

# REPLACEMENT RESERVE REPORT FY 2018 SOUTH HARBOUR MASTER POA



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SOUTH HARBOUR MASTER POA

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# REPLACEMENT RESERVE REPORT

## SOUTH HARBOUR MASTER

SOUTHPORT, NORTH CAROLINA  
December 20, 2017  
Revised July 23, 2018



**Description.** South Harbour is located in Southport, North Carolina near the Intracoastal Waterway and Oak Island. South Harbour Master POA was constructed between 2000 and 2013 and contains 521 units. This POA has been developed as Westport, Village Green, Glen Cove, and Golf villas. The survey examined the common elements of the property including:

- Entrance Monuments
- Asphalt roads and gravel parking areas
- Concrete sidewalks and curbs
- Swimming Pool and Club House Building
- Park Area (former Tennis Courts)
- 2 Tennis Courts
- No Storm Water Management ponds
- Pool Fencing, Furniture Inventory and Pool Equipment

### Section A

#### Replacement Reserve Analysis

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Projected Annual Replacements  
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**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 on May 24, 2013 by Miller-Dodson and the recent inspection on December 20, 2017.

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.

The community manager provided a breakdown of capital expenses for 2014, 2015, 2016, 2017 and proposed capital expenses for 2018 and 2019.

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](http://mdareserves.com).

**Purpose.** The purpose of this Replacement Reserve Study is to provide South Harbour (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 the 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 the most recent visual evaluation on December 20, 2017 to determine a remaining useful life and replacement cost for the commonly owned elements and the community pool 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.

**Current Funding.** This reserve study has been prepared for Fiscal Year 2018 covering the period from January 1, 2018 to December 31, 2018. The Replacement Reserves on deposit as of January 1, 2018 are reported to be \$335,777.93. The planned reserve capital contribution for 2018 is \$60,000.

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, Ms. Carson Lawrence, who provided very helpful insight into the current operations of the property.

**Analyst's Credentials.** B. Emerson Treffer holds a Bachelor's of Science Degree in Business Administration from the University of Maryland. Mr. Treffer has over forty years of experience in valuing all types of commercial, industrial, residential, and special purpose real estate. He has a variety of experience as a reserve analyst and as a property manager. He has valued other types of special purpose properties ranging from religious facilities, sports complexes, fire stations, day care centers, and schools. In addition, Mr. Treffer has experience in alternative use valuations for special use properties as well as valuation of alternative fuel processing plants. He has consulted on and valued green planned residential subdivisions, condominium conversions, and medical office buildings as well as large industrial complexes. For the Department of the Interior, Mr. Treffer has valued The Tower at The Gettysburg National Battlefield as well as the valuation of easements along the Atlantic Ocean shoreline in the Mid-Atlantic States. He also completed valuations of special purpose properties such as the Production Studios used by HBO. He qualified as an expert witness in various Federal, State, and County Courts. Mr. Treffer's court cases have ranged from construction defects and property rights to valuing the property rights for condemnation proceedings. Mr. Treffer is a Reserve Analyst for Miller-Dodson Associates.

Respectfully submitted,



*B. Emerson Treffer*

B. Emerson Treffer  
Reserve Analyst

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## EXECUTIVE SUMMARY

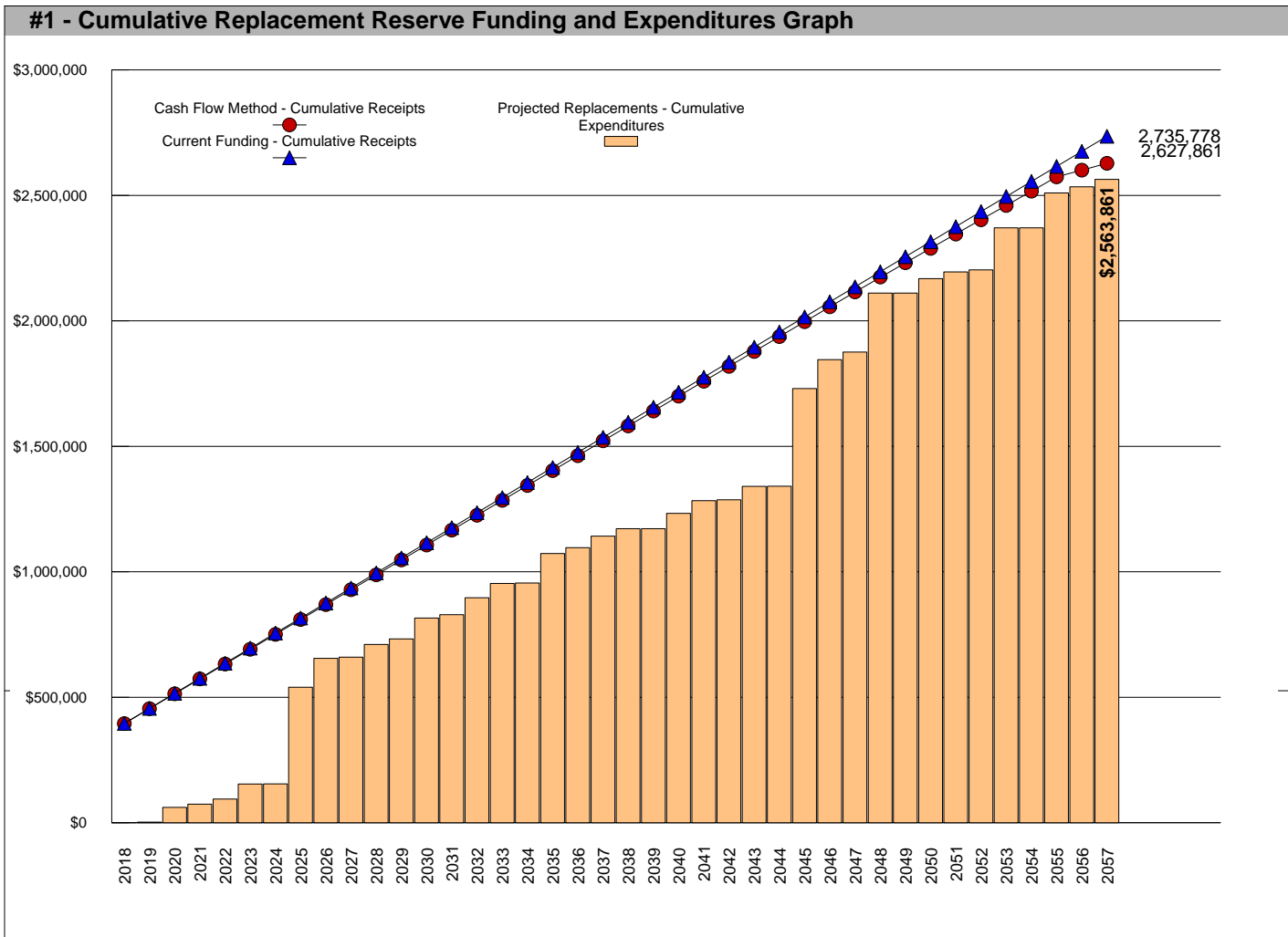
The South Harbour Replacement Reserve Analysis uses the Cash Flow Method (CFM) to calculate Replacement Reserve funding for the periodic replacement of the 102 Projected Replacements identified in the Replacement Reserve Inventory.

### **\$59,317** RECOMMENDED REPLACEMENT RESERVE FUNDING FOR THE STUDY YEAR, 2018

\$9.49 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.

South Harbour reports a Starting Balance of \$335,778 and Annual Funding totaling \$60,000. Current funding is adequate to fund the \$2,563,861 of Projected Replacements scheduled in the Replacement Reserve Inventory over the 40-year Study Period. See Page A3 for a more detailed evaluation.



The Current Funding Objective as calculated by the Component Method (Fully Funded) is \$473,961 making the reserve account 70.8% funded. See the Appendix for more information on this method.

## REPLACEMENT RESERVE ANALYSIS - GENERAL INFORMATION

The South Harbour 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.

### 2018 | 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, 2018.

### 40 Years | STUDY PERIOD

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

### \$335,778 | STARTING BALANCE

The Association reports Replacement Reserves on Deposit totaling \$335,778 at the start of the Study Year.

### Level One | LEVEL OF SERVICE

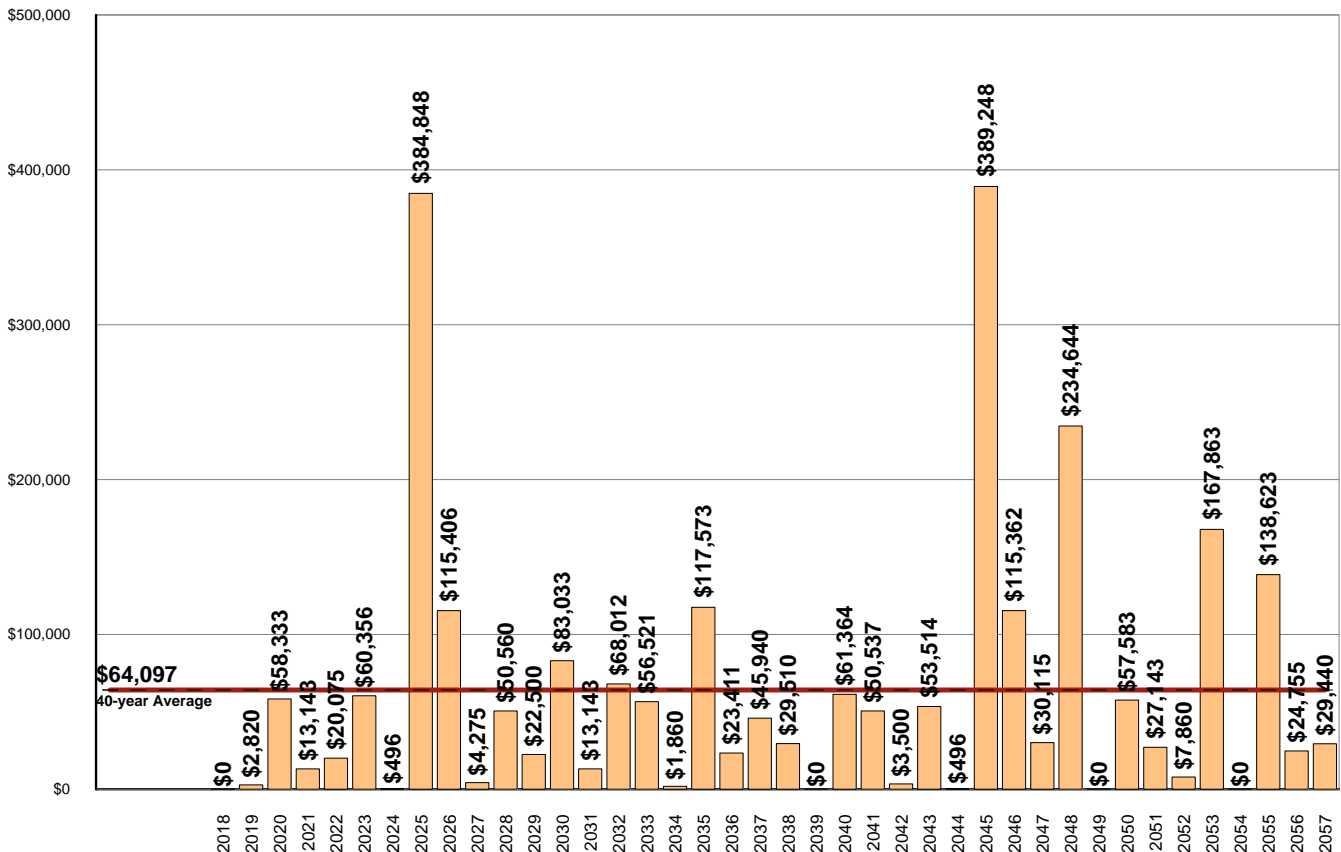
The Replacement Reserve Inventory has been developed in compliance with the National Reserve Study Standards for a Level One Study, as defined by the Community Associations Institute (CAI).

### \$2,563,861 | REPLACEMENT RESERVE INVENTORY - PROJECTED REPLACEMENTS

The South Harbour Replacement Reserve Inventory identifies 102 items that will require periodic replacement, that are to be funded from Replacement Reserves. We estimate the cost of these replacements will be \$2,563,861 over the 40-year Study Period. The Projected Replacements are divided into 14 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 \$64,097. Section C provides a year by year Calendar 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 \$2,563,861 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.

<b>#3 - Table of Annual Expenditures and Current Funding Data - Years 1 through 40</b>										
Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Starting Balance	\$335,778									
Projected Replacements		(\$2,820)	(\$58,333)	(\$13,143)	(\$20,075)	(\$60,356)	(\$496)	(\$384,848)	(\$115,406)	(\$4,275)
Annual Deposit	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000
End of Year Balance	\$395,778	\$452,958	\$454,625	\$501,482	\$541,406	\$541,051	\$600,555	\$275,707	\$220,302	\$276,027
Cumulative Expenditures		(\$2,820)	(\$61,153)	(\$74,296)	(\$94,372)	(\$154,727)	(\$155,223)	(\$540,071)	(\$655,476)	(\$659,751)
Cumulative Receipts	\$395,778	\$455,778	\$515,778	\$575,778	\$635,778	\$695,778	\$755,778	\$815,778	\$875,778	\$935,778
Year	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
Projected Replacements	(\$50,560)	(\$22,500)	(\$83,033)	(\$13,143)	(\$68,012)	(\$56,521)	(\$1,860)	(\$117,573)	(\$23,411)	(\$45,940)
Annual Deposit	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000
End of Year Balance	\$285,466	\$322,966	\$299,933	\$346,790	\$338,778	\$342,258	\$400,397	\$342,824	\$379,414	\$393,474
Cumulative Expenditures	(\$710,312)	(\$732,812)	(\$815,845)	(\$828,988)	(\$897,000)	(\$953,520)	(\$955,381)	(\$1,072,954)	(\$1,096,364)	(\$1,142,304)
Cumulative Receipts	\$995,778	\$1,055,778	\$1,115,778	\$1,175,778	\$1,235,778	\$1,295,778	\$1,355,778	\$1,415,778	\$1,475,778	\$1,535,778
Year	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047
Projected Replacements	(\$29,510)		(\$61,364)	(\$50,537)	(\$3,500)	(\$53,514)	(\$496)	(\$389,248)	(\$115,362)	(\$30,115)
Annual Deposit	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000
End of Year Balance	\$423,964	\$483,964	\$482,600	\$492,063	\$548,563	\$555,050	\$614,554	\$285,306	\$229,944	\$259,829
Cumulative Expenditures	(\$1,171,814)	(\$1,171,814)	(\$1,233,178)	(\$1,283,715)	(\$1,287,215)	(\$1,340,728)	(\$1,341,224)	(\$1,730,472)	(\$1,845,834)	(\$1,875,949)
Cumulative Receipts	\$1,595,778	\$1,655,778	\$1,715,778	\$1,775,778	\$1,835,778	\$1,895,778	\$1,955,778	\$2,015,778	\$2,075,778	\$2,135,778
Year	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057
Projected Replacements	(\$234,644)		(\$57,583)	(\$27,143)	(\$7,860)	(\$167,863)		(\$138,623)	(\$24,755)	(\$29,440)
Annual Deposit	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000
End of Year Balance	\$85,185	\$145,185	\$147,602	\$180,459	\$232,598	\$124,735	\$184,735	\$106,112	\$141,357	\$171,917
Cumulative Expenditures	(\$2,110,593)	(\$2,110,593)	(\$2,168,176)	(\$2,195,319)	(\$2,203,180)	(\$2,371,043)	(\$2,371,043)	(\$2,509,666)	(\$2,534,421)	(\$2,563,861)
Cumulative Receipts	\$2,195,778	\$2,255,778	\$2,315,778	\$2,375,778	\$2,435,778	\$2,495,778	\$2,555,778	\$2,615,778	\$2,675,778	\$2,735,778

### EVALUATION OF CURRENT FUNDING

The evaluation of Current Funding (Starting Balance of \$335,778 & annual funding of \$60,000), 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 102 Projected Replacements identified in the Replacement Reserve Inventory and that the Association will continue Annual Funding of \$60,000 throughout the 40-year Study Period.

Annual Funding of \$60,000 is approximately 101 percent of the \$59,317 recommended Annual Funding calculated by the Cash Flow Method for 2018, the Study Year.

Evaluation of the 102 Projected Replacements calculates an average annual expenditure over the next 40 years of \$64,097. Annual funding of \$60,000 is 94 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 \$2,563,861 of Projected Replacements scheduled in the Replacement Reserve Inventory over the 40-year Study Period.

### CASH FLOW METHOD FUNDING

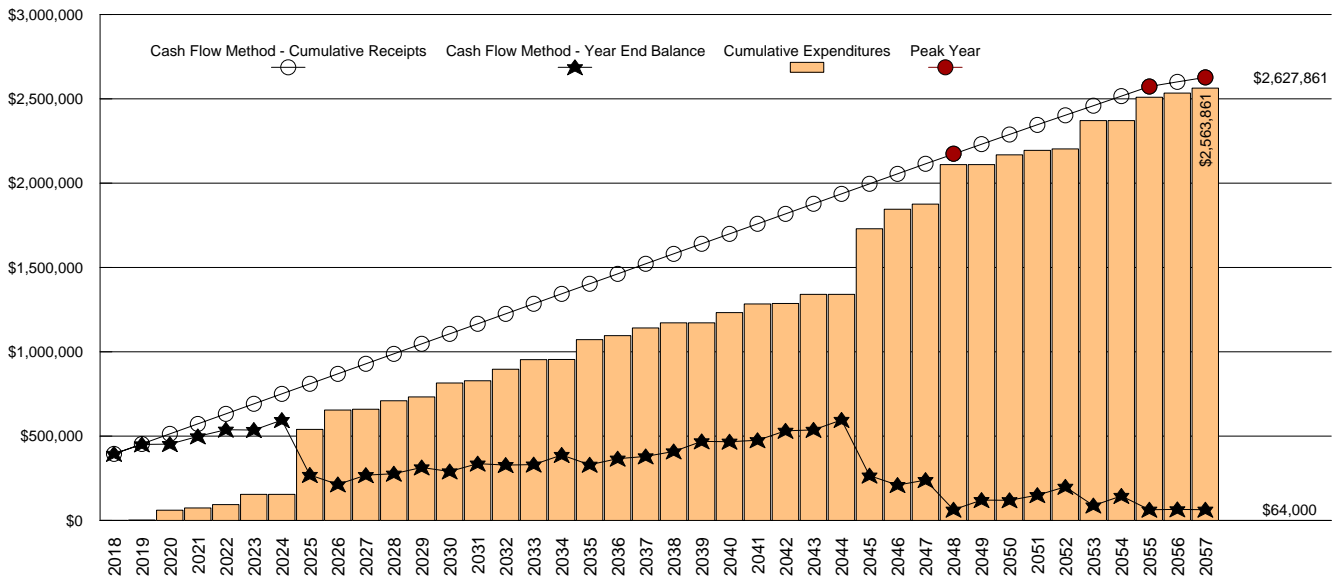
**\$59,317** RECOMMENDED REPLACEMENT RESERVE FUNDING FOR 2018

\$9.49 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 \$2,110,593 of replacements from 2018 to 2048. Recommended funding declines from \$59,317 in 2048 to \$57,010 in 2049. Peak Years are identified in Chart 4 and Table 5.
- **Minimum Balance.** The calculations assume a Minimum Balance of \$64,000 in Replacement Reserves. This is approx. 12 months of average expenditures based on the \$64,097, 40-year average annual expenditure.
- **Cash Flow Method Study Period.** Cash Flow Method calculates funding for \$2,563,861 of expenditures over the 40-year Study Period. It does not include funding for any projects beyond 2057 and in 2057, 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**

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Year Starting Balance	\$335,778									
Projected Replacements		(\$2,820)	(\$58,333)	(\$13,143)	(\$20,075)	(\$60,356)	(\$496)	(\$384,848)	(\$115,406)	(\$4,275)
Annual Deposit	\$59,317	\$59,317	\$59,317	\$59,317	\$59,317	\$59,317	\$59,317	\$59,317	\$59,317	\$59,317
End of Year Balance	\$395,095	\$451,591	\$452,575	\$498,748	\$537,989	\$536,950	\$595,771	\$270,240	\$214,151	\$269,193
Cumulative Expenditures	\$2,820	\$61,153	\$74,296	\$94,372	\$154,727	\$155,223	\$540,071	\$655,476	\$659,751	\$659,751
Cumulative Receipts	\$395,095	\$454,411	\$513,728	\$573,044	\$632,361	\$691,678	\$750,994	\$810,311	\$869,627	\$928,944
Year	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
Projected Replacements	(\$50,560)	(\$22,500)	(\$83,033)	(\$13,143)	(\$68,012)	(\$56,521)	(\$1,860)	(\$117,573)	(\$23,411)	(\$45,940)
Annual Deposit	\$59,317	\$59,317	\$59,317	\$59,317	\$59,317	\$59,317	\$59,317	\$59,317	\$59,317	\$59,317
End of Year Balance	\$277,949	\$314,766	\$291,049	\$337,223	\$328,528	\$331,324	\$388,780	\$330,523	\$366,429	\$379,806
Cumulative Expenditures	(\$710,312)	(\$732,812)	(\$815,845)	(\$828,988)	(\$897,000)	(\$953,520)	(\$955,381)	(\$1,072,954)	(\$1,096,364)	(\$1,142,304)
Cumulative Receipts	\$988,261	\$1,047,577	\$1,106,894	\$1,166,211	\$1,225,527	\$1,284,844	\$1,344,160	\$1,403,477	\$1,462,794	\$1,522,110
Year	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047
Projected Replacements	(\$29,510)	(\$61,364)	(\$50,537)	(\$3,500)	(\$53,514)	(\$496)	(\$389,248)	(\$115,362)	(\$30,115)	(\$30,115)
Annual Deposit	\$59,317	\$59,317	\$59,317	\$59,317	\$59,317	\$59,317	\$59,317	\$59,317	\$59,317	\$59,317
End of Year Balance	\$409,613	\$468,929	\$466,882	\$475,662	\$531,479	\$537,282	\$596,102	\$266,171	\$210,126	\$239,327
Cumulative Expenditures	(\$1,171,814)	(\$1,171,814)	(\$1,233,178)	(\$1,283,715)	(\$1,287,215)	(\$1,340,728)	(\$1,341,224)	(\$1,730,472)	(\$1,845,834)	(\$1,875,949)
Cumulative Receipts	\$1,581,427	\$1,640,743	\$1,700,060	\$1,759,377	\$1,818,693	\$1,878,010	\$1,937,326	\$1,996,643	\$2,055,960	\$2,115,276
Year	1st Peak - 2048	2049	2050	2051	2052	2053	2054	2nd Peak - 2055	2056	3rd Peak - 2057
Projected Replacements	(\$234,644)	(\$57,583)	(\$27,143)	(\$7,860)	(\$167,863)	(\$138,623)	(\$24,755)	(\$29,440)	(\$29,440)	(\$29,440)
Annual Deposit	\$59,317	\$57,010	\$57,010	\$57,010	\$57,010	\$57,010	\$57,010	\$57,010	\$57,010	\$57,010
End of Year Balance	\$64,000	\$121,010	\$120,438	\$150,305	\$199,455	\$88,603	\$145,613	\$64,000	\$66,343	\$64,000
Cumulative Expenditures	(\$2,110,593)	(\$2,110,593)	(\$2,168,176)	(\$2,195,319)	(\$2,203,180)	(\$2,371,043)	(\$2,371,043)	(\$2,509,666)	(\$2,534,421)	(\$2,563,861)
Cumulative Receipts	\$2,174,593	\$2,231,603	\$2,288,614	\$2,345,624	\$2,402,635	\$2,459,645	\$2,516,656	\$2,573,666	\$2,600,763	\$2,627,861

## 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 believe 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.

### **\$59,317** 2018 - CASH FLOW METHOD RECOMMENDED FUNDING

The 2018 Study Year calculations have been made using current replacement costs (see Page B2), modified by the Analyst for any project specific conditions.

### **\$61,035** 2019 - INFLATION ADJUSTED FUNDING

A new analysis calculates 2019 funding based on three assumptions;

- Replacement Reserves on Deposit totaling \$395,095 on January 1, 2019.
  - No Expenditures from Replacement Reserves in 2018.
  - Construction Cost Inflation of 2.30 percent in 2018.
- The \$61,035 inflation adjusted funding in 2019 is a 2.90 percent increase over the non-inflation adjusted 2019 funding of \$59,317.

### **\$62,883** 2020 - INFLATION ADJUSTED FUNDING

A new analysis calculates 2020 funding based on three assumptions;

- Replacement Reserves on Deposit totaling \$453,244 on January 1, 2020.
- All 2019 Projected Replacements listed on Page C2 accomplished at a cost to Replacement Reserves less than \$2,885.
- Construction Cost Inflation of 2.30 percent in 2019.

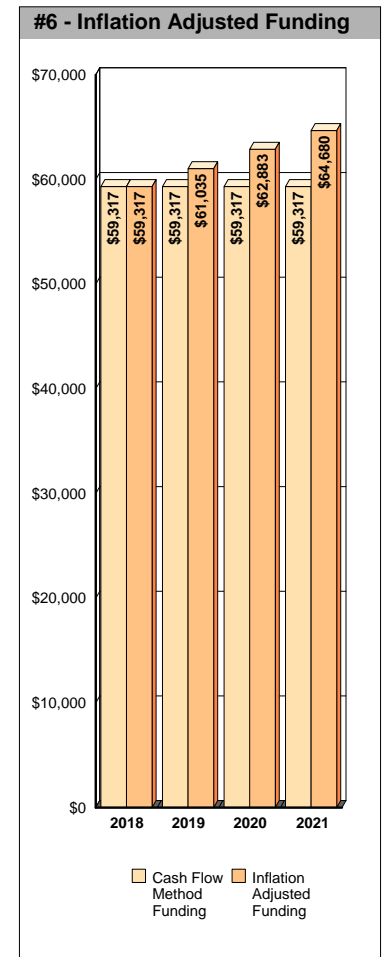
The \$62,883 inflation adjusted funding in 2020 is a 6.01 percent increase over the non-inflation adjusted 2020 funding of \$59,317.

### **\$64,680** 2021 - INFLATION ADJUSTED FUNDING

A new analysis calculates 2021 funding based on three assumptions;

- Replacement Reserves on Deposit totaling \$455,080 on January 1, 2021.
- All 2020 Projected Replacements listed on Page C2 accomplished at a cost to Replacement Reserves less than \$61,047.
- Construction Cost Inflation of 2.30 percent in 2020.

The \$64,680 inflation adjusted funding in 2021 is a 9.04 percent increase over the non-inflation adjusted funding of \$59,317.



## 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 2019, 2020 and 2021 inflation adjusted funding calculations above, the 2.30 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 2018, based on a 1.00 percent interest rate, we estimate the Association may earn \$3,654 on an average balance of \$365,436, \$4,242 on an average balance of \$424,169 in 2019, and \$4,542 on \$454,162 in 2020. The Association may elect to attribute 100 percent of the earned interest to Reserves, resulting in a reduction in the 2018 funding from \$59,317 to \$55,662 (a 6.16 percent reduction), \$61,035 to \$56,793 in 2019 (a 6.95 percent reduction), and \$62,883 to \$58,341 in 2020 (a 7.22 percent reduction).

## REPLACEMENT RESERVE STUDY - SUPPLEMENTAL COMMENTS

- South Harbour has 521 units. The type of property is a Master Association POA.
- 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 102 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

South Harbour - Replacement Reserve Inventory identifies 157 items. Two types of items are identified, Projected Replacements and Excluded Items:

- **PROJECTED REPLACEMENTS.** 102 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 \$1,156,579. Replacements totaling \$2,563,861 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.** 55 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 than \$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 157 items included in the South Harbour Replacement Reserve Inventory are divided into 14 major categories. Each category is printed on a separate page, Pages B3 to B15.
- **LEVEL OF SERVICE.** This Replacement Reserve Inventory has been developed in compliance with the standards established for a Level One Study - Full Service, as defined by the National Reserve Study Standards, established in 1998 by Community Associations Institute, which states:

*A Level I - Full Service Reserve Study includes the computation of complete component inventory information regarding commonly owned components provided by the Association, quantities derived from field measurements and/or quantity takeoffs from to-scale engineering drawings that may be made available. The condition of all components is ascertained from a visual inspection of each component by the analyst. The remaining economic life and the value of the components are provided based on these observations and the funding status and funding plan are then derived from analysis of this data.*

## REPLACEMENT RESERVE INVENTORY - GENERAL INFORMATION (cont'd)

- **INVENTORY DATA.** Each of the 102 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 55 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 COMPONENTS**

**PROJECTED REPLACEMENTS**

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
1	Club House Drive, asphalt pavement	sf	5,960	\$1.65	20	8	\$9,834
2	Club House Drive, seal coat	sf	5,960	\$0.20	5	3	\$1,192
3	Glen Cove Drive, asphalt pavement	sf	84,040	\$1.65	20	7	\$138,666
4	Glen Cove Drive, seal cost	sf	84,040	\$0.20	5	2	\$16,808
5	Thomas Court, asphalt pavement	sf	5,380	\$1.65	20	8	\$8,877
6	Thomas Court, seal coat	sf	5,380	\$0.20	5	3	\$1,076
7	Zachary Court, asphalt pavement	sf	3,860	\$1.65	20	7	\$6,369
8	Zachary Court, seal coat	sf	3,860	\$0.20	5	2	\$772
9	Minnesota Drive, asphalt pavement	sf	75,360	\$1.65	20	7	\$124,344
10	Minnesota Drive, seal coat	sf	75,360	\$0.20	5	2	\$15,072
11	Boss Court, asphalt pavement	sf	7,640	\$1.65	20	8	\$12,606
12	Boss Court, seal coat	sf	7,640	\$0.20	5	3	\$1,528
13	Melinda Court, asphalt pavement	sf	7,260	\$1.65	20	8	\$11,979
14	Melinda Court, seal coat	sf	7,260	\$0.20	5	3	\$1,452
15	Westport Alley, asphalt pavement	sf	13,762	\$1.65	20	7	\$22,707
16	Westport Alley, seal coat	sf	13,762	\$0.20	5	2	\$2,752
17	Wincie Wynd, asphalt pavement	sf	27,220	\$1.65	20	7	\$44,913
18	Wincie Wynd, seal coat	sf	27,220	\$0.20	5	2	\$5,444
19	Elton Drive, asphalt pavement	sf	8,680	\$1.65	20	8	\$14,322
20	Elton Drive, seal coat	sf	8,680	\$0.20	5	3	\$1,736
21	Anderson Drive, asphalt pavement	sf	20,020	\$1.65	20	8	\$33,033
22	Anderson Drive, seal coat	sf	20,020	\$0.20	5	3	\$4,004
SITE COMPONENTS - Replacement Costs - Subtotal							\$479,487

**SITE COMPONENTS**

**COMMENTS**

- We have assumed that the Association will replace the asphalt pavement by the installation of a 2 inch thick overlay. The pavement will need to be milled prior to the installation of the overlay. Milling and the cost of minor repairs (5 to 10 percent of the total area) to the base materials and bearing soils beneath the pavement are included in the cost shown above.
- Note: All asphalt pavement described above is an overlay for each street listed.

**SITE COMPONENTS (cont.)**

**PROJECTED REPLACEMENTS**

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
23	Gravel roadway(replenish 3/8"/sf)	sf	4,233	\$2.50	10	8	\$10,583
24	Concrete curb & gutter, barrier (6%)	ft	36	\$35.50	6	4	\$1,278
25	Concrete sidewalk, (6%)	sf	32	\$9.10	6	4	\$291
26	Concrete sidewalk, (6%)	sf	32	\$9.10	6	4	\$291
27	Park, fido station with post	ea	1	\$775.00	10	9	\$775
28	Stone Walk @ Park, reset (10%)	sf	27	\$38.00	30	20	\$1,026
29	Entry feature repointing, (10%)	sf	58	\$8.50	10	5	\$493
30	Entry feature covered foam letters(lg)	ea	24	\$16.00	20	6	\$384
31	Entry feature covered foam letters(sm)	ea	14	\$8.00	20	6	\$112
32	Benches, park (composite)	ea	2	\$880.00	15	12	\$1,760
33	Swings, park (PTW)	ea	2	\$680.00	15	8	\$1,360
34	Steps, park 6" (PTW)	ft	136	\$4.00	15	8	\$544
35	Flag Pole	ea	1	\$550.00	25	10	\$550
36	Irrigation Allowance	ea	1	\$7,000.00	10	7	\$7,000
37	Privacy fence (PVC)	ft	20	\$28.00	25	18	\$560

SITE COMPONENTS (cont.) - Replacement Costs - Subtotal \$27,007

**SITE COMPONENTS (cont.)**

**COMMENTS**

- For concrete components and other roadway shoulder work, we have assumed that the Association will conduct concrete component replacement projects in conjunction with the asphalt pavement and other concrete or right-of-way replacement projects.



**CLUBHOUSE EXTERIORS**  
**PROJECTED REPLACEMENTS**

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
38	Roof, asphalt shingle	sf	3,902	\$4.00	25	10	\$15,608
39	Gutters & downspouts	ft	170	\$12.00	25	10	\$2,040
40	Siding & Trim, Cementitious	sf	3,240	\$10.50	50	35	\$34,020
41	Vinyl heading, covered pool deck	sf	744	\$5.75	25	10	\$4,278
42	Windows	sf	521	\$42.80	35	20	\$22,299
43	Doors, exterior (pump room)	ea	2	\$850.00	25	12	\$1,700
44	Doors, exterior(french-doublew/transom	ea	6	\$3,200.00	25	12	\$19,200
45	Doors, exterior (single-glass)	ea	2	\$1,200.00	25	12	\$2,400
46	Club house lighting, exterior	ls	1	\$1,500.00	15	5	\$1,500

CLUBHOUSE EXTERIORS - Replacement Costs - Subtotal \$103,045

**CLUBHOUSE EXTERIORS**  
**COMMENTS**

Empty space for comments.

**CLUB HOUSE**  
**PROJECTED REPLACEMENTS**

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
47	Club house lighting, interior allowance	ls	1	\$2,500.00	15	4	\$2,500
48	Club house, furnishings & furniture	ls	1	\$14,000.00	14	5	\$14,000
49	Club house flat screen TV 42"w/DVD	ea	1	\$875.00	10	3	\$875
50	Club house ceramic tile	sf	1,034	\$37.40	21	14	\$38,672
51	Club house carpet	sf	616	\$4.90	10	5	\$3,018
52	Club house restroom renovate	sf	275	\$245.00	20	17	\$67,375
53	Club house sound proofing	ls	1	\$5,000.00	15	14	\$5,000
54	Club house window film	ls	1	\$3,640.00	15	14	\$3,640
55	Club house ceiling fans	ea	3	\$380.00	20	19	\$1,140
56	Security system	ls	1	\$9,500.00	15	14	\$9,500
57	Kitchen stainless work/storage	ft	3	\$80.00	39	23	\$240
58	Kitchen microwave	ea	1	\$325.00	21	1	\$325
59	Kitchen residential refrigerator	ea	1	\$1,395.00	21	1	\$1,395
60	Kitchen residential stove w/ oven	ea	1	\$1,100.00	21	1	\$1,100
61	Kitchen laminate countertop	ft	41	\$35.00	21	4	\$1,435
62	Kitchen cabinets	ft	49	\$220.00	21	4	\$10,780
63	Kitchen dishwasher	ea	1	\$750.00	21	2	\$750
<b>CLUB HOUSE - Replacement Costs - Subtotal</b>							<b>\$161,745</b>

**CLUB HOUSE**  
**COMMENTS**

Empty area for comments.

**CLUBHOUSE EXTERIORS**  
**PROJECTED REPLACEMENTS**

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
64	Heat pump/ AC Unit	ea	1	\$7,500.00	12	11	\$7,500
65	Furnace/Air Handler	ea	1	\$4,000.00	24	23	\$4,000
66	Heat pump/ AC Unit	ea	1	\$7,500.00	12	11	\$7,500
67	Furnace/Air Handler	ea	1	\$4,000.00	24	23	\$4,000
68	Heat pump/ AC Unit	ea	1	\$7,500.00	12	11	\$7,500
69	Furnace/Air Handler	ea	1	\$4,000.00	24	23	\$4,000
70	Hot water tank, gas (80 gallon)	ea	1	\$2,250.00	15	2	\$2,250
71	Piping allowance for water & sewer	ls	1	\$12,000.00	30	15	\$12,000

CLUBHOUSE EXTERIORS - Replacement Costs - Subtotal \$48,750

**CLUBHOUSE EXTERIORS**  
**COMMENTS**

- Piping allowance is for interior water and sewer line plus the exterior lateral water and sewer lines to the main utility piping.

**RECREATION**

**PROJECTED REPLACEMENTS**

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
72	Swimming pool, structure	sf	2,452	\$85.00	45	30	\$208,420
73	Swimming pool, whitecoat	sf	2,452	\$5.85	10	5	\$14,344
74	Swimming pool, waterline tile	ft	712	\$15.00	10	5	\$10,680
75	Swimming pool, concrete deck (1/3)	sf	1,335	\$10.85	10	2	\$14,485
76	Swimming pool pump (5 hp)	ea	1	\$4,685.00	15	5	\$4,685
77	Swimming pool filter	ea	2	\$3,850.00	15	14	\$7,700
78	Pool furniture, lounge	ea	25	\$155.00	10	5	\$3,875
79	Pool furniture, table	ea	6	\$125.00	10	5	\$750
80	Pool furniture, chairs	ea	24	\$250.00	10	5	\$6,000
81	Pool furniture, end table	ea	4	\$65.00	10	5	\$260
82	Pool furniture, stacked chairs	ea	10	\$75.00	10	5	\$750
83	Pool furniture, trash can	ea	1	\$100.00	20	17	\$100
84	Pool furniture, folding tables	ea	1	\$450.00	30	22	\$450
85	Pool perimeter fence (alum)	ft	1	\$288.00	30	25	\$288
86	Pool gate ( alum)	ea	1	\$460.00	30	25	\$460
87	Pool swipe card system	ea	1	\$3,520.00	20	10	\$3,520
88	Pool shed	ea	1	\$900.00	30	22	\$900
89	Pool outdoor shower	ea	1	\$600.00	20	19	\$600
90	Pool trash can enclosure	ea	1	\$650.00	20	19	\$650
91	Pool bike rack	ea	1	\$380.00	30	25	\$380
<b>RECREATION - Replacement Costs - Subtotal</b>							<b>\$279,297</b>

**RECREATION**

**COMMENTS**

- We have assumed that the project to replace the pool deck will include the replacement of the plumbing and electrical systems installed beneath the pavement.
- Tennis Court on Minnesota Avenue deleted as it has been converted into a park with swings.

**RECREATION (cont.)**

**PROJECTED REPLACEMENTS**

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
92	Tennis court, resurface	ls	1	\$10,775.00	20	19	\$10,775
93	Tennis court, color coat	ea	2	\$6,000.00	20	19	\$12,000
94	Tennis court, post & footings	pr	2	\$1,280.00	20	15	\$2,560
95	Tennis court, net	ea	2	\$320.00	5	3	\$640
96	Tennis court, fence	ft	430	\$27.00	20	10	\$11,610
97	Tennis court, wind screen	sf	2,580	\$4.30	20	10	\$11,094
98	Tennis court, post & footings	pr	1	\$1,280.00	20	15	\$1,280
99	Tennis court, net	ea	2	\$320.00	5	3	\$640
100	Tennis court, benches	ea	3	\$880.00	15	12	\$2,640
101	Tennis court, gate	ea	1	\$510.00	30	15	\$510
102	Pickle ball net on wheels	ea	2	\$1,750.00	5	4	\$3,500

RECREATION (cont.) - Replacement Costs - Subtotal \$57,249

**RECREATION (cont.)**

**COMMENTS**

Empty box for comments.

**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
	Mailboxes	ls	1				EXCLUDED
	Fire extinguisher cabinet	ls	1				EXCLUDED
	Interior doors	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
	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
	Electrical wiring	ls	1				EXCLUDED
	Stainless steel pool fixtures	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 (\$)
	Domestic water pipes serving one unit	ls	1				EXCLUDED
	Sanitary sewers serving one unit	ls	1				EXCLUDED
	Electrical wiring serving one unit	ls	1				EXCLUDED
	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
	Driveway on an individual lot	ls	1				EXCLUDED
	Apron on an individual lot	ls	1				EXCLUDED
	Sidewalk on an individual lot	ls	1				EXCLUDED
	Stairs on an individual lot	ls	1				EXCLUDED
	Curb & gutter on an individual lot	ls	1				EXCLUDED
	Retaining wall on an individual lot	ls	1				EXCLUDED
	Fence on an individual lot	ls	1				EXCLUDED
	Dock on an individually lot	ls	1				EXCLUDED
	Unit exterior	ls	1				EXCLUDED
	Unit windows	ls	1				EXCLUDED
	Unit doors	ls	1				EXCLUDED
	Unit skylights	ls	1				EXCLUDED
	Unit deck, patio, and/or balcony	ls	1				EXCLUDED
	Unit mailbox	ls	1				EXCLUDED
	Unit interior	ls	1				EXCLUDED
	Unit HVAC system	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
	Water mains and meters	ls	1				EXCLUDED
	Sanitary sewers	ls	1				EXCLUDED
	Stormwater management system	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
	Landscaping and site grading	ls	1				EXCLUDED
	Exterior painting	ls	1				EXCLUDED
	Interior painting	ls	1				EXCLUDED
	Janitorial service	ls	1				EXCLUDED
	Repair services	ls	1				EXCLUDED
	Partial replacements	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, roadways & parking	ls	1				EXCLUDED
	Government, sidewalks & curbs	ls	1				EXCLUDED
	Government, stormwater mgmt,	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.

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## PROJECTED ANNUAL REPLACEMENTS GENERAL INFORMATION

CALENDAR OF ANNUAL REPLACEMENTS. The 102 Projected Replacements in the South Harbour 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 South Harbour 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	2018 - STUDY YEAR	\$	Item	2019 - YEAR 2	\$	Item	2020 - YEAR 3	\$
			58	Kitchen microwave	\$325	4	Glen Cove Drive, seal coat	\$16,808
			59	Kitchen residential refrigerat	\$1,395	8	Zachary Court, seal coat	\$772
			60	Kitchen residential stove w/	\$1,100	10	Minnesota Drive, seal coat	\$15,072
						16	Westport Alley, seal coat	\$2,752
						18	Wincie Wynd, seal coat	\$5,444
						63	Kitchen dishwasher	\$750
						70	Hot water tank, gas (80 galle	\$2,250
						75	Swimming pool, concrete de	\$14,485
No Scheduled Replacements			Total Scheduled Replacements			Total Scheduled Replacements		
					\$2,820			\$58,333
Item	2021 - YEAR 4	\$	Item	2022 - YEAR 5	\$	Item	2023 - YEAR 6	\$
2	Club House Drive, seal coat	\$1,192	24	Concrete curb & gutter, barr	\$1,278	29	Entry feature repointing, (10	\$493
6	Thomas Court, seal coat	\$1,076	25	Concrete sidewalk, (6%)	\$291	46	Club house lighting, exterior	\$1,500
12	Boss Court, seal coat	\$1,528	26	Concrete sidewalk, (6%)	\$291	48	Club house, furnishings & fu	\$14,000
14	Melinda Court, seal coat	\$1,452	47	Club house lighting, interior	\$2,500	51	Club house carpet	\$3,018
20	Elton Drive, seal coat	\$1,736	61	Kitchen laminate countertop	\$1,435	73	Swimming pool, whitecoat	\$14,344
22	Anderson Drive, seal coat	\$4,004	62	Kitchen cabinets	\$10,780	74	Swimming pool, waterline til	\$10,680
49	Club house flat screen TV 4:	\$875	102	Pickle ball net on wheels	\$3,500	76	Swimming pool pump (5 hp)	\$4,685
95	Tennis court, net	\$640				78	Pool furniture, lounge	\$3,875
99	Tennis court, net	\$640				79	Pool furniture, table	\$750
Total Scheduled Replacements			Total Scheduled Replacements			Total Scheduled Replacements		
		\$13,143			\$20,075			\$60,356

**PROJECTED REPLACEMENTS - YEARS 7 TO 12**

2024 - YEAR 7			2025 - YEAR 8			2026 - YEAR 9		
Item		\$	Item		\$	Item		\$
30	Entry feature covered foam I	\$384	3	Glen Cove Drive, asphalt pa	\$138,666	1	Club House Drive, asphalt p	\$9,834
31	Entry feature covered foam I	\$112	4	Glen Cove Drive, seal coat	\$16,808	2	Club House Drive, seal coat	\$1,192
			7	Zachary Court, asphalt pave	\$6,369	5	Thomas Court, asphalt pave	\$8,877
			8	Zachary Court, seal coat	\$772	6	Thomas Court, seal coat	\$1,076
			9	Minnesota Drive, asphalt pa	\$124,344	11	Boss Court, asphalt paveme	\$12,606
			10	Minnesota Drive, seal coat	\$15,072	12	Boss Court, seal coat	\$1,528
			15	Westport Alley, asphalt pave	\$22,707	13	Melinda Court, asphalt pave	\$11,979
			16	Westport Alley, seal coat	\$2,752	14	Melinda Court, seal coat	\$1,452
			17	Wincie Wynd, asphalt paver	\$44,913	19	Elton Drive, asphalt paveme	\$14,322
			18	Wincie Wynd, seal coat	\$5,444	20	Elton Drive, seal coat	\$1,736
			36	Irrigation Allowance	\$7,000	21	Anderson Drive, asphalt pav	\$33,033
						22	Anderson Drive, seal coat	\$4,004
						23	Gravel roadway(replenish 3/	\$10,583
						33	Swings, park (PTW)	\$1,360
						34	Steps, park 6" (PTW)	\$544
						95	Tennis court, net	\$640
						99	Tennis court, net	\$640
Total Scheduled Replacements		\$496	Total Scheduled Replacements		\$384,848	Total Scheduled Replacements		\$115,406
2027 - YEAR 10			2028 - YEAR 11			2029 - YEAR 12		
Item		\$	Item		\$	Item		\$
27	Park, fido station with post	\$775	24	Concrete curb & gutter, barr	\$1,278	64	Heat pump/ AC Unit	\$7,500
102	Pickle ball net on wheels	\$3,500	25	Concrete sidewalk, (6%)	\$291	66	Heat pump/ AC Unit	\$7,500
			26	Concrete sidewalk, (6%)	\$291	68	Heat pump/ AC Unit	\$7,500
			35	Flag Pole	\$550			
			38	Roof, asphalt shingle	\$15,608			
			39	Gutters & downspouts	\$2,040			
			41	Vinyl heading, covered pool	\$4,278			
			87	Pool swipe card system	\$3,520			
			96	Tennis court, fence	\$11,610			
			97	Tennis court, wind screen	\$11,094			
Total Scheduled Replacements		\$4,275	Total Scheduled Replacements		\$50,560	All Replacements not listed		\$22,500

**PROJECTED REPLACEMENTS - YEARS 13 TO 18**

2030 - YEAR 13			2031 - YEAR 14			2032 - YEAR 15		
Item		\$	Item		\$	Item		\$
4	Glen Cove Drive, seal coat	\$16,808	2	Club House Drive, seal coat	\$1,192	50	Club house ceramic tile	\$38,672
8	Zachary Court, seal coat	\$772	6	Thomas Court, seal coat	\$1,076	53	Club house sound proofing	\$5,000
10	Minnesota Drive, seal coat	\$15,072	12	Boss Court, seal coat	\$1,528	54	Club house window film	\$3,640
16	Westport Alley, seal coat	\$2,752	14	Melinda Court, seal coat	\$1,452	56	Security system	\$9,500
18	Wincie Wynd, seal coat	\$5,444	20	Elton Drive, seal coat	\$1,736	77	Swimming pool filter	\$7,700
32	Benches, park (composite)	\$1,760	22	Anderson Drive, seal coat	\$4,004	102	Pickle ball net on wheels	\$3,500
43	Doors, exterior (pump room)	\$1,700	49	Club house flat screen TV 4:	\$875			
44	Doors, exterior(french-doubl	\$19,200	95	Tennis court, net	\$640			
45	Doors, exterior (single-glass	\$2,400	99	Tennis court, net	\$640			
75	Swimming pool, concrete de	\$14,485						
100	Tennis court, benches	\$2,640						
Total Scheduled Replacements		\$83,033	Total Scheduled Replacements		\$13,143	All Replacements not listed		\$68,012
2033 - YEAR 16			2034 - YEAR 17			2035 - YEAR 18		
Item		\$	Item		\$	Item		\$
29	Entry feature repointing, (10	\$493	24	Concrete curb & gutter, barr	\$1,278	4	Glen Cove Drive, seal cost	\$16,808
51	Club house carpet	\$3,018	25	Concrete sidewalk, (6%)	\$291	8	Zachary Court, seal coat	\$772
71	Piping allowance for water &	\$12,000	26	Concrete sidewalk, (6%)	\$291	10	Minnesota Drive, seal coat	\$15,072
73	Swimming pool, whitecoat	\$14,344				16	Westport Alley, seal coat	\$2,752
74	Swimming pool, waterline til	\$10,680				18	Wincie Wynd, seal coat	\$5,444
78	Pool furniture, lounge	\$3,875				36	Irrigation Allowance	\$7,000
79	Pool furniture, table	\$750				52	Club house restroom renovæ	\$67,375
80	Pool furniture.chairs	\$6,000				70	Hot water tank, gas (80 galle	\$2,250
81	Pool furniture, end table	\$260				83	Pool furniture, trash can	\$100
82	Pool furniture, stacked chair	\$750						
94	Tennis court, post & footings	\$2,560						
98	Tennis court, post & footings	\$1,280						
101	Tennis court, gate	\$510						
Total Scheduled Replacements		\$56,521	Total Scheduled Replacements		\$1,860	Total Scheduled Replacements		\$117,573



**PROJECTED REPLACEMENTS - YEARS 19 TO 24**

2036 - YEAR 19			2037 - YEAR 20			2038 - YEAR 21		
Item		\$	Item		\$	Item		\$
2	Club House Drive, seal coat	\$1,192	27	Park, fido station with post	\$775	28	Stone Walk @ Park, reset (1	\$1,026
6	Thomas Court, seal coat	\$1,076	47	Club house lighting, interior	\$2,500	42	Windows	\$22,299
12	Boss Court, seal coat	\$1,528	48	Club house, furnishings & fu	\$14,000	46	Club house lighting, exterior	\$1,500
14	Melinda Court, seal coat	\$1,452	55	Club house ceiling fans	\$1,140	76	Swimming pool pump (5 hp)	\$4,685
20	Elton Drive, seal coat	\$1,736	89	Pool outdoor shower	\$600			
22	Anderson Drive, seal coat	\$4,004	90	Pool trash can enclosure	\$650			
23	Gravel roadway(replenish 3/	\$10,583	92	Tennis court, resurface	\$10,775			
37	Privacy fence (PVC)	\$560	93	Tennis court, color coat	\$12,000			
95	Tennis court, net	\$640	102	Pickle ball net on wheels	\$3,500			
99	Tennis court, net	\$640						
Total Scheduled Replacements		\$23,411	Total Scheduled Replacements		\$45,940	Total Scheduled Replacements		\$29,510
2039 - YEAR 22			2040 - YEAR 23			2041 - YEAR 24		
Item		\$	Item		\$	Item		\$
			4	Glen Cove Drive, seal cost	\$16,808	2	Club House Drive, seal coat	\$1,192
			8	Zachary Court, seal coat	\$772	6	Thomas Court, seal coat	\$1,076
			10	Minnesota Drive, seal coat	\$15,072	12	Boss Court, seal coat	\$1,528
			16	Westport Alley, seal coat	\$2,752	14	Melinda Court, seal coat	\$1,452
			18	Wincie Wynd, seal coat	\$5,444	20	Elton Drive, seal coat	\$1,736
			24	Concrete curb & gutter, barr	\$1,278	22	Anderson Drive, seal coat	\$4,004
			25	Concrete sidewalk, (6%)	\$291	33	Swings, park (PTW)	\$1,360
			26	Concrete sidewalk, (6%)	\$291	34	Steps, park 6" (PTW)	\$544
			58	Kitchen microwave	\$325	49	Club house flat screen TV 4:	\$875
			59	Kitchen residential refrigerat	\$1,395	57	Kitchen stainless work/stora	\$240
			60	Kitchen residential stove w/	\$1,100	63	Kitchen dishwasher	\$750
			75	Swimming pool, concrete de	\$14,485	64	Heat pump/ AC Unit	\$7,500
			84	Pool furniture, folding tables	\$450	65	Furnace/Air Handler	\$4,000
			88	Pool shed	\$900	66	Heat pump/ AC Unit	\$7,500
No Scheduled Replacements			Total Scheduled Replacements		\$61,364	67	Furnace/Air Handler	\$4,000
						68	Heat pump/ AC Unit	\$7,500
						69	Furnace/Air Handler	\$4,000
						95	Tennis court, net	\$640
						99	Tennis court, net	\$640
Total Scheduled Replacements		\$0	Total Scheduled Replacements		\$61,364	Total Scheduled Replacements		\$50,537

**PROJECTED REPLACEMENTS - YEARS 25 TO 30**

Item	2042 - YEAR 25	\$
102	Pickle ball net on wheels	\$3,500
Total Scheduled Replacements		\$3,500

Item	2043 - YEAR 26	\$
29	Entry feature repointing, (10	\$493
51	Club house carpet	\$3,018
61	Kitchen laminate countertop	\$1,435
62	Kitchen cabinets	\$10,780
73	Swimming pool, whitecoat	\$14,344
74	Swimming pool, waterline til	\$10,680
78	Pool furniture, lounge	\$3,875
79	Pool furniture, table	\$750
80	Pool furniture.chairs	\$6,000
81	Pool furniture, end table	\$260
82	Pool furniture, stacked chair	\$750
85	Pool perimeter fence (alum)	\$288
86	Pool gate ( alum)	\$460
91	Pool bike rack	\$380
Total Scheduled Replacements		\$53,514

Item	2044 - YEAR 27	\$
30	Entry feature covered foam l	\$384
31	Entry feature covered foam l	\$112
Total Scheduled Replacements		\$496

Item	2045 - YEAR 28	\$
3	Glen Cove Drive, asphalt pa	\$138,666
4	Glen Cove Drive, seal coat	\$16,808
7	Zachary Court, asphalt pave	\$6,369
8	Zachary Court, seal coat	\$772
9	Minnesota Drive, asphalt pa	\$124,344
10	Minnesota Drive, seal coat	\$15,072
15	Westport Alley, asphalt pave	\$22,707
16	Westport Alley, seal coat	\$2,752
17	Wincie Wynd, asphalt paver	\$44,913
18	Wincie Wynd, seal coat	\$5,444
32	Benches, park (composite)	\$1,760
36	Irrigation Allowance	\$7,000
100	Tennis court, benches	\$2,640
Total Scheduled Replacements		\$389,248

Item	2046 - YEAR 29	\$
1	Club House Drive, asphalt p	\$9,834
2	Club House Drive, seal coat	\$1,192
5	Thomas Court, asphalt pave	\$8,877
6	Thomas Court, seal coat	\$1,076
11	Boss Court, asphalt paveme	\$12,606
12	Boss Court, seal coat	\$1,528
13	Melinda Court, asphalt pave	\$11,979
14	Melinda Court, seal coat	\$1,452
19	Elton Drive, asphalt paveme	\$14,322
20	Elton Drive, seal coat	\$1,736
21	Anderson Drive, asphalt pav	\$33,033
22	Anderson Drive, seal coat	\$4,004
23	Gravel roadway(replenish 3/	\$10,583
24	Concrete curb & gutter, barr	\$1,278
25	Concrete sidewalk, (6%)	\$291
26	Concrete sidewalk, (6%)	\$291
95	Tennis court, net	\$640
99	Tennis court, net	\$640
Total Scheduled Replacements		\$115,362

Item	2047 - YEAR 30	\$
27	Park, fido station with post	\$775
53	Club house sound proofing	\$5,000
54	Club house window film	\$3,640
56	Security system	\$9,500
77	Swimming pool filter	\$7,700
102	Pickle ball net on wheels	\$3,500
Total Scheduled Replacements		\$30,115

**PROJECTED REPLACEMENTS - YEARS 31 TO 36**

Item	2048 - YEAR 31	\$
72	Swimming pool, structure	\$208,420
87	Pool swipe card system	\$3,520
96	Tennis court, fence	\$11,610
97	Tennis court, wind screen	\$11,094
Total Scheduled Replacements		\$234,644

Item	2049 - YEAR 32	\$
No Scheduled Replacements		

Item	2050 - YEAR 33	\$
4	Glen Cove Drive, seal coat	\$16,808
8	Zachary Court, seal coat	\$772
10	Minnesota Drive, seal coat	\$15,072
16	Westport Alley, seal coat	\$2,752
18	Wincie Wynd, seal coat	\$5,444
70	Hot water tank, gas (80 galle	\$2,250
75	Swimming pool, concrete de	\$14,485
Total Scheduled Replacements		\$57,583

Item	2051 - YEAR 34	\$
2	Club House Drive, seal coat	\$1,192
6	Thomas Court, seal coat	\$1,076
12	Boss Court, seal coat	\$1,528
14	Melinda Court, seal coat	\$1,452
20	Elton Drive, seal coat	\$1,736
22	Anderson Drive, seal coat	\$4,004
48	Club house, furnishings & fu	\$14,000
49	Club house flat screen TV 4:	\$875
95	Tennis court, net	\$640
99	Tennis court, net	\$640
Total Scheduled Replacements		\$27,143

Item	2052 - YEAR 35	\$
24	Concrete curb & gutter, barr	\$1,278
25	Concrete sidewalk, (6%)	\$291
26	Concrete sidewalk, (6%)	\$291
47	Club house lighting, interior	\$2,500
102	Pickle ball net on wheels	\$3,500
All Replacements not listed		\$7,860

Item	2053 - YEAR 36	\$
29	Entry feature repointing, (10	\$493
35	Flag Pole	\$550
38	Roof, asphalt shingle	\$15,608
39	Gutters & downspouts	\$2,040
40	Siding & Trim, Cementitious	\$34,020
41	Vinyl heading, covered pool	\$4,278
46	Club house lighting, exterior	\$1,500
50	Club house ceramic tile	\$38,672
51	Club house carpet	\$3,018
64	Heat pump/ AC Unit	\$7,500
66	Heat pump/ AC Unit	\$7,500
68	Heat pump/ AC Unit	\$7,500
73	Swimming pool, whitecoat	\$14,344
74	Swimming pool, waterline til	\$10,680
76	Swimming pool pump (5 hp)	\$4,685
78	Pool furniture, lounge	\$3,875
79	Pool furniture, table	\$750
80	Pool furniture.chairs	\$6,000
81	Pool furniture, end table	\$260
82	Pool furniture, stacked chair	\$750
94	Tennis court, post & footings	\$2,560
98	Tennis court, post & footings	\$1,280
Total Scheduled Replacements		\$167,863

**PROJECTED REPLACEMENTS - YEARS 37 TO 42**

2054 - YEAR 37			2055 - YEAR 38			2056 - YEAR 39		
Item		\$	Item		\$	Item		\$
			4	Glen Cove Drive, seal coat	\$16,808	2	Club House Drive, seal coat	\$1,192
			8	Zachary Court, seal coat	\$772	6	Thomas Court, seal coat	\$1,076
			10	Minnesota Drive, seal coat	\$15,072	12	Boss Court, seal coat	\$1,528
			16	Westport Alley, seal coat	\$2,752	14	Melinda Court, seal coat	\$1,452
			18	Wincie Wynd, seal coat	\$5,444	20	Elton Drive, seal coat	\$1,736
			36	Irrigation Allowance	\$7,000	22	Anderson Drive, seal coat	\$4,004
			43	Doors, exterior (pump room)	\$1,700	23	Gravel roadway(replenish 3/	\$10,583
			44	Doors, exterior(french-doubl	\$19,200	33	Swings, park (PTW)	\$1,360
			45	Doors, exterior (single-glass	\$2,400	34	Steps, park 6" (PTW)	\$544
			52	Club house restroom renova	\$67,375	95	Tennis court, net	\$640
			83	Pool furniture, trash can	\$100	99	Tennis court, net	\$640
No Scheduled Replacements			Total Scheduled Replacements			Total Scheduled Replacements		
\$			\$138,623			\$24,755		
2057 - YEAR 40			2058 (beyond Study Period)			2059 (beyond Study Period)		
Item		\$	Item		\$	Item		\$
27	Park, fido station with post	\$775	24	Concrete curb & gutter, barr	\$1,278			
55	Club house ceiling fans	\$1,140	25	Concrete sidewalk, (6%)	\$291			
89	Pool outdoor shower	\$600	26	Concrete sidewalk, (6%)	\$291			
90	Pool trash can enclosure	\$650						
92	Tennis court, resurface	\$10,775						
93	Tennis court, color coat	\$12,000						
102	Pickle ball net on wheels	\$3,500						
Total Scheduled Replacements			Total Scheduled Replacements			No Scheduled Replacements		
\$29,440			\$1,860					

## CONDITION ASSESSMENT

**General Comments.** Miller-Dodson Associates conducted a Reserve Study of South Harbour on December 6, 2013 and the most recent inspection was completed on December 20, 2017. 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.

### GENERAL COMMENTS

The main roads and the curbs are maintained by the Association. Site lighting (streetlights) are leased from the power company. These items are excluded in this study.

All of the dwellings including the individual doors, windows, lead walks, patios, patio privacy fencing, steps, balconies, gutters and downspouts and the interior of the units and exterior siding are reported to be the homeowner's responsibility. As a result of this, these components are all excluded from our Analysis.

**Amenities.** The amenities within the overall South Harbour development include Entrance Monuments, the swimming pool with concrete walks, on-site parking, club house with men's and ladies' restrooms, kitchen, gathering area and a reading room, and tennis courts. There is also an area set aside as a park located with a view of the Intracoastal Waterway. This park formerly was the site of tennis courts that were in poor condition that were demolished to make way for the park.

Typical Street Views South Harbour



Typical Street Views South Harbour



Typical Street Views South Harbour



## SITE IMPROVEMENTS

**Asphalt Pavement.** The Analyst was provided with a Street Study dated July 2017, which was completed by Norris & Tunstall Consulting Engineers, P.C. The conclusions of this are summarized as follows:

“The overall condition of the streets and parking area is good based on the age of the pavements and the fact that the project is built out. As such, heavy construction traffic will no longer be a factor in street deterioration. Other than isolated areas, the pavements appear to be performing well. There are some areas that show signs of cracking which could be attributed to a poor or wet subgrade condition. The Alley that parallels Minnesota Drive is mentioned in the report has an area that has failed. The property manager provided me with an invoice showing this work has subsequently been repaired at a cost of \$6,000.00. The engineer's report stated that it would cost \$400,000.00 to resurface this entire area. They recommend road funding program be set up for future repaving.”

The site includes asphalt paving for community roads and the road, which leads to the pool. In general, the asphalt is in average condition with some cracking and alligating observed. The Association maintains an inventory of 281,042 square feet of asphalt pavement, including the following:

Street	Square Footage of Asphalt Pavement
Club House Driveway	5,960
Glenn Cove Drive	84,040
Thomas Court	5,380
Zachary Court	3,860
Minnesota Drive	75,360
Boss Court	7,640
Melinda Court	7,260
Westport Alley	13,762
Wincie Wynd	27,200
Elton Drive	21,860
Anderson Drive	8,680
O'Quinn	20,020
Total Square Footage of Asphalt Pavement	281,042

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>.

**Asphalt Seal Coat.** The asphalt pavement was installed in 2004 and parking lot repairs and seal coating and striping were completed in 2013. We recommend seal coating every five years in order to protect and extend the life of asphalt.

Asphalt pavement is a combination of rock, sand, and liquid asphalt. With time and exposure to sunlight, UV radiation breaks down the asphalt sufficiently to allow loosening of the sand and stone and erosion of the of the top surface of the pavement. The first sign of this deterioration is the gradual change in color of the asphalt from black to gray. As this deterioration continues, the surface of the asphalt takes on a rough appearance. The sun's UV radiation also causes the pavement to lose flexibility. This loss of flexibility causes the pavement to become brittle, crack, and break.

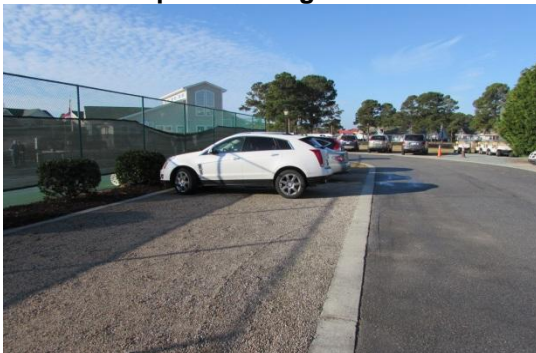
Salt petroleum products, and other chemicals also damage the asphalt pavement by dissolving directly into the asphalt, softening its structure.

Before applying the seal coat, the asphalt must be cleaned and area damaged by petroleum products treated so that the seal coat can properly adhere to the asphalt. Additionally, all cracks in the asphalt must be cleaned out and filled to prevent the penetration of water to the base material under the asphalt. If damaged areas cannot be repaired then sections of the asphalt need to removed and new asphalt installed. The base material may also require replacement based on the cause of the failure of the asphalt pavement.

Seal coating the asphalt on a regular basis provides a barrier between these elements and the asphalt material. Seal coating materials are typically a coal tar emulsion or other similar material that is highly resistant to water, gas, oil, salt, other chemicals and UV radiation.

Most seal coating materials cure in 24 hours to allow normal traffic flow. However, the total curing of the seal coating may take longer in high humidity conditions.

**Asphalt Paving near the Tennis Courts and Club House. Note Gravel Parking Areas.**



**Asphalt Paving near the Tennis Courts and Club House**





**Curb.** The Association maintains an inventory of 596 linear feet of concrete curb along the drive at the clubhouse. There are no gutters. All components have been well maintained and are in average to good condition. Any problems noted are in the form of minor cracks, spalling, or settlement that can be repaired by continued periodic replacement of broken sections. The Analyst looked for the following types of defects:

- Cracking. There are no multiple sections of the curb that are cracked.
- Heaving/Settlement. No sections of the curb have heaved or settled relative to their adjacent sections, creating trip hazards.
- Broken Sections. There are no multiple locations where impacts from vehicles have broken off sections of the curb.
- Scaling and Flaking. Scaling and flaking are the loss of the surface mortar in concrete, typically caused by water freezing within the concrete. Once started, scaling and flaking can be expected to continue to grow as a result of exposure of the concrete to freeze/thaw cycles. No scaled or flaking sections were observed.
- Popouts. The curb has not developed any significant popouts. Popouts are small sections of concrete surface that fail as the result of moisture freezing in a void just below the surface, causing pieces of concrete to pop away, leaving a shallow divot. Water can collect in the popouts and can extend the damage if it freezes.
- Lack of Expansion Joints. Some sections of the curbs were installed without a proper expansion joint between the curb and the adjacent concrete. As a result, the edge of the concrete along the curb may over time break off, creating trip hazards.

Because it is highly unlikely that all of the community's concrete curb sections will fail and require replacement in the period of the study, we have programmed funds for the replacement of 60 percent of the inventory and spread those funds over a 60-year timeframe to reflect the incremental nature of this work. This approach assumes a failure rate of one percent per year.

**Typical Concrete Curb**



**Concrete Flatwork.** The concrete flatwork includes the Community Pool sidewalks and concrete parking for four handicapped parking spaces and entryway into the pool building. The community maintains an inventory of approximately 3,650 square feet of concrete flatwork. The Analyst looked for the following typical defects:

- Cracking. Only a few areas of the concrete flatwork had cracks.
- Heaving/Settlement. No sections of the concrete flatwork have heaved or settled relative to their adjacent sections. No trip hazards were observed.

- **Scaling and Flaking.** No sections of the concrete flatwork were scaling and flaking. Scaling and flaking are the loss of the surface mortar in concrete, typically caused by water freezing within the concrete. Once started, scaling and flaking can be expected to continue to grow as a result of exposure of the concrete to freeze/thaw cycles.
- **Tree Root Damage.** There are no locations where roots from trees planted near the concrete walks have pushed the concrete, causing cracks and heaving. Future repair of these areas will require removal of the asphalt and the tree roots.
- The expansion joint material is not present in many of the joints between the concrete sidewalks and curbs. The expansion material that fills these joints is installed to allow movement and to serve as a gasket to prevent water from entering the pavement.
- If these joints are left open, soil will wash away underneath the pavement and will cause settlement of both the curb and gutter and the sidewalk. Additionally, water that is allowed to collect behind the curb and gutter will open up the joint between the asphalt and gutter pan, which will deteriorate the edges of the asphalt. The expansion joint material should be replaced with an impregnated homasote approximately every five years as a normal maintenance procedure.

The standards we used for recommending replacement are as follows:

1. Trip hazard, 0.5 inch height difference.
2. Severe cracking.
3. Severe spalling.
4. Uneven riser heights on steps.
5. Steps with risers in excess of 8.25 inches.

Because it is highly unlikely that all of the community's concrete components will fail and require replacement in the period of the study, we have programmed funds for the replacement of 60 percent of the inventory and spread those funds over a 60-year timeframe to reflect the incremental nature of this work. This approach assumes a failure rate of one percent per year.

**Entrance Monuments.** Brick masonry walls have been erected as entrance monuments to the community. Because the brickwork has a very long life expectancy, we have excluded replacement of these walls. We have, however, included funding for the periodic tuckpointing of mortar joints as exposure to weather over an extended period of time will wash lime out of the mortar joints as exposure to weather over an extended period of time will wash lime out of the mortar and weaken the joint.

Periodic tuckpointing of these joints and replacement of damaged brick is required to extend the life of the wall. Unless the wall is damaged by settlement, this work is typically not required until the wall is approximately 35-40 years old.

**Entrance Monuments and Brick Column**



At that point, we expect that approximately 10 percent of the surface area will require repair and that an additional 10 percent will require repair every 20 years thereafter.

**Entrance Monuments and Brick Column**



**Park Features.** The park near the intercoastal waterway was formerly the site of tennis courts. However, over time, the courts deteriorated and were removed to develop the park site. The park includes stone walk, steps frame with PTW, swings of PTW and benches of composite material. All features are in good condition. We have provided appropriate funding for the features replacement.

**Park Open Space Area**



**Swings Located At The Park**



**Park Area Located Near The Street**



**Park Open Space Area**



**Miscellaneous Community Signs.** There are various signs located throughout the community that the Association is responsible for such as street, traffic, stop, warning, notice, etc. Signs fail at varying rates that are not predictable and are subject to vandalism. Thus, we have not provided an allowance for periodic sign replacement.

**BUILDING EXTERIOR - CLUB HOUSE**

**Asphalt Shingle Roofing.** The asphalt shingle roof on the clubhouse is in good condition. We have estimated the remaining useful life of the roof based on the conditions seen at the site as well as the age of the roof. We have assumed that when the roof eventually will require replacement, all roofs will be replaced with 25-year roofs. We have assumed that the gutters and downspouts will be replaced when the roofs are replaced.



**Club House**



**Gutters and Downspouts.** The Club House has aluminum gutters and downspouts. The gutters and downspouts are in average condition.

A gutter and downspout system will remove rainwater from the area of the building roof, siding, and foundation. This will protect the 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 inspect 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, Trim and Vinyl Heading.** The hardiboard siding, trim and vinyl heading under the covered pool decking are in good condition. Based on the varying rate of failure of the siding and trim, we have provided a ten percent replacement allowance with the five-year painting cycle. The vinyl heading is programmed for replacement at 25 years. Cementitious materials typically have an extended useful life and require repainting and recaulking every 10 to 15 years. Following the manufacturer's recommendations for cleaning, painting, and caulking, we expect cementitious products to have a useful life of 40 years or more.

**Windows.** The windows in the clubhouse are the responsibility of the Association. The existing windows are dual glazed units with aluminum frames. The windows date to the original construction and are approximately 12 years old. The average service life for windows of this type is 35 years. The windows are in good condition.

Club House



Rear Views of Club House



**Doors.** The pump rooms have metal doors that are in good condition. Metal doors are subject to rust especially around the pool chemicals. The clubhouse doors are double French with glass inserts and single doors with glass inserts and are all in good condition.

**Exterior Lighting.** The clubhouse exterior lighting is in good condition. We have provided an allowance for replacement every fifteen years.

**Rear Views of Club House**



**Pool Furniture**



**Pool Furniture and Storage Shed**



**BUILDING INTERIOR**

**Club House Contents.** The inventory of the clubhouse contents is as comprehensive as practical and includes the furniture, fixtures, and equipment that were noted during the site visit. Items have been programmed for replacement based upon the normal economic life and with a value that is comparable to the existing components. The wood trim and interior doors in the clubhouse are excluded as a long-lived item as these typically do not wear out. The pro shop inventory is not owned by the Association.

Hall Entrance



Pro Shop for Golf Course



Entrance to Pool from Club House



Security System



Views of Reading Room - Second Floor of Club House



Club House Kitchen





**Restrooms.** The two restrooms in the clubhouse that are shared with the pool are in good condition. We have provided an allowance for the renovation of all three rooms.

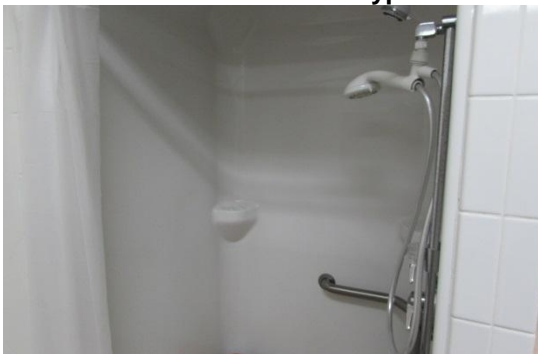
**Typical Restrooms**



**Typical Restrooms**



**Typical Restrooms with Fiberglass Shower Unit**





## MECHANICAL and ELECTRICAL

**Heat Pumps.** There are three heat pumps that serve the building. We have included two items in the Reserve Analysis for the heat pumps: the heat pump system and the system's compressor. For the system, we have assumed a service life of 30 years. For the system's compressor, we have assumed a service life of 15 years. Per the property manager, all three heat pumps have been replaced.

### HVAC SYSTEM INSTALLED IN ATTIC - FURANCE and AIR HANDLER



### HVAC SYSTEM



**Water and Sewer Piping Allowance.** For this study, piping allowance is defined as the domestic water and sanitary sewer lines inside the clubhouse and between the building and the main distribution lines. Life expectancy of these systems ranges from 40 years to 50+/- years.

Ultimately the individual components of these systems will require replacement. Although life expectancy is in the out years, we have included the building common riser systems at a replacement allowance. The intent is to avoid exposing the owners and the Association to a large unfunded liability when the replacement is a reality, and if it comes earlier than expected. The cost and estimated percent of the replacement should be reviewed each time the replacement Reserve Study is updated.

**Irrigation System.** The Association operates an irrigation system that serves the area by the entrance monuments, the swimming pool, and park.

There are no drawings available to accurately estimate the value of the system. Accordingly, we have provided an estimate of the approximate replacement cost based on our experience with other communities of similar size and on our inspection of the visible components while on site. Irrigation systems should be carefully monitored to eliminate repeated saturation and erosion of soils near foundations and retaining walls. The estimate includes replacement of the irrigation system controls only.

## RECREATIONAL FACILITIES

**Swimming Pool.** The community operates an outdoor pool of concrete construction with a concrete deck. The concrete desk is not coated. Listed below are the major components of the pool facilities:

- **Pool Shell.** The shell for the swimming pool is currently being recoated and repaired. Pool shells normally have a finite life of approximately 45 years. At that time, it may not be necessary to replace the entire structure. However, it is prudent to anticipate a major expenditure for replacement of underground lines and sections of the pool. Based on our research, we have found it to be prudent to program \$85.00 per square foot of pool surface to cover these needs.
- **Pool Deck.** The pool has a concrete deck. The overall condition of the deck is good. Because it is highly unlikely that all the community's concrete pool deck sections will fail and require replacement at the same time, we have divided the deck into three equal components in the Reserve Analysis and have spread their replacement over an 18-year period.
- **Whitecoat.** The pool whitecoat is currently being reinstalled and should be in good condition when the pool renovations are completed. We have assumed a service life of eight to ten years for the pool whitecoat.
- **Waterline Tile.** The waterline tile is in good condition. We have assumed that the waterline tile will be replaced or restored when the pool whitecoat is being restored.
- **Pump and Filter System.** The filter system is in average operating condition. A new pump was installed in 2017. We have assumed a service life of 20 years for the filter system, and 10 years for the pump.
- **Pool Fence.** The swimming pool is enclosed by a metal fence. Fencing of this type has a service life of 20 years. The fence is in good condition.
- **Pool Furniture.** We have included these items in the Reserve Analysis for the pool furniture; replacement and restrapping at the mid-point of its service life. The pool furniture is in fair to average condition.
- **Access System.** The building is an access-controlled facility with electrically operated doors activated by a card swipe system. Systems of this type typically have a service life of 15 years. Beyond that point, it becomes difficult to find replacement parts or companies that can service the system. Additionally, changes in technology help render the systems obsolete. For these reasons, we have assumed a service life of 15 years for the system.
- **Security System.** The pool building and the swimming pool are monitored by a video surveillance system. We have assumed a service life of ten years.
- **Restrooms.** We have included two items for the restrooms: the fixtures and the epoxy floor finish. Both are in good condition.

### SWIMMING POOL



POOL FILTERS



POOL PUMP and PIPING



**Security System.** The Association maintains a video system with recording capability with cameras located in various areas along the exterior of the clubhouse.

Security Monitoring System



**Fencing.** The Association maintains a metal fence around the pool that was installed in 2016 and is in good condition. Fencing systems have a large number of configurations and finishes that can usually be repaired as a maintenance activity by replacing individual components as they become damaged or weathered.

Protection from string machine damage during lawn maintenance can extend the useful life of some fence types. Protection from this type of damage is typically provided by applying herbicides around post bases or installing protective sheathing.

Aluminum fencing can have a useful life of 40 years or more. Periodic cleaning and touch-up painting may be required to keep the fence attractive.

For more information on fencing, visit our [website link](#) to the American Fence Association.

As part of normal maintenance, we recommend the following:

- Lift or remove ornamental base covers, if applicable.
- Remove existing caulk completely.
- Clean, prime, and paint all posts.
- Apply an appropriate caulk around each post base.
- Tool and shape caulking to shed water from post.
- Reinstall base covers, and seal and paint all joints.

Fence posts can have an extended useful life if these simple maintenance activities are performed. If left unattended, the pressure from expansive post rust can crack and damage the supporting material.

**Metal Fence Around Pool Perimeter**



**Metal Entrance Gate with Swipe Card Access and Outdoor Shower**



**Metal Fence Around Pool Perimeter**



**Tennis Courts.** The community maintains two tennis courts. The overall condition of these courts is good.

Listed below are the major components of the tennis court facilities:

- Asphalt Pavement (base layer). We have assumed a service life of 20 to 30 years for the asphalt base layer.
- Color Coat (surface layer). Annual cleaning is recommended to maintain the surface of the court. The base of a tennis court is subject to cracking and low spots known as “birdbaths” that can occur from weather and earth movement. A program to address cracks as they appear will help to prolong the useful life of the color coat. We have assumed a service life of five to ten years for the color coat. The courts have recently been color coated.

Fencing. The Association maintains metal fencing that is in generally in average condition. Fencing systems have a large number of configurations and finishes that can usually be repaired as a maintenance activity by replacing individual components as they become damaged or weathered.

We have assumed that the fencing will be replaced when the asphalt pavement is replaced. Posts and fencing should be inspected, repaired, and painted as needed to prolong their economic life. Periodic inspection of the posts, gates, hinges, and latches is also recommended, and it is important that posts and footings be protected to prevent soil erosion. In addition, care should be taken so that damage from string trimmers is minimized.

Chain link fencing can have a useful life of 40 years or more. Periodic weed control may be required to protect and maintain the fence. For more information on fencing, visit our [website link](#) to the American Fence Association.

The Association maintains steel fence posts and fasteners that are embedded in concrete or masonry. Over time, rusting can be occurring at the base of the embedded posts. As part of normal maintenance, we recommend the following:

- Lift or remove ornamental base covers, if applicable.
- Remove existing caulk completely.
- Clean, prime, and paint all posts.
- Apply an appropriate caulk around each post base.
- Tool and shape caulking to shed water from post.
- Reinstall base covers, and seal and paint all joints.

Fence posts can have an extended useful life if these simple maintenance activities are performed. If left unattended, the pressure from expansive post rust can crack and damage the supporting material.

- Net Posts. We have assumed that the new posts will be replaced when the asphalt pavement is replaced.
- Wind Screen. We have assumed a service life of five years for windscreens.
- Lighting System. No exterior lighting.

Tennis Courts, Fence and Wind Screen



Tennis Courts



Tennis Courts and Pickle Ball Nets



**Flagpole.** There is a metal flagpole located near the entrance to the clubhouse. The flagpole appears to be in average condition.



**Miscellaneous Community Signs.** There are various signs located throughout the community that the Association is responsible for such as street, traffic, stop, warning, notice, etc. Signs fail at varying rates that are not predictable and are subject to vandalism. Thus, we have not provided an allowance for periodic sign replacement. It is assumed that the operating funds will cover the replacement of the signage and mailboxes.

**Landscape Maintenance and Tree Replacement.** These items are the responsibility of the property owner's Association and are excluded in this study.

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 South Harbour - Cash Flow Method Accounting Summary is an attachment to the South Harbour - Replacement Reserve Study dated Revised July 23, 2017 and is for use by accounting and reserve professionals experienced in Association funding and accounting principles. This Summary consists of four reports, the 2018, 2019, and 2020 Cash Flow Method Category Funding Reports (3) and a Three-Year Replacement Funding Report.

- CASH FLOW METHOD CATEGORY FUNDING REPORT, 2018, 2019, and 2020. Each of the 102 Projected Replacements listed in the South Harbour Replacement Reserve Inventory has been assigned to one of 7 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 \$335,778 Beginning Balance (at the start of the Study Year) and the \$177,950 of additional Replacement Reserve Funding in 2018 through 2020 (as calculated in the Replacement Reserve Analysis) to each of the 102 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 2018 through 2020.
  - Allocation of the \$335,778 Beginning Balance to the Projected Replacements by Chronological Allocation.
  - Allocation of the \$177,950 of additional Replacement Reserve Funding recommended in the Replacement Reserve Analysis in years 2018 through 2020, 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 \$335,778 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 South Harbour the Beginning Balance funds all Scheduled Replacements in the Study Year through 2024 and provides partial funding (47%) of replacements scheduled in 2025.
  - The next step is the allocation of the \$59,317 of 2018 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 South Harbour the Beginning Balance and the 2018 Replacement Reserve Funding, funds replacements through 2024 and partial funds (62.3%) replacements in 2025.
  - Allocations of the 2019 and 2020 Reserve Funding are done using the same methodology.
  - The Three-Year Replacement Funding Report details component by component allocations made by Chronological Allocation.

## 2018 - CASH FLOW METHOD CATEGORY FUNDING REPORT

Each of the 102 Projected Replacements included in the South Harbour Replacement Reserve Inventory has been assigned to one of the 7 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 \$335,778 as of the first day of the Study Year, January 1, 2018.
- Total reserve funding (including the Beginning Balance) of \$395,095 in the Study Year.
- 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 CF1							
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 COMPONENTS	5 to 20 years	2 to 8 years	\$479,487	\$229,107	\$58,238		\$287,345
SITE COMPONENTS (cont.)	6 to 30 years	4 to 20 years	\$27,007	\$6,134	\$1,079		\$7,212
CLUBHOUSE EXTERIORS	15 to 50 years	5 to 35 years	\$103,045	\$1,500			\$1,500
CLUB HOUSE	10 to 39 years	1 to 23 years	\$161,745	\$36,178			\$36,178
CLUBHOUSE EXTERIORS	12 to 30 years	2 to 23 years	\$48,750	\$2,250			\$2,250
RECREATION	10 to 45 years	2 to 30 years	\$279,297	\$55,829			\$55,829
RECREATION (cont.)	5 to 30 years	3 to 19 years	\$57,249	\$4,780			\$4,780

## 2019 - CASH FLOW METHOD CATEGORY FUNDING REPORT

Each of the 102 Projected Replacements included in the South Harbour Replacement Reserve Inventory has been assigned to one of the 7 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 \$395,095 on January 1, 2019.
- Total reserve funding (including the Beginning Balance) of \$454,411 from 2018 through 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 \$2,820.

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 CF2							
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 COMPONENTS	5 to 20 years	1 to 7 years	\$479,487	\$287,345	\$58,238		\$345,582
SITE COMPONENTS (cont.)	6 to 30 years	3 to 19 years	\$27,007	\$7,212	\$1,079		\$8,291
CLUBHOUSE EXTERIORS	15 to 50 years	4 to 34 years	\$103,045	\$1,500			\$1,500
CLUB HOUSE	10 to 39 years	0 to 22 years	\$161,745	\$36,178		(\$2,820)	\$33,358
CLUBHOUSE EXTERIORS	12 to 30 years	1 to 22 years	\$48,750	\$2,250			\$2,250
RECREATION	10 to 45 years	1 to 29 years	\$279,297	\$55,829			\$55,829
RECREATION (cont.)	5 to 30 years	2 to 18 years	\$57,249	\$4,780			\$4,780

## 2020 - CASH FLOW METHOD CATEGORY FUNDING REPORT

Each of the 102 Projected Replacements included in the South Harbour Replacement Reserve Inventory has been assigned to one of the 7 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 \$451,591 on January 1, 2020.
- Total Replacement Reserve funding (including the Beginning Balance) of \$513,728 from 2018 to 2020.
- 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 2020 being accomplished in 2020 at a cost of \$58,333.

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.

2020 - CASH FLOW METHOD CATEGORY FUNDING - TABLE CF3							
CATEGORY	NORMAL ECONOMIC LIFE	REMAINING ECONOMIC LIFE	ESTIMATED REPLACEMENT COST	2020 BEGINNING BALANCE	2020 RESERVE FUNDING	2020 PROJECTED REPLACEMENTS	2020 END OF YEAR BALANCE
SITE COMPONENTS	5 to 20 years	0 to 6 years	\$479,487	\$345,582	\$58,238	(\$40,848)	\$362,972
SITE COMPONENTS (cont.)	6 to 30 years	2 to 18 years	\$27,007	\$8,291	\$1,079		\$9,370
CLUBHOUSE EXTERIORS	15 to 50 years	3 to 33 years	\$103,045	\$1,500			\$1,500
CLUB HOUSE	10 to 39 years	0 to 21 years	\$161,745	\$33,358		(\$750)	\$32,608
CLUBHOUSE EXTERIORS	12 to 30 years	0 to 21 years	\$48,750	\$2,250		(\$2,250)	
RECREATION	10 to 45 years	0 to 28 years	\$279,297	\$55,829		(\$14,485)	\$41,344
RECREATION (cont.)	5 to 30 years	1 to 17 years	\$57,249	\$4,780			\$4,780



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

Item #	Description of Projected Replacement	Estimated Replacement Costs	Allocation of Beginning Balance	2018 Reserve Funding	2018 Projected Replacements	2018 End of Year Balance	2019 Reserve Funding	2019 Projected Replacements	2019 End of Year Balance	2020 Reserve Funding	2020 Projected Replacements	2020 End of Year Balance
40	Siding & Trim, Cementitious	34,020										
41	Vinyl heading, covered pool deck	4,278										
42	Windows	22,299										
43	Doors, exterior (pump room)	1,700										
44	Doors, exterior (french-doublew/transo	19,200										
45	Doors, exterior (single-glass)	2,400										
46	Club house lighting, exterior	1,500	1,500			1,500			1,500			1,500
	<b>CLUB HOUSE</b>											
47	Club house lighting, interior allowance	2,500	2,500			2,500			2,500			2,500
48	Club house, furnishings & furniture	14,000	14,000			14,000			14,000			14,000
49	Club house flat screen TV 42"w/DVD	875	875			875			875			875
50	Club house ceramic tile	38,672										
51	Club house carpet	3,018	3,018			3,018			3,018			3,018
52	Club house restroom renovate	67,375										
53	Club house sound proofing	5,000										
54	Club house window film	3,640										
55	Club house ceiling fans	1,140										
56	Security system	9,500										
57	Kitchen stainless work/storage	240										
58	Kitchen microwave	325	325			325		(325)				
59	Kitchen residential refrigerator	1,395	1,395			1,395		(1,395)				
60	Kitchen residential stove w/ oven	1,100				1,100		(1,100)				
61	Kitchen laminate countertop	1,435	1,435			1,435			1,435			1,435
62	Kitchen cabinets	10,780	10,780			10,780			10,780			10,780
63	Kitchen dishwasher	750	750			750			750		(750)	
	<b>CLUBHOUSE EXTERIORS</b>											
64	Heat pump/ AC Unit	7,500										
65	Furnace/Air Handler	4,000										
66	Heat pump/ AC Unit	7,500										
67	Furnace/Air Handler	4,000										
68	Heat pump/ AC Unit	7,500										
69	Furnace/Air Handler	4,000										
70	Hot water tank, gas (80 gallon)	2,250	2,250			2,250			2,250		(2,250)	
71	Piping allowance for water & sewer	12,000										
	<b>RECREATION</b>											
72	Swimming pool, structure	208,420										
73	Swimming pool, whitecoat	14,344	14,344			14,344			14,344			14,344
74	Swimming pool, waterline tile	10,680	10,680			10,680			10,680			10,680
75	Swimming pool, concrete deck (1/3)	14,485	14,485			14,485			14,485		(14,485)	
76	Swimming pool pump (5 hp)	4,685	4,685			4,685			4,685			4,685
77	Swimming pool filter	7,700										
78	Pool furniture, lounge	3,875	3,875			3,875			3,875			3,875
79	Pool furniture, table	750	750			750			750			750
80	Pool furniture.chairs	6,000	6,000			6,000			6,000			6,000
81	Pool furniture, end table	260	260			260			260			260
82	Pool furniture, stacked chairs	750	750			750			750			750
83	Pool furniture, trash can	100										
84	Pool furniture, folding tables	450										
85	Pool perimeter fence (alum)	288										
86	Pool gate ( alum)	460										
87	Pool swipe card system	3,520										
88	Pool shed	900										
89	Pool outdoor shower	600										
90	Pool trash can enclosure	650										
91	Pool bike rack	380										
	<b>RECREATION (cont.)</b>											
92	Tennis court, resurface	10,775										
93	Tennis court, color coat	12,000										
94	Tennis court, post & footings	2,560										
95	Tennis court, net	640	640			640			640			640
96	Tennis court, fence	11,610										
97	Tennis court, wind screen	11,094										
98	Tennis court, post & footings	1,280										
99	Tennis court, net	640	640			640			640			640
100	Tennis court, benches	2,640										
101	Tennis court, gate	510										
102	Pickle ball net on wheels	3,500	3,500			3,500			3,500			3,500

### COMPONENT METHOD

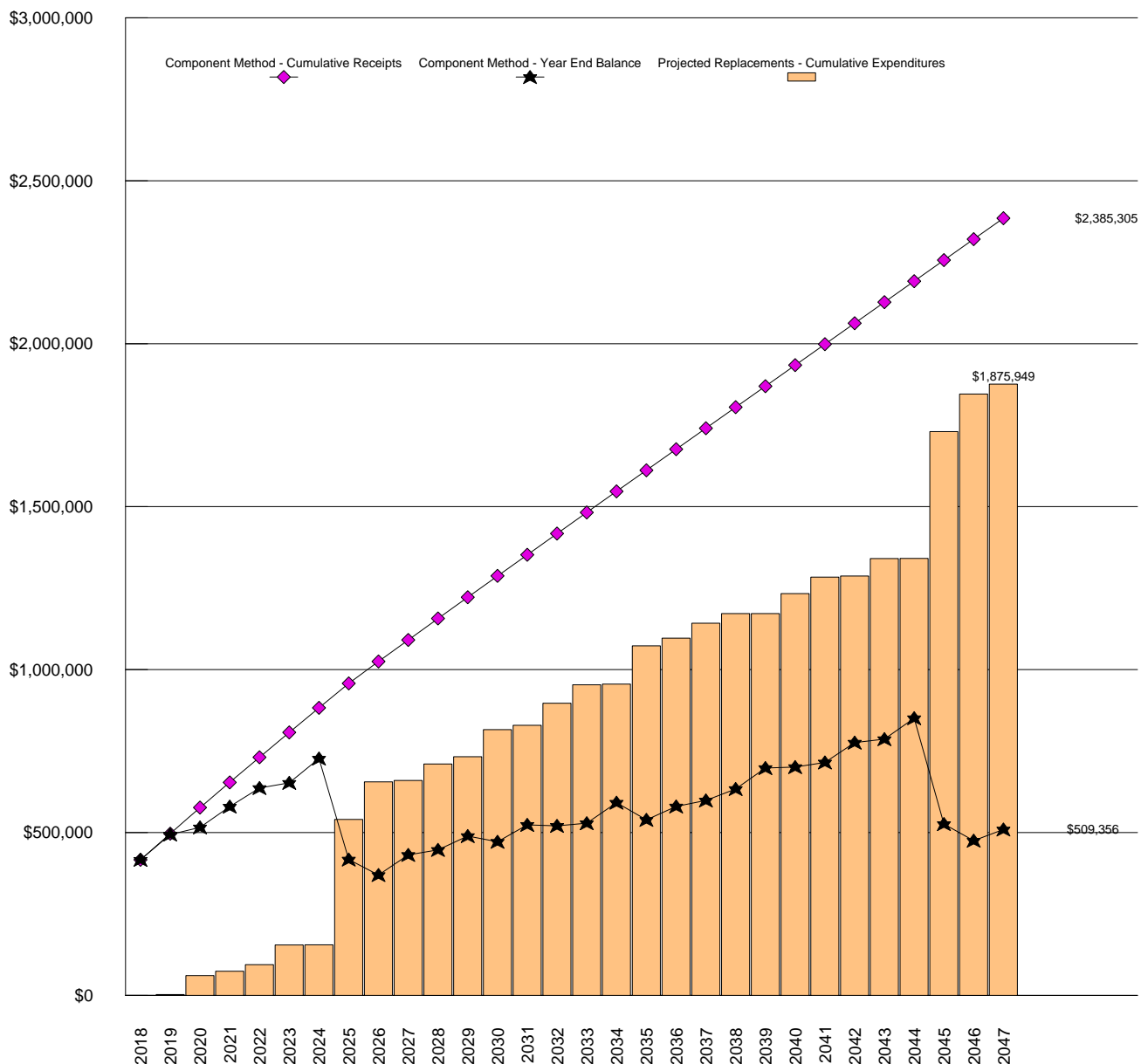


**\$80,441 COMPONENT METHOD RECOMMENDED ANNUAL FUNDING OF REPLACEMENT RESERVES IN THE STUDY YEAR, 2018.**

\$12.87 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 102 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 102 Projected Replacements. The total, \$473,961, 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 (\$335,778) by the Current Funding Objective (\$473,961). At South Harbour the Funding Percentage is 70.8%
- **Allocation of the Beginning Balance.** The Beginning Balance is divided among the 102 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 70.8 percent funded, there is \$567 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 \$80,441, the Component Method Recommended Annual Funding of Replacement Reserves in the Study Year (2018).

In our fence example, the \$567 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 \$217. Next year, the deposit remains \$217, 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	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Beginning balance	\$335,778									
Recommended annual funding	\$80,441	\$80,441	\$80,069	\$77,258	\$77,041	\$76,383	\$75,033	\$75,020	\$67,600	\$65,926
Interest on reserves										
Expenditures		\$2,820	\$58,333	\$13,143	\$20,075	\$60,356	\$496	\$384,848	\$115,406	\$4,275
Year end balance	\$416,219	\$493,840	\$515,575	\$579,691	\$636,656	\$652,684	\$727,221	\$417,394	\$369,588	\$431,239
Cumulative Expenditures	\$710,312	\$732,812	\$61,153	\$74,296	\$94,372	\$154,727	\$155,223	\$540,071	\$655,476	\$659,751
Cumulative Receipts	\$416,219	\$496,660	\$576,729	\$653,987	\$731,028	\$807,411	\$882,445	\$957,465	\$1,025,065	\$1,090,990
Year	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
Recommended annual funding	\$65,926	\$65,280	\$65,280	\$65,016	\$65,016	\$64,801	\$64,680	\$64,680	\$64,571	\$64,569
Interest on reserves										
Expenditures	\$50,560	\$22,500	\$83,033	\$13,143	\$68,012	\$56,521	\$1,860	\$117,573	\$23,411	\$45,940
Year end balance	\$446,605	\$489,384	\$471,631	\$523,503	\$520,507	\$528,787	\$591,607	\$538,714	\$579,875	\$598,504
Cumulative Expenditures	\$710,312	\$732,812	\$815,845	\$828,988	\$897,000	\$953,520	\$955,381	\$1,072,954	\$1,096,364	\$1,142,304
Cumulative Receipts	\$1,156,916	\$1,222,196	\$1,287,475	\$1,352,491	\$1,417,507	\$1,482,307	\$1,546,988	\$1,611,668	\$1,676,239	\$1,740,809
Year	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047
Recommended annual funding	\$64,569	\$64,441	\$64,441	\$64,437	\$64,436	\$64,436	\$64,434	\$64,434	\$64,434	\$64,434
Interest on reserves										
Expenditures	\$29,510		\$61,364	\$50,537	\$3,500	\$53,514	\$496	\$389,248	\$115,362	\$30,115
Year end balance	\$633,563	\$698,004	\$701,082	\$714,982	\$775,918	\$786,840	\$850,778	\$525,965	\$475,037	\$509,356
Cumulative Expenditures	\$1,171,814	\$1,171,814	\$1,233,178	\$1,283,715	\$1,287,215	\$1,340,728	\$1,341,224	\$1,730,472	\$1,845,834	\$1,875,949
Cumulative Receipts	\$1,805,378	\$1,869,819	\$1,934,260	\$1,998,697	\$2,063,132	\$2,127,568	\$2,192,003	\$2,256,437	\$2,320,871	\$2,385,305



## COMPONENT METHOD ACCOUNTING SUMMARY

This South Harbour - Component Method Accounting Summary is an attachment to the South Harbour - Replacement Reserve Study dated Revised July 23, 2017 and is for use by accounting and reserve professionals experienced in Association funding and accounting principles. This Summary consists of four reports, the 2018, 2019, and 2020 Component Method Category Funding Reports (3) and a Three-Year Replacement Funding Report.

- COMPONENT METHOD CATEGORY FUNDING REPORT, 2018, 2019, and 2020. Each of the 102 Projected Replacements listed in the South Harbour Replacement Reserve Inventory has been assigned to one of 7 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 \$335,778 Beginning Balance (at the start of the Study Year) and the \$240,951 of additional Replacement Reserve funding from 2018 to 2020 (as calculated in the Replacement Reserve Analysis) to each of the 102 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 2018 through 2020.
  - Allocation of the \$335,778 Beginning Balance to the Projected Replacements by the Component Method.
  - Allocation of the \$240,951 of additional Replacement Reserve Funding recommended in the Replacement Reserve Analysis in years 2018 through 2020, by the Component Method.

### 2018 - COMPONENT METHOD CATEGORY FUNDING REPORT

Each of the 102 Projected Replacements included in the South Harbour Replacement Reserve Inventory has been assigned to one of the 7 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 \$335,778 as of the first day of the Study Year, January 1, 2018.
- Total reserve funding (including the Beginning Balance) of \$416,219 in the Study Year.
- 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 CM1							
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 COMPONENTS	5 to 20 years	2 to 8 years	\$479,487	\$191,703	\$42,482		\$234,185
SITE COMPONENTS (cont.)	6 to 30 years	4 to 20 years	\$27,007	\$3,567	\$2,714		\$6,280
CLUBHOUSE EXTERIORS	15 to 50 years	5 to 35 years	\$103,045	\$30,327	\$4,048		\$34,375
CLUB HOUSE	10 to 39 years	1 to 23 years	\$161,745	\$29,598	\$10,675		\$40,274
CLUBHOUSE EXTERIORS	12 to 30 years	2 to 23 years	\$48,750	\$5,243	\$3,202		\$8,445
RECREATION	10 to 45 years	2 to 30 years	\$279,297	\$66,959	\$13,390		\$80,349
RECREATION (cont.)	5 to 30 years	3 to 19 years	\$57,249	\$8,382	\$3,931		\$12,312

## 2019 - COMPONENT METHOD CATEGORY FUNDING REPORT

Each of the 102 Projected Replacements included in the South Harbour Replacement Reserve Inventory has been assigned to one of the 7 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 \$416,219 on January 1, 2019.
- Total reserve funding (including the Beginning Balance) of \$496,660 from 2018 through 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 \$2,820.

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 CM2**

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 COMPONENTS	5 to 20 years	1 to 7 years	\$479,487	\$234,185	\$42,482		\$276,667
SITE COMPONENTS (cont.)	6 to 30 years	3 to 19 years	\$27,007	\$6,280	\$2,714		\$8,994
CLUBHOUSE EXTERIORS	15 to 50 years	4 to 34 years	\$103,045	\$34,375	\$4,048		\$38,422
CLUB HOUSE	10 to 39 years	0 to 22 years	\$161,745	\$40,274	\$10,675	\$2,820	\$48,129
CLUBHOUSE EXTERIORS	12 to 30 years	1 to 22 years	\$48,750	\$8,445	\$3,202		\$11,646
RECREATION	10 to 45 years	1 to 29 years	\$279,297	\$80,349	\$13,390		\$93,739
RECREATION (cont.)	5 to 30 years	2 to 18 years	\$57,249	\$12,312	\$3,931		\$16,243

## 2020 - COMPONENT METHOD CATEGORY FUNDING REPORT

Each of the 102 Projected Replacements included in the South Harbour Replacement Reserve Inventory has been assigned to one of the 7 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 \$493,840 on January 1, 2020.
- Total Replacement Reserve funding (including the Beginning Balance) of \$576,729 from 2018 to 2020.
- 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 2020 being accomplished in 2020 at a cost of \$58,333.

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.

**2020 - COMPONENT METHOD CATEGORY FUNDING - TABLE CM3**

CATEGORY	NORMAL ECONOMIC LIFE	REMAINING ECONOMIC LIFE	ESTIMATED REPLACEMENT COST	2020 BEGINNING BALANCE	2020 RESERVE FUNDING	2020 PROJECTED REPLACEMENTS	2020 END OF YEAR BALANCE
SITE COMPONENTS	5 to 20 years	0 to 6 years	\$479,487	\$276,667	\$42,482	\$40,848	\$278,300
SITE COMPONENTS (cont.)	6 to 30 years	2 to 18 years	\$27,007	\$8,994	\$2,714		\$11,707
CLUBHOUSE EXTERIORS	15 to 50 years	3 to 33 years	\$103,045	\$38,422	\$4,048		\$42,470
CLUB HOUSE	10 to 39 years	0 to 21 years	\$161,745	\$48,129	\$10,303	\$750	\$57,682
CLUBHOUSE EXTERIORS	12 to 30 years	0 to 21 years	\$48,750	\$11,646	\$3,202	\$2,250	\$12,598
RECREATION	10 to 45 years	0 to 28 years	\$279,297	\$93,739	\$13,390	\$14,485	\$92,644
RECREATION (cont.)	5 to 30 years	1 to 17 years	\$57,249	\$16,243	\$3,931		\$20,173

### COMPONENT METHOD - THREE-YEAR REPLACEMENT FUNDING REPORT

TABLE CM4 below details the allocation of the \$335,778 Beginning Balance, as reported by the Association and the \$240,951 of Replacement Reserve Funding calculated by the Cash Flow Method from 2018 to 2020, to the 102 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 \$335,778 on January 1, 2018.
- Replacement Reserves on Deposit totaling \$416,219 on January 1, 2019.
- Replacement Reserves on Deposit totaling \$493,840 on January 1, 2020.
- Total Replacement Reserve funding (including the Beginning Balance) of \$576,729 from 2018 to 2020.
- 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 2018 to 2020 being accomplished as scheduled in the Replacement Reserve Inventory at a cost of \$61,153.

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	2018 Reserve Funding	2018 Projected Replacements	2018 End of Year Balance	2019 Reserve Funding	2019 Projected Replacements	2019 End of Year Balance	2020 Reserve Funding	2020 Projected Replacements	2020 End of Year Balance
SITE COMPONENTS												
1	Club House Drive, asphalt pavement	9,834	3,832	667		4,499	667		5,166	667		5,833
2	Club House Drive, seal coat	1,192	169	256		425	256		680	256		936
3	Glen Cove Drive, asphalt pavement	138,666	58,943	9,965		68,908	9,965		78,874	9,965		88,839
4	Glen Cove Drive, seal cost	16,808	4,763	4,015		8,778	4,015		12,793	4,015	(16,808)	
5	Thomas Court, asphalt pavement	8,877	3,459	602		4,061	602		4,663	602		5,265
6	Thomas Court, seal coat	1,076	152	231		383	231		614	231		845
7	Zachary Court, asphalt pavement	6,369	2,707	458		3,165	458		3,623	458		4,080
8	Zachary Court, seal coat	772	219	184		403	184		588	184	(772)	
9	Minnesota Drive, asphalt pavement	124,344	52,855	8,936		61,791	8,936		70,727	8,936		79,663
10	Minnesota Drive, seal coat	15,072	4,271	3,600		7,871	3,600		11,472	3,600	(15,072)	
11	Boss Court, asphalt pavement	12,606	4,912	855		5,767	855		6,622	855		7,477
12	Boss Court, seal coat	1,528	217	328		544	328		872	328		1,200
13	Melinda Court, asphalt pavement	11,979	4,668	812		5,480	812		6,292	812		7,105
14	Melinda Court, seal coat	1,452	206	312		517	312		829	312		1,140
15	Westport Alley, asphalt pavement	22,707	9,652	1,632		11,284	1,632		12,916	1,632		14,548
16	Westport Alley, seal coat	2,752	780	657		1,437	657		2,095	657	(2,752)	
17	Wincie Wynd, asphalt pavement	44,913	19,091	3,228		22,319	3,228		25,547	3,228		28,774
18	Wincie Wynd, seal coat	5,444	1,543	1,300		2,843	1,300		4,144	1,300	(5,444)	
19	Elton Drive, asphalt pavement	14,322	5,581	971		6,552	971		7,523	971		8,494
20	Elton Drive, seal coat	1,736	246	373		618	373		991	373		1,363
21	Anderson Drive, asphalt pavement	33,033	12,871	2,240		15,111	2,240		17,352	2,240		19,592
22	Anderson Drive, seal coat	4,004	567	859		1,426	859		2,286	859		3,145
SITE COMPONENTS (cont.)												
23	Gravel roadway(replenish 3/8"/sf)	10,583	750	1,093		1,842	1,093		2,935	1,093		4,027
24	Concrete curb & gutter, barrier (6%)	1,278	151	225		376	225		602	225		827
25	Concrete sidewalk, (6%)	291	34	51		86	51		137	51		188
26	Concrete sidewalk, (6%)	291	34	51		86	51		137	51		188
27	Park, fido station with post	775		78		78	78		155	78		233
28	Stone Walk @ Park, reset (10%)	1,026	218	38		257	38		295	38		333
29	Entry feature repointing, (10%)	493	140	59		199	59		257	59		316
30	Entry feature covered foam letters(lg)	384	177	30		206	30		236	30		266
31	Entry feature covered foam letters(sm)	112	52	9		60	9		69	9		77
32	Benches, park (composite)	1,760	166	123		289	123		411	123		534
33	Swings, park (PTW)	1,360	385	108		494	108		602	108		710
34	Steps, park 6" (PTW)	544	154	43		197	43		241	43		284
35	Flag Pole	550	218	30		248	30		279	30		309
36	Irrigation Allowance	7,000	992	751		1,743	751		2,494	751		3,245
37	Privacy fence (PVC)	560	95	24		120	24		144	24		169
CLUBHOUSE EXTERIORS												
38	Roof, asphalt shingle	15,608	6,192	856		7,048	856		7,904	856		8,760
39	Gutters & downspouts	2,040	809	112		921	112		1,033	112		1,145

COMPONENT METHOD - THREE-YEAR REPLACEMENT FUNDING - TABLE CM4 cont'd													
Item #	Description of Projected Replacement	Estimated Replacement Costs	Allocation of Beginning Balance	2018 Reserve Funding	2018 Projected Replacements	2018 End of Year Balance	2019 Reserve Funding	2019 Projected Replacements	2019 End of Year Balance	2020 Reserve Funding	2020 Projected Replacements	2020 End of Year Balance	2020 End of Year Balance
40	Siding & Trim, Cementitious	34,020	6,748	758		7,506	758		8,263	758		8,263	9,021
41	Vinyl heading, covered pool deck	4,278	1,697	235		1,932	235		2,166	235		2,166	2,401
42	Windows	22,299	6,319	761		7,080	761		7,841	761		7,841	8,602
43	Doors, exterior (pump room)	1,700	578	86		664	86		751	86		751	837
44	Doors, exterior(french-double/transom)	19,200	6,529	975		7,504	975		8,478	975		8,478	9,453
45	Doors, exterior (single-glass)	2,400	816	122		938	122		1,060	122		1,060	1,182
46	Club house lighting, exterior	1,500	638	144		781	144		925	144		925	1,069
CLUB HOUSE													
47	Club house lighting, interior allowance	2,500	1,181	264		1,445	264		1,708	264		1,708	1,972
48	Club house, furnishings & furniture	14,000	5,668	1,389		7,056	1,389		8,445	1,389		8,445	9,834
49	Club house flat screen TV 42"w/DVD	875	372	126		498	126		623	126		623	749
50	Club house ceramic tile	38,672	7,828	2,056		9,884	2,056		11,940	2,056		11,940	13,996
51	Club house carpet	3,018	855	361		1,216	361		1,576	361		1,576	1,937
52	Club house restroom renovate	67,375	4,773	3,478		8,251	3,478		11,729	3,478		11,729	15,207
53	Club house sound proofing	5,000		333		333	333		667	333		667	1,000
54	Club house window film	3,640		243		243	243		485	243		485	728
55	Club house ceiling fans	1,140		57		57	57		114	57		114	171
56	Security system	9,500		633		633	633		1,267	633		1,267	1,900
57	Kitchen stainless work/storage	240	65	7		73	7		80	7		80	87
58	Kitchen microwave	325	208	58		267	58	(325)		15		15	15
59	Kitchen residential refrigerator	1,395	894	250		1,145	250	(1,395)		66		66	66
60	Kitchen residential stove w/ oven	1,100	705	197		903	197	(1,100)		52		52	52
61	Kitchen laminate countertop	1,435	775	132		907	132		1,039	132		1,039	1,171
62	Kitchen cabinets	10,780	5,819	992		6,811	992		7,803	992		7,803	8,795
63	Kitchen dishwasher	750	455	98		554	98		652	98		652	(750)
CLUBHOUSE EXTERIORS													
64	Heat pump/ AC Unit	7,500		625		625	625		1,250	625		1,250	1,875
65	Furnace/Air Handler	4,000		167		167	167		333	167		333	500
66	Heat pump/ AC Unit	7,500		625		625	625		1,250	625		1,250	1,875
67	Furnace/Air Handler	4,000		167		167	167		333	167		333	500
68	Heat pump/ AC Unit	7,500		625		625	625		1,250	625		1,250	1,875
69	Furnace/Air Handler	4,000		167		167	167		333	167		333	500
70	Hot water tank, gas (80 gallon)	2,250	1,275	325		1,600	325		1,925	325		1,925	(2,250)
71	Piping allowance for water & sewer	12,000	3,967	502		4,469	502		4,971	502		4,971	5,473
RECREATION													
72	Swimming pool, structure	208,420	45,937	5,241		51,179	5,241		56,420	5,241		56,420	61,661
73	Swimming pool, whitecoat	14,344	4,065	1,713		5,778	1,713		7,491	1,713		7,491	9,205
74	Swimming pool, waterline tile	10,680	3,026	1,276		4,302	1,276		5,578	1,276		5,578	6,853
75	Swimming pool, concrete deck (1/3)	14,485	7,183	2,434		9,617	2,434		12,051	2,434		12,051	(14,485)
76	Swimming pool pump (5 hp)	4,685	1,991	449		2,440	449		2,889	449		2,889	3,338
77	Swimming pool filter	7,700		513		513	513		1,027	513		1,027	1,540
78	Pool furniture, lounge	3,875	1,098	463		1,561	463		2,024	463		2,024	2,487
79	Pool furniture, table	750	213	90		302	90		392	90		392	481
80	Pool furniture.chairs	6,000	1,700	717		2,417	717		3,134	717		3,134	3,850
81	Pool furniture, end table	260	74	31		105	31		136	31		136	167
82	Pool furniture, stacked chairs	750	213	90		302	90		392	90		392	481
83	Pool furniture, trash can	100	7	5		12	5		17	5		17	23
84	Pool furniture, folding tables	450	74	16		91	16		107	16		107	123
85	Pool perimeter fence (alum)	288	27	10		37	10		47	10		47	57
86	Pool gate ( alum)	460	43	16		59	16		75	16		75	92
87	Pool swipe card system	3,520	1,122	218		1,340	218		1,558	218		1,558	1,776
88	Pool shed	900	149	33		181	33		214	33		214	247
89	Pool outdoor shower	600		30		30	30		60	30		60	90
90	Pool trash can enclosure	650		33		33	33		65	33		65	98
91	Pool bike rack	380	36	13		49	13		62	13		62	76
RECREATION (cont.)													
92	Tennis court, resurface	10,775		539		539	539		1,078	539		1,078	1,616
93	Tennis court, color coat	12,000		600		600	600		1,200	600		1,200	1,800
94	Tennis court, post & footings	2,560	363	137		500	137		637	137		637	775
95	Tennis court, net	640	91	137		228	137		365	137		365	503
96	Tennis court, fence	11,610	3,701	719		4,420	719		5,139	719		5,139	5,858
97	Tennis court, wind screen	11,094	3,537	687		4,224	687		4,911	687		4,911	5,598
98	Tennis court, post & footings	1,280	181	69		250	69		319	69		319	387
99	Tennis court, net	640	91	137		228	137		365	137		365	503
100	Tennis court, benches	2,640	249	184		433	184		617	184		617	801
101	Tennis court, gate	510	169	21		190	21		211	21		211	233
102	Pickle ball net on wheels	3,500		700		700	700		1,400	700		1,400	2,100

## 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?



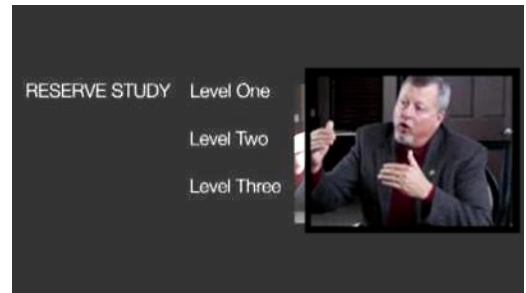
<https://youtu.be/40SodajTW1g>

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



<https://youtu.be/pYSMZ013VjQ>

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?



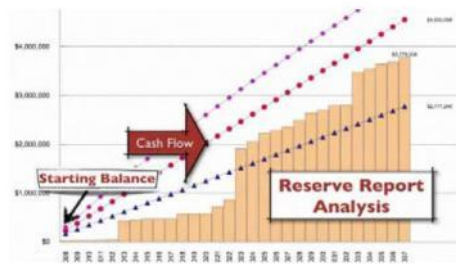
<https://youtu.be/diZfM1lyJYU>

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?



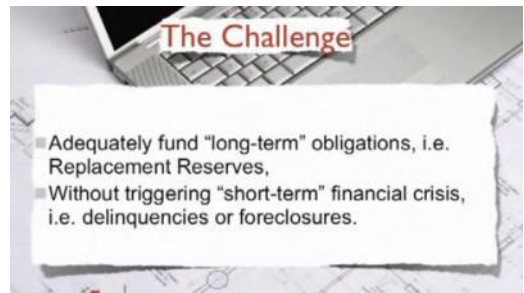
<https://youtu.be/SePdwVDvHWI>

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



<https://youtu.be/W8CDLwRlv68>

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



<https://youtu.be/hIxV9X1tlcA>