LEVEL 2 REPLACEMENT RESERVE REPORT FY 2023
HABITAT 1 SECTION A CONDOMINIUMS

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REPLACEMENT RESERVE REPORT

HABITAT 1 SECTION A CONDOMINIUMS

CROFTON, MARYLAND
November 07, 2022

Description. Habitat 1 Section A residential condominium association located in Crofton, Maryland. Constructed in 1973, the community consists of twenty-seven building clusters containing 108 garage townhouse residences. The survey examined the common elements of the property, including:

- Asphalt roads and driveways.
- Curb gutter, sidewalks, and lead walks.
- Fencing and retaining walls.
- Domestic water and sanitary lateral piping.
- Stormwater inlets.
- Buildings' exteriors.
- Electric meter stacks.

EXECUTIVE SUMMARY
This Reserve Study has been prepared for the Habitat 1 Section A Condominiums for the Fiscal Year 2023 covering the period from January 1, 2023 to December 31, 2023. The Replacement Reserves Starting Balance as of January 1, 2023 are proposed to be $949,294. The reported Current Annual Funding for Reserves is $70,500. The Recommended Annual Reserve Funding level for 2023 is $119,243.

The Next Step - The next step in the Reserve Study process is for the Board to carefully review the Component Inventory to make sure that all components are actually the responsibility of the Association and that the priorities and the timing of the replacement are in keeping with the goals and objectives of the Board.

If, after that review, the Reserve Study still recommends a substantial increase in the Annual Reserve Funding, Miller-Dodson can work with the Board to develop a Strategic Funding Plan to ramp up the Funding levels incrementally.

As shown on Page A.1, Graph #1, the Current Annual Reserve Funding Level inadequately funds the Reserves for the future. The Board will want to begin increasing their Reserve Funding sooner rather than later. The high inflation rate in the construction industry is a significant factor in the required increase.

MillerDodson welcomes the opportunity to answer questions or to discuss this Reserve Study in more detail should the Board so desire.

Current Funding. The Starting Balance and Current Annual Reserve Funding figures have been supplied by the managing agent and/or Board of Directors. 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.

Level of Service. This study has been performed as a Level 2 Update with Site Visit/On-Site Review as defined by the Community Associations Institute's, National Reserve Study Standards. As such, the component inventory is based on the study that was performed by Miller-Dodson Associates, Inc. in November 2017.. This inventory was adjusted to reflect changes provided by the Community Manager and/or the Board of Directors, or adjustments made based on the site visit and visual assessment performed by the Analyst. The analysis, including fund status and funding plan, is developed from the adjusted inventory.

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

Purpose. The purpose of this Replacement Reserve Study is to provide Habitat 1 Section A Condominiums (hereinafter called the Association) with an inventory of the common community facilities and infrastructure components that require periodic replacement. The Study includes a general view of the condition of these items and an effective financial plan to fund projected periodic replacements.

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

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

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

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

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

- Miller+Dodson performed a visual evaluation on November 07, 2022 to determine a remaining useful life and replacement cost for the commonly owned elements of this facility.

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

To-Scale Drawings. Site and building plans were not used in the development of this study. We recommend the Association assemble and maintain a library of site and building plans of the entire facility. Record drawings should be scanned into an electronic format for safe storage and ease of distribution. Upon request for a nominal fee, Miller+Dodson can provide scanning services.

Acknowledgment. Miller+Dodson Associates would like to acknowledge the assistance and input of Casey Perryman, property manager with Brodie Management, Inc. and Patrick Schmitt, association member who provided very helpful insight into the current operations of the property.

Analyst's Credentials. Brian J. Oates graduated from the University of Maryland with a degree in Urban Planning and studied the Principals and Practices of appraisal at the American University. Brian has owned and operated management companies and developed single and multifamily properties in the Washington metropolitan area. As a reserve analyst, Mr. Oates has performed reserve studies for Miller+Dodson Associates since 2009.

Respectfully Submitted,

millerdodson
CAPITAL RESERVE CONSULTANTS

Brian J. Oates
Brian J. Oates

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SECTION A - FINANCIAL ANALYSIS

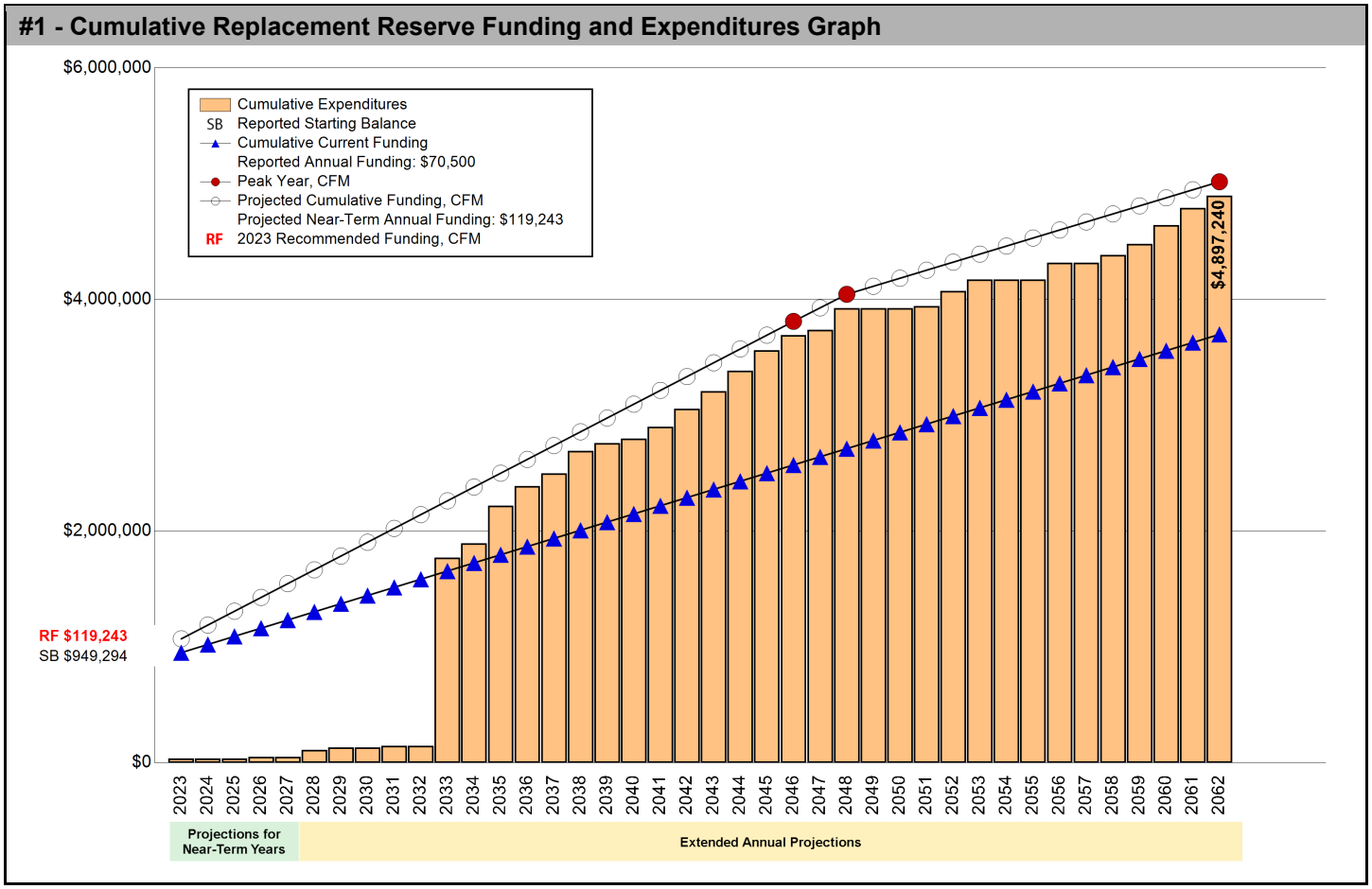
The Habitat I Section A Condominiums Replacement Reserve Analysis uses the Cash Flow Method (CFM) to calculate Replacement Reserve funding for the periodic replacement of the 60 Projected Replacements identified in the Replacement Reserve Inventory.

$119,243 **RECOMMENDED REPLACEMENT RESERVE FUNDING FOR THE STUDY YEAR, 2023**
$92.01 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 A.5.

Habitat I Section A Condominiums reports a Starting Balance of $949,294 and Annual Funding totaling $70,500, which is inadequate to fund projected replacements starting in 2033. See Page A.3 for a more detailed evaluation.

#1 - Cumulative Replacement Reserve Funding and Expenditures Graph



The Next Step - The next step in the Reserve Study process is for the Board to carefully review the Component Inventory to make sure that all components are actually the responsibility of the Association and that the priorities and the timing of the replacement are in keeping with the goals and objectives of the Board.

If, after that review, the Reserve Study still recommends a substantial increase in the Annual Reserve Funding, Miller-Dodson can work with the Board to develop a Strategic Funding Plan to ramp up the Funding levels incrementally.

As shown on Page A.1, Graph #1, the Current Annual Reserve Funding Level inadequately funds the Reserves for the future. The Board will want to begin increasing their Reserve Funding sooner rather than later. The high inflation rate in the construction industry is a significant factor in the required increase.

REPLACEMENT RESERVE ANALYSIS - GENERAL INFORMATION

The Habitat I Section A Condominiums Replacement Reserve Analysis calculations of recommended funding of Replacement Reserves by the Cash Flow Method (CFM) 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.

2023 **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, 2023.

40 Years **STUDY PERIOD**

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

$949,294 **STARTING BALANCE**

The Association reports Replacement Reserves on Deposit totaling $949,294 at the start of the Study Year.

Level Two **LEVEL OF SERVICE**

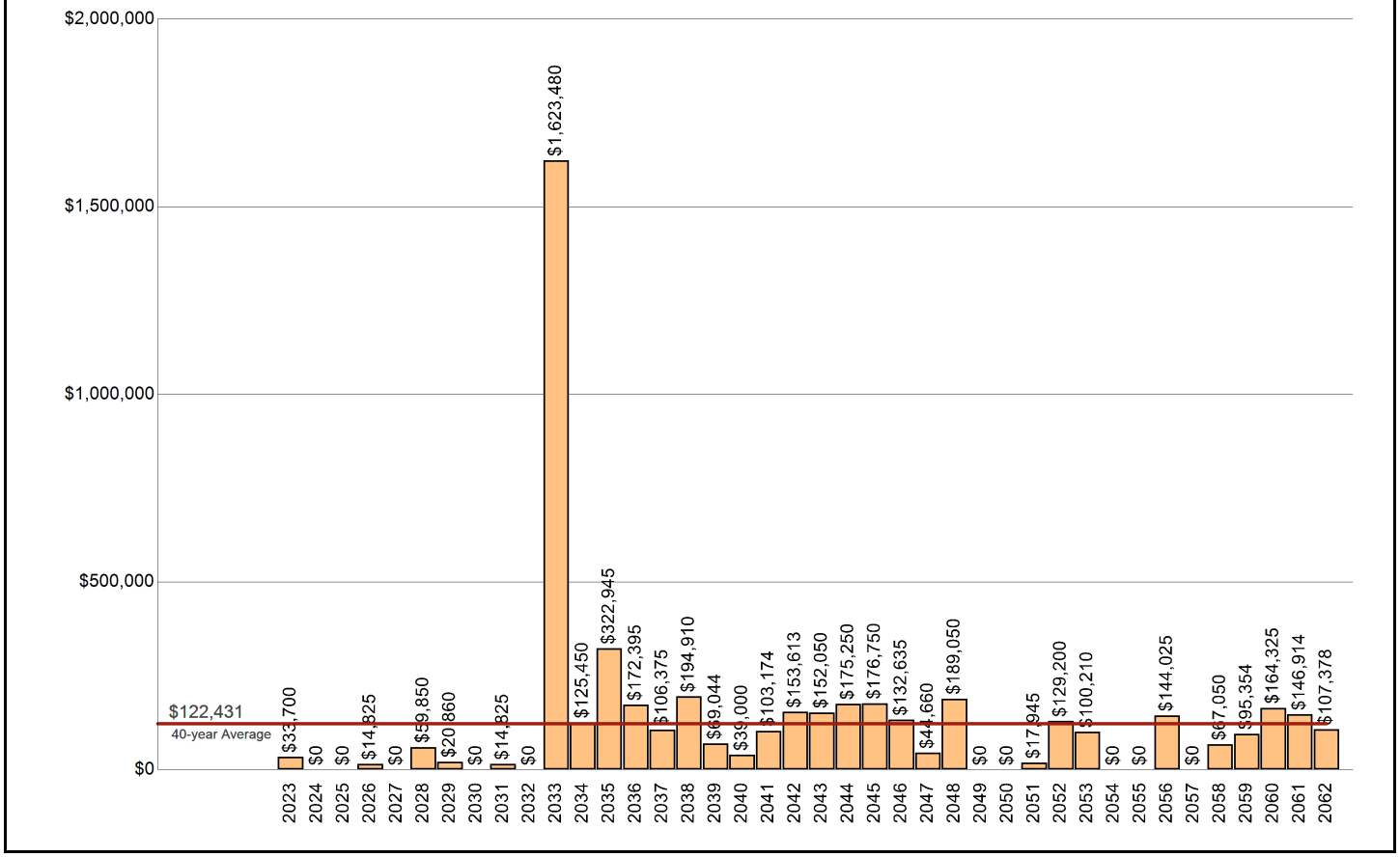
The Replacement Reserve Inventory has been developed in compliance with the National Reserve Study Standards for a Level Two Study, as defined by the Community Associations Institute (CAI).

$4,897,240 **REPLACEMENT RESERVE INVENTORY - PROJECTED REPLACEMENTS**

The Habitat I Section A Condominiums Replacement Reserve Inventory identifies 60 items that will require periodic replacement, which are to be funded from Replacement Reserves. We estimate the cost of these replacements will be $4,897,240 over the 40-year Study Period. The Projected Replacements are divided into 3 major categories starting on Page B.3. Pages B.1-B.2 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 $122,431. Section C provides a year by year Calendar of these expenditures.



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 A.4 and A.5. The Projected Replacements listed on Page C.2 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 A.5.

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 A.5.

ANNUAL EXPENDITURES AND CURRENT FUNDING

The annual expenditures that comprise the $4,897,240 of Projected Expenditures over the 40-year Study Period and the impact of the Association continuing to fund Replacement Reserves at the current level are detailed in Table 3.

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

Year	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Starting Balance	$949,294									
Projected Replacements	($33,700)			($14,825)		($59,850)	($20,860)		($14,825)	
Annual Deposit	$70,500	$70,500	$70,500	$70,500	$70,500	$70,500	$70,500	$70,500	$70,500	$70,500
End of Year Balance	$986,094	$1,056,594	$1,127,094	$1,182,769	$1,253,269	$1,263,919	$1,313,559	$1,384,059	$1,439,734	$1,510,234
Cumulative Expenditures	($33,700)	($33,700)	($33,700)	($48,525)	($48,525)	($108,375)	($129,235)	($129,235)	($144,060)	($144,060)
Cumulative Receipts	$1,019,794	$1,090,294	$1,160,794	$1,231,294	$1,301,794	$1,372,294	$1,442,794	$1,513,294	$1,583,794	$1,654,294
Year	**2033**	**2034**	**2035**	**2036**	**2037**	**2038**	**2039**	**2040**	**2041**	**2042**
Projected Replacements	($1,623,480)	($125,450)	($322,945)	($172,395)	($106,375)	($194,910)	($69,044)	($39,000)	($103,174)	($153,613)
Annual Deposit	$70,500	$70,500	$70,500	$70,500	$70,500	$70,500	$70,500	$70,500	$70,500	$70,500
End of Year Balance	($42,746)	($97,696)	($350,141)	($452,036)	($487,911)	($612,321)	($610,865)	($579,365)	($612,039)	($695,151)
Cumulative Expenditures	($1,767,540)	($1,892,990)	($2,215,935)	($2,388,330)	($2,494,705)	($2,689,615)	($2,758,659)	($2,797,659)	($2,900,833)	($3,054,445)
Cumulative Receipts	$1,724,794	$1,795,294	$1,865,794	$1,936,294	$2,006,794	$2,077,294	$2,147,794	$2,218,294	$2,288,794	$2,359,294
Year	**2043**	**2044**	**2045**	**2046**	**2047**	**2048**	**2049**	**2050**	**2051**	**2052**
Projected Replacements	($152,050)	($175,250)	($176,750)	($132,635)	($44,660)	($189,050)			($17,945)	($129,200)
Annual Deposit	$70,500	$70,500	$70,500	$70,500	$70,500	$70,500	$70,500	$70,500	$70,500	$70,500
End of Year Balance	($776,701)	($881,451)	($987,701)	($1,049,836)	($1,023,996)	($1,142,546)	($1,072,046)	($1,001,546)	($948,991)	($1,007,691)
Cumulative Expenditures	($3,206,495)	($3,381,745)	($3,558,495)	($3,691,130)	($3,735,790)	($3,924,840)	($3,924,840)	($3,924,840)	($3,942,785)	($4,071,985)
Cumulative Receipts	$2,429,794	$2,500,294	$2,570,794	$2,641,294	$2,711,794	$2,782,294	$2,852,794	$2,923,294	$2,993,794	$3,064,294
Year	**2053**	**2054**	**2055**	**2056**	**2057**	**2058**	**2059**	**2060**	**2061**	**2062**
Projected Replacements	($100,210)			($144,025)		($67,050)	($95,354)	($164,325)	($146,914)	($107,378)
Annual Deposit	$70,500	$70,500	$70,500	$70,500	$70,500	$70,500	$70,500	$70,500	$70,500	$70,500
End of Year Balance	($1,037,401)	($966,901)	($896,401)	($969,926)	($899,426)	($895,976)	($920,830)	($1,014,655)	($1,091,069)	($1,127,946)
Cumulative Expenditures	($4,172,195)	($4,172,195)	($4,172,195)	($4,316,220)	($4,316,220)	($4,383,270)	($4,478,624)	($4,642,949)	($4,789,863)	($4,897,240)
Cumulative Receipts	$3,134,794	$3,205,294	$3,275,794	$3,346,294	$3,416,794	$3,487,294	$3,557,794	$3,628,294	$3,698,794	$3,769,294

EVALUATION OF CURRENT FUNDING

The evaluation of Current Funding (Starting Balance of $949,294 & annual funding of $70,500) 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 60 Projected Replacements identified in the Replacement Reserve Inventory and that the Association will continue Annual Funding of $70,500 throughout the 40-year Study Period.

Annual Funding of $70,500 is approximately 59 percent of the $119,243 recommended Annual Funding calculated by the Cash Flow Method for 2023, the Study Year.

See the Executive Summary for the Current Funding Statement.

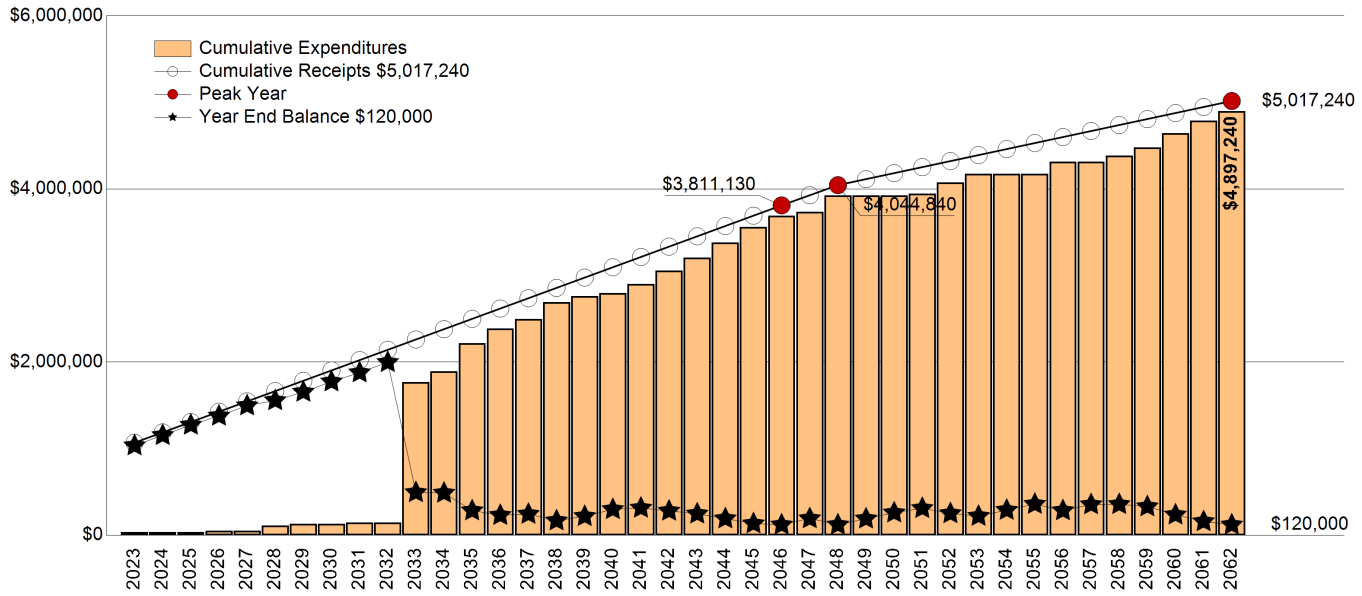
CASH FLOW METHOD FUNDING

$119,243 **RECOMMENDED REPLACEMENT RESERVE FUNDING FOR 2023**
$92.01 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 2046 with Replacement Reserves on Deposit dropping to the Minimum Balance after the completion of $3,691,130 of replacements from 2023 to 2046. Recommended funding is anticipated to decline in 2047. Peak Years are identified in Chart 4 and Table 5.
- **Threshold (Minimum Balance).** The calculations assume a Minimum Balance of $120,000 will always be held in reserve, which is calculated by rounding the 12-month 40-year average annual expenditure of $122,431 as shown on Graph #2.
- **Cash Flow Method Study Period.** Cash Flow Method calculates funding for $4,897,240 of expenditures over the 40-year Study Period. It does not include funding for any projects beyond 2062 and in 2062, the end of year balance will always be the Minimum Balance.

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



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

Year	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Starting Balance	$949,294									
Projected Replacements	($33,700)			($14,825)		($59,850)	($20,860)		($14,825)	
Annual Deposit	$119,243	$119,243	$119,243	$119,243	$119,243	$119,243	$119,243	$119,243	$119,243	$119,243
End of Year Balance	$1,034,837	$1,154,081	$1,273,324	$1,377,742	$1,496,985	$1,556,378	$1,654,761	$1,774,004	$1,878,423	$1,997,666
Cumulative Expenditures	($33,700)	($33,700)	($33,700)	($48,525)	($48,525)	($108,375)	($129,235)	($129,235)	($144,060)	($144,060)
Cumulative Receipts	$1,068,537	$1,187,780	$1,307,023	$1,426,267	$1,545,510	$1,664,753	$1,783,996	$1,903,239	$2,022,482	$2,141,726

Year	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
Projected Replacements	($1,623,480)	($125,450)	($322,945)	($172,395)	($106,375)	($194,910)	($69,044)	($39,000)	($103,174)	($153,613)
Annual Deposit	$119,243	$119,243	$119,243	$119,243	$119,243	$119,243	$119,243	$119,243	$119,243	$119,243
End of Year Balance	$493,429	$487,222	$283,520	$230,368	$243,237	$167,570	$217,769	$298,012	$314,081	$279,712
Cumulative Expenditures	($1,767,540)	($1,892,990)	($2,215,935)	($2,388,330)	($2,494,705)	($2,689,615)	($2,758,659)	($2,797,659)	($2,900,833)	($3,054,445)
Cumulative Receipts	$2,260,969	$2,380,212	$2,499,455	$2,618,698	$2,737,941	$2,857,184	$2,976,428	$3,095,671	$3,214,914	$3,334,157

Year	2043	2044	2045	1st Peak - 2046	2047	2nd Peak - 2048	2049	2050	2051	2052
Projected Replacements	($152,050)	($175,250)	($176,750)	($132,635)	($44,660)	($189,050)			($17,945)	($129,200)
Annual Deposit	$119,243	$119,243	$119,243	$119,243	$116,855	$116,855	$69,457	$69,457	$69,457	$69,457
End of Year Balance	$246,906	$190,899	$133,392	$120,000	$192,195	$120,000	$189,457	$258,914	$310,426	$250,684
Cumulative Expenditures	($3,206,495)	($3,381,745)	($3,558,495)	($3,691,130)	($3,735,790)	($3,924,840)	($3,924,840)	($3,924,840)	($3,942,785)	($4,071,985)
Cumulative Receipts	$3,453,400	$3,572,643	$3,691,887	$3,811,130	$3,927,985	$4,044,840	$4,114,297	$4,183,754	$4,253,211	$4,322,668

Year	2053	2054	2055	2056	2057	2058	2059	2060	2061	3rd Peak - 2062
Projected Replacements	($100,210)			($144,025)		($67,050)	($95,354)	($164,325)	($146,914)	($107,378)
Annual Deposit	$69,457	$69,457	$69,457	$69,457	$69,457	$69,457	$69,457	$69,457	$69,457	$69,457
End of Year Balance	$219,931	$289,388	$358,845	$284,277	$353,734	$356,142	$330,245	$235,377	$157,920	$120,000
Cumulative Expenditures	($4,172,195)	($4,172,195)	($4,172,195)	($4,316,220)	($4,316,220)	($4,383,270)	($4,478,624)	($4,642,949)	($4,789,863)	($4,897,240)
Cumulative Receipts	$4,392,126	$4,461,583	$4,531,040	$4,600,497	$4,669,954	$4,739,411	$4,808,869	$4,878,326	$4,947,783	$5,017,240

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.

$119,243 **2023 - CASH FLOW METHOD RECOMMENDED FUNDING**

The 2023 Study Year calculations have been made using current replacement costs (see Page B.2), modified by the Analyst for any project specific conditions.

$126,398 **2024 - INFLATION ADJUSTED FUNDING**

A new analysis calculates the 2024 funding based on three assumptions:

- Replacement Reserves on Deposit totaling $1,034,837 on January 1, 2024.
- All 2023 Projected Replacements listed on Page C.2 accomplished at a cost to Replacement Reserves less than $33,700.
- Construction Cost Inflation of 6.00 percent in 2023.

The $126,398 inflation adjusted funding in 2024 is a 6.00 percent increase over the non-inflation adjusted funding of $119,243.

$133,982 **2025 - INFLATION ADJUSTED FUNDING**

A new analysis calculates the 2025 funding based on three assumptions:

- Replacement Reserves on Deposit totaling $1,072,386 on January 1, 2025.
- No Expenditures from Replacement Reserves in 2024.
- Construction Cost Inflation of 6.00 percent in 2024.

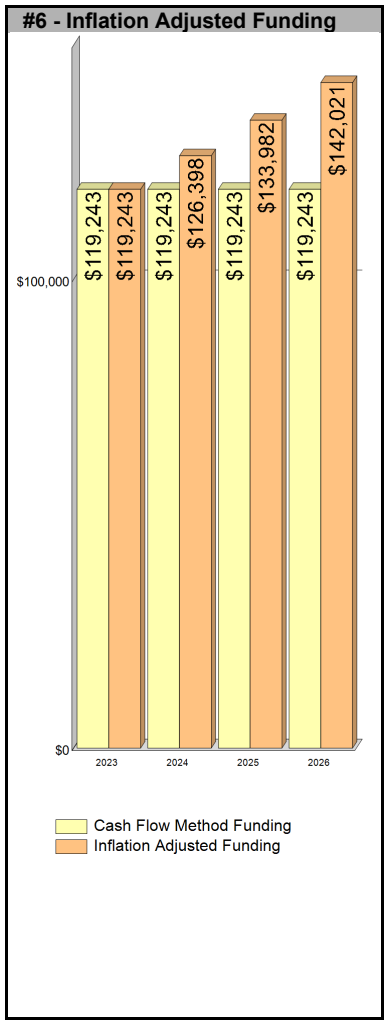
The $133,982 inflation adjusted funding in 2025 is a 12.35 percent increase over the non-inflation adjusted funding of $119,243.

$142,021 **2026 - INFLATION ADJUSTED FUNDING**

A new analysis calculates the 2026 funding based on three assumptions:

- Replacement Reserves on Deposit totaling $1,091,267 on January 1, 2026.
- No Expenditures from Replacement Reserves in 2025.
- Construction Cost Inflation of 6.00 percent in 2025.

The $142,021 inflation adjusted funding in 2026 is a 19.10 percent increase over the non-inflation adjusted funding of $119,243.



Year Four and 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 to be professionally updated every 3 to 5 years.

Inflation Adjustment

Prior to approving a budget based upon the 2024, 2025 and 2026 inflation-adjusted funding calculations above, the 6.00 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 percentage point), 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 2023, based on a 1.00 percent interest rate, we estimate the Association may earn $9,921 on an average balance of $992,066, $10,536 on an average balance of $1,053,612 in 2024, and $10,818 on $1,081,826 in 2025. The Association may elect to attribute 100 percent of the earned interest to Reserves, resulting in a reduction in the 2023 funding from $119,243 to $109,322 (a 8.31 percent reduction), $126,398 to $115,862 in 2024 (a 8.33 percent reduction), and $133,982 to $123,163 in 2025 (a 8.07 percent reduction).

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SECTION B - REPLACEMENT RESERVE INVENTORY

- **PROJECTED REPLACEMENTS.** Habitat I Section A Condominiums - Replacement Reserve Inventory identifies 60 items which 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 $3,768,760. Cumulative Replacements totaling $4,897,240 are scheduled in the Replacement Reserve Inventory over the 40-year Study Period. Cumulative Replacements include those components that are replaced more than once during the period of the study.

  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.** Some of the items contained in the Replacement Reserve Inventory are 'Excluded Items'. Multiple categories of items 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 $1000 and/or a normal economic life of less than 3 years are typically excluded from funding from Replacement Reserves. This exclusion should reflect the 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 B.2.

  Long-lived Items. Items are excluded from the Replacement Reserve Inventory when items are properly maintained and are assumed to have a life equal to the property.

  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.

- **CATEGORIES.** The 60 items included in the Habitat I Section A Condominiums Replacement Reserve Inventory are divided into 3 major categories. Each category is printed on a separate page, beginning on page B.3.

- **LEVEL OF SERVICE.** This Replacement Reserve Inventory has been developed in compliance with the standards established for a Level 2 Update, as defined by the National Reserve Study Standards, established in 1998 by Community Associations Institute, which states:

  This study has been performed as a Level 2 Update with Site Visit/On-Site Review as defined by the Community Associations Institute's, National Reserve Study Standards. As such, the component inventory is based on the study that was performed by Miller-Dodson Associates, Inc. in November 2017.. This inventory was adjusted to reflect changes provided by the Community Manager and/or the Board of Directors, or adjustments made based on the site visit and visual assessment performed by the Analyst. The analysis, including fund status and funding plan, is developed from the adjusted inventory.

REPLACEMENT RESERVE INVENTORY - GENERAL INFORMATION (CONT'D)

- **INVENTORY DATA.** Each of the 60 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 (Years). The number of years that a new and properly installed item should be expected to remain in service.

  Remaining Economic Life (Years). 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.

- **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.
- **ACCURACY OF THE ANALYSIS.** The accuracy of the Replacement Reserve Analysis is dependent upon expenditures from Replacement Reserves being made ONLY for the 60 Projected Replacements specifically listed in the Replacement Reserve Inventory. The inclusion/exclusion of items from the Replacement Reserve Inventory is discussed on Page B.1.

SITE ITEMS
PROJECTED REPLACEMENTS

NEL- Normal Economic Life (yrs)
REL- Remaining Economic Life (yrs)

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NEL	REL	REPLACEMENT COST ($)
1	Asphalt pavement, Aberdeen Court, mill and overlay	sf	7,315	$2.45	20	none	$17,922
2	Asphalt pavement, Aberdeen Court, seal coat	sf	7,315	$0.25	5	3	$1,829
3	Asphalt pavement, Aberdeen Drive, mill and overlay	sf	6,440	$2.45	20	none	$15,778
4	Asphalt pavement, Aberdeen Drive, seal coat	sf	6,440	$0.25	5	3	$1,610
5	Asphalt pavement, Happy Lane, mill and overlay	sf	13,365	$2.45	20	16	$32,744
6	Asphalt pavement, Happy Lane, seal coat	sf	13,365	$0.25	5	3	$3,341
7	Asphalt pavement, Friendly Place, mill and overlay	sf	12,730	$2.45	20	18	$31,189
8	Asphalt pavement, Friendly Place, seal coat	sf	12,730	$0.25	5	3	$3,183
9	Asphalt pavement, Leisure Way, mill and overlay	sf	19,450	$2.45	20	19	$47,653
10	Asphalt pavement, Leisure Way, seal coat	sf	19,450	$0.25	5	3	$4,863
11	Concrete curb and gutter, barrier (6%)	ft	105	$42.00	6	6	$4,410
12	Concrete flatwork (6%)	sf	1,175	$14.00	6	6	$16,450
13	Retaining wall, PTL	sf	160	$45.00	20	15	$7,200
14	Retaining wall, PTL	sf	60	$45.00	20	17	$2,700
15	Retaining wall, segmental block (20% reset	sf	60	$15.00	10	10	$900
16	Fence, wood split, 2 rails	ft	120	$26.00	15	13	$3,120
17	Domestic water laterals (10% allowance)	ft	190	$190.00	5	5	$36,100
18	Sanitary laterals (10% allowance)	ft	95	$250.00	5	5	$23,750
19	Stormwater inlet (allowance)	ea	6	$1,850.00	10	10	$11,100
				Replacement Costs - Page Subtotal			$265,840

COMMENTS

- Item #1: Asphalt pavement, Aberdeen Court, mill and overlay - Aberdeen Court, access road, and driveways.
- Item #3: Asphalt pavement, Aberdeen Drive, mill and overlay - Aberdeen Drive, access road, and driveways.
- Item #5: Asphalt pavement, Happy Lane, mill and overlay - Happy Lane roadway and driveways.
- Item #7: Asphalt pavement, Friendly Place, mill and overlay - Friendly Place roadway and driveways.
- Item #9: Asphalt pavement, Leisure Way, mill and overlay - Leisure Way roadway and driveways.

SITE ITEMS - (cont.)

PROJECTED REPLACEMENTS

NEL- Normal Economic Life (yrs)
REL- Remaining Economic Life (yrs)

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NEL	REL	REPLACEMENT COST ($)
20	Entrance monument, painted composite sign	sf	12	$225.00	25	20	$2,700
				Replacement Costs - Page Subtotal			$2,700

COMMENTS

EXTERIOR ITEMS
PROJECTED REPLACEMENTS

NEL- Normal Economic Life (yrs)
REL- Remaining Economic Life (yrs)

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NEL	REL	REPLACEMENT COST ($)
21	Roofing, asphalt shingles, phase (1)	sf	8,350	$5.00	25	11	$41,750
22	Roofing, asphalt shingles, phase (2)	sf	32,325	$5.00	25	12	$161,625
23	Roofing, asphalt shingles, phase (3)	sf	20,180	$5.00	25	13	$100,900
24	Roofing, asphalt shingles, phase (4)	sf	11,945	$5.00	25	14	$59,725
25	Roofing, asphalt shingles, phase (5)	sf	3,690	$5.00	25	15	$18,450
26	Roofing, asphalt shingles, phase (6)	sf	7,830	$5.00	25	21	$39,150
27	Roofing, asphalt shingles, phase 7)	sf	8,130	$5.00	25	22	$40,650
28	Roofing, asphalt shingles, phase (8)	sf	8,250	$5.00	25	23	$41,250
29	Roofing, asphalt shingles, phase (9)	sf	4,070	$5.00	25	24	$20,350
30	Gutter and downspouts, 6" aluminum	ft	460	$15.00	30	11	$6,900
31	Gutter and downspouts, 6" aluminum	ft	2,300	$15.00	30	12	$34,500
32	Gutter and downspouts, 6" aluminum	ft	1,150	$15.00	30	13	$17,250
33	Gutter and downspouts, 6" aluminum	ft	690	$15.00	30	14	$10,350
34	Gutter and downspouts, 6" aluminum	ft	230	$15.00	30	15	$3,450
35	Gutter and downspouts, 6" aluminum	ft	460	$15.00	30	21	$6,900
36	Gutter and downspouts, 6" aluminum	ft	460	$15.00	30	22	$6,900
37	Gutter and downspouts, 6" aluminum	ft	460	$15.00	30	23	$6,900
38	Gutter and downspouts, 6" aluminum	ft	230	$15.00	30	24	$3,450
39	Siding and trim, vinyl, standard	sf	171,570	$9.00	40	10	$1,544,130
40	Window, operating (20% allowance)	sf	1,900	$68.00	40	21	$129,200
41	Window, operating (20% allowance)	sf	1,900	$68.00	40	22	$129,200
42	Window, operating (20% allowance)	sf	1,900	$68.00	40	25	$129,200
43	Window, operating (20% allowance)	sf	1,900	$68.00	40	29	$129,200
44	Window, operating (20% allowance)	sf	1,900	$68.00	40	33	$129,200

Replacement Costs - Page Subtotal $2,810,580

COMMENTS

- Item #21: Roofing, asphalt shingles, phase (1) - Buildings: 16 and 25.
- Item #22: Roofing, asphalt shingles, phase (2) - Buildings: 1,2,3,4,5,10,14,15,21 & 23.
- Item #23: Roofing, asphalt shingles, phase (3) - Buildings: 3,6,11,13, and19.
- Item #24: Roofing, asphalt shingles, phase (4) - Buildings: 7, 20, and 26.
- Item #25: Roofing, asphalt shingles, phase (5) - Building 8.
- Item #26: Roofing, asphalt shingles, phase (6) - Buildings: 9 and 24.
- Item #27: Roofing, asphalt shingles, phase 7) - Buildings: 12 and 18.
- Item #28: Roofing, asphalt shingles, phase (8) - Buildings: 17 and 22.
- Item #29: Roofing, asphalt shingles, phase (9) - Building 27.

EXTERIOR ITEMS - (cont.)

PROJECTED REPLACEMENTS

NEL- Normal Economic Life (yrs)
REL- Remaining Economic Life (yrs)

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NEL	REL	REPLACEMENT COST ($)
45	Door, fiberglass, flush entry door (3'x6'8") (20%	ea	22	$1,650.00	35	11	$36,300
46	Door, fiberglass, flush entry door (3'x6'8") (20%	ea	22	$1,650.00	35	12	$36,300
47	Door, fiberglass, flush entry door (3'x6'8") (20%	ea	22	$1,650.00	35	13	$36,300
48	Door, fiberglass, flush entry door (3'x6'8") (20%	ea	22	$1,650.00	35	14	$36,300
49	Door, fiberglass, flush entry door (3'x6'8") (20%	ea	22	$1,650.00	35	15	$36,300
50	Door, sliding glass door (5' x 7') (20% allowance)	ea	27	$1,500.00	35	11	$40,500
51	Door, sliding glass door (5' x 7') (20% allowance)	ea	27	$2,580.00	35	12	$69,660
52	Door, sliding glass door (5' x 7') (20% allowance)	ea	27	$2,580.00	35	15	$69,660
53	Door, sliding glass door (5' x 7') (20% allowance)	ea	27	$2,580.00	35	19	$69,660
54	Door, sliding glass door (5' x 7') (20% allowance)	ea	27	$2,580.00	35	23	$69,660
55	Garage door (20% allowance)	ea	22	$1,650.00	30	16	$36,300
56	Garage door (20% allowance)	ea	22	$1,650.00	30	17	$36,300
57	Garage door (20% allowance)	ea	22	$1,650.00	30	18	$36,300
58	Garage door (20% allowance)	ea	22	$1,650.00	30	19	$36,300
59	Garage door (20% allowance)	ea	22	$1,650.00	30	20	$36,300

Replacement Costs - Page Subtotal $682,140

COMMENTS

BUILDING SYSTEMS
PROJECTED REPLACEMENTS

NEL- Normal Economic Life (yrs)
REL- Remaining Economic Life (yrs)

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NEL	REL	REPLACEMENT COST ($)
60	Electric meter stack allowance	ls	1	$7,500.00	10	10	$7,500
				Replacement Costs - Page Subtotal			$7,500

COMMENTS

VALUATION EXCLUSIONS

Excluded Items

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NEL	REL	REPLACEMENT COST ($)
	Miscellaneous signage						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 $1000 have not been scheduled for funding from Replacement Reserve. Examples of items excluded 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 ($)	NEL	REL	REPLACEMENT COST ($)
	Miscellaneous culverts						EXCLUDED
	Building foundation(s)						EXCLUDED
	Concrete floor slabs (interior)						EXCLUDED
	Wall, floor, and roof structure						EXCLUDED
	Electrical wiring						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 ($)	NEL	REL	REPLACEMENT COST ($)
	Domestic water pipes serving one unit						EXCLUDED
	Sanitary sewers serving one unit						EXCLUDED
	Electrical wiring serving one unit						EXCLUDED
	Cable TV service serving one unit						EXCLUDED
	Telephone service serving one unit						EXCLUDED
	Gas service serving one unit						EXCLUDED
	Stairs on an individual lot						EXCLUDED
	Fence on an individual lot						EXCLUDED
	Unit deck, patio, and/or balcony						EXCLUDED
	Unit interior						EXCLUDED
	Unit HVAC system						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 ($)	NEL	REL	REPLACEMENT COST ($)
	Primary electric feeds						EXCLUDED
	Electric transformers						EXCLUDED
	Cable TV systems and structures						EXCLUDED
	Telephone cables and structures						EXCLUDED
	Site lighting						EXCLUDED
	Gas mains and meters						EXCLUDED
	Water mains and meters						EXCLUDED
	Sanitary main sewers						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 ($)	NEL	REL	REPLACEMENT COST ($)
	Cleaning of asphalt pavement						EXCLUDED
	Crack sealing of asphalt pavement						EXCLUDED
	Painting of curbs						EXCLUDED
	Striping of parking spaces						EXCLUDED
	Landscaping and site grading						EXCLUDED
	Exterior painting						EXCLUDED
	Repair services						EXCLUDED
	Partial replacements						EXCLUDED
	Capital improvements						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 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 ($)	NEL	REL	REPLACEMENT COST ($)
	Government, roadways and parking						EXCLUDED
	Government, sidewalks and curbs						EXCLUDED
	Government, lighting						EXCLUDED
	Government, stormwater management						EXCLUDED
	Government, ponds						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 rights-of-way, including adjacent properties and adjacent roadways.
- The list above exemplifies exclusions by the cited standard(s) and is not intended to be comprehensive.

SECTION C - CALENDAR OF PROJECTED ANNUAL REPLACEMENTS

GENERAL STATEMENT. The 60 Projected Replacements in the Habitat I Section A Condominiums 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 C.2.

REPLACEMENT RESERVE ANALYSIS AND INVENTORY POLICIES, PROCEDURES, AND ADMINISTRATION

- **REVIEW OF THE REPLACEMENT RESERVE STUDY.** For this study to be effective, it should be reviewed by the 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.
- **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. We acknowledge that there are instances in which multiple revisions are necessary. However, unnecessary multiple revisions drain on our time and manpower resources. Therefore, Miller Dodson will exercise its sole discretion as to whether additional charges are incurred.
- **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 Study Period, 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.

PROJECTED REPLACEMENTS

Item	2023 - Study Year	$
1	Asphalt pavement, Aberdeen Court, mill and overlay	$17,922
3	Asphalt pavement, Aberdeen Drive, mill and overlay	$15,778
	Total Scheduled Replacements	$33,700

Item	2024 - YEAR 1	$
	No Scheduled Replacements	

Item	2025 - YEAR 2	$
	No Scheduled Replacements	

Item	2026 - YEAR 3	$
2	Asphalt pavement, Aberdeen Court, seal coat	$1,829
4	Asphalt pavement, Aberdeen Drive, seal coat	$1,610
6	Asphalt pavement, Happy Lane, seal coat	$3,341
8	Asphalt pavement, Friendly Place, seal coat	$3,183
10	Asphalt pavement, Leisure Way, seal coat	$4,863
	Total Scheduled Replacements	$14,825

Item	2027 - YEAR 4	$
	No Scheduled Replacements	

Item	2028 - YEAR 5	$
17	Domestic water laterals (10% allowance)	$36,100
18	Sanitary laterals (10% allowance)	$23,750
	Total Scheduled Replacements	$59,850

Item	2029 - YEAR 6	$
11	Concrete curb and gutter, barrier (6%)	$4,410
12	Concrete flatwork (6%)	$16,450
	Total Scheduled Replacements	$20,860

Item	2030 - YEAR 7	$
	No Scheduled Replacements	

PROJECTED REPLACEMENTS

Item	2031 - YEAR 8	$
2	Asphalt pavement, Aberdeen Court, seal coat	$1,829
4	Asphalt pavement, Aberdeen Drive, seal coat	$1,610
6	Asphalt pavement, Happy Lane, seal coat	$3,341
8	Asphalt pavement, Friendly Place, seal coat	$3,183
10	Asphalt pavement, Leisure Way, seal coat	$4,863
	Total Scheduled Replacements	$14,825

Item	2032 - YEAR 9	$
	No Scheduled Replacements	

Item	2033 - YEAR 10	$
15	Retaining wall, segmental block (20% reset allowance)	$900
17	Domestic water laterals (10% allowance)	$36,100
18	Sanitary laterals (10% allowance)	$23,750
19	Stormwater inlet (allowance)	$11,100
39	Siding and trim, vinyl, standard	$1,544,130
60	Electric meter stack allowance	$7,500
	Total Scheduled Replacements	$1,623,480

Item	2034 - YEAR 11	$
21	Roofing, asphalt shingles, phase (1)	$41,750
30	Gutter and downspouts, 6" aluminum	$6,900
45	Door, fiberglass, flush entry door (3'x6'8") (20%	$36,300
50	Door, sliding glass door (5' x 7') (20% allowance)	$40,500
	Total Scheduled Replacements	$125,450

Item	2035 - YEAR 12	$
11	Concrete curb and gutter, barrier (6%)	$4,410
12	Concrete flatwork (6%)	$16,450
22	Roofing, asphalt shingles, phase (2)	$161,625
31	Gutter and downspouts, 6" aluminum	$34,500
46	Door, fiberglass, flush entry door (3'x6'8") (20%	$36,300
51	Door, sliding glass door (5' x 7') (20% allowance)	$69,660
	Total Scheduled Replacements	$322,945

Item	2036 - YEAR 13	$
2	Asphalt pavement, Aberdeen Court, seal coat	$1,829
4	Asphalt pavement, Aberdeen Drive, seal coat	$1,610
6	Asphalt pavement, Happy Lane, seal coat	$3,341
8	Asphalt pavement, Friendly Place, seal coat	$3,183
10	Asphalt pavement, Leisure Way, seal coat	$4,863
16	Fence, wood split, 2 rails	$3,120
23	Roofing, asphalt shingles, phase (3)	$100,900
32	Gutter and downspouts, 6" aluminum	$17,250
47	Door, fiberglass, flush entry door (3'x6'8") (20%	$36,300
	Total Scheduled Replacements	$172,395

Item	2037 - YEAR 14	$
24	Roofing, asphalt shingles, phase (4)	$59,725
33	Gutter and downspouts, 6" aluminum	$10,350
48	Door, fiberglass, flush entry door (3'x6'8") (20%	$36,300
	Total Scheduled Replacements	$106,375

Item	2038 - YEAR 15	$
13	Retaining wall, PTL	$7,200
17	Domestic water laterals (10% allowance)	$36,100
18	Sanitary laterals (10% allowance)	$23,750
25	Roofing, asphalt shingles, phase (5)	$18,450
34	Gutter and downspouts, 6" aluminum	$3,450
49	Door, fiberglass, flush entry door (3'x6'8") (20%	$36,300
52	Door, sliding glass door (5' x 7') (20% allowance)	$69,660
	Total Scheduled Replacements	$194,910

PROJECTED REPLACEMENTS

Item	2039 - YEAR 16	$
5	Asphalt pavement, Happy Lane, mill and overlay	$32,744
55	Garage door (20% allowance)	$36,300
	Total Scheduled Replacements	$69,044

Item	2040 - YEAR 17	$
14	Retaining wall, PTL	$2,700
56	Garage door (20% allowance)	$36,300
	Total Scheduled Replacements	$39,000

Item	2041 - YEAR 18	$
2	Asphalt pavement, Aberdeen Court, seal coat	$1,829
4	Asphalt pavement, Aberdeen Drive, seal coat	$1,610
6	Asphalt pavement, Happy Lane, seal coat	$3,341
7	Asphalt pavement, Friendly Place, mill and overlay	$31,189
8	Asphalt pavement, Friendly Place, seal coat	$3,183
10	Asphalt pavement, Leisure Way, seal coat	$4,863
11	Concrete curb and gutter, barrier (6%)	$4,410
12	Concrete flatwork (6%)	$16,450
57	Garage door (20% allowance)	$36,300
	Total Scheduled Replacements	$103,174

Item	2042 - YEAR 19	$
9	Asphalt pavement, Leisure Way, mill and overlay	$47,653
53	Door, sliding glass door (5' x 7') (20% allowance)	$69,660
58	Garage door (20% allowance)	$36,300
	Total Scheduled Replacements	$153,613

Item	2043 - YEAR 20	$
1	Asphalt pavement, Aberdeen Court, mill and overlay	$17,922
3	Asphalt pavement, Aberdeen Drive, mill and overlay	$15,778
15	Retaining wall, segmental block (20% reset allowance)	$900
17	Domestic water laterals (10% allowance)	$36,100
18	Sanitary laterals (10% allowance)	$23,750
19	Stormwater inlet (allowance)	$11,100
20	Entrance monument, painted composite sign	$2,700
59	Garage door (20% allowance)	$36,300
60	Electric meter stack allowance	$7,500
	Total Scheduled Replacements	$152,050

Item	2044 - YEAR 21	$
26	Roofing, asphalt shingles, phase (6)	$39,150
35	Gutter and downspouts, 6" aluminum	$6,900
40	Window, operating (20% allowance)	$129,200
	Total Scheduled Replacements	$175,250

Item	2045 - YEAR 22	$
27	Roofing, asphalt shingles, phase 7)	$40,650
36	Gutter and downspouts, 6" aluminum	$6,900
41	Window, operating (20% allowance)	$129,200
	Total Scheduled Replacements	$176,750

Item	2046 - YEAR 23	$
2	Asphalt pavement, Aberdeen Court, seal coat	$1,829
4	Asphalt pavement, Aberdeen Drive, seal coat	$1,610
6	Asphalt pavement, Happy Lane, seal coat	$3,341
8	Asphalt pavement, Friendly Place, seal coat	$3,183
10	Asphalt pavement, Leisure Way, seal coat	$4,863
28	Roofing, asphalt shingles, phase (8)	$41,250
37	Gutter and downspouts, 6" aluminum	$6,900
54	Door, sliding glass door (5' x 7') (20% allowance)	$69,660
	Total Scheduled Replacements	$132,635

PROJECTED REPLACEMENTS

Item	2047 - YEAR 24	$
11	Concrete curb and gutter, barrier (6%)	$4,410
12	Concrete flatwork (6%)	$16,450
29	Roofing, asphalt shingles, phase (9)	$20,350
38	Gutter and downspouts, 6" aluminum	$3,450
	Total Scheduled Replacements	$44,660

Item	2048 - YEAR 25	$
17	Domestic water laterals (10% allowance)	$36,100
18	Sanitary laterals (10% allowance)	$23,750
42	Window, operating (20% allowance)	$129,200
	Total Scheduled Replacements	$189,050

Item	2049 - YEAR 26	$
	No Scheduled Replacements	

Item	2050 - YEAR 27	$
	No Scheduled Replacements	

Item	2051 - YEAR 28	$
2	Asphalt pavement, Aberdeen Court, seal coat	$1,829
4	Asphalt pavement, Aberdeen Drive, seal coat	$1,610
6	Asphalt pavement, Happy Lane, seal coat	$3,341
8	Asphalt pavement, Friendly Place, seal coat	$3,183
10	Asphalt pavement, Leisure Way, seal coat	$4,863
16	Fence, wood split, 2 rails	$3,120
	Total Scheduled Replacements	$17,945

Item	2052 - YEAR 29	$
43	Window, operating (20% allowance)	$129,200
	Total Scheduled Replacements	$129,200

Item	2053 - YEAR 30	$
11	Concrete curb and gutter, barrier (6%)	$4,410
12	Concrete flatwork (6%)	$16,450
15	Retaining wall, segmental block (20% reset allowance)	$900
17	Domestic water laterals (10% allowance)	$36,100
18	Sanitary laterals (10% allowance)	$23,750
19	Stormwater inlet (allowance)	$11,100
60	Electric meter stack allowance	$7,500
	Total Scheduled Replacements	$100,210

Item	2054 - YEAR 31	$
	No Scheduled Replacements	

PROJECTED REPLACEMENTS

Item	2055 - YEAR 32	$
	No Scheduled Replacements	

Item	2056 - YEAR 33	$
2	Asphalt pavement, Aberdeen Court, seal coat	$1,829
4	Asphalt pavement, Aberdeen Drive, seal coat	$1,610
6	Asphalt pavement, Happy Lane, seal coat	$3,341
8	Asphalt pavement, Friendly Place, seal coat	$3,183
10	Asphalt pavement, Leisure Way, seal coat	$4,863
44	Window, operating (20% allowance)	$129,200
	Total Scheduled Replacements	$144,025

Item	2057 - YEAR 34	$
	No Scheduled Replacements	

Item	2058 - YEAR 35	$
13	Retaining wall, PTL	$7,200
17	Domestic water laterals (10% allowance)	$36,100
18	Sanitary laterals (10% allowance)	$23,750
	Total Scheduled Replacements	$67,050

Item	2059 - YEAR 36	$
5	Asphalt pavement, Happy Lane, mill and overlay	$32,744
11	Concrete curb and gutter, barrier (6%)	$4,410
12	Concrete flatwork (6%)	$16,450
21	Roofing, asphalt shingles, phase (1)	$41,750
	Total Scheduled Replacements	$95,354

Item	2060 - YEAR 37	$
14	Retaining wall, PTL	$2,700
22	Roofing, asphalt shingles, phase (2)	$161,625
	Total Scheduled Replacements	$164,325

Item	2061 - YEAR 38	$
2	Asphalt pavement, Aberdeen Court, seal coat	$1,829
4	Asphalt pavement, Aberdeen Drive, seal coat	$1,610
6	Asphalt pavement, Happy Lane, seal coat	$3,341
7	Asphalt pavement, Friendly Place, mill and overlay	$31,189
8	Asphalt pavement, Friendly Place, seal coat	$3,183
10	Asphalt pavement, Leisure Way, seal coat	$4,863
23	Roofing, asphalt shingles, phase (3)	$100,900
	Total Scheduled Replacements	$146,914

Item	2062 - YEAR 39	$
9	Asphalt pavement, Leisure Way, mill and overlay	$47,653
24	Roofing, asphalt shingles, phase (4)	$59,725
	Total Scheduled Replacements	$107,378

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SECTION D - CONDITION ASSESSMENT

General Comments. Miller+Dodson Associates conducted a Reserve Study at Habitat I Section A Condominiums in November 2022. Habitat I Section A is in generally good condition for a residential condominium constructed in 1973. 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.

IMPORTANT NOTE: This Condition Assessment is based upon visual and apparent conditions of the common elements of the community which were observed by the Reserve Analyst at the time of the site visit. This Condition Assessment does not constitute, nor is it a substitute for, a professional Structural Evaluation of the buildings, amenities, or systems. Miller Dodson strongly recommends that the Association retain the services of a Structural Engineer to conduct thorough and periodic evaluations of the buildings, balconies, and any other structural components of the buildings and amenities of the Association.

General Condition Statements.

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

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

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

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

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

SITE ITEMS

Asphalt Pavement. The Association is responsible for the roadways and parking areas within the community. Other roadways are maintained by the City, County, or other municipality. In general, the Association's asphalt pavements are in very good condition. The majority of the roadways, driveways, and parking areas were recently resurfaced. The driveways and parking areas off Aberdeen Drive and Court are scheduled to be resurfaced in 2024.

The Association maintains an inventory of asphalt pavement along the following streets and areas:

Street, Driveway, and Parking Areas	sf
Aberdeen Court:	7,315
Aberdeen Drive:	6,440
Happy Lane:	13,365
Leisure Way:	19,450
Friendly Place:	12,730

As stated the majority of the community's asphalt has been resurfaced and is in good condition. The following are defects that affect asphalt roadways. The definitions are for educational purposes:

- **Open Cracks.** Open cracks allow water penetrate to the asphalt base and the bearing soils beneath. Over time, water will erode the base and accelerate the deterioration of the asphalt pavement. If cracks extend to the base and

bearing materials, remove the damaged areas, and replace defective materials. As a part of normal maintenance, clean and fill all other cracks.

- **Alligatoring.** Alligatoring is a term used to describe asphalt that has developed a pattern of cracking. The primary cause of alligatoring is an unstable base. Once these cracks extend through the asphalt, they will allow water to penetrate the base, accelerating the rate of deterioration, and eventually leading to potholes. The only solution is to remove the defective asphalt, compact the base, and install new base materials and asphalt.
- **Improper Grading.** When the asphalt pavement is not properly graded, it results in the ponding of water. Proper grading of the asphalt pavement will require replacing portions of the asphalt. It may also require resetting improperly sloped curb and gutter segments that are not conveying water to the stormwater management system. If ponding is left unattended it can result in unsafe travel areas, by creating conditions for hydroplaning and pockets of ice to form.
- **Potholes.** Potholes form as the result of full-depth pavement failure, including base materials. The repair will require the removal of the asphalt and base materials, installation and compaction of new base materials, and asphalt resurfacing.
- **Depressions.** There are areas where the asphalt surface is depressed due to deformation in the surface or underlying layers. These depressions may continue to grow with exposure to traffic. Water ponding is evident in several of these areas. Repair of these areas will require the removal of the asphalt and base material and reinstallation, by compacting the new base material and resurfacing with asphalt.
- **Wheel Rutting.** Depressions along the wheel lines extend along portions of the roadway. Repair of these areas will require full-depth and full-width pavement replacement. Wheel rutting, if left unattended can adversely affect vehicle steering.
- **Shoving.** Shoving occurs at locations of sharp braking or turning. The primary cause of this defect is large truck traffic. If addressed early, surface milling and overlay using a stiffer topcoat of asphalt pavement shoving can be mitigated.
- **Tree Root Damage.** This is known as Heaving, there are locations where tree roots caused heaving in the pavement surface. The repair of these areas requires the removal of the asphalt and the tree roots, then replenishing and re-compact the base material and resurfacing the asphalt. Root trimming can also be an effective way to control this defect.
- **Edge Cracking.** Sections of the asphalt pavement have developed cracks along the pavement edges due to improper confinement. Installation of curbs or installation of a compacted gravel shoulder at the time of an overlay project can address this defect.
- **Reflective Cracking.** Reflective cracks occur when placing a new asphalt overlay over an existing cracked pavement. With time and movement, existing cracks will migrate through the new asphalt. Installing a bridging membrane or fabric at the time of overlay can control reflective cracking.

A more detailed summary of pavement distress can be found at http://www.asphaltinstitute.org/engineering/maintenance-and-rehabilitation/pavement-distress-summary/.

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 an effort to maintain the condition of the pavement throughout the community and ensure the longest life of the asphalt, we recommend the Association adopt 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 not funded by 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 product is paint. 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 're-moisturize' 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 form of cracking and potholes. Re-moisturizing the pavement can return its flexibility and extend its life of the pavement.






Concrete Work. The concrete work includes the community's curb, gutter, sidewalks, and lead walks. Usually, curb and gutter replacement should be performed when the asphalt pavement is overlaid. The association performed extensive replacement of curb, gutter, and sidewalks during the recent resurfacing of the roadways. The overall condition of the concrete work is in good condition. Some of the lead walks are displaying defects.

The standards we use for recommending replacement are as follows:

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

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

Retaining Walls. The Association maintains two pressure-treated lumber retaining walls at Leisure Way and Aberdeen Drive and a segmented block wall off Happy Lane. The wood retaining wall on Leisure Way was recently installed. The retaining walls are in good overall condition.

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

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

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

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

When and if it becomes necessary to replace these walls, we recommend the Association considers one of the segmental block retaining wall systems. These systems are very low maintenance. If over time the wall experiences movement, sections of the walls can be re-stacked at a very small portion of the cost of a new wall. Segmental block retaining walls can have a service life of 80 years or more.

Retaining wall replacement can be costly, and early planning on the part of the Association can help to reduce the impact of this work on the community's budget in the future. We, therefore, recommend having a Professional Engineer inspect the walls and develop preliminary replacement alternatives and recommendations based on the site conditions, replacement costs, and recommended replacement wall types. This information can then be incorporated into future updates to the Reserve Study.

Fencing. The Association maintains a limited quantity of split rail fencing. The fencing is in good overall condition. The largest section is atop the segmented block retaining wall. This fence should be periodically inspected to ensure there are no issues, as this is a protective barrier fence.

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.

Underground Utilities. The Association is responsible for the underground utility line maintenance and replacement, including domestic water, and sanitary laterals, as well as stormwater inlets and associated piping. There were reports of past issues with certain lateral piping. The lateral piping can be scoped to provide an assessment of conditions. An allowance for future replacements has been programmed in the analysis.

Engineering drawings were not used in the determination of these underground components. Instead, we have provided an estimate of the approximate replacement costs based on our experience with other facilities of similar size and configuration. The inspection and evaluation of underground lines and structures are beyond the scope of work for this study.

Entry Monument and Signage. The Association maintains a single-entrance monument at the intersection of Aberdeen Court and Drive. This is a wood board backing with painted acrylic front support by wood posts. The sign is in good overall condition. To keep the monument fresh and appealing, we recommend replacement every 10 to 15 years.

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

EXTERIOR ITEMS

Building Roofing. The community's buildings have asphalt shingle roofs. The roofs have varying ages with replacement having been performed over the last fourteen years. The analyst was provided with a compendium listing the dates of the roofs' installation. The replacement of the roofs has been listed in phases, reflecting the age of the roofs. The roofs appear to be in good overall condition.

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

Access to the roof was not provided at the time of inspection. Observations were made from ground level.

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

Gutters and Downspouts. The buildings have aluminum gutters and downspouts, there are 4' and 6" gutters and downspouts. The gutters and downspouts are in varying conditions. Future funding for replacement in conjunction with the roof shingles has been programmed in the analysis. Some downspouts have underground piping to direct outflow.

A gutter and downspout system will remove rainwater from the area of the building's roof, siding, and foundation, and protect the exterior surfaces from water damage. Gutters should run the full length of all drip edges of the building's 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 gutter system.

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.

It is also recommended that the discharge from the downspouts be extended at least ten feet away from the foundations.

Siding and Trim. The buildings are clad in vinyl siding and trim. The overall condition of the siding is good. The siding is in the latter stage of normal service life and developing a comprehensive replacement program should be considered.

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

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

As an alternative to high-maintenance materials, the Association may want to consider replacements using low-maintenance synthetic or cementitious materials.

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.

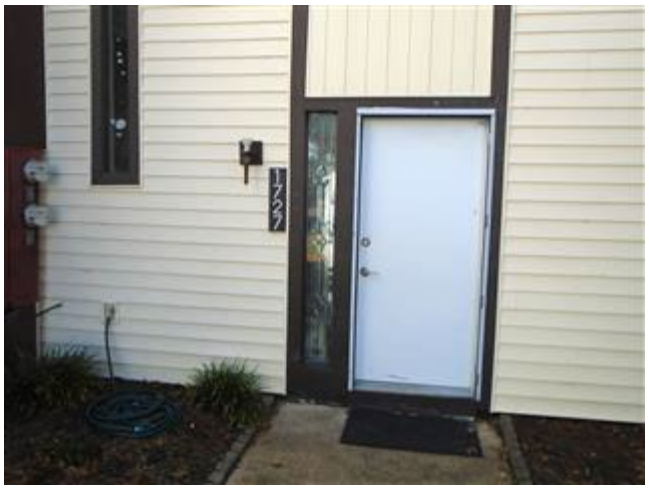



Windows and Doors. The Association is responsible for all of the community's windows and exterior doors and garage doors. The windows and doors were previously replaced in phases. The current analysis reflects the age of the windows and doors for future funding requirements.

The windows and doors are generally in good to fair condition.

Window and door units play an integral part in a facility's overall comfort, efficiency, and energy use. The quality of the installed units and the care taken in their installation and maintenance are major factors in their effectiveness and useful life. These units can have a useful life of 20 to 35 years or more depending on their use and other factors mentioned above.

In general, we recommend coordinating the replacement of these units with other exterior work, such as siding and roof replacements. The weather tightness of the building envelope often requires transitional flashing and caulking that should be performed in coordination with each other. Warranties and advantages in 'economy of scale' can often result in lower overall replacement costs and results that are more reliable. Lastly, coordinated replacements offer the opportunity to correct initial construction defects and improve the effectiveness of details with improved construction techniques and materials.

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BUILDING SYSTEMS

Electric Meter Stacks. The Association is responsible for the electric meter stacks at each of the building clusters. A limited number of the stacks were replaced in 2017 and four since the prior study in 2018. An allowance for future replacement of the meter stacks has been programmed in the analysis.

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 and limited common elements of the property to ascertain their remaining useful life and replacement cost. 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

1. COMMON INTEREST DEVELOPMENTS - AN OVERVIEW

Over the past 40 years, the responsibility for many services, facilities and infrastructure around 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 approximately 500 Community Associations in the United States. According to the 1990 U.S. Census, there were roughly 130,000 Community Associations. The Community Associations Institute (CAI), a national trade association, estimates in 2020 that there were more than 350,000 communities with over 75 million residents.

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 issues. Although Community Associations have succeeded in solving many short-term issues, many Associations still fail to properly plan for the significant 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 invariably exposed to the burden of special assessments, major increases in Association fees, and often 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 major repair or replacement, a general view of the physical condition of these components, and an effective financial plan to fund projected periodic replacements or major repairs. The Replacement Reserve Study consists of the following:

Replacement Reserve Study Introduction. The introduction provides a description of the property, an Executive Summary of the Funding Recommendations, Level of Reserve Study service, and a statement of the Purpose of the Replacement Reserve Study. It also lists documents and site evaluations upon which the Replacement Reserve Study is based, and provides the Credentials of the Reserve Analyst.

Section A Replacement Reserve Analysis. Many components that are owned by the Association have a limited life and require periodic replacement. Therefore, it is essential that the Association have a financial plan that provides funding for the timely replacement of these components in order to protect the safety, appearance, and ultimately, the property value of the home sin the community. In conformance with National Reserve Study Standards, a Replacement Reserve Analysis evaluates the current funding of Replacement Reserves as reported by the Association and recommends annual funding of Replacement Reserves using the Threshold Cash Flow Method. See definition below.

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. Replacement Reserve Inventory includes estimates of the Normal Economic Life (NEL) and the Remaining Economic Life (REL) for those components whose replacement is scheduled for funding from Replacement Reserves.

The Replacement Reserve Inventory also provides information about those components which are excluded from the Replacement Reserve Inventory and whose replacement is not 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. The observed condition of the major 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 at the time of 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.).

3. METHODS OF ANALYSIS

The Replacement Reserve industry generally recognizes two different methods of accounting for Replacement Reserve Analysis, the Cash Flow Method and the Component Method. Due to the difference in accounting methodologies, these methods lead to different calculated values for the Recommended Annual Funding to the Reserves. A brief description is included below:

Cash Flow Threshold Method. This Reserve Study uses the Threshold Cash Flow Method, sometimes referred to as the "Pooling Method." It calculates the minimum constant annual funding to reserves (Minimum Annual Deposit) required to meet projected expenditures without allowing total reserves on hand to fall below the predetermined Minimum Balance, or Threshold, in any year.

Component Method. The Component Method of calculating Reserve Funding needs is based upon an older mathematical model. Instead of calculating total funding based on yearly funding requirements, the Component method treats each component as its own “line item” budget that can only be used for that component. As a result, the Component Method is typically more conservative requiring greater Annual Reserve Funding levels.

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 parties responsible for maintaining the community after acceptance of our proposal. Upon submission of the initial Study, the Study should be reviewed by the Board of Directors and the individuals responsible for maintaining the community. We depend upon the Association for correct information, documentation, and drawings. We also look to the Association representative to help us fashion the Reserve Study so that it reflects what the community hopes to accomplish in the coming years.

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 regular 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 Threshold Method, above.

Component Analysis. See Component Method, above.

Contingency. An allowance for unexpected requirements. The “Threshold” used in the Cash Flow Method is a predetermined minimum balance that serves the same purpose as a “contingency”. However, IRS Guidelines do not allow for a “contingency” line item in the inventory. Therefore, it is built into the mathematical model as a “Threshold”.

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 Normal Economic Life (NEL). 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 Remaining Economic Life (REL). 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.

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 Balance. Otherwise referred to as the Threshold, this amount is used in the Cash Flow Threshold Method only. Normally derived using the average annual expenditure over the study period, this is the minimum amount held in reserves in the Peak Year.

National Reserve Study Standards. A set of Standards developed by the Community Associations Institute in 1995 (and updated in 2017) which establishes the accepted methods of Reserve Calculation and stipulates what data must be included in the Reserve Study for each component listed in the inventory. These Standards can be found at CAIonline.org.

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.)

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. The Reserve Study must cover a minimum of 20 years to comply with the National Reserve Study Standards. However, your study covers a 40-year period.

Peak Year. In the Cash Flow Threshold Method, a year in which the reserves on hand are projected to fall to the established threshold level. See Minimum Balance, above.

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.

Replacement Reserve Study. An analysis of all of the components of the common property of a Community Association for which 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, Normal Economic Life, and Remaining Economic Life. The objective of the study is to calculate a Recommended Annual Funding 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	**ls**	lump sum	**sy**	square yard
ft or lf	linear foot	**pr**	pair	**cy**	cubic yard
sf	square foot				

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What is a Reserve Study?
Who are we?

https://youtu.be/m4BcOE6q3Aw

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

https://youtu.be/40SodajTW1g

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

https://youtu.be/pYSMZO13VjQ

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

https://youtu.be/Qx8WHB9Cgnc

What's in a Reserve Study and what's out?
Improvement/Component, what's the difference?

https://youtu.be/ZfBoAEhtf3E

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

https://youtu.be/1J2h7FIU3qw

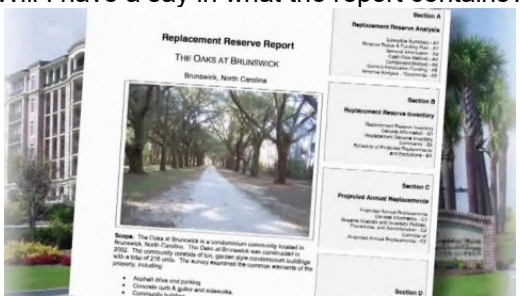
What is my role as a community Board Member?
Will a Reserve Study meet my needs?

https://youtu.be/aARD1B1Oa3o

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

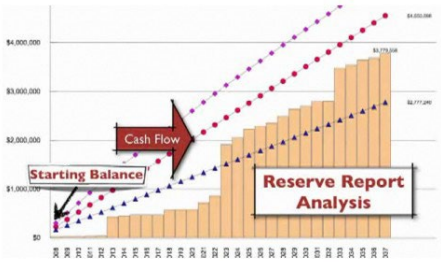
https://youtu.be/diZfM1IyJYU

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



https://youtu.be/qCeVJhFf9ag

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

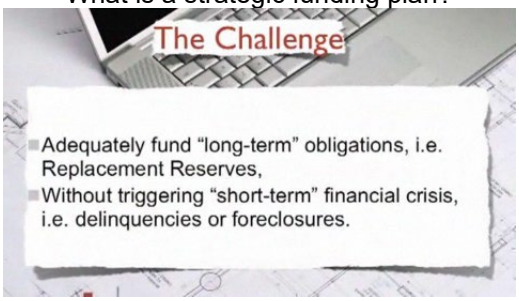


https://youtu.be/SePdwVDvHWI

How are interest and inflation addressed?
Inflation, what should we consider?

https://youtu.be/W8CDLwRIv68

A community needs more help, where do we go?
What is a strategic funding plan?



https://youtu.be/hIxV9X1tIcA