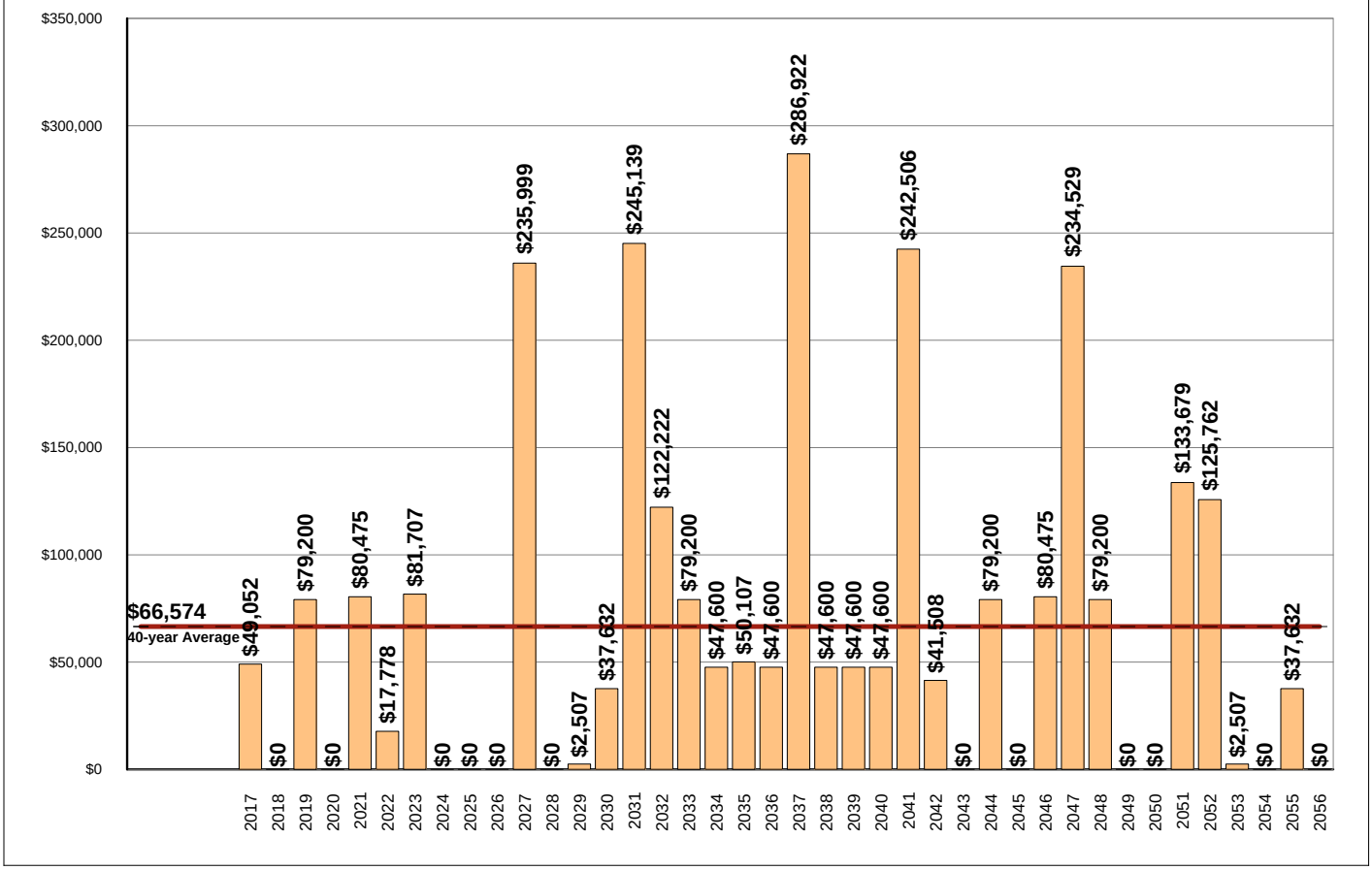
The Replacement Reserve Inventory has been developed in compliance with the National Reserve Study Standards for a Level Two Study, as defined by the Community Associations Institute (CAI).

$2,662,941 | **REPLACEMENT RESERVE INVENTORY - PROJECTED REPLACEMENTS**

The Timberidge Replacement Reserve Inventory identifies 67 items that will require periodic replacement, that are to be funded from Replacement Reserves. We estimate the cost of these replacements will be $2,662,941 over the 40-year Study Period. The Projected Replacements are divided into 12 major categories starting on Page B3. Pages B1-B2 provide detailed information on the Replacement Reserve Inventory.

#2 - Annual Expenditures for Projected Replacements Graph

This graph shows annual expenditures for Projected Replacements over the 40-year Study Period. The red line shows the average annual expenditure of $66,574. Section C provides a year by year Calender of these expenditures.



UPDATING

UPDATING OF THE FUNDING PLAN

The Association has a responsibility to review the Funding Plan annually. The review should include a comparison and evaluation of actual reserve funding with recommended levels shown on Page A4 and A5. The Projected Replacements listed on Page C2 should be compared with any replacements accomplished and funded from Replacement Reserves. Discrepancies should be evaluated and if necessary, the Reserve Study should be updated or a new study commissioned. We recommend annual increases in replacement reserve funding to account for the impact of inflation. Inflation Adjusted Funding is discussed on Page A5.

UPDATING OF THE REPLACEMENT RESERVE STUDY

At a minimum, the Replacement Reserve Study should be professionally updated every three to five years or after completion of a major replacement project. Updating should also be considered if during the annual review of the Funding Plan, discrepancies are noted between projected and actual reserve funding or replacement costs. Updating may also be necessary if there is a meaningful discrepancy between the actual inflation rate and the inflation rate used for the Inflation Adjusted Funding of Replacement Reserves on Page A5.

ANNUAL EXPENDITURES AND CURRENT FUNDING

The annual expenditures that comprise the $2,662,941 of Projected Expenditures over the 40-year Study Period and the impact of the Association continuing to fund Replacement Reserves at the current level are detailed in Table 3.

#3 - Table of Annual Expenditures and Current Funding Data - Years 1 through 40

Year	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Starting Balance	$90,801									
Projected Replacements	($49,052)		($79,200)		($80,475)	($17,778)	($81,707)			
Annual Deposit	$77,716	$77,716	$77,716	$77,716	$77,716	$77,716	$77,716	$77,716	$77,716	$77,716
End of Year Balance	$119,465	$197,181	$195,697	$273,413	$270,654	$330,591	$326,600	$404,316	$482,032	$559,748
Cumulative Expenditures	($49,052)	($49,052)	($128,252)	($128,252)	($208,727)	($226,506)	($308,213)	($308,213)	($308,213)	($308,213)
Cumulative Receipts	$168,517	$246,233	$323,949	$401,665	$479,381	$557,097	$634,813	$712,529	$790,245	$867,961
Year	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**	**2036**
Projected Replacements	($235,999)		($2,507)	($37,632)	($245,139)	($122,222)	($79,200)	($47,600)	($50,107)	($47,600)
Annual Deposit	$77,716	$77,716	$77,716	$77,716	$77,716	$77,716	$77,716	$77,716	$77,716	$77,716
End of Year Balance	$401,465	$479,181	$554,390	$594,474	$427,051	$382,545	$381,061	$411,177	$438,786	$468,902
Cumulative Expenditures	($544,212)	($544,212)	($546,719)	($584,351)	($829,490)	($951,712)	($1,030,912)	($1,078,512)	($1,128,619)	($1,176,219)
Cumulative Receipts	$945,677	$1,023,393	$1,101,109	$1,178,825	$1,256,541	$1,334,257	$1,411,973	$1,489,689	$1,567,405	$1,645,121
Year	**2037**	**2038**	**2039**	**2040**	**2041**	**2042**	**2043**	**2044**	**2045**	**2046**
Projected Replacements	($286,922)	($47,600)	($47,600)	($47,600)	($242,506)	($41,508)		($79,200)		($80,475)
Annual Deposit	$77,716	$77,716	$77,716	$77,716	$77,716	$77,716	$77,716	$77,716	$77,716	$77,716
End of Year Balance	$259,695	$289,811	$319,927	$350,043	$185,253	$221,461	$299,177	$297,693	$375,409	$372,650
Cumulative Expenditures	($1,463,142)	($1,510,742)	($1,558,342)	($1,605,942)	($1,848,448)	($1,889,956)	($1,889,956)	($1,969,156)	($1,969,156)	($2,049,631)
Cumulative Receipts	$1,722,837	$1,800,553	$1,878,269	$1,955,985	$2,033,701	$2,111,417	$2,189,133	$2,266,849	$2,344,565	$2,422,281
Year	**2047**	**2048**	**2049**	**2050**	**2051**	**2052**	**2053**	**2054**	**2055**	**2056**
Projected Replacements	($234,529)	($79,200)			($133,679)	($125,762)	($2,507)		($37,632)	
Annual Deposit	$77,716	$77,716	$77,716	$77,716	$77,716	$77,716	$77,716	$77,716	$77,716	$77,716
End of Year Balance	$215,837	$214,353	$292,069	$369,785	$313,821	$265,775	$340,984	$418,700	$458,784	$536,500
Cumulative Expenditures	($2,284,160)	($2,363,360)	($2,363,360)	($2,363,360)	($2,497,040)	($2,622,802)	($2,625,309)	($2,625,309)	($2,662,941)	($2,662,941)
Cumulative Receipts	$2,499,997	$2,577,713	$2,655,429	$2,733,145	$2,810,861	$2,888,577	$2,966,293	$3,044,009	$3,121,725	$3,199,441

EVALUATION OF CURRENT FUNDING

The evaluation of Current Funding (Starting Balance of $90,801 & annual funding of $77,716), is done in today's dollars with no adjustments for inflation or interest earned on Replacement Reserves. The evaluation assumes Replacement Reserves will only be used for the 67 Projected Replacements identified in the Replacement Reserve Inventory and that the Association will continue Annual Funding of $77,716 throughout the 40-year Study Period.

Annual Funding of $77,716 is approximately 106 percent of the $73,111 recommended Annual Funding calculated by the Cash Flow Method for 2017, the Study Year.
Evaluation of the 67 Projected Replacements calculates an average annual expenditure over the next 40 years of $66,574. Annual funding of $77,716 is 117 percent of the average annual expenditure.

In summary, Current Funding as reported by the Association and outlined above provides timely and adequate funding for the $2,662,941 of Projected Replacements scheduled in the Replacement Reserve Inventory over the 40-year Study Period.

CASH FLOW METHOD FUNDING

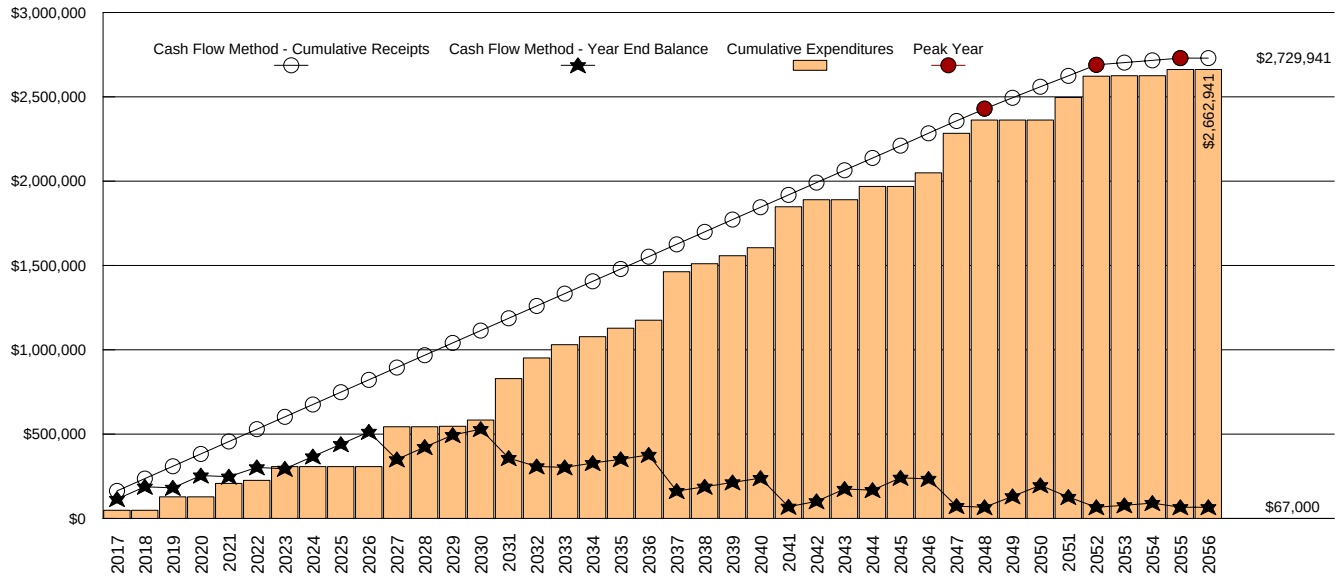
$73,111 **RECOMMENDED REPLACEMENT RESERVE FUNDING FOR 2017**

$50.35 Per unit (average), minimum monthly funding of Replacement Reserves

Recommended Replacement Reserve Funding has been calculated using the Cash Flow Method (also called the Straight Line or Threshold Method). This method calculates a constant annual funding between peaks in cumulative expenditures, while maintaining a Minimum Balance (threshold) in the Peak Years.

- Peak Years. The First Peak Year occurs in 2048 with Replacement Reserves on Deposit dropping to the Minimum Balance after the completion of $2,363,360 of replacements from 2017 to 2048. Recommended funding declines from $73,111 in 2048 to $64,860 in 2049. Peak Years are identified in Chart 4 and Table 5.
- Minimum Balance. The calculations assume a Minimum Balance of $67,000 in Replacement Reserves. This is approx. 12 months of average expenditures based on the $66,574, 40-year average annual expenditure.
- Cash Flow Method Study Period. Cash Flow Method calculates funding for $2,662,941 of expenditures over the 40-year Study Period. It does not include funding for any projects beyond 2056 and in 2056, the end of year balance will always be the Minimum Balance.

#4 - Cash Flow Method - Graph of Cumulative Receipts and Expenditures - Years 1 through 40



#5 - Cash Flow Method - Table of Receipts & Expenditures - Years 1 through 40

Year	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Starting Balance	$90,801									
Projected Replacements	($49,052)		($79,200)		($80,475)	($17,778)	($81,707)			
Annual Deposit	$73,111	$73,111	$73,111	$73,111	$73,111	$73,111	$73,111	$73,111	$73,111	$73,111
End of Year Balance	$114,860	$187,971	$181,882	$254,994	$247,630	$302,963	$294,367	$367,478	$440,589	$513,701
Cumulative Expenditures	$49,052	$49,052	$128,252	$128,252	$208,727	$226,506	$308,213	$308,213	$308,213	$308,213
Cumulative Receipts	$163,912	$237,023	$310,135	$383,246	$456,357	$529,468	$602,580	$675,691	$748,802	$821,913

Year	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Projected Replacements	($235,999)		($2,507)	($37,632)	($245,139)	($122,222)	($79,200)	($47,600)	($50,107)	($47,600)
Annual Deposit	$73,111	$73,111	$73,111	$73,111	$73,111	$73,111	$73,111	$73,111	$73,111	$73,111
End of Year Balance	$350,813	$423,924	$494,528	$530,007	$357,980	$308,868	$302,780	$328,291	$351,295	$376,806
Cumulative Expenditures	($544,212)	($544,212)	($546,719)	($584,351)	($829,490)	($951,712)	($1,030,912)	($1,078,512)	($1,128,619)	($1,176,219)
Cumulative Receipts	$895,025	$968,136	$1,041,247	$1,114,358	$1,187,469	$1,260,581	$1,333,692	$1,406,803	$1,479,914	$1,553,026

Year	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
Projected Replacements	($286,922)	($47,600)	($47,600)	($47,600)	($242,506)	($41,508)		($79,200)		($80,475)
Annual Deposit	$73,111	$73,111	$73,111	$73,111	$73,111	$73,111	$73,111	$73,111	$73,111	$73,111
End of Year Balance	$162,995	$188,506	$214,018	$239,529	$70,134	$101,737	$174,848	$168,759	$241,871	$234,507
Cumulative Expenditures	($1,463,142)	($1,510,742)	($1,558,342)	($1,605,942)	($1,848,448)	($1,889,956)	($1,889,956)	($1,969,156)	($1,969,156)	($2,049,631)
Cumulative Receipts	$1,626,137	$1,699,248	$1,772,359	$1,845,471	$1,918,582	$1,991,693	$2,064,804	$2,137,915	$2,211,027	$2,284,138

Year	2047	1st Peak - 2048	2049	2050	2051	2nd Peak - 2052	2053	2054	3rd Peak - 2055	2056
Projected Replacements	($234,529)	($79,200)			($133,679)	($125,762)	($2,507)		($37,632)	
Annual Deposit	$73,111	$73,111	$64,860	$64,860	$64,860	$64,860	$13,380	$13,380	$13,380	
End of Year Balance	$73,089	$67,000	$131,860	$196,721	$127,902	$67,000	$77,873	$91,252	$67,000	$67,000
Cumulative Expenditures	($2,284,160)	($2,363,360)	($2,363,360)	($2,363,360)	($2,497,040)	($2,622,802)	($2,625,309)	($2,625,309)	($2,662,941)	($2,662,941)
Cumulative Receipts	$2,357,249	$2,430,360	$2,495,221	$2,560,081	$2,624,942	$2,689,802	$2,703,182	$2,716,561	$2,729,941	$2,729,941

INFLATION ADJUSTED FUNDING

The Cash Flow Method calculations on Page A4 have been done in today's dollars with no adjustment for inflation. At Miller + Dodson, we belive that long-term inflation forecasting is effective at demonstrating the power of compounding, not at calculating appropriate funding levels for Replacement Reserves. We have developed this proprietary model to estimate the short-term impact of inflation on Replacement Reserve funding.

$73,111 2017 - CASH FLOW METHOD RECOMMENDED FUNDING

The 2017 Study Year calculations have been made using current replacement costs (see Page B2), modified by the Analyst for any project specific conditions.

$76,567 2018 - INFLATION ADJUSTED FUNDING

A new analysis calculates 2018 funding based on three assumptions;

- Replacement Reserves on Deposit totaling $114,860 on January 1, 2018.
- All 2017 Projected Replacements listed on Page C2 accomplished at a cost to Replacement Reserves less than $49,052.
- Construction Cost Inflation of 4.50 percent in 2017.

The $76,567 inflation adjusted funding in 2018 is a 4.73 percent increase over the non-inflation adjusted 2018 funding of $73,111.

$80,372 2019 - INFLATION ADJUSTED FUNDING

A new analysis calculates 2019 funding based on three assumptions;

- Replacement Reserves on Deposit totaling $191,427 on January 1, 2019.
- No Expenditures from Replacement Reserves in 2018.
- Construction Cost Inflation of 4.50 percent in 2018.

The $80,372 inflation adjusted funding in 2019 is a 9.93 percent increase over the non-inflation adjusted 2019 funding of $73,111.

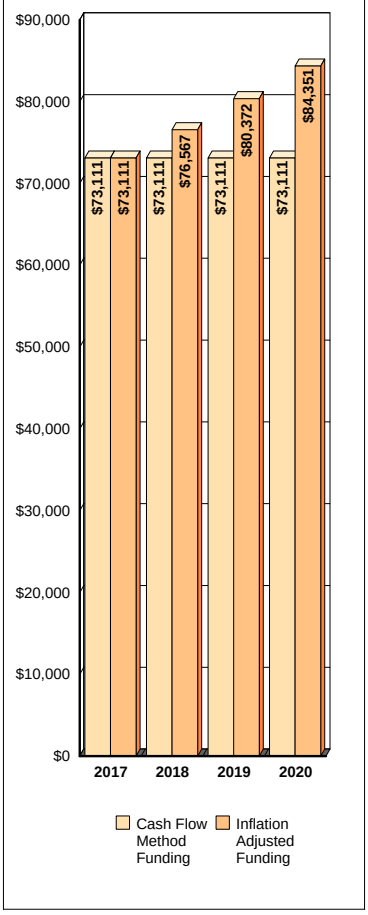
$84,351 2020 - INFLATION ADJUSTED FUNDING

A new analysis calculates 2020 funding based on three assumptions;

- Replacement Reserves on Deposit totaling $185,311 on January 1, 2020.
- All 2019 Projected Replacements listed on Page C2 accomplished at a cost to Replacement Reserves less than $86,488.
- Construction Cost Inflation of 4.50 percent in 2019.

The $84,351 inflation adjusted funding in 2020 is a 15.37 percent increase over the non-inflation adjusted funding of $73,111.

#6 - Inflation Adjusted Funding



YEAR FIVE & BEYOND

The inflation adjusted funding calculations outlined above are not intended to be a substitute for periodic evaluation of common elements by an experienced Reserve Analyst. Industry Standards, lender requirements, and many state and local statutes require a Replacement Reserve Study be professionally updated every 3 to 5 years.

INFLATION ADJUSTMENT

Prior to approving a budget based upon the 2018, 2019 and 2020 inflation adjusted funding calculations above, the 4.50 percent base rate of inflation used in our calculations should be compared to rates published by the Bureau of Labor Statistics. If there is a significant discrepancy (over 1 percent), contact Miller Dodson + Associates prior to using the Inflation Adjusted Funding.

INTEREST ON RESERVES

The recommended funding calculations do not account for interest earned on Replacement Reserves.
In 2017, based on a 1.00 percent interest rate, we estimate the Association may earn $1,028 on an average balance of $102,830, $1,531 on an average balance of $153,144 in 2018, and $1,884 on $188,369 in 2019. The Association may elect to attribute 100 percent of the earned interest to Reserves, resulting in a reduction in the 2017 funding from $73,111 to $72,083 (a 1.41 percent reduction), $76,567 to $75,036 in 2018 (a 2.00 percent reduction), and $80,372 to $78,488 in 2019 (a 2.34 percent reduction).

REPLACEMENT RESERVE STUDY - SUPPLEMENTAL COMMENTS

- Timberidge has 121 units. The type of property is a townhouse condominium association.
- The Cash Flow Method calculates the minimum annual funding necessary to prevent Replacement Reserves from dropping below the Minimum Balance. Failure to fund at least the recommended levels may result in funding not being available for the Projected Replacements listed in the Replacement Reserve Inventory.
- The accuracy of the Replacement Reserve Analysis is dependent upon expenditures from Replacement Reserves being made ONLY for the 67 Projected Replacements specifically listed in the Replacement Reserve Inventory. The inclusion/exclusion of items from the Replacement Reserve Inventory is discussed on Page B1.

REPLACEMENT RESERVE INVENTORY
GENERAL INFORMATION

Timberidge - Replacement Reserve Inventory identifies 101 items. Two types of items are identified, Projected Replacements and Excluded Items:

- PROJECTED REPLACEMENTS. 67 of the items are Projected Replacements and the periodic replacements of these items are scheduled for funding from Replacement Reserves. The Projected Replacements have an estimated one-time replacement cost of $1,480,408. Replacements totaling $2,662,941 are scheduled in the Replacement Reserve Inventory over the 40-year Study Period.

  Projected Replacements are the replacement of commonly-owned physical assets that require periodic replacement and whose replacement is to be funded from Replacement Reserves.

- EXCLUDED ITEMS. 34 of the items are Excluded Items, and expenditures for these items are NOT scheduled for funding from Replacement Reserves. The accuracy of the calculations made in the Replacement Reserve Analysis is dependent on expenditures NOT being made for Excluded Items. The Excluded Items are listed in the Replacement Reserve Inventory to identify specific items and categories of items that are not to be funded from Replacement Reserves. There are multiple categories of items that are typically excluded from funding by Replacement Reserves, including but not limited to:

  Tax Code. The United States Tax Code grants very favorable tax status to Replacement Reserves, conditioned on expenditures being made within certain guidelines. These guidelines typically exclude maintenance activities, minor repairs and capital improvements.

  Value. Items with a replacement cost of less that $1,000 and/or a normal economic life of less than 3 years are typically excluded from funding from Replacement Reserves. This exclusion should reflect Association policy on the administration of Replacement Reserves. If the Association has selected an alternative level, it will be noted in the Replacement Reserve Inventory - General Comments on Page B2.

  Long-lived Items. Items that when properly maintained, can be assumed to have a life equal to the property as a whole, are typically excluded from the Replacement Reserve Inventory.

  Unit improvements. Items owned by a single unit and where the items serve a single unit are generally assumed to be the responsibility of that unit, not the Association.

  Other non-common improvements. Items owned by the local government, public and private utility companies, the United States Postal Service, Master Associations, state and local highway authorities, etc., may be installed on property that is owned by the Association. These types of items are generally not the responsibility of the Association and are excluded from the Replacement Reserve Inventory.

  The rationale for the exclusion of an item from funding by Replacement Reserves is discussed in more detail in the 'Comments' sections of the Section B - Replacement Reserve Inventory.

- CATEGORIES. The 101 items included in the Timberidge Replacement Reserve Inventory are divided into 12 major categories. Each category is printed on a separate page, Pages B3 to B14.

- LEVEL OF SERVICE. This Replacement Reserve Inventory has been developed in compliance with the standards established for a Level Two - Update (with site visit and on-site review), as defined by the National Reserve Study Standards, established in 1998 by Community Associations Institute, which states:

  Level II Studies are based entirely on the component inventory from a prior study. This information is adjusted to reflect changes to the inventory that are provided by the Association, and the quantities are adjusted accordingly from field measurement and/or quantity takeoffs from to-scale drawings that are made available to us. The condition of all components is ascertained from a site visit and the visual inspection of each component by the analyst. The Remaining Economic Life and replacement cost of components are provided based in part on these observations. The fund status and Funding Plan are derived from analysis of this data.

REPLACEMENT RESERVE INVENTORY - GENERAL INFORMATION (cont'd)

- INVENTORY DATA. Each of the 67 Projected Replacements listed in the Replacement Reserve Inventory includes the following data:

  Item Number. The Item Number is assigned sequentially and is intended for identification purposes only.

  Item Description. We have identified each item included in the Inventory. Additional information may be included in the Comments section at the bottom of each page of the Inventory.

  Units. We have used standard abbreviations to identify the number of units including SF-square feet, LF-lineal feet, SY-square yard, LS-lump sum, EA-each, and PR-pair. Non-standard abbreviations are noted in the Comments section at the bottom of the page.

  Number of Units. The methods used to develop the quantities are discussed in "Level of Service" above.

  Unit Replacement Cost. We use four sources to develop the unit cost data shown in the Inventory; actual replacement cost data provided by the client, information provided by local contractors and suppliers, industry standard estimating manuals, and a cost database we have developed based upon our detailed interviews with contractors and service providers who are specialists in their respective lines of work.

  Normal Economic Life (Yrs). The number of years that a new and properly installed item should be expected to remain in service.

  Remaining Economic Life (Yrs). The estimated number of years before an item will need to be replaced. In "normal" conditions, this could be calculated by subtracting the age of the item from the Normal Economic Life of the item, but only rarely do physical assets age "normally". Some items may have longer or shorter lives depending on many factors such as environment, initial quality of the item, maintenance, etc.

  Total Replacement Cost. This is calculated by multiplying the Unit Replacement Cost by the Number of Units.

  Each of the 34 Excluded Items includes the Item Description, Units, and Number of Units. Many of the Excluded Items are listed as a 'Lump Sum' with a quantity of 1. For the Excluded Items, this indicates that all of the items identified by the 'Item Description' are excluded from funding by Replacement Reserves.

- REVIEW OF EXPENDITURES. This Replacement Reserve Study should be reviewed by an accounting professional representing the Association prior to implementation.

- PARTIAL FUNDING. Items may have been included in the Replacement Reserve Inventory at less than 100 percent of their full quantity and/or replacement cost. This is done on items that will never be replaced in their entirety, but which may require periodic replacements over an extended period of time. The assumptions that provide the basis for any partial funding are noted in the Comments section.

- REMAINING ECONOMIC LIFE GREATER THAN 40 YEARS. The calculations do not include funding for initial replacements beyond 40 years. These replacements are included in this Study for tracking and evaluation. They should be included for funding in future Studies, when they enter the 40-year window.

SITE COMPONENT
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST ($)
1	Concrete sidewalk/ lead walk (6%)	sf	111	$9.10	6	6	$1,010
2	Concrete patio & stoop (6%)	sf	48	$9.10	6	6	$437
3	Concrete step (6%)	ft	4	$265.00	6	6	$1,060
4	Asphalt roads-mill & overlay (allowance)	ls	1	$100,000.00	10	10	$100,000
5	Seal asphalt roads	sf	48,637	$0.20	5	none	$9,727
6	Asphalt parking & driveways (allowance)	ls	1	$50,000.00	10	10	$50,000
7	Seal asphalt parking & driveways	sf	37,975	$0.20	5	none	$7,595
8	Asphalt curb and gutter - entrance rd. (allowar	ls	1	$10,000.00	10	10	$10,000
9	Asphalt curb - parking area (allowance)	ls	1	$10,000.00	10	10	$10,000
10	Foundation plantings (allowance)	ls	1	$8,000.00	10	10	$8,000

SITE COMPONENT - Replacement Costs - Subtotal $197,829

SITE COMPONENT
COMMENTS

- 2017 update: Added foundation plantings.

- Milling and overlay of the asphalt is based on an incremental approach that the Association has adopted. It reflects the average expenditure of $15,000/year that the Association has experienced.

SITE COMPONENT (CONT.)
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST ($)
11	Concrete mailbox pads	sf	48	$9.10	30	10	$437
12	Steel guard rails	ft	177	$20.00	25	10	$3,540
13	PTL, wood retaining wall (20%)	sf	105	$34.00	10	14	$3,570
14	Wood boardwalk, bldg 400	sf	450	$60.00	20	15	$27,000
15	PTL retaining wall, bldg 600	sf	190	$37.25	20	15	$7,078
16	PTL retaining wall, bldg 800	sf	210	$37.25	20	15	$7,823
17	Wood & steel retaining wall, bldg 1000	sf	510	$60.00	20	15	$30,600
18	Block retaining wall, bldg 1200 (reset)	sf	360	$45.00	20	15	$16,200
19	Block retaining wall, bldg 1400 (reset)	sf	360	$45.00	20	15	$16,200
20	Wood & steel retaining wall, road	sf	600	$60.00	20	20	$36,000
21	Wood & steel retaining wall, road	sf	600	$60.00	20	10	$36,000
22	Concrete segmental blk. retaining wall	sf	530	$55.00	60	47	$29,150
23	Reset segmental blk. retaining wall	sf	20	$35.00	10	none	$700
24	Reset segmental blk. retaining wall (10%)	sf	51	$35.00	10	14	$1,785
25	Site Lighting	ea	3	$425.00	25	4	$1,275
26	Entrance structure, wood	lf	60	$15.00	30	14	$900
27	Community sign, wood	ea	1	$456.00	20	5	$456
28	Community sign, brick re-point (allowance)	ls	1	$1,000.00	20	none	$1,000
					SITE COMPONENT (CONT.) - Replacement Costs - Subtotal		$219,713

SITE COMPONENT (CONT.)
COMMENTS

- REL for concrete mailbox pads is estimated. The REL has been extended due to the condition.
- REL for steel guard rails is estimated. The REL has been extended due to the condition.
- REL for wood & steel retaining wall has been adjusted to account for recent replacements.
- 2017 update: Added brick re-point.

SITE COMPONENT (CONT.)

PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST ($)
29	Conc. patio pavers sand set	sf	7,600	$13.10	36	14	$99,560
30	Conc. patio pavers, replace (10%)	sf	760	$4.75	10	14	$3,610
31	Rail access walkway, railing (20%)	ft	65	$28.50	10	14	$1,853
32	Rail access walkway, decking (20%)	sf	121	$11.25	10	14	$1,361
33	Rail access walkway, structure (20%)	sf	121	$52.40	10	14	$6,340

SITE COMPONENT (CONT.) - Replacement Costs - Subtotal $112,724

SITE COMPONENT (CONT.)

COMMENTS

SITE UTILITIES
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST ($)
34	Domestic water main (10%)	ls	1	$22,290.00	10	14	$22,290
35	Sanitary main (10%)	ls	1	$19,290.00	10	14	$19,290
36	Storm water piping system (allowance)	ls	1	$11,000.00	30	14	$11,000
37	Domestic water lateral (10%)	ls	1	$21,780.00	10	14	$21,780
38	Sanitary lateral (10%)	ls	1	$26,620.00	10	14	$26,620

SITE UTILITIES - Replacement Costs - Subtotal $100,980

SITE UTILITIES
COMMENTS

- 2017 update: Revised estimates for underground utilities.

BUILDING EXTERIOR
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST ($)
39	Asphalt shingle roof (1 bldg)	sf	4,970	$4.00	25	none	$19,880
40	Asphalt shingle roof (3 bldg)	sf	13,150	$4.00	25	24	$52,600
41	Asphalt shingle roof (2 bldg)	sf	9,975	$4.00	25	23	$39,900
42	Asphalt shingle roof (2 bldg)	sf	9,975	$4.00	25	22	$39,900
43	Asphalt shingle roof (2 bldg)	sf	9,975	$4.00	25	21	$39,900
44	Asphalt shingle roof (2 bldg)	sf	9,975	$4.00	25	20	$39,900
45	Asphalt shingle roof (2 bldg)	sf	9,975	$4.00	25	19	$39,900
46	Asphalt shingle roof (2 bldg)	sf	9,975	$4.00	25	18	$39,900
47	Asphalt shingle roof (2 bldg)	sf	9,975	$4.00	25	17	$39,900
48	Gutter & downspout, 5" alum. (1 bldg)	ft	550	$7.00	25	none	$3,850
49	Gutter & downspout, 5" alum. (3 bldg)	ft	2,000	$7.00	25	24	$14,000
50	Gutter & downspout, 5" alum. (2 bldg)	ft	1,100	$7.00	25	23	$7,700
51	Gutter & downspout, 5" alum. (2 bldg)	ft	1,100	$7.00	25	22	$7,700
52	Gutter & downspout, 5" alum. (2 bldg)	ft	1,100	$7.00	25	21	$7,700
53	Gutter & downspout, 5" alum. (2 bldg)	ft	1,100	$7.00	25	20	$7,700
54	Gutter & downspout, 5" alum. (2 bldg)	ft	1,100	$7.00	25	19	$7,700
55	Gutter & downspout, 5" alum. (2 bldg)	ft	1,100	$7.00	25	18	$7,700
56	Gutter & downspout, 5" alum. (2 bldg)	ft	1,100	$7.00	25	17	$7,700

BUILDING EXTERIOR - Replacement Costs - Subtotal $423,530

BUILDING EXTERIOR
COMMENTS

- Roofing and gutters have been performed in phases from 2009 - 2017. Unit cost for roofing is consistent with the cost per building.

BUILDING EXTERIOR (CONT.)
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST ($)
57	Siding & trim, vinyl, standard (25%)	sf	11,000	$7.20	25	2	$79,200
58	Siding & trim, vinyl, standard (25%)	sf	11,000	$7.20	25	4	$79,200
59	Siding & trim, vinyl, standard (25%)	sf	11,000	$7.20	25	6	$79,200
60	Siding & trim, vinyl, standard (25%)	sf	11,000	$7.20	25	16	$79,200
61	Vinyl shutters	pr	42	$150.00	20	none	$6,300
62	Brick re-pointing (5%)	sf	2,254	$10.00	10	14	$22,540
63	Deck, PTL structure (2nd floor)	sf	300	$52.40	25	24	$15,720
64	Deck, composite decking (2nd floor)	ea	6	$2,000.00	25	24	$12,000
65	Deck, composite railing (2nd floor)	ea	6	$2,000.00	25	24	$12,000
66	Vinyl privacy screen	lf	1,344	$28.00	25	13	$37,632
67	Metal hand railing, bldg.1800 (50%)	ft	66	$40.00	10	14	$2,640

BUILDING EXTERIOR (CONT.) - Replacement Costs - Subtotal $425,632

BUILDING EXTERIOR (CONT.)
COMMENTS

- Decks upgraded to composite material in 2016. NEL and cost have been revised.

VALUATION EXCLUSIONS
EXCLUDED ITEMS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST ($)
	Site lighting fixtures	ls	1				EXCLUDED
	Property identification signage	ls	1				EXCLUDED
	Miscellaneous signage	ls	1				EXCLUDED
	Mailboxes	ls	1				EXCLUDED

VALUATION EXCLUSIONS
COMMENTS

- Valuation Exclusions. For ease of administration of the Replacement Reserves and to reflect accurately how Replacement Reserves are administered, items with a dollar value less than $1,000.00 have not been scheduled for funding from Replacement Reserves. Examples of items excluded from funding by Replacement Reserves by this standard are listed above.

- The list above exemplifies exclusions by the cited standard(s) and is not intended to be comprehensive.

LONG-LIFE EXCLUSIONS
EXCLUDED ITEMS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST ($)
	Masonry features	ls	1				EXCLUDED
	Miscellaneous culverts	ls	1				EXCLUDED
	Exterior brick veneer	ls	1				EXCLUDED
	Building foundation(s)	ls	1				EXCLUDED
	Concrete floor slabs (interior)	ls	1				EXCLUDED
	Wall, floor, & roof structure	ls	1				EXCLUDED
	Common element electrical services	ls	1				EXCLUDED

LONG-LIFE EXCLUSIONS
COMMENTS

- Long Life Exclusions. Components that when properly maintained, can be assumed to have a life equal to the property as a whole, are normally excluded from the Replacement Reserve Inventory. Examples of items excluded from funding by Replacement Reserves by this standard are listed above.
- Exterior masonry is generally assumed to have an unlimited economic life but periodic repointing is required and we have included this for funding in the Replacement Reserve Inventory.
- The list above exemplifies exclusions by the cited standard(s) and is not intended to be comprehensive.

UNIT IMPROVEMENTS EXCLUSIONS

EXCLUDED ITEMS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST ($)
	Cable TV service serving one unit	ls	1				EXCLUDED
	Telephone service serving one unit	ls	1				EXCLUDED
	Gas service serving one unit	ls	1				EXCLUDED
	Unit windows	ls	1				EXCLUDED
	Unit doors	ls	1				EXCLUDED
	Unit skylights	ls	1				EXCLUDED
	Unit mailbox	ls	1				EXCLUDED
	Unit interior	ls	1				EXCLUDED

UNIT IMPROVEMENTS EXCLUSIONS

COMMENTS

- Unit improvement Exclusions. We understand that the elements of the project that relate to a single unit are the responsibility of that unit owner. Examples of items excluded from funding by Replacement Reserves by this standard are listed above.

- The list above exemplifies exclusions by the cited standard(s) and is not intended to be comprehensive.

UTILITY EXCLUSIONS
EXCLUDED ITEMS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST ($)
	Primary electric feeds	ls	1				EXCLUDED
	Electric transformers	ls	1				EXCLUDED
	Cable TV systems and structures	ls	1				EXCLUDED
	Telephone cables and structures	ls	1				EXCLUDED
	Site lighting	ls	1				EXCLUDED
	Gas mains and meters	ls	1				EXCLUDED

UTILITY EXCLUSIONS
COMMENTS

- Utility Exclusions. Many improvements owned by utility companies are on property owned by the Association. We have assumed that repair, maintenance, and replacements of these components will be done at the expense of the appropriate utility company. Examples of items excluded from funding Replacement Reserves by this standard are listed above.

- The list above exemplifies exclusions by the cited standard(s) and is not intended to be comprehensive.

MAINTENANCE AND REPAIR EXCLUSIONS

EXCLUDED ITEMS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST ($)
	Cleaning of asphalt pavement	ls	1				EXCLUDED
	Crack sealing of asphalt pavement	ls	1				EXCLUDED
	Painting of curbs	ls	1				EXCLUDED
	Striping of parking spaces	ls	1				EXCLUDED
	Landscaping and site grading	ls	1				EXCLUDED
	Exterior painting	ls	1				EXCLUDED
	Capital improvements	ls	1				EXCLUDED

MAINTENANCE AND REPAIR EXCLUSIONS

COMMENTS

- Maintenance activities, one-time-only repairs, and capital improvements. These activities are NOT appropriately funded from Replacement Reserves. The inclusion of such component in the Replacement Reserve Inventory could jeopardize the special tax status of ALL Replacement Reserves, exposing the Association to significant tax liabilities. We recommend that the Board of Directors discuss these exclusions and Revenue Ruling 75-370 with a Certified Public Accountant.
- Examples of items excluded from funding by Replacement Reserves by this standard are listed above.
- The list above exemplifies exclusions by the cited standard(s) and is not intended to be comprehensive.

GOVERNMENT EXCLUSIONS
EXCLUDED ITEMS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST ($)
	Government, lighting	ls	1				EXCLUDED
	Government, mailboxes	ls	1				EXCLUDED

GOVERNMENT EXCLUSIONS
COMMENTS

- Government Exclusions. We have assumed that some of the improvements installed on property owned by the Association will be maintained by the state, county, or local government, or other association or other responsible entity. Examples of items excluded from funding by Replacement Reserves by this standard are listed above.

- Excluded right-of-ways, including LIST ROADS, and adjacent properties.

- The list above exemplifies exclusions by the cited standard(s) and is not intended to be comprehensive.

PROJECTED ANNUAL REPLACEMENTS
GENERAL INFORMATION

CALENDAR OF ANNUAL REPLACEMENTS. The 67 Projected Replacements in the Timberidge Replacement Reserve Inventory whose replacement is scheduled to be funded from Replacement Reserves are broken down on a year-by-year basis, beginning on Page C2.

REPLACEMENT RESERVE ANALYSIS AND INVENTORY
POLICIES, PROCEDURES, AND ADMINISTRATION

- REVISIONS. Revisions will be made to the Replacement Reserve Analysis and Replacement Reserve Inventory in accordance with the written instructions of the Board of Directors. No additional charge is incurred for the first revision, if requested in writing within three months of the date of the Replacement Reserve Study. It is our policy to provide revisions in electronic (Adobe PDF) format only.
- TAX CODE. The United States Tax Code grants favorable tax status to a common interest development (CID) meeting certain guidelines for their Replacement Reserve. If a CID files their taxes as a 'Corporation' on Form 1120 (IRC Section 277), these guidelines typically require maintenance activities, partial replacements, minor replacements, capital improvements, and one-time only replacements to be excluded from Reserves. A CID cannot co-mingle planning for maintenance activities with capital replacement activities in the Reserves (Revenue Ruling 75-370). Funds for maintenance activities and capital replacements activities must be held in separate accounts. If a CID files taxes as an "Exempt Homeowners Association" using Form 1120H (IRC Section 528), the CID does not have to segregate these activities. However, because the CID may elect to change their method of filing from year to year within the Study Period, we advise using the more restrictive approach. We further recommend that the CID consult with their Accountant and consider creating separate and independent accounts and reserves for large maintenance items, such as painting.
- CONFLICT OF INTEREST. Neither Miller - Dodson Associates nor the Reserve Analyst has any prior or existing relationship with this Association which would represent a real or perceived conflict of interest.
- RELIANCE ON DATA PROVIDED BY THE CLIENT. Information provided by an official representative of the Association regarding financial, physical conditions, quality, or historical issues is deemed reliable.
- INTENT. This Replacement Reserve Study is a reflection of the information provided by the Association and the visual evaluations of the Analyst. It has been prepared for the sole use of the Association and is not for the purpose of performing an audit, quality/forensic analyses, or background checks of historical records.
- PREVIOUS REPLACEMENTS. Information provided to Miller - Dodson Associates regarding prior replacements is considered to be accurate and reliable. Our visual evaluation is not a project audit or quality inspection.
- EXPERIENCE WITH FUTURE REPLACEMENTS. The Calendar of Annual Projected Replacements, lists replacements we have projected to occur over the next thirty years, begins on Page C2. Actual experience in replacing the items may differ significantly from the cost estimates and time frames shown because of conditions beyond our control. These differences may be caused by maintenance practices, inflation, variations in pricing and market conditions, future technological developments, regulatory actions, acts of God, and luck. Some items may function normally during our visual evaluation and then fail without notice.
- REVIEW OF THE REPLACEMENT RESERVE STUDY. For this study to be effective, it should be reviewed by the Timberidge Board of Directors, those responsible for the management of the items included in the Replacement Reserve Inventory, and the accounting professionals employed by the Association.

PROJECTED REPLACEMENTS - YEARS 1 TO 6

Item	2017 - STUDY YEAR	$
5	Seal asphalt roads	$9,727
7	Seal asphalt parking & drive	$7,595
23	Reset segmental blk. retaini	$700
28	Community sign, brick re-po	$1,000
39	Asphalt shingle roof (1 bldg)	$19,880
48	Gutter & downspout, 5" alum	$3,850
61	Vinyl shutters	$6,300
	Total Scheduled Replacements	$49,052

Item	2018 - YEAR 2	$
	No Scheduled Replacements	

Item	2019 - YEAR 3	$
57	Siding & trim, vinyl, standarc	$79,200
	Total Scheduled Replacements	$79,200

Item	2020 - YEAR 4	$
	No Scheduled Replacements	

Item	2021 - YEAR 5	$
25	Site Lighting	$1,275
58	Siding & trim, vinyl, standarc	$79,200
	Total Scheduled Replacements	$80,475

Item	2022 - YEAR 6	$
5	Seal asphalt roads	$9,727
7	Seal asphalt parking & drive	$7,595
27	Community sign, wood	$456
	Total Scheduled Replacements	$17,778

PROJECTED REPLACEMENTS - YEARS 7 TO 12

Item	2023 - YEAR 7	$
1	Concrete sidewalk/ lead wal	$1,010
2	Concrete patio & stoop (6%)	$437
3	Concrete step (6%)	$1,060
59	Siding & trim, vinyl, standarc	$79,200
	Total Scheduled Replacements	$81,707

Item	2024 - YEAR 8	$
	No Scheduled Replacements	

Item	2025 - YEAR 9	$
	No Scheduled Replacements	

Item	2026 - YEAR 10	$
	No Scheduled Replacements	

Item	2027 - YEAR 11	$
4	Asphalt roads-mill & overlay	$100,000
5	Seal asphalt roads	$9,727
6	Asphalt parking & driveways	$50,000
7	Seal asphalt parking & drive	$7,595
8	Asphalt curb and gutter - ent	$10,000
9	Asphalt curb - parking area (	$10,000
10	Foundation plantings (allowa	$8,000
11	Concrete mailbox pads	$437
12	Steel guard rails	$3,540
21	Wood & steel retaining wall,	$36,000
23	Reset segmental blk. retaini	$700
	Total Scheduled Replacements	$235,999

Item	2028 - YEAR 12	$
	No Scheduled Replacements	

PROJECTED REPLACEMENTS - YEARS 13 TO 18

Item	2029 - YEAR 13	$
1	Concrete sidewalk/ lead wal	$1,010
2	Concrete patio & stoop (6%)	$437
3	Concrete step (6%)	$1,060
	Total Scheduled Replacements	$2,507

Item	2030 - YEAR 14	$
66	Vinyl privacy screen	$37,632
	Total Scheduled Replacements	$37,632

Item	2031 - YEAR 15	$
13	PTL, wood retaining wall (20	$3,570
24	Reset segmental blk. retaini	$1,785
26	Entrance structure, wood	$900
29	Conc. patio pavers sand set	$99,560
30	Conc. patio pavers, replace	$3,610
31	Rail access walkway, railing	$1,853
32	Rail access walkway, deckin	$1,361
33	Rail access walkway, structu	$6,340
34	Domestic water main (10%)	$22,290
35	Sanitary main (10%)	$19,290
36	Storm water piping system (	$11,000
37	Domestic water lateral (10%	$21,780
38	Sanitary lateral (10%)	$26,620
62	Brick re-pointing (5%)	$22,540
67	Metal hand railing, bldg.180	$2,640
	All Replacements not listed	$245,139

Item	2032 - YEAR 16	$
5	Seal asphalt roads	$9,727
7	Seal asphalt parking & drive	$7,595
14	Wood boardwalk, bldg 400	$27,000
15	PTL retaining wall, bldg 600	$7,078
16	PTL retaining wall, bldg 800	$7,823
17	Wood & steel retaining wall,	$30,600
18	Block retaining wall, bldg 12	$16,200
19	Block retaining wall, bldg 14	$16,200
	Total Scheduled Replacements	$122,222

Item	2033 - YEAR 17	$
60	Siding & trim, vinyl, standarc	$79,200
	Total Scheduled Replacements	$79,200

Item	2034 - YEAR 18	$
47	Asphalt shingle roof (2 bldg)	$39,900
56	Gutter & downspout, 5" alum	$7,700
	Total Scheduled Replacements	$47,600

PROJECTED REPLACEMENTS - YEARS 19 TO 24

Item	2035 - YEAR 19	$
1	Concrete sidewalk/ lead wal	$1,010
2	Concrete patio & stoop (6%)	$437
3	Concrete step (6%)	$1,060
46	Asphalt shingle roof (2 bldg)	$39,900
55	Gutter & downspout, 5" alum	$7,700
	Total Scheduled Replacements	$50,107

Item	2036 - YEAR 20	$
45	Asphalt shingle roof (2 bldg)	$39,900
54	Gutter & downspout, 5" alum	$7,700
	Total Scheduled Replacements	$47,600

Item	2037 - YEAR 21	$
4	Asphalt roads-mill & overlay	$100,000
5	Seal asphalt roads	$9,727
6	Asphalt parking & driveways	$50,000
7	Seal asphalt parking & drive	$7,595
8	Asphalt curb and gutter - ent	$10,000
9	Asphalt curb - parking area (	$10,000
10	Foundation plantings (allowa	$8,000
20	Wood & steel retaining wall,	$36,000
23	Reset segmental blk. retaini	$700
28	Community sign, brick re-po	$1,000
44	Asphalt shingle roof (2 bldg)	$39,900
53	Gutter & downspout, 5" alum	$7,700
61	Vinyl shutters	$6,300
	Total Scheduled Replacements	$286,922

Item	2038 - YEAR 22	$
43	Asphalt shingle roof (2 bldg)	$39,900
52	Gutter & downspout, 5" alum	$7,700
	Total Scheduled Replacements	$47,600

Item	2039 - YEAR 23	$
42	Asphalt shingle roof (2 bldg)	$39,900
51	Gutter & downspout, 5" alum	$7,700
	Total Scheduled Replacements	$47,600

Item	2040 - YEAR 24	$
41	Asphalt shingle roof (2 bldg)	$39,900
50	Gutter & downspout, 5" alum	$7,700
	Total Scheduled Replacements	$47,600

PROJECTED REPLACEMENTS - YEARS 25 TO 30

Item	2041 - YEAR 25	$
1	Concrete sidewalk/ lead wal	$1,010
2	Concrete patio & stoop (6%)	$437
3	Concrete step (6%)	$1,060
13	PTL, wood retaining wall (20	$3,570
24	Reset segmental blk. retaini	$1,785
30	Conc. patio pavers, replace	$3,610
31	Rail access walkway, railing	$1,853
32	Rail access walkway, deckin	$1,361
33	Rail access walkway, structu	$6,340
34	Domestic water main (10%)	$22,290
35	Sanitary main (10%)	$19,290
37	Domestic water lateral (10%	$21,780
38	Sanitary lateral (10%)	$26,620
40	Asphalt shingle roof (3 bldg)	$52,600
49	Gutter & downspout, 5" alum	$14,000
62	Brick re-pointing (5%)	$22,540
63	Deck, PTL structure (2nd flo	$15,720
64	Deck, composite decking (2r	$12,000
65	Deck, composite railing (2nc	$12,000
67	Metal hand railing, bldg.180	$2,640
	Total Scheduled Replacements	$242,506

Item	2042 - YEAR 26	$
5	Seal asphalt roads	$9,727
7	Seal asphalt parking & drive	$7,595
27	Community sign, wood	$456
39	Asphalt shingle roof (1 bldg)	$19,880
48	Gutter & downspout, 5" alum	$3,850
	Total Scheduled Replacements	$41,508

Item	2043 - YEAR 27	$
	No Scheduled Replacements	

Item	2044 - YEAR 28	$
57	Siding & trim, vinyl, standarc	$79,200
	Total Scheduled Replacements	$79,200

Item	2045 - YEAR 29	$
	No Scheduled Replacements	

Item	2046 - YEAR 30	$
25	Site Lighting	$1,275
58	Siding & trim, vinyl, standarc	$79,200
	Total Scheduled Replacements	$80,475

PROJECTED REPLACEMENTS - YEARS 31 TO 36

Item	2047 - YEAR 31	$
1	Concrete sidewalk/ lead wal	$1,010
2	Concrete patio & stoop (6%)	$437
3	Concrete step (6%)	$1,060
4	Asphalt roads-mill & overlay	$100,000
5	Seal asphalt roads	$9,727
6	Asphalt parking & driveways	$50,000
7	Seal asphalt parking & drive	$7,595
8	Asphalt curb and gutter - ent	$10,000
9	Asphalt curb - parking area (	$10,000
10	Foundation plantings (allowa	$8,000
21	Wood & steel retaining wall,	$36,000
23	Reset segmental blk. retaini	$700
	Total Scheduled Replacements	$234,529

Item	2048 - YEAR 32	$
59	Siding & trim, vinyl, standarc	$79,200
	Total Scheduled Replacements	$79,200

Item	2049 - YEAR 33	$
	No Scheduled Replacements	

Item	2050 - YEAR 34	$
	No Scheduled Replacements	

Item	2051 - YEAR 35	$
13	PTL, wood retaining wall (2C	$3,570
24	Reset segmental blk. retaini	$1,785
30	Conc. patio pavers, replace	$3,610
31	Rail access walkway, railing	$1,853
32	Rail access walkway, deckin	$1,361
33	Rail access walkway, structu	$6,340
34	Domestic water main (10%)	$22,290
35	Sanitary main (10%)	$19,290
37	Domestic water lateral (10%	$21,780
38	Sanitary lateral (10%)	$26,620
62	Brick re-pointing (5%)	$22,540
67	Metal hand railing, bldg.18C	$2,640
	All Replacements not listed	$133,679

Item	2052 - YEAR 36	$
5	Seal asphalt roads	$9,727
7	Seal asphalt parking & drive	$7,595
12	Steel guard rails	$3,540
14	Wood boardwalk, bldg 400	$27,000
15	PTL retaining wall, bldg 600	$7,078
16	PTL retaining wall, bldg 800	$7,823
17	Wood & steel retaining wall,	$30,600
18	Block retaining wall, bldg 12	$16,200
19	Block retaining wall, bldg 14	$16,200
	Total Scheduled Replacements	$125,762

PROJECTED REPLACEMENTS - YEARS 37 TO 42

Item	2053 - YEAR 37	$
1	Concrete sidewalk/ lead wal	$1,010
2	Concrete patio & stoop (6%)	$437
3	Concrete step (6%)	$1,060
	Total Scheduled Replacements	$2,507

Item	2054 - YEAR 38	$
	No Scheduled Replacements	

Item	2055 - YEAR 39	$
66	Vinyl privacy screen	$37,632
	Total Scheduled Replacements	$37,632

Item	2056 - YEAR 40	$
	No Scheduled Replacements	

Item	2057 (beyond Study Period)	$
4	Asphalt roads-mill & overlay	$100,000
5	Seal asphalt roads	$9,727
6	Asphalt parking & driveways	$50,000
7	Seal asphalt parking & drive	$7,595
8	Asphalt curb and gutter - ent	$10,000
9	Asphalt curb - parking area (	$10,000
10	Foundation plantings (allowa	$8,000
11	Concrete mailbox pads	$437
20	Wood & steel retaining wall,	$36,000
23	Reset segmental blk. retaini	$700
28	Community sign, brick re-po	$1,000
61	Vinyl shutters	$6,300
	Total Scheduled Replacements	$239,759

Item	2058 (beyond Study Period)	$
60	Siding & trim, vinyl, standarc	$79,200
	Total Scheduled Replacements	$79,200

CONDITION ASSESSMENT

General Comments. Miller - Dodson Associates conducted a Reserve Study at Timberidge in February 2017. Timberidge is in generally good condition for a community constructed in 1982. A review of the Replacement Reserve Inventory will show that we are anticipating most of the components achieving their normal economic lives.

The following comments pertain to the larger, more significant components in the Replacement Reserve Inventory and to those items that are unique or deserving of attention because of their condition or the manner in which they have been treated in the Replacement Reserve Analysis or Inventory.

General Condition Statements.

Excellent. 100% to 90% of Normal Economic Life expected, with no appreciable wear or defects.

Good. 90% to 60% of Normal Economic Life expected, minor wear or cosmetic defects found. Normal maintenance should be expected. If performed properly, normal maintenance may increase the useful life of a component. Otherwise, the component is wearing normally.

Fair. 60% to 30% of Normal Economic Life expected, moderate wear with defects found. Repair actions should be taken to extend the life of the component or to correct repairable defects and distress. Otherwise, the component is wearing normally.

Marginal. 30% to 10% of Normal Economic Life expected, with moderate to significant wear or distress found. Repair actions are expected to be cost effective for localized issues, but normal wear and use are evident. The component is reaching the end of the Normal Economic Life.

Poor. 10% to 0% of Normal Economic Life expected, with significant distress and wear. Left unattended, additional damage to underlying structures is likely to occur. Further maintenance is unlikely to be cost effective.

SITE COMPONENTS

Entry Monument and Signage. The Association maintains two entry monuments. The monuments are made of brick masonry and are in fair condition, with open masonry joints and loose and broken masonry units.

We recommend repointing and replacement of defective areas of the masonry as needed. The Association may want to consider applying a coat of Siloxane or other appropriate breathable sealant to mitigate water penetration and further degradation of the masonry work. For additional information, please see the appropriate links on our web site at http://mdareserves.com/resources/links/building-exterior.

Small miscellaneous signs are not considered in this study and should be replaced using other funds.

Asphalt Pavement. The Association is responsible for the roadways, and parking areas within the community. In general, the Association's asphalt pavements are in fair condition to poor condition, with wide cracking and significant distress in many locations and with incipient potholes and full-depth pavement failure. The Association has established a plan for cycles of partial replacement to address pavement issues.

As a rule of thumb, asphalt should be overlaid when approximately 5% of the surface area is cracked or otherwise deteriorated. The normal service life of asphalt pavement is typically 18 to 20 years.

In order to maintain the condition of the pavement throughout the community and to ensure the longest life of the asphalt, we recommend a systematic and comprehensive maintenance program that includes:

- **Cleaning.** Long-term exposure to oil or gas breaks down asphalt. Because this asphalt pavement is generally not used for long-term parking, it is unlikely that frequent cleaning will be necessary. When necessary, spill areas should be cleaned or patched if deterioration has penetrated the asphalt. This is a maintenance activity, and we have assumed that it will not be funded from Reserves.

- **Crack Repair.** All cracks should be repaired with an appropriate compound to prevent water infiltration through the asphalt into the base. This repair should be done annually. Crack repair is normally considered a maintenance activity and is not funded from Reserves. Areas of extensive cracking or deterioration that cannot be made watertight should be cut out and patched.

- **Seal Coating.** The asphalt should be seal coated every five to seven years. For this maintenance, activity to be effective in extending the life of the asphalt, cleaning and crack repair should be performed first.

The pricing used is based on recent contracts for a two-inch overlay, which reflects the current local market for this work.

For seal coating, several different products are available. The older, more traditional seal coating products are simply paints. They coat the surface of the asphalt and they are minimally effective. However, the newer coating materials, such as those from Total Asphalt Management, Asphalt Restoration Technologies, Inc., and others, are penetrating. They are engineered, so to speak, to 'remoisturize' the pavement. Asphalt pavement is intended to be flexible. Over time, the volatile chemicals in the pavement dry, the pavement becomes brittle, and degradation follows in the forms of cracking and potholes. Remoisturizing the pavement can return its flexibility and extend the life of the pavement.

Lastly, the resource links provided on our website may provide insight into the general terms and concerns, including maintenance related advantages and disadvantages, which may help the Association better manage the asphalt pavements throughout the community: http://mdareserves.com/resources/links/site-components.

Concrete Work. The concrete work includes the community sidewalks, leadwalks, stairs, stoops, patios, and other flatwork. The overall condition of the concrete work is good.

The standards we use for recommending replacement are as follows:

- Trip hazard, ½ inch height difference.
- Severe cracking.
- Severe spalling and scale.
- Uneven riser heights on steps.
- Steps with risers in excess of 8¼ inches.

Because it is highly unlikely that all of the concrete components will fail and require replacement in the period of the study, we have programmed funds for the replacement of these inventories and spread the funds over an extended timeframe to reflect the incremental nature of this work.

The relevant links on our web site may provide useful information related to concrete terminology, maintenance, and repair. Please see http://mdareserves.com/resources/links/site-components.

Retaining Walls. The Association maintains several steel and wood, Pressure Treated Lumber (PTL), and segmental block retaining walls. The retaining walls are in mixed condition based on the age of the installation. New sections are stable and sound. Older sections are showing leaning, bowing, deterioration, and rot.

Retaining walls in general are designed to provide slope stabilization and soil retention by means of a structural system. Typically, walls that are three feet high or more require some level of design.

Movement and displacement of any retaining wall is a sign of general settlement or failure. This typically is in the form of leaning and bowing, and can involve the entire wall or localized sections of the wall. Typically, these types of movements are gradual and may require the replacement of the wall. Movement of retaining walls located near other buildings or structures may negatively affect the stability of the adjacent structure. These conditions can become extremely costly if not properly identified, monitored, and addressed.

Wood retaining walls will experience rot and decay over time and partial replacement of defective wooden members is often possible in the early stages of decay. Eventually however, these walls will require replacement. Wood retaining walls can have a useful life of 25 to 35 years.

Segmental block retaining walls can have an extended useful life, and if stable, are likely to only require localized resetting of displaced blocks, typically near the top of the wall. This study assumes that resetting will be performed incrementally as needed.

When and if it becomes necessary to replace these walls, we recommend the Association consider one of the segmental block retaining wall systems. These systems are very low maintenance. If over time the wall experiences movement, sections of the walls can be re-stacked at a very small portion of the cost of a new wall. Segmental block retaining walls can have a service life of 80 years or more. As a general source of information about retaining walls, we offer several links from our website at http://mdareserves.com/resources/links/site-components.

Retaining wall replacement can be costly, and early planning on the part of the Association can help to reduce the impact of this work on the community's budget in the future. We therefore recommend having a

Professional Engineer inspect the walls and develop preliminary replacement alternatives and recommendations based on the site conditions, replacement costs, and recommended replacement wall types. This information can then be incorporated into future updates to the Reserve Study.

Underground Utilities. The Association is responsible for the maintenance of the underground utility lines, including the storm water management pipes, water lines, and sanitary lines. Engineering drawings were not used in the determination of these underground components. Instead, we have provided an estimate of the approximate replacement costs based on our experience with other facilities of similar size and configuration. The inspection and evaluation of underground lines and structures is beyond the scope of work for this study.

BUILDING EXTERIORS

Building Roofing. The buildings are roofed in asphalt shingle roofing that is in generally good condition.

Asphalt shingle roofs can have a useful life of 20 to 50 years depending on the weight and quality of the shingle. Weathered, curled, and missing shingles are all indications that the shingles may be nearing the end of their useful life.

Access to the roof was not provided at the time of inspection. The roofing was observed from the ground level.

Annual inspections are recommended, with cleaning, repair, and mitigation of vegetation performed as needed. Access, inspection, and repair work should be performed by contractors and personnel with the appropriate access equipment who are experienced in the types of roofing used for the facility.

For additional information on roofs and roof maintenance, please see the appropriate links on our web site at http://mdareserves.com/resources/links/building-exterior.

Gutters and Downspouts. The buildings have has aluminum gutters and downspouts. The gutters and downspouts are in good condition.

A gutter and downspout system will remove rainwater from the area of the building roof, siding, and foundation. This will protect building's exterior surfaces from water damage. Gutters should run the full length of all drip edges of the building roof. Even with full gutters, it is important to inspection the function of the gutters during heavy rain to identify any deficiencies. It may be necessary to periodically adjust the slope of sections, repair connections, replace hangers, and install shrouds to the gutters. Downspouts should be securely attached to the side of the structure. Any broken straps should be replaced. The area of the outlet should be inspected to promote run-off in the desired direction. Long straight runs should have an elbow at the bottom. Splash blocks should be installed to fray the water out-letting from the downspout.

It is recommended that all gutters be cleaned at least twice each year. If there are a large number of trees located close to a building, consider installing a gutter debris shield that will let water into the gutters but will filter out leaves, twigs, and other debris.

Siding and Trim. The exteriors of the buildings are clad in vinyl siding, brick veneer and wood trim. The siding and trim materials are in generally good condition.

Wooden exterior materials are typically repaired as needed during normal painting cycles. Painting cycles for wooden exteriors vary between five and ten years depending on the grade of wood and the quality of the materials and finish work. In this study, we have modeled for incremental wood material replacement to coincide with the painting cycle of the facility.

As an alternative to high-maintenance materials, the Association may want to consider replacements using low maintenance synthetic or cementitious materials. For additional consideration, please see the related articles "Alternative Trim Materials - A Replacement for Wood Trim?" and "An Examination of New Materials - Cement Fiber Composites" on our web site at http://mdareserves.com/resources/links/building-exterior.

Vinyl siding and trim can have an extended useful life if not damaged by impact, heat, or other physical reasons. However, the coatings and finishes typically have a useful life and over time begin to weather, chalk, and show their age. For these reasons, we have modeled for the replacement of the siding and trim every 25 years.

Brick masonry is used as the main exterior cladding of the building. As masonry weathers, the mortar joints will become damaged by water penetration. As additional water gains access to the joints, repeated freeze-thaw cycles gradually increase the damage to the mortar joints. If allowed to progress, even the masonry units such as brick, block, and stone can have their surfaces affected and masonry units can become loose.

In general, masonry is considered a long-life item and is therefore excluded from reserve funding. However, because weather and other conditions result in the slow deterioration of the mortar in masonry joints, we have included funding in this study for repointing. Repointing is the process of raking and cutting out damaged sections of mortar and replacing them with new mortar.

Periodic repointing and local replacement of damaged masonry units will limit the damage done by moisture penetration. For this study, we assume that 10% of the masonry will require repointing every 10 years after approximately 30 years. For additional information about masonry and repointing, please view the relevant links at http://mdareserves.com/resources/links/building-exterior.

Wood Balconies. The wooden balconies of the community are maintained by the Association. The wooden balcony structures are in good condition, with the composite decking in excellent condition and the composite railings in excellent condition.

We recommend for the Association implement an annual inspection program. We also recommend power washing and the application of a wood sealer with UV protection every two to three years. Installation of carpet or other water trapping coverings should be prohibited and potted plants should be placed on raised feet to allow for proper air circulation and drying of wooden components.

When installing new decking, installation of a self-healing flashing membrane is recommended along the top and ends of all wooden horizontal structural members. Synthetic decking and railing systems should also be considered.

This Condition Assessment is based upon our visual survey of the property. The sole purpose of the visual survey was an evaluation of the common elements of the property to ascertain the remaining useful life and the replacement costs of these common elements. Our evaluation assumed that all components met building code requirements in force at the time of construction. Our visual survey was conducted with care by experienced persons, but no warranty or guarantee is expressed or implied.

End of Condition Assessment

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CASH FLOW METHOD ACCOUNTING SUMMARY

This Timberidge - Cash Flow Method Accounting Summary is an attachment to the Timberidge - Replacement Reserve Study dated February 17, 2017 and is for use by accounting and reserve professionals experienced in Association funding and accounting principles. This Summary consists of four reports, the 2017, 2018, and 2019 Cash Flow Method Category Funding Reports (3) and a Three-Year Replacement Funding Report.

- CASH FLOW METHOD CATEGORY FUNDING REPORT, 2017, 2018, and 2019. Each of the 67 Projected Replacements listed in the Timberidge Replacement Reserve Inventory has been assigned to one of 6 categories. The following information is summarized by category in each report:
  - Normal Economic Life and Remaining Economic Life of the Projected Replacements.
  - Cost of all Scheduled Replacements in each category.
  - Replacement Reserves on Deposit allocated to the category at the beginning and end of the report period.
  - Cost of Projected Replacements in the report period.
  - Recommended Replacement Reserve Funding allocated to the category during the report period as calculated by the Cash Flow Method.

- THREE-YEAR REPLACEMENT FUNDING REPORT. This report details the allocation of the $90,801 Beginning Balance (at the start of the Study Year) and the $219,334 of additional Replacement Reserve Funding in 2017 through 2019 (as calculated in the Replacement Reserve Analysis) to each of the 67 Projected Replacements listed in the Replacement Reserve Inventory. These allocations have been made using Chronological Allocation, a method developed by Miller Dodson Associates, Inc., and discussed below. The calculated data includes:
  - Identification and estimated cost of each Projected Replacement scheduled in years 2017 through 2019.
  - Allocation of the $90,801 Beginning Balance to the Projected Replacements by Chronological Allocation.
  - Allocation of the $219,334 of additional Replacement Reserve Funding recommended in the Replacement Reserve Analysis in years 2017 through 2019, by Chronological Allocation.

- CHRONOLOGICAL ALLOCATION. Chronological Allocation assigns Replacement Reserves to Projected Replacements on a "first come, first serve" basis in keeping with the basic philosophy of the Cash Flow Method. The Chronological Allocation methodology is outlined below.
  - The first step is the allocation of the $90,801 Beginning Balance to the Projected Replacements in the Study Year. Remaining unallocated funds are next allocated to the Projected Replacements in subsequent years in chronological order until the total of Projected Replacements in the next year is greater than the unallocated funds. Projected Replacements in this year are partially funded with each replacement receiving percentage funding. The percentage of funding is calculated by dividing the unallocated funds by the total of Projected Replacements in the partially funded year.

    At Timberidge the Beginning Balance funds all Scheduled Replacements in the Study Year through 2018 and provides partial funding (53%) of replacements scheduled in 2019.
  - The next step is the allocation of the $73,111 of 2017 Cash Flow Method Reserve Funding calculated in the Replacement Reserve Analysis. These funds are first allocated to fund the partially funded Projected Replacements and then to subsequent years in chronological order as outlined above.

    At Timberidge the Beginning Balance and the 2017 Replacement Reserve Funding, funds replacements through 2020 and partial funds (44.3%) replacements in 2021.
  - Allocations of the 2018 and 2019 Reserve Funding are done using the same methodology.
  - The Three-Year Replacement Funding Report details component by component allocations made by Chronological Allocation.

2017 - CASH FLOW METHOD CATEGORY FUNDING REPORT

Each of the 67 Projected Replacements included in the Timberidge Replacement Reserve Inventory has been assigned to one of the 6 categories listed in TABLE CF1 below. This calculated data is a summary of data provided in the Three-Year Replacement Funding Report and Replacement Reserve Inventory. The accuracy of this data is dependent upon many factors including the following critical financial data:

- A Beginning Balance of $90,801 as of the first day of the Study Year, January 1, 2017.
- Total reserve funding (including the Beginning Balance) of $163,912 in the Study Year.
- No expenditures from Replacement Reserves other than those specifically listed in the Replacement Reserve Inventory.
- All Projected Replacements scheduled in the Replacement Reserve Inventory in 2017 being accomplished in 2017 at a cost of $49,052.

If any of these critical factors are inaccurate, do not use the data and please contact Miller Dodson Associates to arrange for an update of the Replacement Reserve Study.

2017 - CASH FLOW METHOD CATEGORY FUNDING - TABLE CF1

CATEGORY	NORMAL ECONOMIC LIFE	REMAINING ECONOMIC LIFE	ESTIMATED REPLACEMENT COST	2017 BEGINNING BALANCE	2017 RESERVE FUNDING	2017 PROJECTED REPLACEMENTS	2017 END OF YEAR BALANCE
SITE COMPONENT	5 to 10 years	0 to 10 years	$197,829	$17,322		($17,322)	
SITE COMPONENT (CONT.)	10 to 60 years	0 to 47 years	$219,713	$1,700	$565	($1,700)	$565
SITE COMPONENT (CONT.)	10 to 36 years	14 years	$112,724				
SITE UTILITIES	10 to 30 years	14 years	$100,980				
BUILDING EXTERIOR	25 years	0 to 24 years	$423,530	$23,730		($23,730)	
BUILDING EXTERIOR (CONT.)	10 to 25 years	0 to 24 years	$425,632	$48,049	$72,546	($6,300)	$114,295

2018 - CASH FLOW METHOD CATEGORY FUNDING REPORT

Each of the 67 Projected Replacements included in the Timberidge Replacement Reserve Inventory has been assigned to one of the 6 categories listed in TABLE CF2 below. This calculated data is a summary of data provided in the Three-Year Replacement Funding Report and Replacement Reserve Inventory. The accuracy of this data is dependent upon many factors including the following critical financial data:

- Replacement Reserves on Deposit totaling $114,860 on January 1, 2018.
- Total reserve funding (including the Beginning Balance) of $237,023 from 2017 through 2018.
- No expenditures from Replacement Reserves other than those specifically listed in the Replacement Reserve Inventory.

If any of these critical factors are inaccurate, do not use the data and please contact Miller Dodson Associates to arrange for an update of the Replacement Reserve Study.

2018 - CASH FLOW METHOD CATEGORY FUNDING - TABLE CF2

CATEGORY	NORMAL ECONOMIC LIFE	REMAINING ECONOMIC LIFE	ESTIMATED REPLACEMENT COST	2018 BEGINNING BALANCE	2018 RESERVE FUNDING	2018 PROJECTED REPLACEMENTS	2018 END OF YEAR BALANCE
SITE COMPONENT	5 to 10 years	4 to 9 years	$197,829		$17,645		$17,645
SITE COMPONENT (CONT.)	10 to 60 years	3 to 46 years	$219,713	$565	$1,166		$1,731
SITE COMPONENT (CONT.)	10 to 36 years	13 years	$112,724				
SITE UTILITIES	10 to 30 years	13 years	$100,980				
BUILDING EXTERIOR	25 years	16 to 24 years	$423,530				
BUILDING EXTERIOR (CONT.)	10 to 25 years	1 to 23 years	$425,632	$114,295	$54,300		$168,595

2019 - CASH FLOW METHOD CATEGORY FUNDING REPORT

Each of the 67 Projected Replacements included in the Timberidge Replacement Reserve Inventory has been assigned to one of the 6 categories listed in TABLE CF3 below. This calculated data is a summary of data provided in the Three-Year Replacement Funding Report and Replacement Reserve Inventory. The accuracy of this data is dependent upon many factors including the following critical financial data:

- Replacement Reserves on Deposit totaling $187,971 on January 1, 2019.
- Total Replacement Reserve funding (including the Beginning Balance) of $310,135 from 2017 to 2019.
- No expenditures from Replacement Reserves other than those specifically listed in the Replacement Reserve Inventory.
- All Projected Replacements scheduled in the Replacement Reserve Inventory in 2019 being accomplished in 2019 at a cost of $79,200.

If any of these critical factors are inaccurate, do not use the data and please contact Miller Dodson Associates to arrange for an update of the Replacement Reserve Study.

2019 - CASH FLOW METHOD CATEGORY FUNDING - TABLE CF3

CATEGORY	NORMAL ECONOMIC LIFE	REMAINING ECONOMIC LIFE	ESTIMATED REPLACEMENT COST	2019 BEGINNING BALANCE	2019 RESERVE FUNDING	2019 PROJECTED REPLACEMENTS	2019 END OF YEAR BALANCE
SITE COMPONENT	5 to 10 years	3 to 8 years	$197,829	$17,645	$3,775		$21,420
SITE COMPONENT (CONT.)	10 to 60 years	2 to 45 years	$219,713	$1,731	$331		$2,062
SITE COMPONENT (CONT.)	10 to 36 years	12 years	$112,724				
SITE UTILITIES	10 to 30 years	12 years	$100,980				
BUILDING EXTERIOR	25 years	15 to 23 years	$423,530				
BUILDING EXTERIOR (CONT.)	10 to 25 years	0 to 22 years	$425,632	$168,595	$69,005	($79,200)	$158,400

CASH FLOW METHOD - THREE-YEAR REPLACEMENT FUNDING REPORT

TABLE CF4 below details the allocation of the $90,801 Beginning Balance, as reported by the Association and the $219,334 of Replacement Reserve Funding calculated by the Cash Flow Method from 2017 to 2019, to the 67 Projected Replacements listed in the Replacement Reserve Inventory. These allocations have been made by Chronological Allocation, a method developed by Miller Dodson Associates, Inc., and outlined on Page CF1. The accuracy of the allocations is dependent upon many factors including the following critical financial data:

- Replacement Reserves on Deposit totaling $90,801 on January 1, 2017.
- Replacement Reserves on Deposit totaling $114,860 on January 1, 2018.
- Replacement Reserves on Deposit totaling $187,971 on January 1, 2019.
- Total Replacement Reserve funding (including the Beginning Balance) of $310,135 from 2017 to 2019.
- No expenditures from Replacement Reserves other than those specifically listed in the Replacement Reserve Inventory.
- All Projected Replacements scheduled in the Replacement Reserve Inventory from 2017 to 2019 being accomplished as scheduled in the Replacement Reserve Inventory at a cost of $128,252.

If any of these critical factors are inaccurate, do not use the data and please contact Miller Dodson Associates, Inc., to arrange for an update of the Replacement Reserve Study.

CASH FLOW METHOD - THREE-YEAR REPLACEMENT FUNDING - TABLE CF4

Item #	Description of Projected Replacement	Estimated Replacement Costs	Allocation of Beginning Balance	2017 Reserve Funding	2017 Projected Replacements	2017 End of Year Balance	2018 Reserve Funding	2018 Projected Replacements	2018 End of Year Balance	2019 Reserve Funding	2019 Projected Replacements	2019 End of Year Balance
	SITE COMPONENT											
1	Concrete sidewalk/ lead walk (6%)	1,010					130		130	880		1,010
2	Concrete patio & stoop (6%)	437					56		56	381		437
3	Concrete step (6%)	1,060					136		136	924		1,060
4	Asphalt roads-mill & overlay (allowan	100,000								814		814
5	Seal asphalt roads	9,727	9,727		(9,727)		9,727		9,727	79		9,807
6	Asphalt parking & driveways (allowan	50,000								407		407
7	Seal asphalt parking & driveways	7,595	7,595		(7,595)		7,595		7,595	62		7,657
8	Asphalt curb and gutter - entrance rd. (	10,000								81		81
9	Asphalt curb - parking area (allowance	10,000								81		81
10	Foundation plantings (allowance)	8,000								65		65
	SITE COMPONENT (CONT.)											
11	Concrete mailbox pads	437								4		4
12	Steel guard rails	3,540								29		29
13	PTL, wood retaining wall (20%)	3,570										
14	Wood boardwalk, bldg 400	27,000										
15	PTL retaining wall, bldg 600	7,078										
16	PTL retaining wall, bldg 800	7,823										
17	Wood & steel retaining wall, bldg 100	30,600										
18	Block retaining wall, bldg 1200 (reset)	16,200										
19	Block retaining wall, bldg 1400 (reset)	16,200										
20	Wood & steel retaining wall, road	36,000										
21	Wood & steel retaining wall, road	36,000								293		293
22	Concrete segmental blk. retaining wall	29,150										
23	Reset segmental blk. retaining wall	700	700		(700)					6		6
24	Reset segmental blk. retaining wall (10	1,785										
25	Site Lighting	1,275		565		565	710		1,275			1,275
26	Entrance structure, wood	900										
27	Community sign, wood	456					456		456			456
28	Community sign, brick re-point (allow	1,000	1,000		(1,000)							
	SITE COMPONENT (CONT.)											
29	Conc. patio pavers sand set	99,560										
30	Conc. patio pavers, replace (10%)	3,610										
31	Rail access walkway, railing (20%)	1,853										
32	Rail access walkway, decking (20%)	1,361										
33	Rail access walkway, structure (20%)	6,340										
	SITE UTILITIES											
34	Domestic water main (10%)	22,290										
35	Sanitary main (10%)	19,290										
36	Storm water piping system (allowance)	11,000										

CASH FLOW METHOD - THREE-YEAR REPLACEMENT FUNDING - TABLE CF4 cont'd

Item #	Description of Projected Replacement	Estimated Replacement Costs	Allocation of Beginning Balance	2017 Reserve Funding	2017 Projected Replacements	2017 End of Year Balance	2018 Reserve Funding	2018 Projected Replacements	2018 End of Year Balance	2019 Reserve Funding	2019 Projected Replacements	2019 End of Year Balance
37	Domestic water lateral (10%)	21,780										
38	Sanitary lateral (10%)	26,620										
	BUILDING EXTERIOR											
39	Asphalt shingle roof (1 bldg)	19,880	19,880		(19,880)							
40	Asphalt shingle roof (3 bldg)	52,600										
41	Asphalt shingle roof (2 bldg)	39,900										
42	Asphalt shingle roof (2 bldg)	39,900										
43	Asphalt shingle roof (2 bldg)	39,900										
44	Asphalt shingle roof (2 bldg)	39,900										
45	Asphalt shingle roof (2 bldg)	39,900										
46	Asphalt shingle roof (2 bldg)	39,900										
47	Asphalt shingle roof (2 bldg)	39,900										
48	Gutter & downspout, 5" alum. (1 bldg)	3,850	3,850		(3,850)							
49	Gutter & downspout, 5" alum. (3 bldg)	14,000										
50	Gutter & downspout, 5" alum. (2 bldg)	7,700										
51	Gutter & downspout, 5" alum. (2 bldg)	7,700										
52	Gutter & downspout, 5" alum. (2 bldg)	7,700										
53	Gutter & downspout, 5" alum. (2 bldg)	7,700										
54	Gutter & downspout, 5" alum. (2 bldg)	7,700										
55	Gutter & downspout, 5" alum. (2 bldg)	7,700										
56	Gutter & downspout, 5" alum. (2 bldg)	7,700										
	BUILDING EXTERIOR (CONT.)											
57	Siding & trim, vinyl, standard (25%)	79,200	41,749	37,451		79,200			79,200		(79,200)	
58	Siding & trim, vinyl, standard (25%)	79,200		35,095		35,095	44,105		79,200			79,200
59	Siding & trim, vinyl, standard (25%)	79,200					10,195		10,195	69,005		79,200
60	Siding & trim, vinyl, standard (25%)	79,200										
61	Vinyl shutters	6,300	6,300		(6,300)							
62	Brick re-pointing (5%)	22,540										
63	Deck, PTL structure (2nd floor)	15,720										
64	Deck, composite decking (2nd floor)	12,000										
65	Deck, composite railing (2nd floor)	12,000										
66	Vinyl privacy screen	37,632										
67	Metal hand railing, bldg.1800 (50%)	2,640										

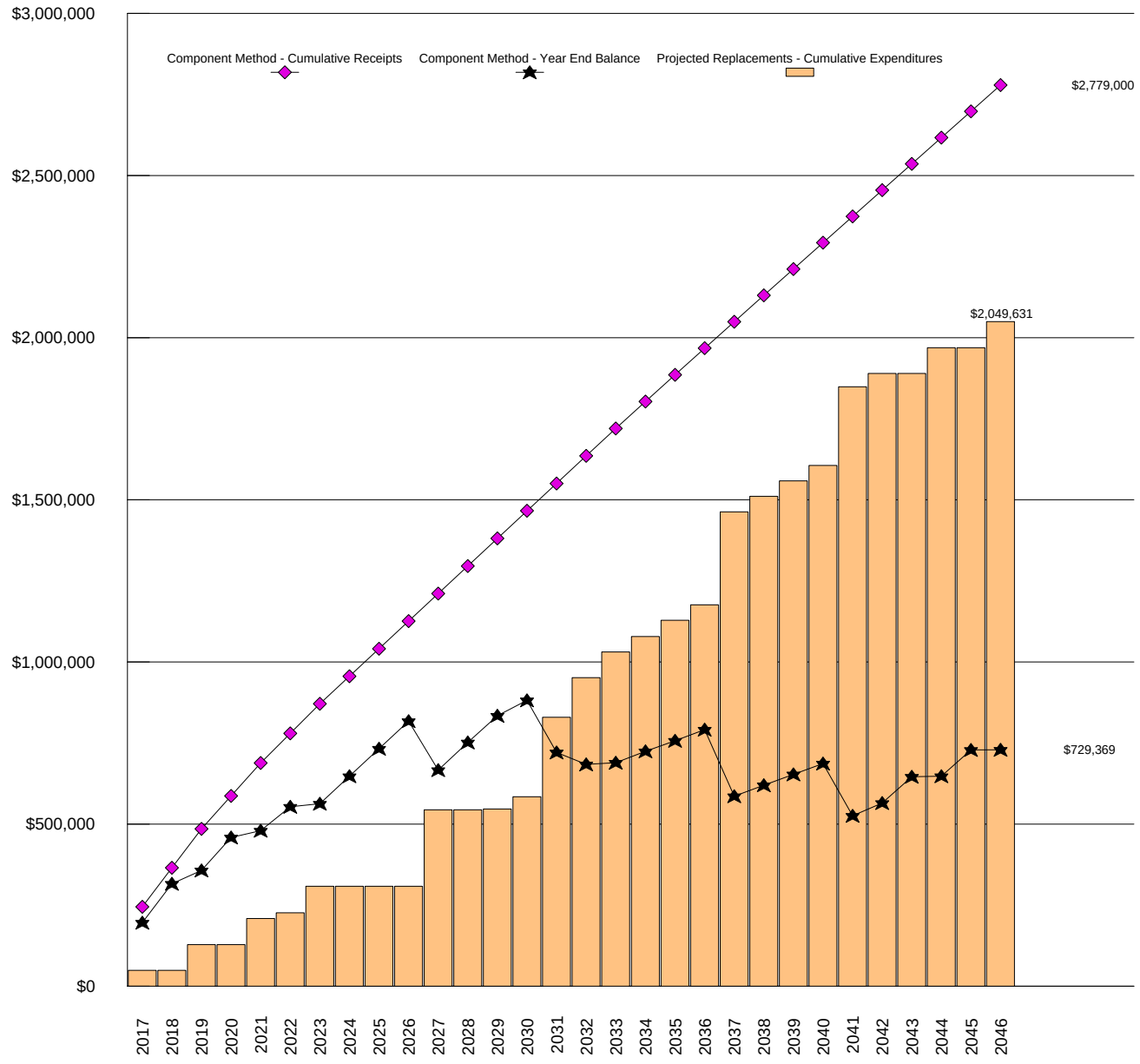
COMPONENT METHOD

$154,295 **COMPONENT METHOD RECOMMENDED ANNUAL FUNDING OF REPLACEMENT RESERVES IN THE STUDY YEAR, 2017.**

$106.26 Per unit (average), recommended monthly funding of Replacement Reserves

General. The Component Method (also referred to as the Full Funded Method) is a very conservative mathematical model developed by HUD in the early 1980s. Each of the 67 Projected Replacements listed in the Replacement Reserve Inventory is treated as a separate account. The Beginning Balance is allocated to each of the individual accounts, as is all subsequent funding of Replacement Reserves. These funds are "locked" in these individual accounts and are not available to fund other Projected Replacements. The calculation of Recommended Annual Funding of Replacement Reserves is a multi-step process outlined in more detail on Page CM2.

Component Method - Cumulative Receipts and Expenditures Graph



COMPONENT METHOD (cont'd)

- Current Funding Objective. A Current Funding Objective is calculated for each of the Projected Replacements listed in the Replacement Reserve Inventory. Replacement Cost is divided by the Normal Economic Life to determine the nominal annual contribution. The Remaining Economic Life is then subtracted from the Normal Economic Life to calculate the number of years that the nominal annual contribution should have been made. The two values are then multiplied to determine the Current Funding Objective. This is repeated for each of the 67 Projected Replacements. The total, $444,981, is the Current Funding Objective.

  For an example, consider a very simple Replacement Reserve Inventory with one Projected Replacement, a fence with a $1,000 Replacement Cost, a Normal Economic Life of 10 years, and a Remaining Economic Life of 2 years. A contribution to Replacement Reserves of $100 ($1,000 + 10 years) should have been made in each of the previous 8 years (10 years - 2 years). The result is a Current Funding Objective of $800 (8 years x $100 per year).

- Funding Percentage. The Funding Percentage is calculated by dividing the Beginning Balance ($90,801) by the Current Funding Objective ($444,981). At Timberidge the Funding Percentage is 20.4%

- Allocation of the Beginning Balance. The Beginning Balance is divided among the 67 Projected Replacements in the Replacement Reserve Inventory. The Current Funding Objective for each Projected Replacement is multiplied by the Funding Percentage and these funds are then "locked" into the account of each item.

  If we relate this calculation back to our fence example, it means that the Association has not accumulated $800 in Reserves (the Funding Objective), but rather at 20.4 percent funded, there is $163 in the account for the fence.

- Annual Funding. The Recommended Annual Funding of Replacement Reserves is then calculated for each Projected Replacement. The funds allocated to the account of the Projected Replacement are subtracted from the Replacement Cost. The result is then divided by the number of years until replacement, and the result is the annual funding for each of the Projected Replacements. The sum of these is $154,295, the Component Method Recommended Annual Funding of Replacement Reserves in the Study Year (2017).

  In our fence example, the $163 in the account is subtracted from the $1,000 Total Replacement Cost and divided by the 2 years that remain before replacement, resulting in an annual deposit of $418. Next year, the deposit remains $418, but in the third year, the fence is replaced and the annual funding adjusts to $100.

- Adjustment to the Component Method for interest and inflation. The calculations in the Replacement Reserve Analysis do not account for interest earned on Replacement Reserves, inflation, or a constant annual increase in Annual Funding of Replacement Reserves. The Component Method is a very conservative method and if the Analysis is updated regularly, adequate funding will be maintained without the need for adjustments.

Component Method Data - Years 1 through 30

Year	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Beginning balance	$90,801									
Recommended annual funding	$154,295	$120,101	$120,101	$101,609	$101,609	$91,361	$91,318	$84,894	$84,894	$84,894
Interest on reserves										
Expenditures	$49,052		$79,200		$80,475	$17,778	$81,707			
Year end balance	$196,044	$316,144	$357,045	$458,654	$479,789	$553,371	$562,983	$647,877	$732,771	$817,665
Cumulative Expenditures	$49,052	$49,052	$128,252	$128,252	$208,727	$226,506	$308,213	$308,213	$308,213	$308,213
Cumulative Receipts	$245,096	$365,197	$485,298	$586,907	$688,516	$779,877	$871,195	$956,090	$1,040,984	$1,125,878

Year	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Recommended annual funding	$84,894	$85,177	$85,177	$85,177	$84,235	$85,294	$84,250	$83,064	$82,474	$81,996
Interest on reserves										
Expenditures	$235,999		$2,507	$37,632	$245,139	$122,222	$79,200	$47,600	$50,107	$47,600
Year end balance	$666,560	$751,737	$834,407	$881,951	$721,047	$684,119	$689,169	$724,632	$757,000	$791,395
Cumulative Expenditures	$544,212	$544,212	$546,719	$584,351	$829,490	$951,712	$1,030,912	$1,078,512	$1,128,619	$1,176,219
Cumulative Receipts	$1,210,772	$1,295,949	$1,381,125	$1,466,302	$1,550,537	$1,635,831	$1,720,081	$1,803,145	$1,885,619	$1,967,614

Year	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
Recommended annual funding	$81,617	$81,414	$81,207	$81,075	$81,012	$81,012	$81,012	$81,012	$81,012	$81,012
Interest on reserves										
Expenditures	$286,922	$47,600	$47,600	$47,600	$242,506	$41,508		$79,200		$80,475
Year end balance	$586,089	$619,903	$653,510	$686,986	$525,492	$564,996	$646,008	$647,820	$728,832	$729,369
Cumulative Expenditures	$1,463,142	$1,510,742	$1,558,342	$1,605,942	$1,848,448	$1,889,956	$1,889,956	$1,969,156	$1,969,156	$2,049,631
Cumulative Receipts	$2,049,231	$2,130,645	$2,211,852	$2,292,927	$2,373,939	$2,454,952	$2,535,964	$2,616,976	$2,697,988	$2,779,000

COMPONENT METHOD ACCOUNTING SUMMARY

This Timberidge - Component Method Accounting Summary is an attachment to the Timberidge - Replacement Reserve Study dated February 17, 2017 and is for use by accounting and reserve professionals experienced in Association funding and accounting principles. This Summary consists of four reports, the 2017, 2018, and 2019 Component Method Category Funding Reports (3) and a Three-Year Replacement Funding Report.

- COMPONENT METHOD CATEGORY FUNDING REPORT, 2017, 2018, and 2019. Each of the 67 Projected Replacements listed in the Timberidge Replacement Reserve Inventory has been assigned to one of 6 categories. The following information is summarized by category in each report:
  - Normal Economic Life and Remaining Economic Life of the Projected Replacements.
  - Cost of all Scheduled Replacements in each category.
  - Replacement Reserves on Deposit allocated to the category at the beginning and end of the report period.
  - Cost of Projected Replacements in the report period.
  - Recommended Replacement Reserve Funding allocated to the category during the report period as calculated by the Component Method.
- THREE-YEAR REPLACEMENT FUNDING REPORT. This report details the allocation of the $90,801 Beginning Balance (at the start of the Study Year) and the $394,497 of additional Replacement Reserve funding from 2017 to 2019 (as calculated in the Replacement Reserve Analysis) to each of the 67 Projected Replacements listed in the Replacement Reserve Inventory. These allocations have been made using the Component Method as outlined in the Replacement Reserve Analysis.
  The calculated data includes:
  - Identification and estimated cost of each Projected Replacement schedule in years 2017 through 2019.
  - Allocation of the $90,801 Beginning Balance to the Projected Replacements by the Component Method.
  - Allocation of the $394,497 of additional Replacement Reserve Funding recommended in the Replacement Reserve Analysis in years 2017 through 2019, by the Component Method.

2017 - COMPONENT METHOD CATEGORY FUNDING REPORT

Each of the 67 Projected Replacements included in the Timberidge Replacement Reserve Inventory has been assigned to one of the 6 categories listed in TABLE CM1 below. This calculated data is a summary of data provided in the Three-Year Replacement Funding Report and Replacement Reserve Inventory. The accuracy of this data is dependent upon many factors including the following critical financial data:

- A Beginning Balance of $90,801 as of the first day of the Study Year, January 1, 2017.
- Total reserve funding (including the Beginning Balance) of $245,096 in the Study Year.
- No expenditures from Replacement Reserves other than those specifically listed in the Replacement Reserve Inventory.
- All Projected Replacements scheduled in the Replacement Reserve Inventory in 2017 being accomplished in 2017 at a cost of $49,052.

If any of these critical factors are inaccurate, do not use the data and please contact Miller Dodson Associates to arrange for an update of the Replacement Reserve Study.

2017 - COMPONENT METHOD CATEGORY FUNDING - TABLE CM1

CATEGORY	NORMAL ECONOMIC LIFE	REMAINING ECONOMIC LIFE	ESTIMATED REPLACEMENT COST	2017 BEGINNING BALANCE	2017 RESERVE FUNDING	2017 PROJECTED REPLACEMENTS	2017 END OF YEAR BALANCE
SITE COMPONENT	5 to 10 years	0 to 10 years	$197,829	$3,535	$30,328	$17,322	$16,540
SITE COMPONENT (CONT.)	10 to 60 years	0 to 47 years	$219,713	$9,949	$13,920	$1,700	$22,169
SITE COMPONENT (CONT.)	10 to 36 years	14 years	$112,724	$11,851	$6,725		$18,576
SITE UTILITIES	10 to 30 years	14 years	$100,980	$1,122	$6,657		$7,779
BUILDING EXTERIOR	25 years	0 to 24 years	$423,530	$15,721	$37,017	$23,730	$29,008
BUILDING EXTERIOR (CONT.)	10 to 25 years	0 to 24 years	$425,632	$48,623	$59,649	$6,300	$101,972

2018 - COMPONENT METHOD CATEGORY FUNDING REPORT

Each of the 67 Projected Replacements included in the Timberidge Replacement Reserve Inventory has been assigned to one of the 6 categories listed in TABLE CM2 below. This calculated data is a summary of data provided in the Three-Year Replacement Funding Report and Replacement Reserve Inventory. The accuracy of this data is dependent upon many factors including the following critical financial data:

- Replacement Reserves on Deposit totaling $196,044 on January 1, 2018.
- Total reserve funding (including the Beginning Balance) of $365,197 from 2017 through 2018.
- No expenditures from Replacement Reserves other than those specifically listed in the Replacement Reserve Inventory.

If any of these critical factors are inaccurate, do not use the data and please contact Miller Dodson Associates to arrange for an update of the Replacement Reserve Study.

2018 - COMPONENT METHOD CATEGORY FUNDING - TABLE CM2

CATEGORY	NORMAL ECONOMIC LIFE	REMAINING ECONOMIC LIFE	ESTIMATED REPLACEMENT COST	2018 BEGINNING BALANCE	2018 RESERVE FUNDING	2018 PROJECTED REPLACEMENTS	2018 END OF YEAR BALANCE
SITE COMPONENT	5 to 10 years	4 to 9 years	$197,829	$16,540	$20,004		$36,544
SITE COMPONENT (CONT.)	10 to 60 years	3 to 46 years	$219,713	$22,169	$12,687		$34,856
SITE COMPONENT (CONT.)	10 to 36 years	13 years	$112,724	$18,576	$6,725		$25,301
SITE UTILITIES	10 to 30 years	13 years	$100,980	$7,779	$6,657		$14,437
BUILDING EXTERIOR	25 years	16 to 24 years	$423,530	$29,008	$19,078		$48,086
BUILDING EXTERIOR (CONT.)	10 to 25 years	1 to 23 years	$425,632	$101,972	$54,949		$156,921

2019 - COMPONENT METHOD CATEGORY FUNDING REPORT

Each of the 67 Projected Replacements included in the Timberidge Replacement Reserve Inventory has been assigned to one of the 6 categories listed in TABLE CM3 below. This calculated data is a summary of data provided in the Three-Year Replacement Funding Report and Replacement Reserve Inventory. The accuracy of this data is dependent upon many factors including the following critical financial data:

- Replacement Reserves on Deposit totaling $316,144 on January 1, 2019.
- Total Replacement Reserve funding (including the Beginning Balance) of $485,298 from 2017 to 2019.
- No expenditures from Replacement Reserves other than those specifically listed in the Replacement Reserve Inventory.
- All Projected Replacements scheduled in the Replacement Reserve Inventory in 2019 being accomplished in 2019 at a cost of $79,200.

If any of these critical factors are inaccurate, do not use the data and please contact Miller Dodson Associates to arrange for an update of the Replacement Reserve Study.

2019 - COMPONENT METHOD CATEGORY FUNDING - TABLE CM3

CATEGORY	NORMAL ECONOMIC LIFE	REMAINING ECONOMIC LIFE	ESTIMATED REPLACEMENT COST	2019 BEGINNING BALANCE	2019 RESERVE FUNDING	2019 PROJECTED REPLACEMENTS	2019 END OF YEAR BALANCE
SITE COMPONENT	5 to 10 years	3 to 8 years	$197,829	$36,544	$20,004		$56,549
SITE COMPONENT (CONT.)	10 to 60 years	2 to 45 years	$219,713	$34,856	$12,687		$47,543
SITE COMPONENT (CONT.)	10 to 36 years	12 years	$112,724	$25,301	$6,725		$32,026
SITE UTILITIES	10 to 30 years	12 years	$100,980	$14,437	$6,657		$21,094
BUILDING EXTERIOR	25 years	15 to 23 years	$423,530	$48,086	$19,078		$67,164
BUILDING EXTERIOR (CONT.)	10 to 25 years	0 to 22 years	$425,632	$156,921	$54,949	$79,200	$132,670

COMPONENT METHOD - THREE-YEAR REPLACEMENT FUNDING REPORT

TABLE CM4 below details the allocation of the $90,801 Beginning Balance, as reported by the Association and the $394,497 of Replacement Reserve Funding calculated by the Cash Flow Method from 2017 to 2019, to the 67 Projected Replacements listed in the Replacement Reserve Inventory. These allocations have been made by Chronological Allocation, a method developed by Miller Dodson Associates, Inc., and outlined on Page CF1. The accuracy of the allocations is dependent upon many factors including the following critical financial data:

- Replacement Reserves on Deposit totaling $90,801 on January 1, 2017.
- Replacement Reserves on Deposit totaling $196,044 on January 1, 2018.
- Replacement Reserves on Deposit totaling $316,144 on January 1, 2019.
- Total Replacement Reserve funding (including the Beginning Balance) of $485,298 from 2017 to 2019.
- No expenditures from Replacement Reserves other than those specifically listed in the Replacement Reserve Inventory.
- All Projected Replacements scheduled in the Replacement Reserve Inventory from 2017 to 2019 being accomplished as scheduled in the Replacement Reserve Inventory at a cost of $128,252.

If any of these critical factors are inaccurate, do not use the data and please contact Miller Dodson Associates, Inc., to arrange for an update of the Replacement Reserve Study.

COMPONENT METHOD - THREE-YEAR REPLACEMENT FUNDING - TABLE CM4

Item #	Description of Projected Replacement	Estimated Replacement Costs	Allocation of Beginning Balance	2017 Reserve Funding	2017 Projected Replacements	2017 End of Year Balance	2018 Reserve Funding	2018 Projected Replacements	2018 End of Year Balance	2019 Reserve Funding	2019 Projected Replacements	2019 End of Year Balance
	SITE COMPONENT											
1	Concrete sidewalk/ lead walk (6%)	1,010		144		144	144		289	144		433
2	Concrete patio & stoop (6%)	437		62		62	62		125	62		187
3	Concrete step (6%)	1,060		151		151	151		303	151		454
4	Asphalt roads-mill & overlay (allowan	100,000		9,091		9,091	9,091		18,182	9,091		27,273
5	Seal asphalt roads	9,727	1,985	7,742	(9,727)		1,945		1,945	1,945		3,891
6	Asphalt parking & driveways (allowan	50,000		4,545		4,545	4,545		9,091	4,545		13,636
7	Seal asphalt parking & driveways	7,595	1,550	6,045	(7,595)		1,519		1,519	1,519		3,038
8	Asphalt curb and gutter - entrance rd. (	10,000		909		909	909		1,818	909		2,727
9	Asphalt curb - parking area (allowance	10,000		909		909	909		1,818	909		2,727
10	Foundation plantings (allowance)	8,000		727		727	727		1,455	727		2,182
	SITE COMPONENT (CONT.)											
11	Concrete mailbox pads	437	56	35		91	35		126	35		160
12	Steel guard rails	3,540	405	285		690	285		975	285		1,260
13	PTL, wood retaining wall (20%)	3,570		238		238	238		476	238		714
14	Wood boardwalk, bldg 400	27,000	1,102	1,619		2,721	1,619		4,339	1,619		5,958
15	PTL retaining wall, bldg 600	7,078	289	424		713	424		1,137	424		1,562
16	PTL retaining wall, bldg 800	7,823	319	469		788	469		1,257	469		1,726
17	Wood & steel retaining wall, bldg 100(	30,600	1,249	1,834		3,083	1,834		4,918	1,834		6,752
18	Block retaining wall, bldg 1200 (reset)	16,200	661	971		1,632	971		2,603	971		3,575
19	Block retaining wall, bldg 1400 (reset)	16,200	661	971		1,632	971		2,603	971		3,575
20	Wood & steel retaining wall, road	36,000		1,714		1,714	1,714		3,429	1,714		5,143
21	Wood & steel retaining wall, road	36,000	3,306	2,972		6,278	2,972		9,250	2,972		12,222
22	Concrete segmental blk. retaining wall	29,150	1,190	583		1,772	583		2,355	583		2,937
23	Reset segmental blk. retaining wall	700	143	557	(700)		70		70	70		140
24	Reset segmental blk. retaining wall (10	1,785		119		119	119		238	119		357
25	Site Lighting	1,275	208	213		422	213		635	213		848
26	Entrance structure, wood	900	92	54		146	54		200	54		253
27	Community sign, wood	456	65	65		130	65		195	65		261
28	Community sign, brick re-point (allow	1,000	204	796	(1,000)		50		50	50		100
	SITE COMPONENT (CONT.)											
29	Conc. patio pavers sand set	99,560	11,851	5,847		17,698	5,847		23,545	5,847		29,393
30	Conc. patio pavers, replace (10%)	3,610		241		241	241		481	241		722
31	Rail access walkway, railing (20%)	1,853		124		124	124		247	124		371
32	Rail access walkway, decking (20%)	1,361		91		91	91		182	91		272
33	Rail access walkway, structure (20%)	6,340		423		423	423		845	423		1,268
	SITE UTILITIES											
34	Domestic water main (10%)	22,290		1,486		1,486	1,486		2,972	1,486		4,458
35	Sanitary main (10%)	19,290		1,286		1,286	1,286		2,572	1,286		3,858
36	Storm water piping system (allowance)	11,000	1,122	659		1,781	659		2,439	659		3,098

COMPONENT METHOD - THREE-YEAR REPLACEMENT FUNDING - TABLE CM4 cont'd

Item #	Description of Projected Replacement	Estimated Replacement Costs	Allocation of Beginning Balance	2017 Reserve Funding	2017 Projected Replacements	2017 End of Year Balance	2018 Reserve Funding	2018 Projected Replacements	2018 End of Year Balance	2019 Reserve Funding	2019 Projected Replacements	2019 End of Year Balance
37	Domestic water lateral (10%)	21,780		1,452		1,452	1,452		2,904	1,452		4,356
38	Sanitary lateral (10%)	26,620		1,775		1,775	1,775		3,549	1,775		5,324
	BUILDING EXTERIOR											
39	Asphalt shingle roof (1 bldg)	19,880	4,057	15,823	(19,880)		795		795	795		1,590
40	Asphalt shingle roof (3 bldg)	52,600		2,104		2,104	2,104		4,208	2,104		6,312
41	Asphalt shingle roof (2 bldg)	39,900	326	1,649		1,975	1,649		3,624	1,649		5,272
42	Asphalt shingle roof (2 bldg)	39,900	651	1,706		2,358	1,706		4,064	1,706		5,771
43	Asphalt shingle roof (2 bldg)	39,900	977	1,769		2,746	1,769		4,515	1,769		6,285
44	Asphalt shingle roof (2 bldg)	39,900	1,303	1,838		3,141	1,838		4,979	1,838		6,817
45	Asphalt shingle roof (2 bldg)	39,900	1,628	1,914		3,542	1,914		5,456	1,914		7,369
46	Asphalt shingle roof (2 bldg)	39,900	1,954	1,997		3,951	1,997		5,948	1,997		7,946
47	Asphalt shingle roof (2 bldg)	39,900	2,280	2,090		4,370	2,090		6,460	2,090		8,550
48	Gutter & downspout, 5" alum. (1 bldg)	3,850	786	3,064	(3,850)		154		154	154		308
49	Gutter & downspout, 5" alum. (3 bldg)	14,000		560		560	560		1,120	560		1,680
50	Gutter & downspout, 5" alum. (2 bldg)	7,700	63	318		381	318		699	318		1,017
51	Gutter & downspout, 5" alum. (2 bldg)	7,700	126	329		455	329		784	329		1,114
52	Gutter & downspout, 5" alum. (2 bldg)	7,700	189	341		530	341		871	341		1,213
53	Gutter & downspout, 5" alum. (2 bldg)	7,700	251	355		606	355		961	355		1,315
54	Gutter & downspout, 5" alum. (2 bldg)	7,700	314	369		684	369		1,053	369		1,422
55	Gutter & downspout, 5" alum. (2 bldg)	7,700	377	385		763	385		1,148	385		1,533
56	Gutter & downspout, 5" alum. (2 bldg)	7,700	440	403		843	403		1,247	403		1,650
	BUILDING EXTERIOR (CONT.)											
57	Siding & trim, vinyl, standard (25%)	79,200	14,222	21,659		35,881	21,659		57,541	21,659	(79,200)	
58	Siding & trim, vinyl, standard (25%)	79,200	12,929	13,254		26,183	13,254		39,437	13,254		52,692
59	Siding & trim, vinyl, standard (25%)	79,200	11,636	9,652		21,288	9,652		30,940	9,652		40,592
60	Siding & trim, vinyl, standard (25%)	79,200	5,172	4,355		9,526	4,355		13,881	4,355		18,235
61	Vinyl shutters	6,300	1,286	5,014	(6,300)		315		315	315		630
62	Brick re-pointing (5%)	22,540		1,503		1,503	1,503		3,005	1,503		4,508
63	Deck, PTL structure (2nd floor)	15,720		629		629	629		1,258	629		1,886
64	Deck, composite decking (2nd floor)	12,000		480		480	480		960	480		1,440
65	Deck, composite railing (2nd floor)	12,000		480		480	480		960	480		1,440
66	Vinyl privacy screen	37,632	3,379	2,447		5,825	2,447		8,272	2,447		10,719
67	Metal hand railing, bldg.1800 (50%)	2,640		176		176	176		352	176		528

1. COMMON INTEREST DEVELOPMENTS - AN OVERVIEW

Over the past 40 years, the responsibility for community facilities and infrastructure around many of our homes has shifted from the local government to Community Associations. Thirty years ago, a typical new town house abutted a public street on the front and a public alley on the rear. Open space was provided by a nearby public park and recreational facilities were purchased ala carte from privately owned country clubs, swim clubs, tennis clubs, and gymnasiums. Today, 60% of all new residential construction, i.e. townhouses, single-family homes, condominiums, and cooperatives, is in Common Interest Developments (CID). In a CID, a homeowner is bound to a Community Association that owns, maintains, and is responsible for periodic replacements of various components that may include the roads, curbs, sidewalks, playgrounds, streetlights, recreational facilities, and other community facilities and infrastructure.

The growth of Community Associations has been explosive. In 1965, there were only 500 Community Associations in the United States. According to the 1990 U.S. Census, there were 130,000 Community Associations. Community Associations Institute (CAI), a national trade association, estimates there were more than 200,000 Community Associations in the year 2000, and that the number of Community Associations will continue to multiply.

The shift of responsibility for billions of dollars of community facilities and infrastructure from the local government and private sector to Community Associations has generated new and unanticipated problems. Although Community Associations have succeeded in solving many short-term problems, many Associations have failed to properly plan for the tremendous expenses of replacing community facilities and infrastructure components. When inadequate replacement reserve funding results in less than timely replacements of failing components, home owners are exposed to the burden of special assessments, major increases in Association fees, and a decline in property values.

2. REPLACEMENT RESERVE STUDY

The purpose of a Replacement Reserve Study is to provide the Association with an inventory of the common community facilities and infrastructure components that require periodic replacement, a general view of the condition of these components, and an effective financial plan to fund projected periodic replacements. The Replacement Reserve Study consists of the following:

- Replacement Reserve Study Introduction. The introduction provides a description of the property, reviews the intent of the Replacement Reserve Study, and lists documents and site evaluations upon which the Replacement Reserve Study is based.

- Section A Replacement Reserve Analysis. Many components owned by the Association have a limited life and require periodic replacement. Therefore, it is essential the Association have a financial plan that provides funding for the timely replacement of these components in order to protect the safety, appearance, and value of the community. In conformance with American Institute of Certified Public Accountant guidelines, a Replacement Reserve Analysis evaluates the current funding of Replacement Reserves as reported by the Association and recommends annual funding of Replacement Reserves by two generally accepted accounting methods; the Cash Flow Method and the Component Method. Miller - Dodson provides a replacement reserve recommendation based on the Cash Flow Method in Section A, and the Component Method in the Appendix of the report.

- Section B Replacement Reserve Inventory. The Replacement Reserve Inventory lists the commonly owned components within the community that require periodic replacement using funding from Replacement Reserves. The Replacement Reserve Inventory also provides information about components excluded from the Replacement Reserve Inventory whose replacement is not scheduled for funding from Replacement Reserves.

  Replacement Reserve Inventory includes estimates of the normal economic life and the remaining economic life for those components whose replacement is scheduled for funding from Replacement Reserves.

- Section C Projected Annual Replacements. The Calendar of Projected Annual Replacements provides a year-by-year listing of the Projected Replacements based on the data in the Replacement Reserve Inventory.

- Section D Condition Assessment. Several of the items listed in the Replacement Reserve Inventory are discussed in more detail. The Condition Assessment includes a narrative and photographs that document conditions at the property observed during our visual evaluation.

- The Appendix is provided as an attachment to the Replacement Reserve Study. Additional attachments may include supplemental photographs to document conditions at the property and additional information specific to the property cited in the Conditions Assessment (i.e. Consumer Product Safety Commission, Handbook for Public Playground Safety, information on segmental retaining walls, manufacturer recommendations for asphalt shingles or siding, etc). The Appendix also includes the Accounting Summary for the Cash Flow Method and the Component Method.

3. METHODS OF ANALYSIS

The Replacement Reserve industry generally recognizes two different methods of accounting for Replacement Reserve Analysis. Due to the difference in accounting methodologies, these methods lead to different calculated values for the Minimum Annual Contribution to the Reserves. The results of both methods are presented in this report. The Association should obtain the advice of its accounting professional as to which method is more appropriate for the Association. The two methods are:

- Cash Flow Method. The Cash Flow Method is sometimes referred to as the "Pooling Method." It calculates the minimum constant annual contribution to reserves (Minimum Annual Deposit) required to meet projected expenditures without allowing total reserves on hand to fall below the specified minimum level in any year.

  First, the Minimum Recommended Reserve Level to be Held on Account is determined based on the age, condition, and replacement cost of the individual components. The mathematical model then allocates the estimated replacement costs to the future years in which they are projected to occur. Based on these expenditures, it then calculates the minimum constant yearly contribution (Minimum Annual Deposit) to the reserves necessary to keep the reserve balance at the end of each year above the Minimum Recommended Reserve Level to be Held on Account. The Cash Flow Analysis assumes that the Association will have authority to use all of the reserves on hand for replacements as the need occurs. This method usually results in a Minimum Annual Deposit that is less than that arrived at by the Component Method.

- Component Method. This method is a time tested mathematical model developed by HUD in the early 1980s, but has been generally relegated to a few States that require it by law. For the vast majority of Miller - Dodson's clients, this method is not used.

  The Component Method treats each item in the replacement schedule as an individual line item budget. Generally, the Minimum Annual Contribution to Reserves is higher when calculated by the Component Method. The mathematical model for this method works as follows:

  First, the total Current Objective is calculated, which is the reserve amount that would have accumulated had all of the items on the schedule been funded from initial construction at their current replacement costs. Next, the Reserves Currently on Deposit (as reported by the Association) are distributed to the components in the schedule in proportion to the Current Objective. The Minimum Annual Deposit for each component is equal to the Estimated Replacement Cost, minus the Reserves on Hand, divided by the years of life remaining.

4. REPLACEMENT RESERVE STUDY DATA

- Identification of Reserve Components. The Reserve Analyst has only two methods of identifying Reserve Components; (1) information provided by the Association and (2) observations made at the site. It is important that the Reserve Analyst be provided with all available information detailing the components owned by the Association. It is our policy to request such information prior to bidding on a project and to meet with the individuals responsible for maintaining the community after acceptance of our proposal. After completion of the Study, the Study should be reviewed by the Board of Directors, individuals responsible for maintaining the community, and the Association's accounting professionals. We are dependent upon the Association for correct information, documentation, and drawings.

- Unit Costs. Unit costs are developed using nationally published standards and estimating guides and are adjusted by state or region. In some instances, recent data received in the course of our work is used to modify these figures.

  Contractor proposals or actual cost experience may be available as part of the Association records. This is useful information, which should be incorporated into your report. Please bring any such available data to our attention, preferably before the report is commenced.

- Replacement vs. Repair and Maintenance. A Replacement Reserve Study addresses the required funding for Capital Replacement Expenditures. This should not be confused with operational costs or cost of repairs or maintenance.

5. DEFINITIONS

Adjusted Cash Flow Analysis. Cash flow analysis adjusted to take into account annual cost increases due to inflation and interest earned on invested reserves. In this method, the annual contribution is assumed to grow annually at the inflation rate.

Annual Deposit if Reserves Were Fully Funded. Shown on the Summary Sheet A1 in the Component Method summary, this would be the amount of the Annual Deposit needed if the Reserves Currently on Deposit were equal to the Total Current Objective.

Cash Flow Analysis. See Cash Flow Method, above.

Component Analysis. See Component Method, above.

Contingency. An allowance for unexpected requirements. Roughly the same as the Minimum Recommended Reserve Level to be Held on Account used in the Cash Flow Method of analysis.

Critical Year. In the Cash Flow Method, a year in which the reserves on hand are projected to fall to the established minimum level. See Minimum Recommended Reserve Level to be Held on Account.

Current Objective. This is the reserve amount that would have accumulated had the item been funded from initial construction at its current replacement cost. It is equal to the estimated replacement cost divided by the estimated economic life, times the number of years expended (the difference between the Estimated Economic Life and the Estimated Life Left). The Total Current Objective can be thought of as the amount of reserves the Association should now have on hand based on the sum of all of the Current Objectives.

Cyclic Replacement Item. A component item that typically begins to fail after an initial period (Estimated Initial Replacement), but which will be replaced in increments over a number of years (the Estimated Replacement Cycle). The Reserve Analysis program divides the number of years in the Estimated Replacement Cycle into five equal increments. It then allocates the Estimated Replacement Cost equally over those five increments. (As distinguished from Normal Replacement Items, see below)

Estimated Economic Life. Used in the Normal Replacement Schedules. This represents the industry average number of years that a new item should be expected to last until it has to be replaced. This figure is sometimes modified by climate, region, or original construction conditions.

Estimated Economic Life Left. Used in the Normal Replacement Schedules. Number of years until the item is expected to need replacement. Normally, this number would be considered to be the difference between the Estimated Economic Life and the age of the item. However, this number must be modified to reflect maintenance practice, climate, original construction and quality, or other conditions. For the purpose of this report, this number is determined by the Reserve Analyst based on the present condition of the item relative to the actual age.

Estimated Initial Replacement. For a Cyclic Replacement Item (see above), the number of years until the replacement cycle is expected to begin.

Estimated Replacement Cycle. For a Cyclic Replacement Item, the number of years over which the remainder of the component's replacement occurs.

Minimum Annual Deposit. Shown on the Summary Sheet A1. The calculated requirement for annual contribution to reserves as calculated by the Cash Flow Method (see above).

Minimum Deposit in the Study Year. Shown on the Summary Sheet A1. The calculated requirement for contribution to reserves in the study year as calculated by the Component Method (see above).

Minimum Recommended Reserve Level to be Held on Account. Shown on the Summary Sheet A1, this number is used in the Cash Flow Method only. This is the prescribed level below which the reserves will not be allowed to fall in any year. This amount is determined based on the age, condition, and replacement cost of the individual components. This number is normally given as a percentage of the total Estimated Replacement Cost of all reserve components.

Normal Replacement Item. A component of the property that, after an expected economic life, is replaced in its entirety. (As distinguished from Cyclic Replacement Items, see above.)

Normal Replacement Schedules. The list of Normal Replacement Items by category or location. These items appear on pages designated.

Number of Years of the Study. The numbers of years into the future for which expenditures are projected and reserve levels calculated. This number should be large enough to include the projected replacement of every item on the schedule, at least once. This study covers a 40-year period.

One Time Deposit Required to Fully Fund Reserves. Shown on the Summary Sheet A1 in the Component Method summary, this is the difference between the Total Current Objective and the Reserves Currently on Deposit.

Reserves Currently on Deposit. Shown on the Summary Sheet A1, this is the amount of accumulated reserves as reported by the Association in the current year.

Reserves on Hand. Shown in the Cyclic Replacement and Normal Replacement Schedules, this is the amount of reserves allocated to each component item in the Cyclic or Normal Replacement schedules. This figure is based on the ratio of Reserves Currently on Deposit divided by the total Current Objective.

Replacement Reserve Study. An analysis of all of the components of the common property of the Association for which a need for replacement should be anticipated within the economic life of the property as a whole. The analysis involves estimation for each component of its estimated Replacement Cost, Estimated Economic Life, and Estimated Life Left. The objective of the study is to calculate a recommended annual contribution to the Association's Replacement Reserve Fund.

Total Replacement Cost. Shown on the Summary Sheet A1, this is total of the Estimated Replacement Costs for all items on the schedule if they were to be replaced once.

Unit Replacement Cost. Estimated replacement cost for a single unit of a given item on the schedule.

Unit (of Measure). Non-standard abbreviations are defined on the page of the Replacement Reserve Inventory where the item appears. The following standard abbreviations are used in this report:

EA: each FT: feet LS: lump sum PR: pair SF: square feet SY: square yard

What is a Reserve Study?
Who are we?

https://youtu.be/m4BcOE6q3Aw

What kind of property uses a Reserve Study?
Who are our clients?

https://youtu.be/40SodajTW1g

Who conducts a Reserve Study?
Reserve Specialist (RS) what does this mean?

https://youtu.be/pYSMZO13VjQ

When should a Reserve Study be updated?
What are the different types of Reserve Studies?

https://youtu.be/Qx8WHB9Cgnc

What is in a Reserve Study and what is out?
Improvement vs Component, is there a difference?

https://youtu.be/ZfBoAEhtf3E

What is my role as a Community Manager?
Will the report help me explain Reserves to my clients?

https://youtu.be/1J2h7FIU3qw

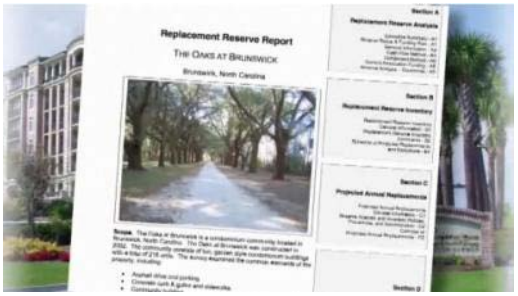
What is my role as a Board Member?
Will a Reserve Study meet my community's needs?

https://youtu.be/aARD1B1Oa3o

Community dues, how can a Reserve Study help?
Will a study help keep my property competitive?

https://youtu.be/diZfM1IyJYU

How do I read the report?
Will I have a say in what the report contains?



https://youtu.be/qCeVJhFf9ag

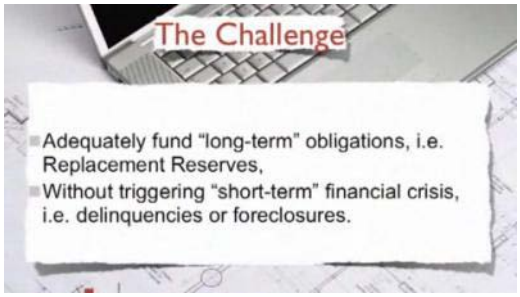
Where do the numbers come from?
Cumulative expenditures and funding, what?

https://youtu.be/SePdwVDvHWI

How are interest and inflation addressed?
What should we look at when considering inflation?

https://youtu.be/W8CDLwRIv68

A community needs more help, where do we go?
What is a Strategic Funding Plan?



https://youtu.be/hIxV9X1tIcA