

Crescent Ridge Townhomes

Rockingham, VA



CAPITAL RESERVE STUDY & FINANCIAL ANALYSIS

2021

Final Analysis
Executive Summary

Date: 2/22/2021

DMA Project #2010009

Prepared for: Crescent Ridge Townhomes

Managed by: Rocktown Realty

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Welcome to NAVIGATOR™ - DMA's Interactive Reserve Study

On behalf of DMA Reserves, Inc., I am pleased to provide you with the Capital Reserve Analysis for your Association. This report and the accompanying data reports have been prepared in NAVIGATOR™, DMA's proprietary database reserve analysis software. Our goal is to create an ongoing useful tool for evaluating your reserves and your funding plan quickly and more responsively to ever-changing conditions in the real world.

Complementing our physical or online working session with management and community leaders, this tool will give your association greater power, knowledge and control over the future of your community's plan for financial stability. The NAVIGATOR™ system is a dynamic resource that we can use to revise, adjust and re-analyze your reserve account and your funding options at any time. We hope that you will find this information useful in your budget planning and oversight over the next several years.

This study should be reviewed annually and updated every five (5) years at a minimum. The annual review will allow you to make any adjustments to the funding contribution, to adjust the study based on any actual capital component replacements that you make during that time, your actual funding, current inflation rates, and interest rates. The five-year update will provide for re-inspection of the components, evaluate the condition of the components and their remaining useful life, update the inventory of components, update the unit costs, update the inflation, interest and threshold factors and revise the funding model as needed.

To maximize the value of this tool, you should keep a record of each capital replacement expenditure made by the community. We recommend that you keep copies of all purchase orders, invoices, work contracts, specifications, warranty information, etc. that can provide accurate information on your replacement history, costs and future replacement expectations for each component. Periodic updating of this report with recorded reserve expenditures and dates will create an actual history of your community's reserve activity, which is the best predictor of future needs.

Thank you again for the opportunity to provide you with this analysis. We look forward to working with you in the future.



Douglas L. Greene, RS, NCARB
President, DMA Reserves, Inc.

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ADDITIONAL SEPARATE FILES PROVIDED

Detailed Schedule of Components

– includes detail information about quantities, locations, lifecycle projections, client historical cost data, comments from DMA staff and estimated replacement costs for all components. All cost projections are in current values.

Expenditures by Year for Entire Study Period

– includes budgeted expenditures per year in total and by component. All costs are in future values based on the inflation rate used in the study.

Photographic Record

– digital folder of all photographs taken on site (provided with the Final Report).

Crescent Ridge Townhomes

Purpose of the Reserve Study

Your community contains infrastructure and amenities (capital assets) that are owned in common by all property or unit owners. Your owners' association is responsible for replacing these assets when they wear out or become unusable. A capital reserve account is a savings account designed specifically to accumulate funds for eventual replacement of your commonly owned assets when they reach the end of their useful lives. Funds in this dedicated account can be accumulated over a period of many years without being taxed, however they can only be used for the repair or replacement of capital assets. They cannot, for example, be returned to the operating account without the Association paying a penalty. Each capital asset is referred to in this study as a *component* of your Capital Reserves. All components eventually need to be replaced in full or in part, although they may normally function for 10, 20, 30 years, or longer. Regular operating and maintenance budgets do not cover the funding required for these needs. This capital reserve study looks at various ways to adequately fund your reserves.

A reserve study is a funding plan - not a maintenance schedule. This study is a general predictor for replacement of components however it is not a *required* maintenance or replacement schedule. Specific decisions about replacement of each component should be made by Management and the Board based on this information *and* on a periodic assessment of the actual condition of each component.

A reserve study is also not an engineering study. A reserve study is geared toward evaluating when a component needs to be replaced and how much it will cost to replace. It is not an in-depth engineering assessment of the component's functional operation, defects or design. Our company is staffed with construction professionals – architects, engineers and designers who understand the general nature of all of the components listed, however in-depth assessments of specific components is outside the scope of the reserve analysis. Where clients have specific questions or concerns about the condition, operation or suitability of specific components to their purpose, they should retain the services of specialized consultants who can provide such assessments. DMA may recommend such additional studies for specific components when our observations warrant.

Crescent Ridge Townhomes

Governing Statutes**Virginia**

Updated on: 9/1/2013

Associations must conduct a reserve study at least once every five years to determine the necessity and amount of reserves required to repair, replace and restore the common elements or capital components. The board of directors must review the study at least annually and make adjustments as the board determines to keep the funding of reserves sufficient. The statutory provisions on reserves also include requirements for the contents of the association budget if reserves are determined to be a necessity. Section 55-79.83.1 and 55-514.1. Resale certificates must include the current reserve study report or a summary thereof, a statement of the status and amount of any reserve or replacement fund and any portion of the fund designated for any specified project by the association. Section 55-79.97.

Crescent Ridge Townhomes

Personnel and Project Information

This study was prepared under the direct supervision of Douglas Greene, NCARB, RS, a Reserve Specialist certified by the Community Association Institute, a registered Architect in the states of Virginia, Maryland and North Carolina and a member of the National Council of Architectural Registration Boards (NCARB). Mr. Greene holds a Bachelor of Architecture degree from Kent State University.

The field survey, inventory, and condition assessment was conducted by Rick Weinberg, RA, a Reserve Analyst and a Registered Architect in Washington, DC. Mr. Weinberg holds a Bachelor of Science in Architecture from The Georgia Institute of Technology.

DMA was awarded the contract on 10/28/2020.

DMA conducted site visits at the property on 11/17/2020.

Photographs were taken at the site and a digital folder will be provided with the Final Report at the completion of the project. In addition to the on-site review of components, DMA also reviewed the following information provided by the client:

Chad Branson 7 UNIT LOTS 10-16 Permit & Construction 10-26-2020.pdf

Crescent Ridge Files.pdf

Crescent Ridge Townhomes

Reserve Study Updates**Draft Analysis****Published on: Monday, December 28, 2020**

This is the first draft of your reserve study. It shows the current health of your reserve account compared to the expected cash needs for the components identified in the Schedule of Components. We then use the Cash Flow funding method to project your likely funding needs going forward to adequately fund this account in view of our Schedule of Components including the projected lifecycle and estimated replacement costs for all components. This is a preliminary funding plan for initial review. It includes an assumption about future inflation and also makes assumptions about future escalation or reduction of the annual contribution. See “The Physical Analysis” and “The Financial Analysis” discussions to understand all of the workings of this study.

The assumptions and decisions that we have preliminarily made need to be discussed, and corrections, revisions and adjustments made prior to the final determination of the reserve plan for this community. The next step is to conduct the working session with you, as described in the proposal and contract. During the working session, all aspects of the analysis will be reviewed and alternate funding and/or expenditure scenarios can be explored, in order to develop the plan that works for you. Contact DMA to set up this session.

Final Analysis**Published on: Monday, February 22, 2021**

This is the Final Analysis for your reserve study. It shows the current health of your reserve account compared to the expected cash needs for the components identified in the Schedule of Components. We then use the Cash Flow funding method to project your likely funding needs going forward to adequately fund this account in view of our Schedule of Components including the projected lifecycle and estimated replacement costs for all components. This is our recommended funding plan. It includes an assumption about future inflation and also makes assumptions about future escalation or reduction of the annual contribution. See “The Physical Analysis” and “The Financial Analysis” discussions to understand all of the workings of this study.

Currently the community has not been completed so we have estimated assessments and transfers to reserves based on initial amounts furnished by Rocktown Realty. Currently there are 24 units sold and it is projected another 16 units will be sold this year for a total of 40 units. At \$90 a month x 12 months x 40 units = an assessed income of \$43,200 for 2021. The analysis shows 20% of this to be transferred to reserves which equals \$8,640. In 2022 it is projected another 40 units will be sold which will double the reserve transfer to \$17,280 for that year. In 2023 it is projected the remaining 50 units will be sold which will bring the reserve transfer that year to \$28,080. Then, beginning in 2024 a 6.7% yearly increase to the reserve transfer is shown for the remainder of the reserve study 30 year period.

Crescent Ridge Townhomes

Community Synopsis

Association Name: Crescent Ridge Townhomes
Community Location / Address: Taylor Spring Lane/Bluemoon Drive
 Rockingham, VA 22801
Community Size (Number of Units): 130
Unit Types: Townhomes
Year(s) constructed: 2021
Year converted: N/A
Management: Rocktown Realty
Represented by: Kristin Bosworth
Telephone: (540) 705-0805
E-mail kristin@rocktownrealty.com
Study Level: Capital Reserve Analysis, Level I

Financial Summary

Fiscal Year:	1/1/2021 to 12/31/2021	Current Fiscal Year Name:	2021	All Values are for Study Year	2021	Study Period:	30 Years
		Reserve Account Starting Balance		Avg Earnings Rate		Budgeted Contribution	
Crescent Ridge Townhomes		\$5,600		0.50%		\$8,640	

Financial Information Source: information from Kristen Bosworth and Bernard Hamann at Rocktown Realty.

Crescent Ridge Townhomes

Reserve Study Results

This reserve study is a dynamic planning tool. The current analysis results as of the date on this report are provided on the following pages. This information will change in future updates.

Following the current analysis results, we provide a discussion of the Physical Analysis and of the Financial Analysis. These are followed by Standards, Limitations, Conditions, Disclosure and Restrictions that affect this study. The final pages in this report contain a tabulation of projected Reserve Expenditures by Year for the first five years of the study and a Summary Schedule of Components.

	Expected Fund Balance	\$0
Percent Funded	Actual Fund Balance	\$5,600
0%	Reserve Fund Deficit	\$5,600
	Number of Units	130
	Deficit per Unit	\$43.08

CURRENT RECOMMENDED FUNDING PLAN

The current projected inflation rate for future expenditures in this analysis 3.08%

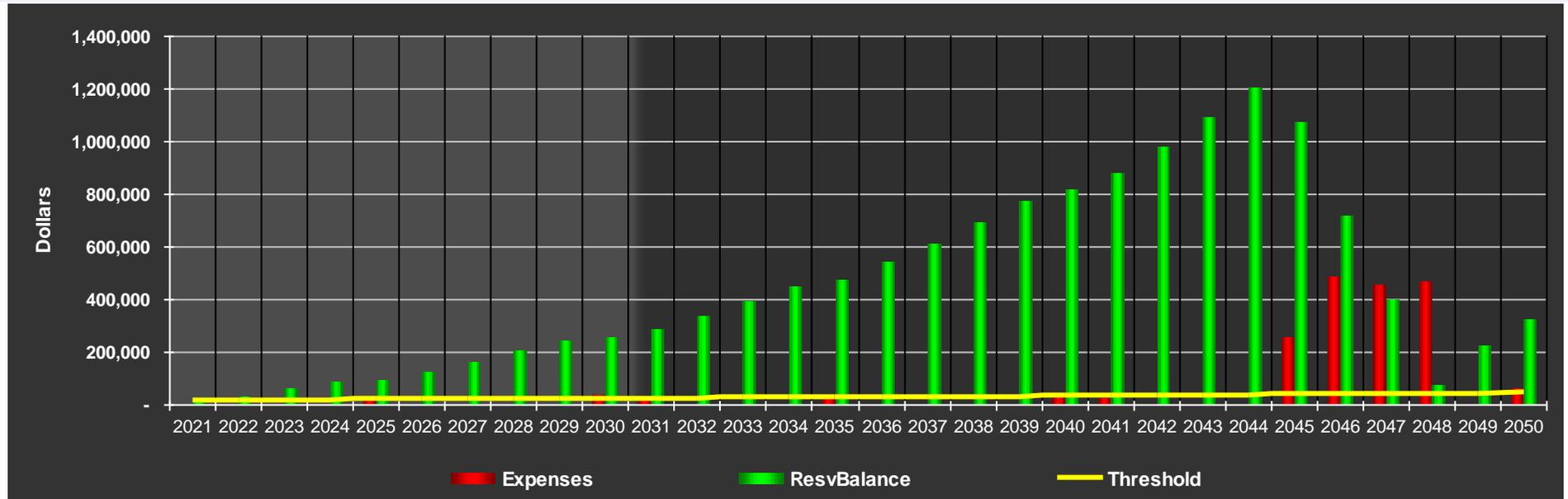
Below is a summary of the funding plan for the next five years. The full funding plan for the entire study period is shown on the following pages.

	<u>Year</u>	<u>Reserve Transfer Amount</u>	<u>Transfer Rate</u>
Reserve Transfer:	2021	\$8,640	0.00%
Reserve Transfer:	2022	\$17,280	100.00%
Reserve Transfer:	2023	\$28,080	62.50%
Reserve Transfer:	2024	\$29,961	6.70%
Reserve Transfer:	2025	\$31,968	6.70%

Crescent Ridge Townhomes

DMA Cash Flow Funding Plan

NAVIGATOR™



Cash Flow Summary

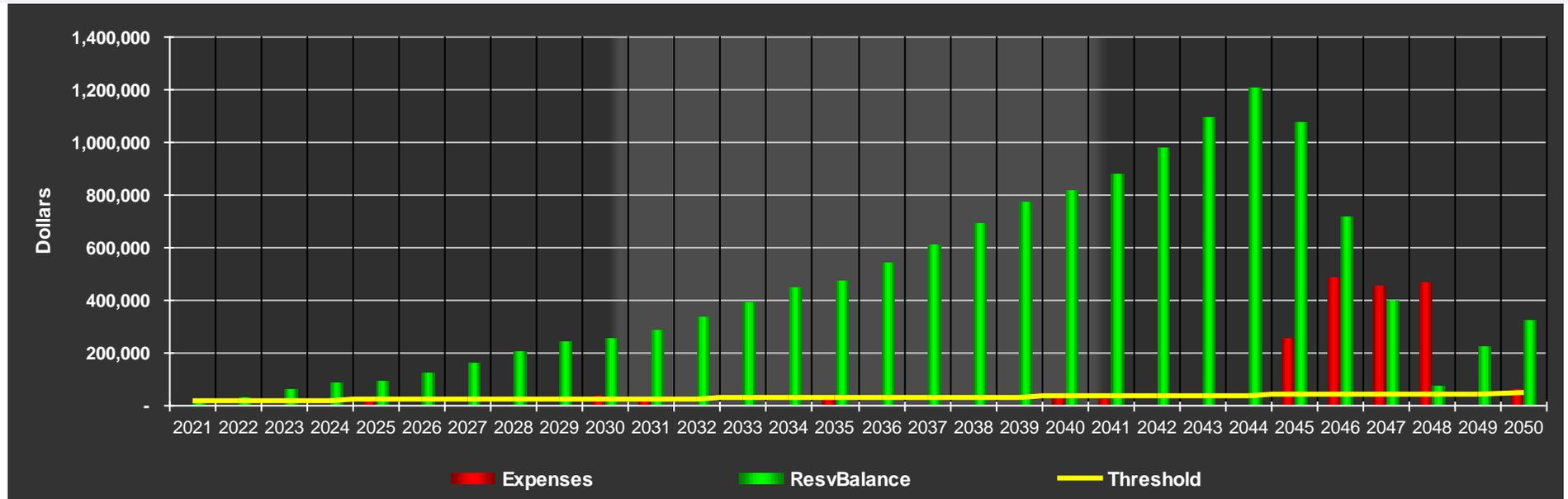
Years:	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Beginning Balance	\$5,600	\$14,268	\$31,619	\$59,857	\$90,117	\$92,850	\$127,424	\$164,456	\$204,111	\$246,567
Transfer To Reserve	\$8,640	\$17,280	\$28,080	\$29,961	\$31,968	\$34,110	\$36,395	\$38,833	\$41,435	\$44,211
Investment Income	\$28	\$71	\$158	\$299	\$451	\$464	\$637	\$822	\$1,021	\$1,233
Projected Expenditures	\$0				-\$29,686					-\$34,548
EOY Reserve Balance	\$14,268	\$31,619	\$59,857	\$90,117	\$92,850	\$127,424	\$164,456	\$204,111	\$246,567	\$257,463
Threshold	\$19,898	\$20,511	\$21,143	\$21,794	\$22,465	\$23,157	\$23,870	\$24,606	\$25,364	\$26,145
Transfer Change +/- (%)	0.00%	100.00%	62.50%	6.70%	6.70%	6.70%	6.70%	6.70%	6.70%	6.70%
Investment Income Rate	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%

Projected Expenditures: The inflation rate for future expenditures is compounded annually at: 3.08% Transfer Change: The % increase/decrease of the Reserve Transfer from previous year.
 Reserve Balance: All annual reserve account balances are end of year balances after deposits and expenditures. Deposits are not shown on this graph.
 Threshold: A percentage of the total one-time replacement cost of all components, indexed to inflation in future years. Current setting: 5.00%

Crescent Ridge Townhomes

DMA Cash Flow Funding Plan

NAVIGATOR™



Cash Flow Summary

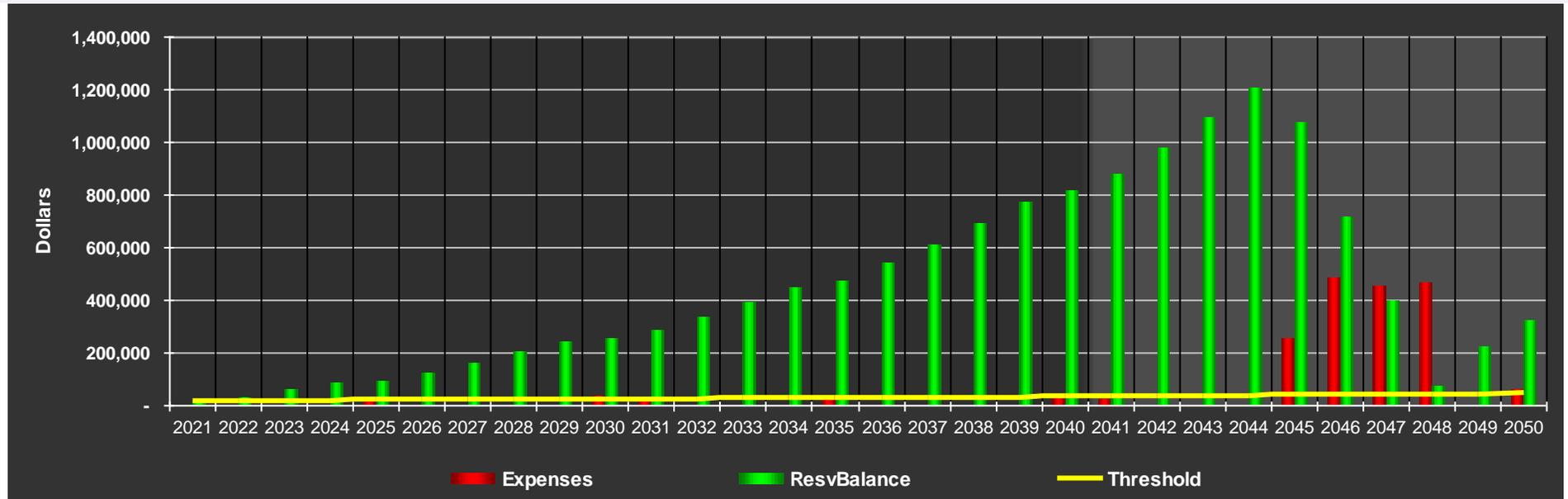
Years:	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Beginning Balance	\$257,463	\$285,408	\$337,169	\$392,561	\$451,828	\$475,024	\$542,639	\$614,963	\$692,313	\$775,026
Transfer To Reserve	\$47,173	\$50,334	\$53,706	\$57,304	\$61,143	\$65,240	\$69,611	\$74,275	\$79,251	\$84,561
Investment Income	\$1,287	\$1,427	\$1,686	\$1,963	\$2,259	\$2,375	\$2,713	\$3,075	\$3,462	\$3,875
Projected Expenditures	-\$20,515				-\$40,206					-\$46,791
EOY Reserve Balance	\$285,408	\$337,169	\$392,561	\$451,828	\$475,024	\$542,639	\$614,963	\$692,313	\$775,026	\$816,671
Threshold	\$26,950	\$27,780	\$28,636	\$29,518	\$30,427	\$31,364	\$32,330	\$33,326	\$34,352	\$35,410
Transfer Change +/- (%)	6.70%	6.70%	6.70%	6.70%	6.70%	6.70%	6.70%	6.70%	6.70%	6.70%
Investment Income Rate	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%

Projected Expenditures: The inflation rate for future expenditures is compounded annually at: 3.08% Transfer Change: The % increase/decrease of the Reserve Transfer from previous year.
 Reserve Balance: All annual reserve account balances are end of year balances after deposits and expenditures. Deposits are not shown on this graph.
 Threshold: A percentage of the total one-time replacement cost of all components, indexed to inflation in future years. Current setting: 5.00%

Crescent Ridge Townhomes

DMA Cash Flow Funding Plan

NAVIGATOR™



Cash Flow Summary

Years:	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050
Beginning Balance	\$816,671	\$883,196	\$983,884	\$1,091,525	\$1,206,587	\$1,073,886	\$718,249	\$400,312	\$75,703	\$227,663
Transfer To Reserve	\$90,227	\$96,272	\$102,722	\$109,604	\$116,947	\$124,782	\$133,142	\$142,063	\$151,581	\$161,737
Investment Income	\$4,083	\$4,416	\$4,919	\$5,458	\$6,033	\$5,369	\$3,591	\$2,002	\$379	\$1,138
Projected Expenditures	-\$27,785				-\$255,681	-\$485,788	-\$454,670	-\$468,674	\$0	-\$63,375
EOY Reserve Balance	\$883,196	\$983,884	\$1,091,525	\$1,206,587	\$1,073,886	\$718,249	\$400,312	\$75,703	\$227,663	\$327,163
Threshold	\$36,501	\$37,625	\$38,784	\$39,978	\$41,210	\$42,479	\$43,787	\$45,136	\$46,526	\$47,959
Transfer Change +/- (%)	6.70%	6.70%	6.70%	6.70%	6.70%	6.70%	6.70%	6.70%	6.70%	6.70%
Investment Income Rate	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%

Projected Expenditures: The inflation rate for future expenditures is compounded annually at: 3.08% Transfer Change: The % increase/decrease of the Reserve Transfer from previous year.
 Reserve Balance: All annual reserve account balances are end of year balances after deposits and expenditures. Deposits are not shown on this graph.
 Threshold: A percentage of the total one-time replacement cost of all components, indexed to inflation in future years. Current setting: 5.00%

Crescent Ridge Townhomes

DMA Assessment Allocation Model

Yearly Change	Year	Operating *	Reserve	Special	TOTAL	Reserves as a % of Total	Annual Increase
	2021	\$34,560	\$8,640	\$0	\$43,200	20.00%	0.00%
	2022	\$35,141	\$17,280	\$0	\$52,421	32.96%	21.34%
	2023	\$35,731	\$28,080	\$0	\$63,811	44.00%	21.73%
	2024	\$36,331	\$29,961	\$0	\$66,292	45.20%	3.89%
	2025	\$36,942	\$31,968	\$0	\$68,910	46.39%	3.95%

* In the model above, the annual reserve budget numbers are as recommended in this analysis. The operating budget number is increased annually at the consumer price index and does not reflect any actual budget planning that will be undertaken as part of the association's annual budgeting process. The purpose of this analysis is to show the potential impact of the reserve recommendation on a hypothetical overall budget. The current consumer price index used in this model is 1.68%.

Average Annual Assessment per Unit

No Units	Unit Type		Alloc %	Year	Operating *	Reserve	Special	TOTAL
40	Townhomes	Units	100.0%	2021	\$864	\$216	\$0	\$1,080
				2022	\$879	\$432	\$0	\$1,311
				2023	\$893	\$702	\$0	\$1,595
				2024	\$908	\$749	\$0	\$1,657
				2025	\$924	\$799	\$0	\$1,723

Average Monthly Assessment per Unit

No Units	Unit Type		Alloc %	Year	Operating *	Reserve	Special	TOTAL
40	Townhomes	Units	100.0%	2021	\$72	\$18	\$0	\$90
				2022	\$73	\$36	\$0	\$109
				2023	\$74	\$59	\$0	\$133
				2024	\$76	\$62	\$0	\$138
				2025	\$77	\$67	\$0	\$144

Crescent Ridge Townhomes

The Physical Analysis**RESERVE COMPONENTS DEFINED**

In this study a Reserve Component is defined as a specific project to replace, refurbish or significantly repair a specific capital asset in a specific location in the community, property or facility. Capital assets may include all types of property improvements which are owned by the owners Association, or for which the Association is required by the Declaration to provide maintenance. Examples would include any private roads, parking lots, sidewalks, paved trails, lakes, dams, swimming pools, tennis courts, playgrounds, clubhouses, etc., that make up the common area or shared amenities of the community. Other capital assets may include clubhouse or pool furniture, maintenance equipment and vehicles, or other miscellaneous assets like pumps, motors, generators, etc.

In condominiums, cooperatives and some HOA's capital assets can include certain exterior components of individual units or buildings containing units, as identified in the governing documents. Some capital assets may also be classified as limited common elements of individual homes or lots, such as driveways, patios, decks, siding and roofing. A limited common element may be owned by one unit-owner but maintained by the association, or used only by a limited group of owners and maintained by the association.

In large condominium buildings capital assets will include interior common areas – lobbies, halls, elevators, party rooms, etc., and common building equipment such as boilers, chillers, water pumps, generators, trash compactor and the like.

This study will also include any components related to hidden capital assets (within a structure or underground) which cannot be viewed or quantified by visual observation when we feel that replacement or significant capital repair activities will be required over the life of the asset. Such components may be listed as an "allowance" for costs related to potential repair or partial replacement projects.

This study may also include components with estimated useful lives and remaining lives that exceed the default 30-year study period. The cash flow financial analysis can be adjusted at any time (including during working sessions) to capture long-life components and examine their impact on reserve funding. DMA studies can be published with a study period of any time frame from 20 years to 50 years at the request of the client.

NAVIGATOR™ uses two descriptors to define individual components – a component name and a component location. These descriptors can be used interchangeably to identify the capital asset. In some cases, a specific project such as "mill and resurface asphalt" will be the component name and "Center Street" will be both the asset name and the asset location. In other cases, the asset, such as "split-system heat pump" will be the component name (meaning replacement of the split-system heat pump), and "Clubhouse" will be the location. Use of the asset name as the component name will always mean complete replacement of that asset unless otherwise noted.

MINIMUM CRITERIA FOR RESERVE COMPONENTS

DMA reserve studies do not set minimum criteria for reserve components. We prefer to leave the decision to include components up to the Reserve Specialist first, and then up to review by the client. We believe that arbitrary limits can potentially leave out components that may have significant impacts on association budgets and thus, diminish the effectiveness of the reserve analysis to predict funding needs. We can include minimum criteria upon request by the client. The two typical minimum limits are:

- ❖ Minimum dollar value (current dollars). For example, a client may ask that we not include any components with replacement costs less than \$1,000, \$5,000, etc.
- ❖ Minimum estimated useful life (EUL). For example, a client may ask that we not include any components with an EUL of less than 3 years.

Crescent Ridge Townhomes

The Physical Analysis

Keep in mind that all assets that an association owns and that need replacement, will be replaced with association funds – either from the reserve account or the operating account. DMA puts as many assets as possible in the reserve account so that they can be tracked over time in the reserve analysis. The operating account typically does not have this capability.

COMPONENT ASSEMBLIES AND RELATED COMPONENTS

Related components that may, of necessity, be replaced at the same time may be grouped into Assemblies. The Assembly is then the line-item component in our main Schedule of Components. Any sub-component included in an assembly can be pulled out of that assembly and listed separately if it is replaced individually.

Similarly, small components that may be too insignificant to track in the reserve study but which may likely be replaced as a group, will be combined into an assembly and put in the Schedule of Components as such. An example would be furniture which may be replaced as a group in a renovation or refurbishment project.

OPTIONAL COMPONENTS

In order to include all projected major expenditures involving capital assets, DMA may include components that may not typically qualify for tax exemption under IRS rulings for Associations filing Form 1120 or 1120H. It is incumbent upon the Association to determine the tax implications of comingling exempt capital expenditure funds from excluded or nonexempt designated funds in their bank and investment accounts. The Association should consult their attorney or accountant on this matter. Some of these items include:

- ❖ Painting, wall coverings and other cosmetic work.
- ❖ Landscape Improvements and replacement of any landscaping (trees, shrubbery, etc.).
- ❖ Irrigation system maintenance.
- ❖ Asphalt seal coating and striping.
- ❖ Cleaning and power washing activities.

You may request that any of these components be removed from the reserve account, in which case they will be funded from your operating account or a separate non-tax-exempt account.

EXCLUSIONS

Some capital assets are not included as reserve components. Components that you do not see in this report are generally related to one of the categories below or are not owned by the association:

- ❖ Permanent Improvements: This group includes components that if properly maintained will have a useful life equal to the property as a whole. The end of the useful life of the property would occur when it would be necessary that all of the infrastructure would need to be demolished and cleared or the area and infrastructure completely evacuated and reconditioned to return the property to a safe and useful state. A typical example would be entire building structures.
- ❖ Masonry, Stone, Concrete: Generally, masonry, stone and concrete building cladding and flatwork would be considered to have an unlimited useful life and their replacement is not envisioned. However, repairs such as mortar tuck pointing, patching and replacing sections of broken or damaged masonry, stone and concrete is a reality and a component line item for this is often included in the reserve funding study.

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The Physical Analysis

- ❖ Unit or Home Owner Modifications: Components that are part of a Unit in a condominium, or a private home in an HOA are not included unless they are specifically defined in the Declaration or Bylaws as a Common Area or Limited Common Area. On occasion unit or home owners will modify components that are considered common or limited common elements. The cost of these modifications are typically not included as part of the capital reserves.
- ❖ Incidental or Maintenance Items: Some components are small enough, or may require repair or replacement on a recurring short-term basis. These items and actions are typically funded from the operating account as annual maintenance items.
- ❖ Capital Improvements: These include development or purchase of any new asset to be placed in service for the first time. These are not capital reserve components. After the asset has been placed in service, the money set aside for repair and replacement can then be included in the capital reserve study.

COMPONENT QUANTITIES AND MEASUREMENT

The Schedule of Components provides the total quantity or measurement of each asset for which a reserve component is identified. This is stated as the amount, size, number or extent of each component based on defined units of measure. Typical units of measure include:

- ❖ SF = area measurement defined in square feet
- ❖ SY = area measurement defined in square yards
- ❖ SQ = area measurement defined by "square" (100 square feet)
- ❖ LF = length measurement defined by linear feet
- ❖ CY = volume measurement defined by cubic yards
- ❖ EA = quantity measurement defined by number of individual units, "each".
- ❖ PR = quantity measurement defined by number of paired units, "pair".
- ❖ LS = allowance measurement for components with indeterminate or combined quantities of different individual units "lump sum"

All components are viewed on site unless otherwise specified herein. The components are documented with a photo of the component or of a typical component or group of components where there are a large number of repetitive component elements. Quantities for each component are developed either by on-site measurement, measurement from scale engineering and architectural drawings when available, measurement on scaled photos or measurement by satellite mapping. In the case of on-site measurements of building envelope components for multiple buildings (i.e., roofs, siding, trim, doors, windows, gutters, etc.) it would take an extraordinary amount of time and money to identify and measure each and every component on each and every unit. In that case quantities may be arrived at by measuring a single model or a single unit of similar character and multiplying those quantities by the number of similar units. This methodology has resulted in acceptably accurate results as far as quantities are concerned for the reserve study budget analyses.

If this study is an update of a previous study, the quantities used are as determined in the previous study unless otherwise noted. In cases where a recent historic cost estimate or bid exists the bid amount may be used as a "lump sum" in lieu of a unit quantity estimate.

COMPONENT IN-SERVICE DATE, ESTIMATED LIFE AND REPLACEMENT SCHEDULE

The following component information is included in the Summary Schedule of Components in this report and/or in the Detailed Schedule of Components, provided as a separate file:

Crescent Ridge Townhomes

The Physical Analysis

- ❖ In Service Date: This identifies either the known year or our estimate of the year that each component was placed in service (built, installed, replaced, etc.).
- ❖ Estimated Useful Life (EUL): This is the expected working life of the component in years, based on the actuarial or industry standard life, combined with our observation of the condition and use of the component in this setting. Our EUL for a component in one setting may be different for the same or similar component in another setting. The terminology “expected” is important in that some components are subject to partial failures and replacements even though a portion or majority of the component may have a much longer service life. An example is concrete sidewalks. Concrete may last in serviceable condition for 100 years, but outside factors can affect sidewalks and require replacement of specific locations in a shorter time frame. In some cases, the same portion may be replaced multiple times within the total life span. Some components may be a group of like entities such as doors. In this case some doors may be more susceptible to replacement than others based on use and exposure. The EUL sets a minimum estimated life before we expect some replacement activity even though many of the doors in the group may last much longer.

Our sources for these EUL's include R. S. Means Cost Data, Fannie Mae Property Condition Assessment tables, and American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) Equipment Life Expectancy tables. These are industry averages based on nationwide experience in many different locations, conditions and building types. Since reserve studies are budget planning tools, these are reasonable approaches to guiding that planning, however, the Analyst performing your study may adjust some EUL's based on (a) what he/she observes about the component condition on site, (b) what your history has been with each component, if known, and (c) other potential impacts on the component due to location, exposure, usage, etc. Other factors will also affect the actual service life that you get from a component. Some components fail completely, i.e., they no longer work; others fail gradually through aging. For those components, the decision to replace may be guided by the amount of maintenance the component is requiring, obsolescence of the component, better technology and cost savings from new components, and relative appearance or operating condition that impacts the perception of your property or facility by owners / users. Remember that reserve studies are not prescriptive maintenance plans for your property. The final decision to replace a component rests with the Board of Directors based on its actual condition, relative priorities, and other maintenance options.

- ❖ Next Replacement Year: This number is computed by adding the Estimated Useful Life (EUL) to the In-Service Date.
- ❖ Remaining Useful Life: This number is computed by subtracting the Study Year (the year the analysis is being conducted) from the Next Replacement Year.
- ❖ Percent Replaced: In its simplest form, this number tells the analysis to either fund for the full replacement amount or to fund for a partial replacement amount at each occasion. Again, with the sidewalk example, the analysis may be told to fund for 5% of the total component quantity replacement at each interval. For a shingle roof, it would likely be for 100% of the component at each replacement interval.

This number can also be used to assist in “what if” scenarios. If an association is trying to decide if they want to replace a component, remove it, or do something else; the percent of replacement could be set at zero (0%) in order to remove the component from the funding plan, while still recognizing its existence in the community.

Crescent Ridge Townhomes

The Physical Analysis

- ❖ Replacement Interval (only shown in the Detailed Schedule of Components): This is the number of years after the first projected replacement event in the study, that we expect to have another. For a component with a predictable estimated life, such as shingle roofs, the replacement interval may be the same as the estimated useful life (EUL). If the EUL is 30 years the subsequent replacement interval will also be 30 years. For our concrete sidewalk example in the previous section, however, you may replace 5% of it after an EUL of 15 years, and then another 5% every 5 years thereafter, as the entire walkway component gradually ages. These numbers are often affected by outside forces that impact the component, and can also be affected by the manner in which the association maintains the community. One association may elect to replace portions of a component every 5 years or more often, and another association may not elect to do any work for 15 years at a time. These are all decisions that can be made in DMA's working session with the Association.
- ❖ Client Responsibility (only shown in the Detailed Schedule of Components): Generally, this will always be 100%. In some situations, however, the responsibility for maintenance of certain components may be shared with another entity, such as another association, or another property owner. In these cases, the % listed will be the percentage of responsibility applicable to this account only.

REPLACEMENT COST

The replacement cost for each component in the Schedule of Components is the product of a source cost and other component descriptors discussed above.

- ❖ Unit Cost: This is the source cost for the replacement of one unit of measure for each component. This will always be expressed in current dollars (See our discussion below on cost estimating.)
- ❖ Replacement Cost: This number is derived from multiplying the Quantity in units x the Unit Cost x the Percent Replaced x the Client Responsibility.

DMA uses three sources of costing for components in this study. Our standard source for computing component replacement costs is from cost data published by R. S. Means Company, a division of The Gordian Group, including *Facility Construction, Facility Maintenance and Repair, Commercial Construction, and Residential Construction*. Our second source is actual recent replacement costs for specific components provided by the association from your General Ledger or from actual contracts or invoices. Our third source is from local contractors and suppliers, and from manufacturers of specific products. All source unit costs are indexed (cost weighted) by geographic area based on R. S. Means national cost indexing system.

All DMA estimated costs are "turn-key" costs, meaning that they include both materials and labor costs as well as indirect costs such as project staging, demolition or removal of the old components, overhead and profit, and permitting (for construction projects). They typically do not include soft costs such as engineering, design, specifications and inspections. Those can be provided as separate line-item costs when they represent material expenditures.

COST ASSEMBLY BY THE RESERVE SPECIALIST

The Reserve Specialist (RS) in charge of your project will select the most appropriate costs for the components that they see on your property or in your facility. In some cases, the RS will need to additionally assemble costs from our data base to fully address the needs of a replacement project – such as equipment replacement that requires architectural alterations, complex roof replacement projects, or underground utility replacement projects. The RS will also determine the percentage of replacement per occurrence for each component. Replacement occurrences for long-life components or component groups may be better projected as partial replacements on a recurring basis.

YOUR ACTUAL COSTS WILL VARY

DMA's cost estimating meets industry standards for this work and we use the best information available to develop our cost data base. Many factors affect the actual cost of project at a point in time however, and you should expect your cost experience to vary somewhat from the estimates. Factors to remember include:

Crescent Ridge Townhomes

The Physical Analysis

- ❖ Actual cost growth for a particular product or labor market vs. projected inflation rates. Most costs grow in leaps and spurts, even though they average out over time to a measurable rate. Your experience at a point in time may be on one side or the other of a cost increase.
- ❖ Competition and local market factors at the time of your replacement may put temporary upward or downward pressures on the cost of a particular item or labor rate.
- ❖ Your replacement project may include other work within the scope that is not identified or anticipated in the component replacement cost.
- ❖ Component replacement estimates are made for the most similar product, material or labor cost to what we observe on your property. It may not be an exact match for your component.
- ❖ The community may elect to upgrade or downgrade the material or product selected for replacement vs. the existing component on which the estimate was based.

Because DMA's analyses are interactive, you can track your actual costs on our Schedule of Components and report back changes at any time and request an updated analysis based on this information.

OBSERVATIONS AND ASSESSMENT OF COMPONENT CONDITION

DMA enters observations, information and condition assessments of components in our database when we develop the Schedule of Components. This information is included in the Detailed Schedule of Components, which is issued as a separate document along with this report. In future updates this information can be updated to reflect changes in the condition or the component itself, including information provided by the client.

A photographic record of components is also provided in a companion folder to the final report. It contains photo documentation of our field observations. These photos are also linked to individual components in our database for ease of access in working sessions and in later reviews and updates.

The observations and opinions expressed in this report are based on our general professional knowledge of construction and our knowledge of the typical replacement experience of many communities and other entities with the same component types. Our projections are not architectural or engineering recommendations for specific projects. The Board of Directors should seek professional or industry assistance for each specific replacement project, based on the conditions in existence at the time of replacement and as the need for replacement or repair becomes imminent.

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The Financial Analysis

This reserve study provides (1) a financial assessment of your current reserve fund vs. the estimated funding need, and (2) a recommended funding plan to adequately fund the reserve account going forward. To accomplish this analysis, we first have to identify six parameters:

Parameters:

- ❖ **Fiscal Year:** To determine the beginning point of the study, we first have to identify the fiscal year that the association is using. The fiscal year is identified with a start date and an end date. The most common fiscal year is the calendar year with a start date of January 1st and an end date of December 31st. For some associations, the fiscal year begins on another month, such June 1st, (ending on May 31st).
- ❖ **Study Year:** This study identifies the first year of calculations, which includes the current value of the reserve components. It is normally the calendar year that includes the starting date of the association's fiscal year. However, a fiscal year which is not the calendar year may be defined as the year that includes the end date. For example, a fiscal year starting June 1st, 2020 and ending May 31st, 2021 is typically identified as FY 2021. In the DMA reserve study, the study year will be defined as year 2021. In studies that are completed close to the end of the fiscal year, DMA may elect to move ahead to the upcoming fiscal year to be the study year.
- ❖ **Reserve Account Starting Balance:** This is the total of all funds in cash and investment accounts for an identified capital reserve account, as defined in the association balance sheet for the period ending at the end of the previous fiscal year. Accounting methods and balance sheet vary. If the reserve account balance is not easily discernable from the balance sheet, then it is the association's responsibility to provide DMA with this value as of that date. If the study year is moved ahead to the upcoming fiscal year, the reserve account balance for that date needs to be estimated. Note: a balance sheet may include other factors that affect the reserve account balance used in the study. These can include outstanding loans from the reserve account to the operating account, any payables due from the reserve account that are not included in the funding plan, non-collected funds due to the reserve account or prepaid assessments already in the reserve account, among others. It is the association's responsibility to adjust the starting balance of the reserve account to reflect any of these factors that may be material. In the case of new communities, unbuilt communities or communities without existing reserve accounts, this starting balance may be \$0.00.
- ❖ **Average Earnings Rate:** This is the average of the rates of return on interest or income from reserve funds on deposit in banks and in investment accounts. This is the net income to the reserve account from these deposits, exclusive of taxes. If the association advises DMA that this income is not paid back into the reserve account, then the earnings rate in this study will be 0.00%.
- ❖ **Budgeted Contribution:** This is the cash contribution or transfer of assessment funds to the reserve account in the association's budget for the fiscal year corresponding to the study year. In the case of new communities, unbuilt communities or communities without existing reserve accounts, there may be no budgeted contribution, in which case this study will recommend the initial contribution.
- ❖ **Inflation Rate:** This study includes a projected inflation rate for the study period. While this is only a projection, it is also important to understand how significantly inflation impacts replacement costs projected to occur 5, 10, 20 or more years from now. At an inflation rate of just 3.00% a project that costs \$10,000 in the current year will cost over \$18,000 in 20 years. DMA uses a focused construction inflation index provided by R.S. Means – the same company that provides us with construction cost data. This is an historical record of actual construction costs and can be focused on residential or non-residential construction as opposed to the more general consumer or producer price indices generated by the U. S. Government. We use the most current index available and we use that projection for all years in the study. As the inflation rate changes over time, we can update with one click, which will update all of the information in the analysis immediately.

Crescent Ridge Townhomes

The Financial Analysis**CURRENT FUNDING STATUS – PERCENT FUNDED AND FUNDING DEFICIT**

To assess your current funding level DMA calculates the percent funded for each component in the study at a point in time – generally at the beginning of the fiscal year corresponding with Year 1 of the study (study year). We use an inflation-adjusted method for calculating the relative replacement value of each component (the amount of money that should be available to replace the component if it were fully funded) and compare the total value for all components to the actual total balance of the reserve account. This is called the percent funded.

Note: the term “fully funded” does not mean that the total replacement cost of every component is always available at any time. It means that the funding level is sufficient such that the total replacement cost will be funded at the time that the component is projected to be replaced. The funding deficit (or surplus) is the difference between the combined inflation-adjusted replacement values of all components and the actual reserve account balance.

Some states require that reserve studies provide this information, and the Community Associations Institute requires that reserve studies provide a statement on the relative health of the reserve account. This information should meet both requirements, but we do not use this to project a long-term funding solution for your reserve account.

DMA’S INTERACTIVE CASH FLOW FUNDING PLAN

There are four funding models used to create funding plans for reserve accounts including:

- ❖ Full Funding Model – (Also called the Component Method.) This is the most conservative funding model. It funds each component as its own line-item budget. The goal of this model is to attain and maintain the reserves at or near 100%. For example, if an association has a component with a 10-year life and a \$10,000 replacement cost, it should have \$3,000 set aside for its replacement after three years. In this case, \$3,000 equals full funding.
- ❖ Baseline Funding Model – (Also called a Minimum Funded Model.) The goal of this model is to keep the reserve cash balance above zero. This means that at no time during the funding period will the projected *reserve balance* drop below zero dollars. This is the least conservative model. An association using this model must understand that even a minor reduction in a component’s remaining useful life can result in a deficit in the reserve cash balance. Associations can implement this model more safely by conducting annual reserve updates that include field observations.
- ❖ Threshold Funding Model – (Also called the Cash Flow Method.) This model is based on the Baseline Funding concept. However, in this model a minimum cash reserve balance is established at some predetermined dollar amount. This minimum balance becomes the “threshold” above which the reserve account should remain in every year of the study. Associations should take into consideration that depending on the mix of common area major components this model may be more or less conservative than the fully funded model.
- ❖ Statutory Funding Model – This model is based on local statutes. To use it, associations set aside a specific minimum dollar amount of reserves as required by statutes.

Crescent Ridge Townhomes

The Financial Analysis

DMA's NAVIGATOR™ uses the Threshold Funding Model to calculate your recommended reserve funding plan. This model includes our Reserve Navigator graph which shows the entire study period, which typically is 30 years. Note that DMA can revise this study period to a minimum of 20 years or up to 50 years. Different study periods can be looked at in the live working session.

The Reserve Navigator graph shows the projected total reserve expenditures in each year (red bars), the end-of-year reserve account balance (green bars) and the minimum threshold balance (yellow line) over the entire reserve study period. The table below the graph shows the beginning and end reserve balances in each year, the contribution or transfer to reserves in each year, the interest income in each year (if any) and the total expenditures in each year. Expenditures are adjusted for inflation. Ten year periods are shown on each page, and the graph is repeated on each subsequent page with the tabular period highlighted.

The goal of the Cash Flow funding plan is to keep your account above a minimum balance over the life of the study while ensuring that all components are fully funded when they are scheduled to be replaced. We can set that minimum balance to zero dollars (\$0.00), and convert this to a baseline funding model but we strongly recommend against using that model for your funding plan. We set the minimum account balance, or "threshold", at a level above zero, in order to provide a buffer for the variations in actual expenditures that will inevitably occur over the life of the study. We generate that number from a percentage of the total estimated one-time replacement costs of all components in current dollars. The percentage amount is entered into the study as a bottom limit for the cash flow in the account. We then index this amount to the projected rate of inflation so that it increases every year in proportion to the relative value of the dollar. Note: The threshold amount is an arbitrary number. It is not set by any law or any accounting standard. We can look at different threshold amounts in the working session and evaluate what would be most appropriate for your association and the expenditure projections. Ultimately, you the client can establish the threshold amount.

Reserve Account Transfer Change Rate

As inflation decreases the value of the dollar over time, it is logical to introduce a transfer change rate to the reserve contribution so that it grows in relation to the growth in actual costs over time. If we did not do this - if we kept the contribution constant - owners today would have to contribute a much larger amount in order to offset the declining value of the same contributions made in the future. The change rate provides parity for present and future owners.

In communities that are underfunded, it may be necessary to use a change rate that is greater than the inflation rate in order to gradually increase your contributions to an acceptable level. The Reserve Account Transfer Change Rate is expressed as a percentage (%). We can adjust this rate as a constant over the entire study period, or manually adjust it from year to year, to help us design the appropriate funding plan.

Specific Project Funding, Special Assessments and Commercial Loans

In some instances, it will be necessary for an association to fund a specific single project or one or more years of total reserve expenses with additional funds. This may be due to a history of underfunding the reserves, or it may be due to an unexpected significant expense in a given year. This additional funding can come from two sources – a special assessment and a commercial loan. DMA studies can include either or both options as appropriate to the needs and resources of the community and its members. We can evaluate both options, and also a combination option, in the working session. A funding solution that includes one or more of these options can become part of the published reserve funding plan.

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The Financial Analysis

Assessment Allocation Model

This reserve analysis also includes an Assessment Allocation Model. It is important to keep the reserve account funding in perspective with your overall assessment needs. Usually, the reserve budget is smaller than your operating budget and this model puts your reserve account in context of your overall budget. Keep in mind that this is only an example model. DMA does not have any responsibility for your overall budget or your operating budget, and this model makes a specific assumption about the growth of your operating budget over the next few years which may vary from your actual budget. This model shows percentage of your overall budget allotted to reserves and shows how the recommended reserve funding plan in this study might affect your overall budget in the next several years.

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Standards, Limitations, Conditions, Disclosure and Restrictions**STUDY STANDARDS**

This study was conducted in accordance with the Community Associations Institute National Reserve Study Standards. A summary of the standards is contained in our information article entitled "National Standards" which is included in the Appendix.

The data and analysis information that forms a part of this report contains proprietary programming and program coding that is not available for distribution to outside parties. Copies of the data and analysis have been made available in Adobe's Portable Document Format and included as part of this report. Upon request, component information can also be provided in Excel format for easier viewing and navigating through the data.

STUDY LIMITATIONS AND CONDITIONS

- 1 No destructive testing, lab analysis or other investigative methods were used to determine the condition of the components. Due to these limitations, as set forth in the reserve study guidelines that we subscribe to, the limited visual observations that were made are not sufficient to be considered a qualified architectural or engineering assessment of the state or condition of the components.
- 2 All common areas on the property were observed unless access was limited or not made available to us at the time of the inspection. The observations and opinions expressed herein with regard to the useful life of the components are based on our general professional knowledge of construction and our knowledge of the typical replacement experience of many communities and other entities with the same component types.
- 3 The inventory included taking field measurements, measurements from aerial and satellite imagery, digitized measurement over photo imagery and takeoffs and measurements from design and as-built drawings as there were deemed to be reliable. In the case of a Level II Update the quantities provided by the Client from previous studies was utilized when it was deemed to be reliable and accurate. In the case of a Level III Update all inventory data from previous studies provided by the Client was deemed accurate and reliable.
- 4 Our projections of remaining useful life are not architectural or engineering recommendations for executing specific projects. As the end of the remaining useful life approaches, as set forth in this study, the association should seek professional architectural, engineering, contractor, service providers or qualified product manufacturer or supplier assistance, as appropriate, and as to the need for and the scheduling of each specific replacement project. Particularly those of any significant magnitude.
- 5 An asset can be made up of several components that need to be maintained, repaired and replaced. Other elements of the asset may be considered permanent with respect to the asset. The schedule of components provided herein, is based upon information received from the client regarding the common elements and/or assets that the client is responsible for. It is the client's responsibility to verify that the schedule of components is complete.
- 6 Financial information including the present fund balance, interest from funds on deposit, and recent capital expenditures, were provided by the Client and are deemed reliable and complete by DMA Reserves, Inc.
- 7 Information provided by the Association about prior reserve replacement projects is considered to be reliable and complete. No inspection by DMA Reserves, Inc. should be interpreted as a project audit or quality inspection.
- 8 Industry Life Expectancy is based on printed product literature, product or material warranties, industry standards literature, and on the opinions of manufacturers, installers, or maintenance contractors based on their experience with these products and materials.
- 9 Unit prices are based on published unit price standards such as R. S. Means "Residential Cost Data", Facilities Maintenance and Repair Cost Data, and "Facilities Construction Cost Data", latest editions, and on pricing obtained from contractors, installers, or manufacturers. All prices are given in present dollars unless noted otherwise. Prices listed are not guaranteed as exact quotes for work included.

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Standards, Limitations, Conditions, Disclosure and Restrictions

- 10 This analysis incorporates assumptions about the future rate of inflation, and the future interest income on your account deposits. If significant changes occur in either of these rates, this calculation should be re-run with current information.
- 11 The results of this analysis are predicated on your contributing the recommended amount in each previous year and on expenses occurring generally as predicted. This Reserve Study can be updated as a Level III study every year up to 4 years from the original study date, and should be updated with a Level II study or replaced with a new Level I study every 3 to 5 years, which may depend on statutory requirements, to correct for normal variations.
- 12 DMA's Capital Replacement Reserve Studies are designed to be used as planning tools. They are a reflection of information provided by the Client and our analytical inputs, and are assembled for the Client's use. This reserve study should not be used for the purpose of performing an audit, quality/forensic analysis, or for background checks of historical records.

DISCLOSURE

DMA does not have any financial interest in this community or facility, its management company or any vendor mentioned or used in this study beyond this work. This study represents all facts known to DMA at the time of its preparation that if purposefully omitted would cause a distortion of the Client's situation regarding its capital reserve plan.

LEGAL RESTRICTIONS ON USE OF THIS INFORMATION

Ownership of Reports, Electronic Files, Data, Media, Software Programs and Other Related Materials: Reports, electronic files, media, and software programs are instruments of professional service and the intellectual property of DMA Reserves Inc., and where appropriate, shall be protected and copyrighted under the laws of the United States with all rights reserved. The Client and their authorized representative or agent are entitled to use these documents in connection with this project. This use may include distribution of DMA reports including electronic files to membership, including publication on private member access portions of client's website. Client may also share DMA reports with Client's accountants, auditors, and bankers, and may include DMA reports in required disclosures to buyers or prospective members in accordance with governing statutes. DMA reports, electronic files, data, media, software programs, written and electronic communications relative to this project, may NOT be shared with or distributed to ANY THIRD PARTIES not defined above without the express written consent of DMA Reserves Inc.

Use of Electronic Files, Media, Software and Programs: DMA may transmit these documents as electronic files. DMA shall not be responsible for any viruses that may be transmitted with the electronic files, media, software or programs furnished to the Client. DMA shall not be responsible for any data erosion, erasure, alteration or failure of electronic files, media, software or programs that may occur at the time of transmission or over time. DMA makes no warranty as to the compatibility of the electronic files, media, software or programs with any operating system or programs.

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Reserve Expenditures by Year (First 5 years)

Year 2025

Line #	Component	Location	Replacement Cost *
1.00.02	Asphalt sealcoating	Site-Wide	\$7,370.00
1.00.03	Crack Filler	Site-Wide	\$4,505.00
1.00.04	Asphalt patching allowance	Site-Wide	\$17,811.00
Total Expenditures for Year 2025			\$29,686.00

* Cost after first year includes an inflation factor of 3.08%

Crescent Ridge Townhomes

Summary Schedule of Components

Total Replacement Cost by Section

Section	Section Name	Number of Components	Replacement Costs	% of Replacement Costs
1.00	Paving, Flatwork & Site Features	7	\$513,062	26.61%
2.00	Stormwater Management	8	\$50,228	2.61%
3.00	Building Exterior	2	\$1,364,429	70.78%
Totals		17	\$1,927,719	

Replacement Costs are the projected inflation adjusted costs of ALL components within the timeframe of this analysis.

Replacement Costs Proportions



Crescent Ridge Townhomes

Summary Schedule of Components

Component Summary

Red typeface reflects changes from the prior DMA draft.

Line	Component Name and Location	Quantity	Units	% Repl	In-Service/ Replace Date	Current Estimated Useful Life	Remain Useful Life	Next Repl Year	Unit Cost	Replacement Cost for Study Year
1 - Paving, Flatwork & Site Features										
1.00.01	Mill and Overlay Asphalt - 2" Site-Wide	6400	SY	100%	2021	24	24	2045	\$19.29	\$123,456.00
1.00.02	Asphalt sealcoating Site-Wide	6400	SY	100%	2021	4	4	2025	\$1.02	\$6,528.00
1.00.03	Crack Filler Site-Wide	1500	LF	100%	2021	4	4	2025	\$2.66	\$3,990.00
1.00.04	Asphalt patching allowance Site-Wide	6400	SY	5%	2021	4	4	2025	\$49.30	\$15,776.00
1.00.05	Concrete curb and gutter Site-Wide	5000	LF	5%	2021	30	30	2051	\$75.99	\$18,998.00
1.00.06	Concrete walkway, broom finish Site-Wide	2500	SF	5%	2021	25	25	2046	\$9.70	\$1,212.00
1.00.07	Exterior cluster mail boxes- 12 cube Site-Wide	11	EA	100%	2021	25	25	2046	\$1,711.32	\$18,825.00
2 - Stormwater Management										
2.00.01	Curb inlet Site-Wide	12	EA	5%	2021	30	30	2051	\$9,678.29	\$5,807.00
2.00.02	HDPE Storm pipe, 15" diameter Site-Wide	971	LF	5%	2021	50	50	2071	\$157.75	\$7,659.00
2.00.03	HDPE Storm pipe, 18" diameter Site-Wide	327	LF	5%	2021	50	50	2071	\$216.03	\$3,532.00
2.00.04	RCP Storm pipe, 15" diameter Site-Wide	82	LF	5%	2021	50	50	2071	\$188.44	\$773.00

Crescent Ridge Townhomes

Summary Schedule of Components

Component Summary

Red typeface reflects changes from the prior DMA draft.

Line	Component Name and Location	Quantity	Units	% Repl	In-Service/ Replace Date	Current Estimated Useful Life	Remain Useful Life	Next Repl Year	Unit Cost	Replacement Cost for Study Year
2 - Stormwater Management										
2.00.05	RCP Storm pipe, 21" diameter Site-Wide	161	LF	5%	2021	50	50	2071	\$224.66	\$2,351.00
2.00.06	Pond maintenance, clearing brush, by hand Bio-retention pond A, B, C & D	8100	SY	100%	2021	10	10	2031	\$1.87	\$15,147.00
2.00.07	Outflow tee trash rack Bio-retention pond A	1	EA	100%	2021	25	25	2046	\$902.79	\$903.00
2.00.08	Outflow tee Bio-retention pond A	1	EA	100%	2021	50	50	2071	\$2,533.60	\$2,534.00
3 - Building Exterior										
3.00.01	Shingled roof Site-Wide	1300	SQ	33%	2021	25	25	2046	\$422.18	\$182,762.00
3.00.02	Gutters and downspouts Site-Wide	130	LS	33%	2021	25	25	2046	\$551.00	\$23,853.00

Crescent Ridge Townhomes

Rockingham, VA

CAPITAL RESERVE STUDY & FINANCIAL ANALYSIS

2021

Schedule of Components

Detail Schedule

Final Analysis

Date: 2/22/2021

DMA Project #2010009



Prepared by : DMA Reserves, Inc.

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1.00 Paving, Flatwork & Site Features

1.00.01 Mill and Overlay Asphalt - 2"

Site-Wide

Field Meas. Quantity or Count	Units	Last In- Service	Est Useful Life	Repl Interval	Next Repl. Year	Remain Useful Life	Client Responsibility	% Replaced Per Interval	Unit Cost	Replacement Cost for Study Year
6400	SY	2021	24	25	2045	24	100.00%	100.0%	\$19.29	\$123,456.00

Year(s) and expenditures are shown below for this component if occurring within the study period. Expenditures after 2021 include an inflation factor of 3.08%

2045 \$255,681.00

1.00.02 Asphalt sealcoating

Site-Wide

Field Meas. Quantity or Count	Units	Last In- Service	Est Useful Life	Repl Interval	Next Repl. Year	Remain Useful Life	Client Responsibility	% Replaced Per Interval	Unit Cost	Replacement Cost for Study Year
6400	SY	2021	4	5	2025	4	100.00%	100.0%	\$1.02	\$6,528.00

Year(s) and expenditures are shown below for this component if occurring within the study period. Expenditures after 2021 include an inflation factor of 3.08%

2025 \$7,370.00

2030 \$8,577.00

2035 \$9,982.00

2040 \$11,617.00

2050 \$15,734.00

1.00.03 Crack Filler

Site-Wide

Field Meas. Quantity or Count	Units	Last In- Service	Est Useful Life	Repl Interval	Next Repl. Year	Remain Useful Life	Client Responsibility	% Replaced Per Interval	Unit Cost	Replacement Cost for Study Year
1500	LF	2021	4	5	2025	4	100.00%	100.0%	\$2.66	\$3,990.00

Year(s) and expenditures are shown below for this component if occurring within the study period. Expenditures after 2021 include an inflation factor of 3.08%

2025 \$4,505.00

2030 \$5,243.00

2035 \$6,101.00

2040 \$7,100.00

2050 \$9,617.00

1.00.04 Asphalt patching allowance

Site-Wide

Field Meas. Quantity or Count	Units	Last In- Service	Est Useful Life	Repl Interval	Next Repl. Year	Remain Useful Life	Client Responsibility	% Replaced Per Interval	Unit Cost	Replacement Cost for Study Year
6400	SY	2021	4	5	2025	4	100.00%	5.0%	\$49.30	\$15,776.00

Year(s) and expenditures are shown below for this component if occurring within the study period. Expenditures after 2021 include an inflation factor of 3.08%

2025 \$17,811.00

2030 \$20,728.00

2035 \$24,123.00

2040 \$28,074.00

2050 \$38,024.00

Crescent Ridge Townhomes

1.00 Paving, Flatwork & Site Features

1.00.05 Concrete curb and gutter Site-Wide

Field Meas. Quantity or Count	Units	Last In-Service	Est Useful Life	Repl Interval	Next Repl. Year	Remain Useful Life	Client Responsibility	% Replaced Per Interval	Unit Cost	Replacement Cost for Study Year
5000	LF	2021	30	5	2051	30	100.00%	5.0%	\$75.99	\$18,998.00

1.00.06 Concrete walkway, broom finish Site-Wide

Field Meas. Quantity or Count	Units	Last In-Service	Est Useful Life	Repl Interval	Next Repl. Year	Remain Useful Life	Client Responsibility	% Replaced Per Interval	Unit Cost	Replacement Cost for Study Year
2500	SF	2021	25	5	2046	25	100.00%	5.0%	\$9.70	\$1,212.00

Year(s) and expenditures are shown below for this component if occurring within the study period. Expenditures after 2021 include an inflation factor of 3.08%

2046 \$2,587.00

1.00.07 Exterior cluster mail boxes- 12 cube Site-Wide

Field Meas. Quantity or Count	Units	Last In-Service	Est Useful Life	Repl Interval	Next Repl. Year	Remain Useful Life	Client Responsibility	% Replaced Per Interval	Unit Cost	Replacement Cost for Study Year
11	EA	2021	25	25	2046	25	100.00%	100.0%	\$1,711.32	\$18,825.00

Year(s) and expenditures are shown below for this component if occurring within the study period. Expenditures after 2021 include an inflation factor of 3.08%

2046 \$40,188.00

Crescent Ridge Townhomes

2.00 Stormwater Management

2.00.01 Curb inlet Site-Wide

Field Meas. Quantity or Count	Units	Last In-Service	Est Useful Life	Repl Interval	Next Repl. Year	Remain Useful Life	Client Responsibility	% Replaced Per Interval	Unit Cost	Replacement Cost for Study Year
12	EA	2021	30	5	2051	30	100.00%	5.0%	\$9,678.29	\$5,807.00

2.00.02 HDPE Storm pipe, 15" diameter Site-Wide

Field Meas. Quantity or Count	Units	Last In-Service	Est Useful Life	Repl Interval	Next Repl. Year	Remain Useful Life	Client Responsibility	% Replaced Per Interval	Unit Cost	Replacement Cost for Study Year
971	LF	2021	50	5	2071	50	100.00%	5.0%	\$157.75	\$7,659.00

2.00.03 HDPE Storm pipe, 18" diameter Site-Wide

Field Meas. Quantity or Count	Units	Last In-Service	Est Useful Life	Repl Interval	Next Repl. Year	Remain Useful Life	Client Responsibility	% Replaced Per Interval	Unit Cost	Replacement Cost for Study Year
327	LF	2021	50	5	2071	50	100.00%	5.0%	\$216.03	\$3,532.00

2.00.04 RCP Storm pipe, 15" diameter Site-Wide

Field Meas. Quantity or Count	Units	Last In-Service	Est Useful Life	Repl Interval	Next Repl. Year	Remain Useful Life	Client Responsibility	% Replaced Per Interval	Unit Cost	Replacement Cost for Study Year
82	LF	2021	50	5	2071	50	100.00%	5.0%	\$188.44	\$773.00

2.00.05 RCP Storm pipe, 21" diameter Site-Wide

Field Meas. Quantity or Count	Units	Last In-Service	Est Useful Life	Repl Interval	Next Repl. Year	Remain Useful Life	Client Responsibility	% Replaced Per Interval	Unit Cost	Replacement Cost for Study Year
161	LF	2021	50	5	2071	50	100.00%	5.0%	\$224.66	\$2,351.00

2.00.06 Pond maintenance, clearing brush, by hand Bio-retention pond A, B, C & D

Encompasses four bio-retention ponds.

Field Meas. Quantity or Count	Units	Last In-Service	Est Useful Life	Repl Interval	Next Repl. Year	Remain Useful Life	Client Responsibility	% Replaced Per Interval	Unit Cost	Replacement Cost for Study Year
8100	SY	2021	10	10	2031	10	100.00%	100.0%	\$1.87	\$15,147.00

Year(s) and expenditures are shown below for this component if occurring within the study period. Expenditures after 2021 include an inflation factor of 3.08%

2031	\$20,515.00	2041	\$27,785.00
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Crescent Ridge Townhomes

2.00 Stormwater Management

2.00.07 Outflow tee trash rack Bio-retention pond A

Field Meas. Quantity or Count	Units	Last In- Service	Est Useful Life	Repl Interval	Next Repl. Year	Remain Useful Life	Client Responsibility	% Replaced Per Interval	Unit Cost	Replacement Cost for Study Year
1	EA	2021	25	25	2046	25	100.00%	100.0%	\$902.79	\$903.00

Year(s) and expenditures are shown below for this component if occurring within the study period. Expenditures after 2021 include an inflation factor of 3.08%

2046 \$1,928.00

2.00.08 Outflow tee Bio-retention pond A

Field Meas. Quantity or Count	Units	Last In- Service	Est Useful Life	Repl Interval	Next Repl. Year	Remain Useful Life	Client Responsibility	% Replaced Per Interval	Unit Cost	Replacement Cost for Study Year
1	EA	2021	50	50	2071	50	100.00%	100.0%	\$2,533.60	\$2,534.00

Crescent Ridge Townhomes

3.00 Building Exterior

3.00.01 Shingled roof Site-Wide

Allowance shown for replacing the roofs over a three year period.

Field Meas. Quantity or Count	Units	Last In- Service	Est Useful Life	Repl Interval	Next Repl. Year	Remain Useful Life	Client Responsibility	% Replaced Per Interval	Unit Cost	Replacement Cost for Study Year
1300	SQ	2021	25	1	2046	25	100.00%	33.3%	\$422.18	\$182,762.00

Year(s) and expenditures are shown below for this component if occurring within the study period. Expenditures after 2021 include an inflation factor of 3.08%

2046	\$390,163.00	2047	\$402,180.00	2048	\$414,567.00
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3.00.02 Gutters and downspouts Site-Wide

Allowance shown to replace the same percentage of gutters and downspouts at the same intervals as the roofs.

Field Meas. Quantity or Count	Units	Last In- Service	Est Useful Life	Repl Interval	Next Repl. Year	Remain Useful Life	Client Responsibility	% Replaced Per Interval	Unit Cost	Replacement Cost for Study Year
130	LS	2021	25	1	2046	25	100.00%	33.3%	\$551.00	\$23,853.00

Year(s) and expenditures are shown below for this component if occurring within the study period. Expenditures after 2021 include an inflation factor of 3.08%

2046	\$50,922.00	2047	\$52,490.00	2048	\$54,107.00
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Crescent Ridge Townhomes

Rockingham, VA

CAPITAL RESERVE STUDY & FINANCIAL ANALYSIS

2021

Capital Expenditures by Year

Final Analysis

Date: 2/22/2021

DMA Project #2010009



Prepared by : DMA Reserves, Inc.

2302 E Cary Street

Richmond, Virginia 23223

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Year	Total Expenditures	Page
Year: 2021	No Yearly Expenses	
Year: 2022	No Yearly Expenses	
Year: 2023	No Yearly Expenses	
Year: 2024	No Yearly Expenses	
Year: 2025	\$29,686.00	1
Year: 2026	No Yearly Expenses	
Year: 2027	No Yearly Expenses	
Year: 2028	No Yearly Expenses	
Year: 2029	No Yearly Expenses	
Year: 2030	\$34,548.00	2
Year: 2031	\$20,515.00	3
Year: 2032	No Yearly Expenses	
Year: 2033	No Yearly Expenses	
Year: 2034	No Yearly Expenses	
Year: 2035	\$40,206.00	4
Year: 2036	No Yearly Expenses	
Year: 2037	No Yearly Expenses	
Year: 2038	No Yearly Expenses	
Year: 2039	No Yearly Expenses	

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Year	Total Expenditures	Page
Year: 2040	\$46,791.00	5
Year: 2041	\$27,785.00	6
Year: 2042	No Yearly Expenses	
Year: 2043	No Yearly Expenses	
Year: 2044	No Yearly Expenses	
Year: 2045	\$255,681.00	7
Year: 2046	\$485,788.00	8
Year: 2047	\$454,670.00	9
Year: 2048	\$468,674.00	10
Year: 2049	No Yearly Expenses	
Year: 2050	\$63,375.00	11

Crescent Ridge Townhomes
Capital Expenditures for Year 2025

Line #	Component	Location	Replacement Cost *
1.00.02	Asphalt sealcoating	Site-Wide	\$7,370.00
1.00.03	Crack Filler	Site-Wide	\$4,505.00
1.00.04	Asphalt patching allowance	Site-Wide	\$17,811.00
Total Expenditures for Year 2025			\$29,686.00

Crescent Ridge Townhomes
Capital Expenditures for Year 2030

Line #	Component	Location	Replacement Cost *
1.00.02	Asphalt sealcoating	Site-Wide	\$8,577.00
1.00.03	Crack Filler	Site-Wide	\$5,243.00
1.00.04	Asphalt patching allowance	Site-Wide	\$20,728.00
Total Expenditures for Year 2030			\$34,548.00

Crescent Ridge Townhomes
Capital Expenditures for Year 2031

Line #	Component	Location	Replacement Cost *
2.00.06	Pond maintenance, clearing brush, by hand	Bio-retention pond A, B, C & D	\$20,515.00
Total Expenditures for Year 2031			\$20,515.00

Crescent Ridge Townhomes
Capital Expenditures for Year 2035

Line #	Component	Location	Replacement Cost *
1.00.02	Asphalt sealcoating	Site-Wide	\$9,982.00
1.00.03	Crack Filler	Site-Wide	\$6,101.00
1.00.04	Asphalt patching allowance	Site-Wide	\$24,123.00
Total Expenditures for Year 2035			\$40,206.00

Crescent Ridge Townhomes
Capital Expenditures for Year 2040

Line #	Component	Location	Replacement Cost *
1.00.02	Asphalt sealcoating	Site-Wide	\$11,617.00
1.00.03	Crack Filler	Site-Wide	\$7,100.00
1.00.04	Asphalt patching allowance	Site-Wide	\$28,074.00
Total Expenditures for Year 2040			\$46,791.00

Crescent Ridge Townhomes
Capital Expenditures for Year 2041

Line #	Component	Location	Replacement Cost *
2.00.06	Pond maintenance, clearing brush, by hand	Bio-retention pond A, B, C & D	\$27,785.00
Total Expenditures for Year 2041			\$27,785.00

Crescent Ridge Townhomes
Capital Expenditures for Year 2045

Line #	Component	Location	Replacement Cost *
1.00.01	Mill and Overlay Asphalt - 2"	Site-Wide	\$255,681.00
Total Expenditures for Year 2045			\$255,681.00

Crescent Ridge Townhomes
Capital Expenditures for Year 2046

Line #	Component	Location	Replacement Cost *
1.00.06	Concrete walkway, broom finish	Site-Wide	\$2,587.00
1.00.07	Exterior cluster mail boxes- 12 cube	Site-Wide	\$40,188.00
2.00.07	Outflow tee trash rack	Bio-retention pond A	\$1,928.00
3.00.01	Shingled roof	Site-Wide	\$390,163.00
3.00.02	Gutters and downspouts	Site-Wide	\$50,922.00
Total Expenditures for Year 2046			\$485,788.00

Crescent Ridge Townhomes
Capital Expenditures for Year 2047

Line #	Component	Location	Replacement Cost *
3.00.01	Shingled roof	Site-Wide	\$402,180.00
3.00.02	Gutters and downspouts	Site-Wide	\$52,490.00
Total Expenditures for Year 2047			\$454,670.00

Crescent Ridge Townhomes
Capital Expenditures for Year 2048

Line #	Component	Location	Replacement Cost *
3.00.01	Shingled roof	Site-Wide	\$414,567.00
3.00.02	Gutters and downspouts	Site-Wide	\$54,107.00
Total Expenditures for Year 2048			\$468,674.00

Crescent Ridge Townhomes
Capital Expenditures for Year 2050

Line #	Component	Location	Replacement Cost *
1.00.02	Asphalt sealcoating	Site-Wide	\$15,734.00
1.00.03	Crack Filler	Site-Wide	\$9,617.00
1.00.04	Asphalt patching allowance	Site-Wide	\$38,024.00
Total Expenditures for Year 2050			\$63,375.00