RESERVE STUDY

Tanyard Springs
Homeowners Association

Glen Burnie, Maryland

June 2, 2022

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Tanyard Springs Homeowners Association
Glen Burnie, Maryland

Dear Board of Directors of Tanyard Springs Homeowners Association:

At the direction of the Board that recognizes the need for proper reserve planning, we have conducted a *Reserve Study* of Tanyard Springs Homeowners Association in Glen Burnie, Maryland and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, June 2, 2022.

This *Reserve Study* exceeds the Association of Professional Reserve Analysts (APRA) standards fulfilling the requirements of a "Level II Reserve Study Update."

An ongoing review by the Board and an Update of this Reserve Study are necessary to ensure an equitable funding plan since a Reserve Study is a snapshot in time. We recommend the Board budget for an Update to this Reserve Study in two- to three-years. We look forward to continuing to help Tanyard Springs Homeowners Association plan for a successful future.

As part of our long-term thinking and everyday commitment to our clients, we are available to answer any questions you may have regarding this study.

Respectfully submitted on June 23, 2022 by

Reserve Advisors, LLC

Visual Inspection and Report by: Matthew D. Casey, RS[1]
Review by: Alan M. Ebert, RS, PRA[2], Director of Quality Assurance

[1] RS (Reserve Specialist) is the reserve provider professional designation of the Community Associations Institute (CAI) representing America's more than 300,000 condominium, cooperative and homeowners associations.
[2] PRA (Professional Reserve Analyst) is the professional designation of the Association of Professional Reserve Analysts. Learn more about APRA at http://www.apra-usa.com.

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1. RESERVE STUDY EXECUTIVE SUMMARY

Client: Tanyard Springs Homeowners Association (Tanyard Springs)
Location: Glen Burnie, Maryland
Reference: 202213

Property Basics: Tanyard Springs Homeowners Association is responsible for the common elements shared by 1,424 single family homes. The community was built from 2008 to 2018. The community contains a clubhouse and pool.

Reserve Components Identified: 50 General Reserve Components and 11 Townhomes Reserve Components.

Inspection Date: June 2, 2022. We conducted the original inspection on April 29, 2021.

Funding Goal: The Funding Goal of this Reserve Study is to maintain reserves above an adequate, not excessive threshold during one or more years of significant expenditures.

- ***General –*** The ***General Funding Plan*** recognizes this critical year in 2050 due to replacement of the plaster and tile finishes at the pool, and the irrigation system.
- ***Townhomes*** – The ***Townhomes Funding Plan*** does not recognize a critical year. Rather, the Reserve Funding Plan recommends 2052 year end accumulated reserves of approximately $1,408,000. We judge this amount of accumulated reserves in 2052 necessary to fund the likely repaving after 2052. Future replacement costs beyond the next 30 years for the replacement of the repaving are likely to more than double the current cost of replacement. These future needs, although beyond the limit of the Cash Flow Analysis of this Reserve Study, are reflected in the amount of accumulated 2052 year end reserves.

Cash Flow Method: We use the Cash Flow Method to compute the Reserve Funding Plan. This method offsets future variable Reserve Expenditures with existing and future stable levels of reserve funding. Our application of this method also considers:

- Current and future local costs of replacement
- 0.7% anticipated annual rate of return on invested reserves
- 3.0% future Inflation Rate for estimating Future Replacement Costs

Sources for *Local* Costs of Replacement: Our proprietary database, historical costs and published sources, i.e., R.S. Means, Incorporated.

Project Prioritization: We note anticipated Reserve Expenditures for the next 30 years in the ***Reserve Expenditures*** tables and include a ***Five-Year Outlook*** table following the ***Reserve Funding Plan*** in Section 3. We recommend the Association prioritize the following projects in the next five years based on the conditions identified:

- **General –** Partial replacement of the clubhouse furniture.
- **Townhomes –** Crack repairs and patching at the streets and parking areas.
- **General –** Partial replacements at the landscape.
- **General –** Replacement of the cardiovascular exercise equipment.
- **Townhomes –** Partial replacement of the concrete sidewalks.

General

Recommended Reserve Funding Table and Graph

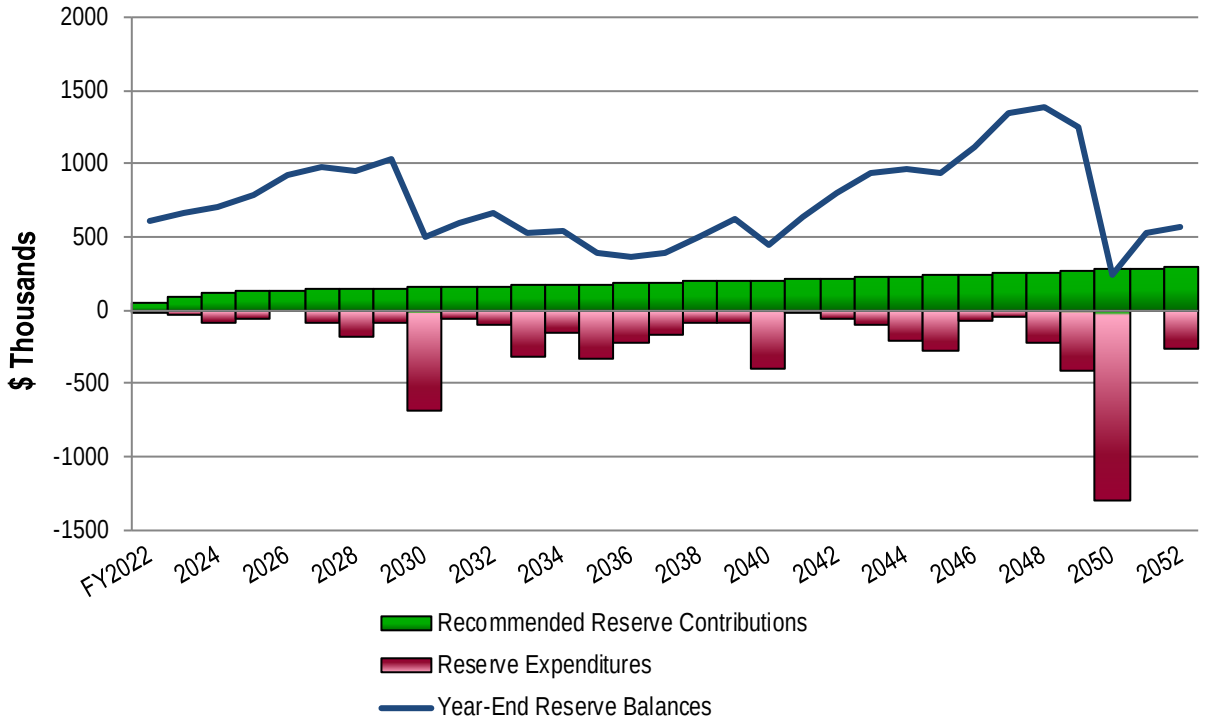
Unaudited Cash Status of General Reserve Fund:

- $568,221 as of April 30, 2022
- 2022 budgeted reserve contributions of $73,700

Recommended Reserve Funding: We recommend the following in order to achieve a stable and equitable Funding Plan:

- Phased increases of $19,600 from 2023 through 2025
- Inflationary increases through 2052, the limit of this study's Cash Flow Analysis
- Initial adjustment in Reserve Contributions of $19,600 represents an average monthly increase of $1.15 per homeowner and about an one percent (1.2%) adjustment in the 2022 total Operating Budget of $1,686,698.

Year	Reserve Contributions ($)	Reserve Balances ($)	Year	Reserve Contributions ($)	Reserve Balances ($)	Year	Reserve Contributions ($)	Reserve Balances ($)
2023	93,300	665,156	2033	167,800	520,978	2043	225,500	931,066
2024	112,900	701,131	2034	172,800	541,691	2044	232,300	959,169
2025	132,500	779,240	2035	178,000	397,245	2045	239,300	932,713
2026	136,500	921,672	2036	183,300	359,306	2046	246,500	1,117,248
2027	140,600	976,963	2037	188,800	390,562	2047	253,900	1,337,835
2028	144,800	951,733	2038	194,500	504,160	2048	261,500	1,381,255
2029	149,100	1,024,092	2039	200,300	624,100	2049	269,300	1,251,019
2030	153,600	500,346	2040	206,300	440,349	2050	277,400	241,010
2031	158,200	597,798	2041	212,500	633,799	2051	285,700	529,397
2032	162,900	664,086	2042	218,900	795,554	2052	294,300	566,151



Townhomes

Recommended Reserve Funding Table and Graph

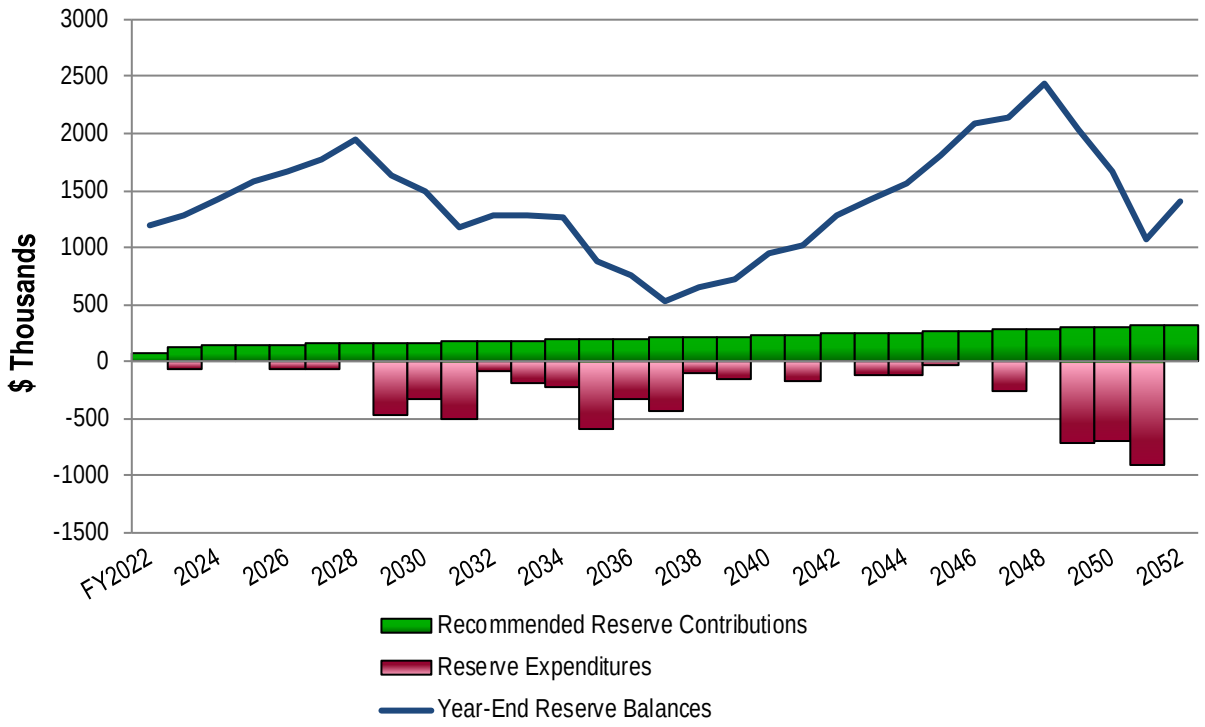
Unaudited Cash Status of Townhomes Reserve Fund:

- $1,116,631 as of April 30, 2022
- 2022 budgeted reserve contributions of $118,000

Recommended Reserve Funding: We recommend the following in order to achieve a stable and equitable Funding Plan:

- Phased increases of $9,500 from 2023 through 2025
- Inflationary increases through 2052, the limit of this study's Cash Flow Analysis
- Initial adjustment in Reserve Contributions of $9,500 represents a less than one percent (0.6%) adjustment in the 2022 total Operating Budget of $1,686,698.

Year	Reserve Contributions ($)	Reserve Balances ($)	Year	Reserve Contributions ($)	Reserve Balances ($)	Year	Reserve Contributions ($)	Reserve Balances ($)
2023	127,500	1,273,374	2033	185,500	1,284,716	2043	249,400	1,421,463
2024	137,000	1,419,767	2034	191,100	1,259,831	2044	256,900	1,569,744
2025	146,500	1,576,718	2035	196,800	876,640	2045	264,600	1,808,550
2026	150,900	1,669,007	2036	202,700	759,119	2046	272,500	2,094,664
2027	155,400	1,764,973	2037	208,800	530,500	2047	280,700	2,131,033
2028	160,100	1,937,988	2038	215,100	650,013	2048	289,100	2,436,062
2029	164,900	1,639,919	2039	221,600	719,037	2049	297,800	2,028,737
2030	169,800	1,493,168	2040	228,200	953,069	2050	306,700	1,658,240
2031	174,900	1,173,661	2041	235,000	1,027,107	2051	315,900	1,073,917
2032	180,100	1,278,814	2042	242,100	1,277,244	2052	325,400	1,407,973



2. RESERVE STUDY REPORT

At the direction of the Board that recognizes the need for proper reserve planning, we have conducted a *Reserve Study* of

Tanyard Springs Homeowners Association

Glen Burnie, Maryland

and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, June 2, 2022. We conducted the original inspection on April 29, 2021.

We present our findings and recommendations in the following report sections and spreadsheets:

- **Identification of Property -** Segregates all property into several areas of responsibility for repair or replacement
- **Reserve Expenditures -** Identifies reserve components and related quantities, useful lives, remaining useful lives and future reserve expenditures during the next 30 years
- **Reserve Funding Plan -** Presents the recommended Reserve Contributions and year-end Reserve Balances for the next 30 years
- **Five-Year Outlook -** Identifies reserve components and anticipated reserve expenditures during the first five years
- **Reserve Component Detail -** Describes the reserve components, includes photographic documentation of the condition of various property elements, describes our recommendations for repairs or replacement, and includes detailed solutions and procedures for replacements for the benefit of current and future board members
- **Methodology -** Lists the national standards, methods and procedures used to develop the Reserve Study
- **Definitions -** Contains definitions of terms used in the Reserve Study, consistent with national standards
- **Professional Service Conditions -** Describes Assumptions and Professional Service Conditions
- **Credentials and Resources**

IDENTIFICATION OF PROPERTY

Our investigation includes Reserve Components or property elements as set forth in your Declaration. The Expenditure tables in Section 3 list the elements contained in this study. Our analysis begins by segregating the property elements into several areas of responsibility for repair and replacement.

Our process of identification helps assure that future boards and the management team understand whether reserves, the operating budget or Homeowners fund certain replacements and assists in preparation of the annual budget. We derive these segregated classes of property from our review of the information provided by the Association and through conversations with Management. These classes of property include:

- Reserve Components
- Long-Lived Property Elements
- Operating Budget Funded Repairs and Replacements
- Property Maintained by Homeowners
- Property Maintained by Others

We advise the Board conduct an annual review of these classes of property to confirm its policy concerning the manner of funding, i.e., from reserves or the operating budget. The Reserve Study identifies Reserve Components as set forth in your Declaration or which were identified as part of your request for proposed services. Reserve Components are defined by CAI as property elements with:

- Tanyard Springs responsibility
- Limited useful life expectancies
- Predictable remaining useful life expectancies
- Replacement cost above a minimum threshold

Long-Lived Property Elements may not have predictable Remaining Useful Lives or their replacement may occur beyond the 30-year scope of the study. The operating budget should fund infrequent repairs. Funding untimely or unexpected replacements from reserves will necessitate increases to Reserve Contributions. Periodic updates of this Reserve Study will help determine the merits of adjusting the Reserve Funding Plan. We identify the following Long-Lived Property Elements as excluded from the 30-year Reserve Expenditures at this time:

- Art Fixtures, Clubhouse
- Bridges, Pedestrian, Structures
- Electrical Systems, Common
- Foundations, Clubhouse and Pool House
- Inlet/Outlet Structures, Concrete, Storm Water Management System
- Pipes, Interior Building, Clubhouse
- Pipes, Subsurface Utilities
- Pool Structure
- Structural Frames, Clubhouse and Pool House
- Walls, Siding, Fiber Cement, Clubhouse and Pool House

The operating budget provides money for the repair and replacement of certain Reserve Components. The Association may develop independent criteria for use of operating and reserve funds. For purposes of calculating appropriate Reserve Contributions, we identify the following list of Operating Budget Funded Repairs and Replacements:

- General Maintenance to the Common Elements
- Expenditures less than $8,000 (These relatively minor expenditures have a limited effect on the recommended Reserve Contributions.)
- Basketball Court, Archibald Drive, Mat
- Catch Basins, Landscape
- Clubhouse Parking Area, Crack Repairs, Patching and Striping
- Clubhouse Trash Corral
- Community Garden, Pea Gravel, Replenishment
- Community Garden, Plastic Shed
- Computers and IT Equipment

IT Equipment

- Irrigation System, Controls and Maintenance
- Landscape
- Light Fixtures, Clubhouse
- Open Channel Drainage Infrastructure, Repairs and Regrading
- Paint Finishes, Touch Up
- Pool Shade Structures, Interim Shade Replacements
- Retaining Walls, Less than 4’ in Height
- Signage, Street and Traffic, Private Roads
- Walls, Masonry, Clubhouse, Repairs
- Water Heater, Clubhouse
- Other Repairs normally funded through the Operating Budget

Certain items have been designated as the responsibility of the homeowners to repair or replace at their cost. Property Maintained by Homeowners, including items billed back to Homeowners, relates to:

- Carriage Light Poles and Fixtures (at Townhomes)
- Homes and Lots

Certain items have been designated as the responsibility of others to repair or replace. Property Maintained by Others relates to:

- 500 Tanyard Springs Road (Separate Entity)
- Detention Ponds Excluding Mockingbird Circle Pond (Ann Arundel County)
- Light Poles and Fixtures (Baltimore Gas and Electric)
- Street Systems Including Sidewalks, Public (Ann Arundel County)

3. RESERVE EXPENDITURES and FUNDING PLAN

The tables following this introduction present:

Reserve Expenditures

- Line item numbers
- Total quantities
- Quantities replaced per phase (in a single year)
- Reserve component inventory
- Estimated first year of event (i.e., replacement, application, etc.)
- Life analysis showing
  - useful life
  - remaining useful life
- 2022 local cost of replacement
  - Per unit
  - Per phase
  - Replacement of total quantity
- Percentage of future expenditures anticipated during the next 30 years
- Schedule of estimated future costs for each reserve component including inflation

Reserve Funding Plan

- Reserves at the beginning of each year
- Total recommended reserve contributions
- Estimated interest earned from invested reserves
- Anticipated expenditures by year
- Anticipated reserves at year end

Five-Year Outlook

- Line item numbers
- Reserve component inventory of only the expenditures anticipated to occur within the first five years
- Schedule of estimated future costs for each reserve component anticipated to occur within the first five years

The purpose of a Reserve Study is to provide an opinion of reasonable annual Reserve Contributions. Prediction of exact timing and costs of minor Reserve Expenditures typically will not significantly affect the 30-year cash flow analysis. Adjustments to the times and/or costs of expenditures may not always result in an adjustment in the recommended Reserve Contributions.

Financial statements prepared by your association, by you or others might rely in part on information contained in this section. For your convenience, we have provided an electronic data file containing the tables of ***Reserve Expenditures*** and ***Reserve Funding Plan***.

General

RESERVE EXPENDITURES

Tanyard Springs
Homeowners Association
Glen Burnie, Maryland

Years 2022 to 2037

Explanatory Notes:

1) **3.0%** **is the estimated Inflation Rate for estimating Future Replacement Costs.**
2) **FY2022 is Fiscal Year beginning January 1, 2022 and ending December 31, 2022.**

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years Useful	Life Analysis, Years Remaining	Costs, $ Unit (2022)	Costs, $ Per Phase (2022)	Costs, $ Total (2022)	Percentage of Future Expenditures	RUL = 0 FY2022	1 2023	2 2024	3 2025	4 2026	5 2027	6 2028	7 2029	8 2030	9 2031	10 2032	11 2033	12 2034	13 2035	14 2036	15 2037
				Exterior Clubhouse Elements																							
1.280	80	**80**	Squares	Roof Assemblies, Asphalt Shingles	2030	15 to 20	8	600.00	48,000	48,000	**2.8%**									60,805							
1.840	1	**1**	Allowance	Walls, Siding, Fiber Cement, Paint Finishes	2025	8 to 10	3	9,000.00	9,000	9,000	**0.7%**				9,835										13,217		
1.980	710	**710**	Square Feet	Windows and Doors	2050	to 40	28	52.00	36,920	36,920	**1.4%**																
				Interior Clubhouse Elements																							
2.155	1	**1**	Allowance	Exercise Equipment, Cardiovascular	2025	to 5	3	45,500.00	45,500	45,500	**7.3%**				49,719					57,638					66,818		
2.165	2	**1**	Allowance	Exercise Equipment, Strength Training, Phased	2027	to 15	5 to 12	13,000.00	13,000	26,000	**1.4%**						15,071							18,535			
2.175	110	**110**	Square Yards	Exercise Room, Rubber Floor	2035	to 15	13	65.00	7,150	7,150	**0.4%**														10,500		
2.200	110	**110**	Square Yards	Floor Coverings, Carpet	2023	8 to 12	1	75.00	8,250	8,250	**0.6%**		8,498										11,420				
2.240	350	**350**	Square Yards	Floor Coverings, Tile	2040	to 30	18	125.00	43,750	43,750	**1.2%**																
2.450	2	**1**	Allowance	Furnishings, Phased	2022	to 15	0 to 7	17,000.00	17,000	34,000	**2.2%**	17,000							20,908							25,714	
2.520	1	**1**	Allowance	Kitchen, Renovation	2028	15 to 20	6	34,000.00	34,000	34,000	**1.8%**							40,598									
2.679	2	**2**	Each	Locker Rooms, Fixtures	2035	to 25	13	21,500.00	43,000	43,000	**1.0%**														63,147		
2.800	10,900	**10,900**	Square Feet	Paint Finishes	2030	8 to 12	8	1.10	11,990	11,990	**1.0%**									15,189							
				Clubhouse Building Services Elements																							
3.070	5	**5**	Each	Air Handling and Condensing Units, Split Systems	2027	15 to 20	5	7,500.00	37,500	37,500	**1.9%**						43,473										
3.560	1	**1**	Allowance	Life Safety System, Control Panel and Emergency Devices	2035	to 25	13	15,000.00	15,000	15,000	**0.4%**														22,028		
3.820	2	**1**	Allowance	Security System, Phased	2024	10 to 15	2 to 9	9,500.00	9,500	19,000	**1.3%**			10,079							12,395						
				Property Site Elements																							
4.040	3,370	**3,370**	Square Yards	Asphalt Pavement, Mill and Overlay	2030	15 to 20	8	18.50	62,345	62,345	**3.6%**									78,977							
4.080	5,030	**1,677**	Square Yards	Asphalt Pavement, Total Replacement, Walking Paths, Phased	2030	15 to 20	8 to 12	27.00	45,270	135,810	**6.5%**									57,347		60,839		64,544			
4.090	170	**170**	Square Yards	Basketball Court, Archibald Drive, Concrete Repairs and Mat Replacement	2031	10 to 15	9	50.00	8,500	8,500	**0.5%**										11,091						
4.095	1,520	**1,520**	Square Feet	Bridges, Pedestrian, Renovation	2037	to 25	15	35.00	53,200	53,200	**1.4%**																82,884
4.101	230	**230**	Square Feet	Community Garden, Pergola	2032	15 to 20	10	30.00	6,900	6,900	**0.4%**											9,273					
4.102	32	**32**	Each	Community Garden, Raised Beds	2027	to 15	5	900.00	28,800	28,800	**1.4%**						33,387										
4.103	1	**1**	Allowance	Community Garden, Shed	2032	15 to 20	10	8,000.00	8,000	8,000	**0.5%**											10,751					
4.140	15,000	**750**	Square Feet	Concrete Sidewalks, Partial	2023	to 65	1 to 30+	14.50	10,875	217,500	**1.6%**		11,201					12,986					15,054				
4.220	280	**280**	Linear Feet	Fences, Chain Link, Archibald Drive Dog Park	2042	to 25	20	20.00	5,600	5,600	**0.2%**																
4.221	730	**730**	Linear Feet	Fences, Chain Link, Clubhouse Dog Park	2037	to 25	15	20.00	14,600	14,600	**0.4%**																22,746
4.260	670	**670**	Linear Feet	Fences, Vinyl	2028	15 to 20	6	48.00	32,160	32,160	**1.8%**							38,401									
4.286	1,730	**577**	Linear Feet	Fences, Wood, Split Rail, Phased	2031	to 25	9 to 11	26.00	14,993	44,980	**1.0%**										19,563	20,150	20,754				
4.420	28	**28**	Zones	Irrigation System	2050	to 40+	28	3,500.00	98,000	98,000	**3.7%**																
4.500	1	**1**	Allowance	Landscape, Partial Replacements	2024	to 5	2	51,000.00	51,000	51,000	**7.9%**			54,106					62,724					72,714			
4.560	10	**10**	Each	Light Poles and Fixtures, Clubhouse	2030	15 to 20	8	1,900.00	19,000	19,000	**1.1%**									24,069							
4.625	400	**400**	Square Feet	Pavilion, Archibald Drive, Renovation	2047	to 30	25	50.00	20,000	20,000	**0.7%**																
4.626	400	**400**	Square Feet	Pavilion, Clubhouse, Renovation	2040	to 30	18	50.00	20,000	20,000	**0.6%**																
4.660	1	**1**	Allowance	Playground Equipment, Archibald Drive	2037	15 to 20	15	35,000.00	35,000	35,000	**0.9%**																54,529
4.661	1	**1**	Allowance	Playground Equipment, Clubhouse	2030	15 to 20	8	60,000.00	60,000	60,000	**3.4%**									76,006							
4.662	1	**1**	Allowance	Playground Equipment, Mockingbird Circle	2030	15 to 20	8	73,000.00	73,000	73,000	**4.2%**									92,474							
4.663	1	**1**	Allowance	Playground Equipment, Tanyard Knoll Lane	2036	15 to 20	14	65,000.00	65,000	65,000	**1.6%**															98,318	

General

RESERVE EXPENDITURES

Tanyard Springs
Homeowners Association
Glen Burnie, Maryland

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years Useful	Life Analysis, Years Remaining	Costs, $ Unit (2022)	Costs, $ Per Phase (2022)	Costs, $ Total (2022)	Percentage of Future Expenditures	16 2038	17 2039	18 2040	19 2041	20 2042	21 2043	22 2044	23 2045	24 2046	25 2047	26 2048	27 2049	28 2050	29 2051	30 2052
				Exterior Clubhouse Elements																						
1.280	80	**80**	Squares	Roof Assemblies, Asphalt Shingles	2030	15 to 20	8	600.00	48,000	48,000	**2.8%**													109,821		
1.840	1	**1**	Allowance	Walls, Siding, Fiber Cement, Paint Finishes	2025	8 to 10	3	9,000.00	9,000	9,000	**0.7%**								17,762							
1.980	710	**710**	Square Feet	Windows and Doors	2050	to 40	28	52.00	36,920	36,920	**1.4%**													84,470		
				Interior Clubhouse Elements																						
2.155	1	**1**	Allowance	Exercise Equipment, Cardiovascular	2025	to 5	3	45,500.00	45,500	45,500	**7.3%**			77,461					89,798					104,101		
2.165	2	**1**	Allowance	Exercise Equipment, Strength Training, Phased	2027	to 15	5 to 12	13,000.00	13,000	26,000	**1.4%**				22,796							28,036				
2.175	110	**110**	Square Yards	Exercise Room, Rubber Floor	2035	to 15	13	65.00	7,150	7,150	**0.4%**													16,359		
2.200	110	**110**	Square Yards	Floor Coverings, Carpet	2023	8 to 12	1	75.00	8,250	8,250	**0.6%**						15,347									
2.240	350	**350**	Square Yards	Floor Coverings, Tile	2040	to 30	18	125.00	43,750	43,750	**1.2%**			74,481												
2.450	2	**1**	Allowance	Furnishings, Phased	2022	to 15	0 to 7	17,000.00	17,000	34,000	**2.2%**						31,625							38,895		
2.520	1	**1**	Allowance	Kitchen, Renovation	2028	15 to 20	6	34,000.00	34,000	34,000	**1.8%**									69,115						
2.679	2	**2**	Each	Locker Rooms, Fixtures	2035	to 25	13	21,500.00	43,000	43,000	**1.0%**															
2.800	10,900	**10,900**	Square Feet	Paint Finishes	2030	8 to 12	8	1.10	11,990	11,990	**1.0%**			20,412										27,432		
				Clubhouse Building Services Elements																						
3.070	5	**5**	Each	Air Handling and Condensing Units, Split Systems	2027	15 to 20	5	7,500.00	37,500	37,500	**1.9%**							71,854								
3.560	1	**1**	Allowance	Life Safety System, Control Panel and Emergency Devices	2035	to 25	13	15,000.00	15,000	15,000	**0.4%**															
3.820	2	**1**	Allowance	Security System, Phased	2024	10 to 15	2 to 9	9,500.00	9,500	19,000	**1.3%**	15,245							18,749							23,059
				Property Site Elements																						
4.040	3,370	**3,370**	Square Yards	Asphalt Pavement, Mill and Overlay	2030	15 to 20	8	18.50	62,345	62,345	**3.6%**													142,641		
4.080	5,030	**1,677**	Square Yards	Asphalt Pavement, Total Replacement, Walking Paths, Phased	2030	15 to 20	8 to 12	27.00	45,270	135,810	**6.5%**													103,575		109,882
4.090	170	**170**	Square Yards	Basketball Court, Archibald Drive, Concrete Repairs and Mat Replacement	2031	10 to 15	9	50.00	8,500	8,500	**0.5%**								16,775							
4.095	1,520	**1,520**	Square Feet	Bridges, Pedestrian, Renovation	2037	to 25	15	35.00	53,200	53,200	**1.4%**															
4.101	230	**230**	Square Feet	Community Garden, Pergola	2032	15 to 20	10	30.00	6,900	6,900	**0.4%**															16,748
4.102	32	**32**	Each	Community Garden, Raised Beds	2027	to 15	5	900.00	28,800	28,800	**1.4%**					52,016										
4.103	1	**1**	Allowance	Community Garden, Shed	2032	15 to 20	10	8,000.00	8,000	8,000	**0.5%**															19,418
4.140	15,000	**750**	Square Feet	Concrete Sidewalks, Partial	2023	to 65	1 to 30+	14.50	10,875	217,500	**1.6%**	17,451					20,231					23,453				
4.220	280	**280**	Linear Feet	Fences, Chain Link, Archibald Drive Dog Park	2042	to 25	20	20.00	5,600	5,600	**0.2%**					10,114										
4.221	730	**730**	Linear Feet	Fences, Chain Link, Clubhouse Dog Park	2037	to 25	15	20.00	14,600	14,600	**0.4%**															
4.260	670	**670**	Linear Feet	Fences, Vinyl	2028	15 to 20	6	48.00	32,160	32,160	**1.8%**											69,356				
4.286	1,730	**577**	Linear Feet	Fences, Wood, Split Rail, Phased	2031	to 25	9 to 11	26.00	14,993	44,980	**1.0%**															
4.420	28	**28**	Zones	Irrigation System	2050	to 40+	28	3,500.00	98,000	98,000	**3.7%**													224,217		
4.500	1	**1**	Allowance	Landscape, Partial Replacements	2024	to 5	2	51,000.00	51,000	51,000	**7.9%**		84,295					97,721					113,286			
4.560	10	**10**	Each	Light Poles and Fixtures, Clubhouse	2030	15 to 20	8	1,900.00	19,000	19,000	**1.1%**													43,471		
4.625	400	**400**	Square Feet	Pavilion, Archibald Drive, Renovation	2047	to 30	25	50.00	20,000	20,000	**0.7%**										41,876					
4.626	400	**400**	Square Feet	Pavilion, Clubhouse, Renovation	2040	to 30	18	50.00	20,000	20,000	**0.6%**			34,049												
4.660	1	**1**	Allowance	Playground Equipment, Archibald Drive	2037	15 to 20	15	35,000.00	35,000	35,000	**0.9%**															
4.661	1	**1**	Allowance	Playground Equipment, Clubhouse	2030	15 to 20	8	60,000.00	60,000	60,000	**3.4%**												133,277			
4.662	1	**1**	Allowance	Playground Equipment, Mockingbird Circle	2030	15 to 20	8	73,000.00	73,000	73,000	**4.2%**												162,154			
4.663	1	**1**	Allowance	Playground Equipment, Tanyard Knoll Lane	2036	15 to 20	14	65,000.00	65,000	65,000	**1.6%**															

General
RESERVE EXPENDITURES

Tanyard Springs
Homeowners Association
Glen Burnie, Maryland

Explanatory Notes:

1) 3.0% is the estimated Inflation Rate for estimating Future Replacement Costs.
2) FY2022 is Fiscal Year beginning January 1, 2022 and ending December 31, 2022.

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years: Useful	Life Analysis, Years: Remaining	Costs, $: Unit (2022)	Costs, $: Per Phase (2022)	Costs, $: Total (2022)	Percentage of Future Expenditures	RUL = 0 FY2022	1 2023	2 2024	3 2025	4 2026	5 2027	6 2028	7 2029	8 2030	9 2031	10 2032	11 2033	12 2034	13 2035	14 2036	15 2037
4.800	1	**1**	Allowance	Signage, Entrance Monuments, Renovation (Incl. Clock Tower)	2028	15 to 20	6	34,000.00	34,000	34,000	**1.9%**							40,598									
4.820	3	**1**	Allowance	Site Furniture, Phased	2030	15 to 25	8 to 14	44,500.00	44,500	133,500	**4.7%**									56,371			61,598			67,310	
4.830	1,630	**1,630**	Square Yards	Tennis Courts, Color Coat (Incl. Clubhouse Basketball Court)	2023	4 to 6	1	9.50	15,485	15,485	**2.0%**		15,950					18,490									
4.840	520	**520**	Linear Feet	Tennis Courts, Fence (Incl. Clubhouse Basketball Court)	2033	to 25	11	46.50	24,180	24,180	**0.5%**												33,471				
4.860	1,630	**1,630**	Square Yards	Tennis Courts, Surface Replacement (Incl. Clubhouse Basketball Court)	2033	to 25	11	46.50	75,795	75,795	**1.7%**												104,918				
				Pool Elements																								
6.200	13,520	**13,520**	Square Feet	Concrete Deck, Inspections, Partial Replacements and Repairs	2030	8 to 12	8	1.50	20,280	20,280	**1.7%**									25,690							
6.300	7,170	**7,170**	Square Feet	Covers, Vinyl	2028	6 to 8	6	3.00	21,510	21,510	**2.5%**							25,684								32,536	
6.400	650	**650**	Linear Feet	Fences, Aluminum (Incl. Gate)	2035	to 25	13	63.00	40,950	40,950	**1.0%**														60,136		
6.500	1	**1**	Allowance	Furniture	2033	to 12	11	49,000.00	49,000	49,000	**2.7%**												67,827				
6.550	4	**4**	Each	Light Poles and Fixtures	2035	to 25	13	3,300.00	13,200	13,200	**0.3%**														19,385		
6.600	2	**1**	Allowance	Mechanical Equipment, Phased	2024	to 15	2 to 9	16,500.00	16,500	33,000	**2.3%**			17,505							21,529						
6.800	6,650	**6,650**	Square Feet	Pool Finishes, Plaster	2030	8 to 12	8	13.50	89,775	89,775	**7.7%**									113,724							
6.801	520	**520**	Linear Feet	Pool Finishes, Tile	2030	15 to 25	8	37.00	19,240	19,240	**1.1%**									24,373							
6.870	4	**4**	Each	Shade Structures	2035	to 25	13	12,000.00	48,000	48,000	**1.2%**														70,490		
				Anticipated Expenditures, By Year ($6,102,473 over 30 years)								17,000	35,649	81,690	59,554	0	91,931	176,757	83,632	682,663	64,578	101,013	315,042	155,793	325,721	223,878	160,159

General

RESERVE EXPENDITURES

Years 2038 to 2052

Tanyard Springs
Homeowners Association
Glen Burnie, Maryland

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years Useful	Life Analysis, Years Remaining	Costs, $ Unit (2022)	Costs, $ Per Phase (2022)	Costs, $ Total (2022)	Percentage of Future Expenditures	16 2038	17 2039	18 2040	19 2041	20 2042	21 2043	22 2044	23 2045	24 2046	25 2047	26 2048	27 2049	28 2050	29 2051	30 2052
4.800	1	**1**	Allowance	Signage, Entrance Monuments, Renovation (Incl. Clock Tower)	2028	15 to 20	6	34,000.00	34,000	34,000	**1.9%**											73,324				
4.820	3	**1**	Allowance	Site Furniture, Phased	2030	15 to 25	8 to 14	44,500.00	44,500	133,500	**4.7%**													101,813		
4.830	1,630	**1,630**	Square Yards	Tennis Courts, Color Coat (Incl. Clubhouse Basketball Court)	2023	4 to 6	1	9.50	15,485	15,485	**2.0%**	24,849					28,807					33,395				
4.840	520	**520**	Linear Feet	Tennis Courts, Fence (Incl. Clubhouse Basketball Court)	2033	to 25	11	46.50	24,180	24,180	**0.5%**															
4.860	1,630	**1,630**	Square Yards	Tennis Courts, Surface Replacement (Incl. Clubhouse Basketball Court)	2033	to 25	11	46.50	75,795	75,795	**1.7%**															
				Pool Elements																						
6.200	13,520	**13,520**	Square Feet	Concrete Deck, Inspections, Partial Replacements and Repairs	2030	8 to 12	8	1.50	20,280	20,280	**1.7%**			34,525										46,399		
6.300	7,170	**7,170**	Square Feet	Covers, Vinyl	2028	6 to 8	6	3.00	21,510	21,510	**2.5%**							41,215								52,210
6.400	650	**650**	Linear Feet	Fences, Aluminum (Incl. Gate)	2035	to 25	13	63.00	40,950	40,950	**1.0%**															
6.500	1	**1**	Allowance	Furniture	2033	to 12	11	49,000.00	49,000	49,000	**2.7%**								96,706							
6.550	4	**4**	Each	Light Poles and Fixtures	2035	to 25	13	3,300.00	13,200	13,200	**0.3%**															
6.600	2	**1**	Allowance	Mechanical Equipment, Phased	2024	to 15	2 to 9	16,500.00	16,500	33,000	**2.3%**	26,478							32,564							40,050
6.800	6,650	**6,650**	Square Feet	Pool Finishes, Plaster	2030	8 to 12	8	13.50	89,775	89,775	**7.7%**			152,836										205,399		
6.801	520	**520**	Linear Feet	Pool Finishes, Tile	2030	15 to 25	8	37.00	19,240	19,240	**1.1%**													44,020		
6.870	4	**4**	Each	Shade Structures	2035	to 25	13	12,000.00	48,000	48,000	**1.2%**															
				Anticipated Expenditures, By Year ($6,102,473 over 30 years)								84,023	84,295	393,764	22,796	62,130	96,010	210,790	272,354	69,115	41,876	227,564	408,717	1,292,613	0	261,367

RESERVE FUNDING PLAN

General

CASH FLOW ANALYSIS
Tanyard Springs
Homeowners Association
Glen Burnie, Maryland

Individual Reserve Budgets & Cash Flows for the Next 30 Years

		FY2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
Reserves at Beginning of Year	*(Note 1)*	568,221	603,082	665,156	701,131	779,240	921,672	976,963	951,733	1,024,092	500,346	597,798	664,086	520,978	541,691	397,245	359,306
Total Recommended Reserve Contributions	*(Note 2)*	**49,133**	**93,300**	**112,900**	**132,500**	**136,500**	**140,600**	**144,800**	**149,100**	**153,600**	**158,200**	**162,900**	**167,800**	**172,800**	**178,000**	**183,300**	**188,800**
Estimated Interest Earned, During Year	*(Note 3)*	2,727	4,423	4,765	5,163	5,932	6,622	6,727	6,891	5,317	3,830	4,401	4,133	3,706	3,275	2,639	2,615
Anticipated Expenditures, By Year		(17,000)	(35,649)	(81,690)	(59,554)	0	(91,931)	(176,757)	(83,632)	(682,663)	(64,578)	(101,013)	(315,042)	(155,793)	(325,721)	(223,878)	(160,159)
Anticipated Reserves at Year End		$603,082	$665,156	$701,131	$779,240	$921,672	$976,963	$951,733	$1,024,092	$500,346	$597,798	$664,086	$520,978	$541,691	$397,245	$359,306	$390,562

(continued)

Individual Reserve Budgets & Cash Flows for the Next 30 Years, Continued

	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052
Reserves at Beginning of Year	390,562	504,160	624,100	440,349	633,799	795,554	931,066	959,169	932,713	1,117,248	1,337,835	1,381,255	1,251,019	241,010	529,397
Total Recommended Reserve Contributions	**194,500**	**200,300**	**206,300**	**212,500**	**218,900**	**225,500**	**232,300**	**239,300**	**246,500**	**253,900**	**261,500**	**269,300**	**277,400**	**285,700**	**294,300**
Estimated Interest Earned, During Year	3,121	3,935	3,713	3,746	4,985	6,022	6,593	6,598	7,150	8,563	9,484	9,181	5,204	2,687	3,821
Anticipated Expenditures, By Year	(84,023)	(84,295)	(393,764)	(22,796)	(62,130)	(96,010)	(210,790)	(272,354)	(69,115)	(41,876)	(227,564)	(408,717)	(1,292,613)	0	(261,367)
Anticipated Reserves at Year End	$504,160	$624,100	$440,349	$633,799	$795,554	$931,066	$959,169	$932,713	$1,117,248	$1,337,835	$1,381,255	$1,251,019	$241,010 *(NOTE 5)*	$529,397	$566,151 *(NOTE 4)*

Explanatory Notes:

1) Year 2022 starting reserves are as of April 30, 2022; FY2022 starts January 1, 2022 and ends December 31, 2022.
2) Reserve Contributions for 2022 are the remaining budgeted 8 months; 2023 is the first year of recommended contributions.
3) **0.7%** is the estimated annual rate of return on invested reserves; 2022 is a partial year of interest earned.
4) Accumulated year 2052 ending reserves consider the age, size, overall condition and complexity of the property.
5) Threshold Funding Year (reserve balance at critical point).

*Refer to the Reserve Expenditures pages for the full list of reserve elements

General

FIVE-YEAR OUTLOOK

Tanyard Springs
Homeowners Association
Glen Burnie, Maryland

Line Item	Reserve Component Inventory	RUL = 0 FY2022	1 2023	2 2024	3 2025	4 2026	5 2027
	Exterior Clubhouse Elements						
1.840	Walls, Siding, Fiber Cement, Paint Finishes				9,835		
	Interior Clubhouse Elements						
2.155	Exercise Equipment, Cardiovascular				49,719		
2.165	Exercise Equipment, Strength Training, Phased						15,071
2.200	Floor Coverings, Carpet		8,498				
2.450	Furnishings, Phased	17,000					
	Clubhouse Building Services Elements						
3.070	Air Handling and Condensing Units, Split Systems						43,473
3.820	Security System, Phased			10,079			
	Property Site Elements						
4.102	Community Garden, Raised Beds						33,387
4.140	Concrete Sidewalks, Partial		11,201				
4.500	Landscape, Partial Replacements			54,106			
4.830	Tennis Courts, Color Coat (Incl. Clubhouse Basketball Court)		15,950				
	Pool Elements						
6.600	Mechanical Equipment, Phased			17,505			
	Anticipated Expenditures, By Year ($6,102,473 over 30 years)	17,000	35,649	81,690	59,554	0	91,931

Townhomes

RESERVE EXPENDITURES

Years 2022 to 2037

Tanyard Springs
Homeowners Association
Glen Burnie, Maryland

Explanatory Notes:

1) **3.0%** **is the estimated Inflation Rate for estimating Future Replacement Costs.**
2) **FY2022 is Fiscal Year beginning January 1, 2022 and ending December 31, 2022.**

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years Useful	Life Analysis, Years Remaining	Costs, $ Unit (2022)	Costs, $ Per Phase (2022)	Costs, $ Total (2022)	Percentage of Future Expenditures	RUL = 0 FY2022	1 2023	2 2024	3 2025	4 2026	5 2027	6 2028	7 2029	8 2030	9 2031	10 2032	11 2033	12 2034	13 2035	14 2036	15 2037
5.020	88,000	**88,000**	Square Yards	Asphalt Pavement, Crack Repair and Patch	2023	3 to 5	1	0.70	61,600	61,600	**12.0%**		63,448				71,411				80,374				90,462		
5.040	20,350	**10,175**	Square Yards	Asphalt Pavement, Mill and Overlay, Section A, Phased	2034	15 to 20	12 to 13	15.50	157,713	315,425	**6.9%**													224,860	231,606		
5.041	46,350	**15,450**	Square Yards	Asphalt Pavement, Mill and Overlay, Sections B and C, Phased	2029	15 to 20	7 to 9	15.50	239,475	718,425	**38.5%**								294,524	303,360	312,461						
5.042	21,300	**10,650**	Square Yards	Asphalt Pavement, Mill and Overlay, Section D and Oak Pointe, Phased	2036	15 to 20	14 to 15	15.50	165,075	330,150	**7.6%**															249,691	257,181
5.100	63	**13**	Each	Catch Basins, Inspections and Capital Repairs, Phased	2029	15 to 20	7 to 15	950.00	11,970	59,850	**2.1%**								14,722		15,618		16,569		17,578		18,649
5.110	54,900	**1,570**	Linear Feet	Concrete Curbs and Gutters, Partial	2029	to 65	7 to 30+	46.50	73,005	2,552,850	**12.7%**								89,787		95,255		101,056		107,210		113,739
5.140	192,800	**4,285**	Square Feet	Concrete Sidewalks, Partial	2026	to 65	4 to 30+	14.50	62,133	2,795,600	**13.9%**					69,931			76,415			83,501			91,244		
5.260	1,050	**1,050**	Linear Feet	Fences, Vinyl, Oak Pointe	2036	15 to 20	14	48.00	50,400	50,400	**1.1%**															76,235	
5.600	80	**16**	Each	Mailbox Stations, Phased	2033	to 25	11 to 19	2,100.00	33,600	168,000	**4.0%**												46,510		49,343		52,348
5.731	410	**410**	Linear Feet	Railings, Aluminum	2033	to 25	11	43.00	17,630	17,630	**0.4%**												24,404				
5.740	2,380	**2,380**	Square Feet	Retaining Walls, Masonry, Greater than 4' in Height, Capital Repairs	2030	10 to 15	8	8.00	19,040	19,040	**0.9%**									24,119							
				Anticipated Expenditures, By Year ($6,639,331 over 30 years)								0	63,448	0	0	69,931	71,411	0	475,448	327,479	503,708	83,501	188,539	224,860	587,443	325,926	441,917

Townhomes

RESERVE EXPENDITURES

Tanyard Springs
Homeowners Association
Glen Burnie, Maryland

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years Useful	Life Analysis, Years Remaining	Costs, $ Unit (2022)	Costs, $ Per Phase (2022)	Costs, $ Total (2022)	Percentage of Future Expenditures	16 2038	17 2039	18 2040	19 2041	20 2042	21 2043	22 2044	23 2045	24 2046	25 2047	26 2048	27 2049	28 2050	29 2051	30 2052
5.020	88,000	**88,000**	Square Yards	Asphalt Pavement, Crack Repair and Patch	2023	3 to 5	1	0.70	61,600	61,600	**12.0%**		101,815				114,594				128,977				145,164	
5.040	20,350	**10,175**	Square Yards	Asphalt Pavement, Mill and Overlay, Section A, Phased	2034	15 to 20	12 to 13	15.50	157,713	315,425	**6.9%**															
5.041	46,350	**15,450**	Square Yards	Asphalt Pavement, Mill and Overlay, Sections B and C, Phased	2029	15 to 20	7 to 9	15.50	239,475	718,425	**38.5%**												531,943	547,901	564,339	
5.042	21,300	**10,650**	Square Yards	Asphalt Pavement, Mill and Overlay, Section D and Oak Pointe, Phased	2036	15 to 20	14 to 15	15.50	165,075	330,150	**7.6%**															
5.100	63	**13**	Each	Catch Basins, Inspections and Capital Repairs, Phased	2029	15 to 20	7 to 15	950.00	11,970	59,850	**2.1%**												26,589		28,208	
5.110	54,900	**1,570**	Linear Feet	Concrete Curbs and Gutters, Partial	2029	to 65	7 to 30+	46.50	73,005	2,552,850	**12.7%**												162,165		172,041	
5.140	192,800	**4,285**	Square Feet	Concrete Sidewalks, Partial	2026	to 65	4 to 30+	14.50	62,133	2,795,600	**13.9%**	99,704			108,950			119,052			130,092			142,155		
5.260	1,050	**1,050**	Linear Feet	Fences, Vinyl, Oak Pointe	2036	15 to 20	14	48.00	50,400	50,400	**1.1%**															
5.600	80	**16**	Each	Mailbox Stations, Phased	2033	to 25	11 to 19	2,100.00	33,600	168,000	**4.0%**		55,536		58,918											
5.731	410	**410**	Linear Feet	Railings, Aluminum	2033	to 25	11	43.00	17,630	17,630	**0.4%**															
5.740	2,380	**2,380**	Square Feet	Retaining Walls, Masonry, Greater than 4' in Height, Capital Repairs	2030	10 to 15	8	8.00	19,040	19,040	**0.9%**								37,577							
				Anticipated Expenditures, By Year ($6,639,331 over 30 years)								99,704	157,351	0	167,868	0	114,594	119,052	37,577	0	259,069	0	720,697	690,056	909,752	0

RESERVE FUNDING PLAN

Townhomes

CASH FLOW ANALYSIS
Tanyard Springs
Homeowners Association
Glen Burnie, Maryland

Individual Reserve Budgets & Cash Flows for the Next 30 Years

		FY2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
Reserves at Beginning of Year	*(Note 1)*	1,116,631	1,200,693	1,273,374	1,419,767	1,576,718	1,669,007	1,764,973	1,937,988	1,639,919	1,493,168	1,173,661	1,278,814	1,284,716	1,259,831	876,640	759,119
Total Recommended Reserve Contributions	*(Note 2)*	**78,667**	**127,500**	**137,000**	**146,500**	**150,900**	**155,400**	**160,100**	**164,900**	**169,800**	**174,900**	**180,100**	**185,500**	**191,100**	**196,800**	**202,700**	**208,800**
Estimated Interest Earned, During Year	*(Note 3)*	5,395	8,629	9,393	10,451	11,320	11,977	12,915	12,479	10,928	9,301	8,554	8,941	8,875	7,452	5,705	4,498
Anticipated Expenditures, By Year		0	(63,448)	0	0	(69,931)	(71,411)	0	(475,448)	(327,479)	(503,708)	(83,501)	(188,539)	(224,860)	(587,443)	(325,926)	(441,917)
Anticipated Reserves at Year End		$1,200,693	$1,273,374	$1,419,767	$1,576,718	$1,669,007	$1,764,973	$1,937,988	$1,639,919	$1,493,168	$1,173,661	$1,278,814	$1,284,716	$1,259,831	$876,640	$759,119	$530,500

(continued)

Individual Reserve Budgets & Cash Flows for the Next 30 Years, Continued

	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052
Reserves at Beginning of Year	530,500	650,013	719,037	953,069	1,027,107	1,277,244	1,421,463	1,569,744	1,808,550	2,094,664	2,131,033	2,436,062	2,028,737	1,658,240	1,073,917
Total Recommended Reserve Contributions	**215,100**	**221,600**	**228,200**	**235,000**	**242,100**	**249,400**	**256,900**	**264,600**	**272,500**	**280,700**	**289,100**	**297,800**	**306,700**	**315,900**	**325,400**
Estimated Interest Earned, During Year	4,117	4,775	5,832	6,906	8,037	9,413	10,433	11,783	13,614	14,738	15,929	15,572	12,859	9,529	8,656
Anticipated Expenditures, By Year	(99,704)	(157,351)	0	(167,868)	0	(114,594)	(119,052)	(37,577)	0	(259,069)	0	(720,697)	(690,056)	(909,752)	0
Anticipated Reserves at Year End	$650,013	$719,037	$953,069	$1,027,107	$1,277,244	$1,421,463	$1,569,744	$1,808,550	$2,094,664	$2,131,033	$2,436,062	$2,028,737	$1,658,240	$1,073,917	$1,407,973
															(NOTE 4)

Explanatory Notes:

1) Year 2022 starting reserves are as of April 30, 2022; FY2022 starts January 1, 2022 and ends December 31, 2022.

2) Reserve Contributions for 2022 are the remaining budgeted 8 months; 2023 is the first year of recommended contributions.

3) **0.7%** is the estimated annual rate of return on invested reserves; 2022 is a partial year of interest earned.

4) Accumulated year 2052 ending reserves consider the need to fund for subsequent asphalt repaving shortly after 2052, and the age, size, overall condition and complexity of the property.

*Refer to the Reserve Expenditures pages for the full list of reserve elements

Townhomes

FIVE-YEAR OUTLOOK

Tanyard Springs
Homeowners Association
Glen Burnie, Maryland

Line Item	Reserve Component Inventory	RUL = 0 FY2022	1 2023	2 2024	3 2025	4 2026	5 2027
5.020	Asphalt Pavement, Crack Repair and Patch		63,448				71,411
5.140	Concrete Sidewalks, Partial					69,931	
	Anticipated Expenditures, By Year ($6,639,331 over 30 years)	0	63,448	0	0	69,931	71,411

4. RESERVE COMPONENT DETAIL

The Reserve Component Detail of this *Reserve Study* includes enhanced solutions and procedures for select significant components. This section describes the Reserve Components, documents specific problems and condition assessments, and may include detailed solutions and procedures for necessary capital repairs and replacements for the benefit of current and future board members. We advise the Board use this information to help define the scope and procedures for repair or replacement when soliciting bids or proposals from contractors. *However, the Report in whole or part is not and should not be used as a design specification or design engineering service*.

General

Exterior Clubhouse Elements

Clubhouse overview

Roof Assemblies, Asphalt Shingles

Line Item: 1.280

Quantity: Approximately 80 *squares*[1] with 500 linear feet of aluminum gutters and downspouts

History: Original to 2010

Condition: Good to fair overall with stains evident from our visual inspection from the ground. Management do not report a history of leaks.

[1] We quantify the roof area in squares where one square is equal to 100 square feet of surface area.

Clubhouse roof overview
Note: Stains.

Roof overview

Roof overview

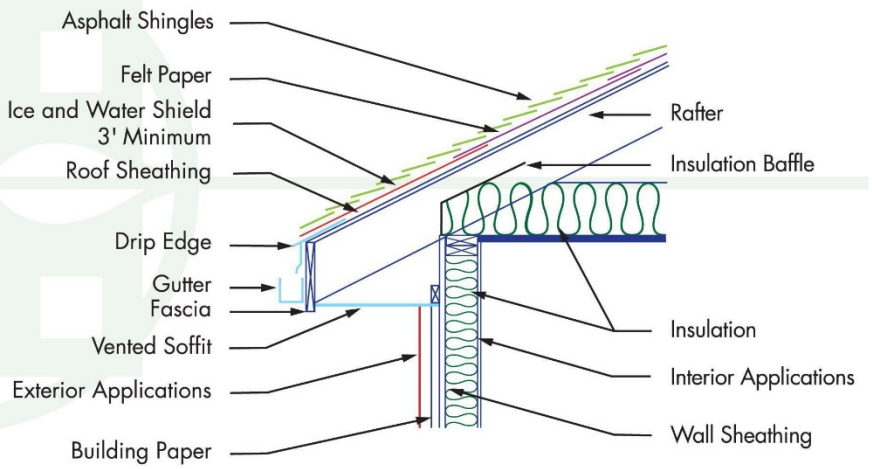
Useful Life: 15- to 20-years

Component Detail Notes: The existing roof assembly comprises the following:

- Laminate shingles
- Boston style ridge caps
- Rubber seal with metal base boot flashing at waste pipes
- Soffit and ridge vents
- Metal drip edge
- Enclosed half weaved valleys

The following cross-sectional schematic illustrates a typical asphalt shingle roof system although it may not reflect the actual configuration at Tanyard Springs:

ROOF SCHEMATIC



Contractors use one of two methods for replacement of sloped roofs, either an overlayment or a tear-off. Overlayment is the application of new shingles over an existing roof. However, there are many disadvantages to overlayment including hidden defects of the underlying roof system, absorption of more heat resulting in accelerated deterioration of the new and old shingles, and an uneven visual appearance. Therefore, we recommend only the tear-off method of replacement. The tear-off method of replacement includes removal of the existing shingles, flashings if required and underlayments.

Preventative Maintenance Notes: We recommend the Association maintain a service and inspection contract with a qualified professional and record all documentation of repairs conducted. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
  - Record any areas of water infiltration, flashing deterioration, damage or loose shingles
  - Implement repairs as needed if issues are reoccurring
  - Trim tree branches that are near or in contact with roof
- As-needed:
  - Ensure proper ventilation and verify vents are clear of debris and not blocked from attic insulation

Priority/Criticality: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3.

Walls, Siding, Fiber Cement

Line Item: 1.840

Quantity: Approximately 5,700 square feet of the exterior walls at the clubhouse and pool house. This quantity includes the soffit, fascia and trim.

History: Original to 2010

Condition: Good overall

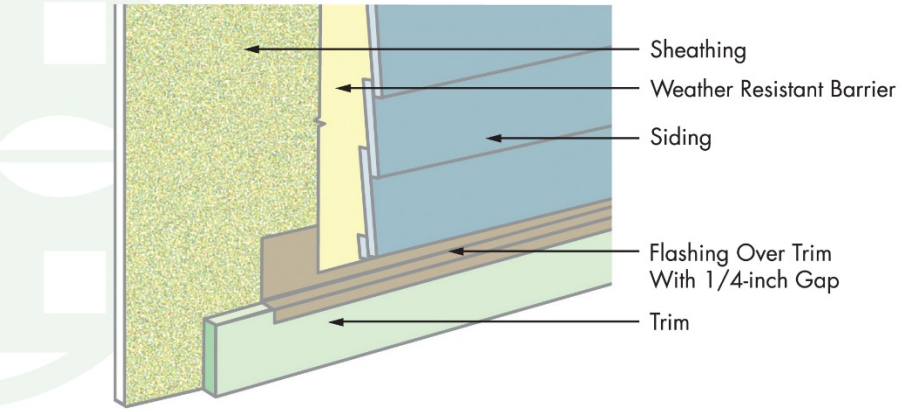
Fiber cement walls, trim, soffits and fascia

Useful Life: With the benefit of periodic maintenance, applications of this type of material can have a useful life of up to 50 years. This useful life is based on a high-grade pre-finish applied in the factory. This useful life is also dependent upon paint applications and partial replacements up to every 8- to 10-years.

Component Detail Notes: Fiber cement siding is made from a combination of cement, sand and cellulose fiber. Manufacturing of the siding utilizes a steam curing process to increase strength and dimensional stability. The siding is also manufactured in layers forming a sheet of desired thickness. A wood grain imprint is typically applied to the exposed surface. Fiber cement siding offers many advantages over other types of siding. These advantages include:

- Capable of withstanding salt spray and ultraviolet rays
- Dimensional stability (will not buckle or warp as easily as other materials)
- Paint applications last longer compared to wood siding
- Resistant to insects, birds and fire

The following diagram details a typical fiber cement siding system at the interface with other building components although it may not reflect the actual configuration at Tanyard Springs:



Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
    - Inspect and repair damage, loose boards and finish stains
    - Periodic pressure cleaning at areas with organic growth
    - Touch-up paint finish applications as needed and sealing of butt joints and field cut end joints

Priority/Criticality: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. We anticipate the following during each paint application cycle:

- Paint finish application
- Replacement of 60 square feet, or up to one percent (1%), of the siding and trim (The exact amount of material in need of replacement will depend on the actual future conditions and desired appearance. We recommend replacement wherever cracks, delamination and deterioration impair the ability of the material to prevent water infiltration.)

- Replacement of up to 290 linear feet of sealants at the windows and doors, or fifty percent (50%) of the total

Windows and Doors

Line Item: 1.980

Quantity: Approximately 710 square feet

History: Original to 2010

Condition: Good overall

Clubhouse windows and doors

Useful Life: Up to 40 years

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
    - Inspect and repair loose weather stripping and/or lock damage
    - Inspect for broken glass and damaged screens
    - Record instances of water infiltration, trapped moisture or leaks
- As-needed:
    - Verify weep holes are unobstructed and note blocked with dirt or sealant

Priority/Criticality: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3.

Interior Clubhouse Elements

Exercise Equipment

Line Items: 2.155 and 2.165

Quantity: The exercise room contains the following types of cardiovascular aerobic training equipment:

- Ellipticals
- Stationary cycles
- Stepper
- Televisions
- Treadmills
- Rowing machine

The exercise room contains the following types of strength training equipment:

- Benches
- Dumbbells

History: Mostly replaced in 2020

Conditions: Good overall

Cardiovascular equipment

Strength training equipment

Useful Life: The useful life of cardiovascular equipment is up to five years. The useful life of strength training equipment is up to 15years.

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3.

Exercise Room, Rubber Floor

Line Item: 2.175

Quantity: Approximately 110 square yards

History: Replaced in 2020

Condition: Good overall

Useful Life: Renovation up to every 15 years

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3.

Floor Coverings, Carpet

Line Item: 2.200

Quantity: Approximately 110 square yards at the hallway and offices (Contractor measurements will vary from the actual floor area due to standard roll lengths, patterns and installation waste.)

History: Original to 2010

Condition: Good to fair overall with deterioration evident

Carpet deterioration

Useful Life: 8- to 12-years

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3.

Floor Coverings, Tile

Line Item: 2.240

Quantity: 350 square yards at the hallway, great room and rest rooms

History: Original to 2010

Condition: Good overall

Great room tile floor covering

Useful Life: Up to 30 years although replacement of tile is often based on discretionary redecorating prior to the tile reaching the end of its useful life.

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. The Association should fund regrouting of the tiles through the operating budget if necessary.

Furnishings

Line Item: 2.450

Quantity: Furnishings and components in the clubhouse include but are not limited to the following elements:

- Bookcases
- Cabinets
- Chairs

- Countertop
- Desks
- File cabinets
- Sofas
- Tables
- Television

History: Original to 2010

Condition: Reported unsatisfactory

Great room furnishings

Great room furnishings

Useful Life: Varies significantly up to 15 years

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. Due to varied uses, ages and useful lives, we recommend the Association budget $20,000 plus inflation for phased replacements of up to fifty percent (50%) of the furnishings per event.

Kitchen

Line Item: 2.520

Quantity: Components of the kitchen include:

- Appliances
- Cabinets and countertops
- Light fixtures

History: Components are original to 2010

Condition: Good to fair overall with isolated countertop damage evident

Kitchen overview

Kitchen cabinets and countertop

Useful Life: Renovation 15- to 20-years

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3.

Locker Rooms, Fixtures

Line Item: 2.680

Quantity: Two locker rooms; locker room fixtures include:

- Lockers
- Partitions
- Showers
- Sinks
- Toilets
- Urinals

History: Components are original to 2010

Condition: Good overall

Locker room fixtures

Lockers

Useful Life: Renovation up to every 25 years

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3.

Paint Finishes

Line Item: 2.800

Quantity: Approximately 10,900 square feet on the walls and ceilings of the clubhouse

History: Painted in 2020

Condition: Good overall

Useful Life: 8- to 12-years

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3.

Clubhouse Building Services Elements

Air Handling and Condensing Units, Split Systems

Line Item: 3.070

Quantity: Five split systems

History: Original to Original

Condition: Reported satisfactory without operational deficiencies

Split system condensing units

Useful Life: 15- to 20-years

Component Detail Notes: A split system air conditioner consists of an outside condensing unit, an interior evaporator coil, refrigerant lines and an interior air handling unit. The split system capacities range from 2.5- to 4-Tons. The split systems use R-410A refrigerant.

Preventative Maintenance Notes: We recommend the Association obtain and adhere to the manufacturer's recommended maintenance plan. We also recommend the Association maintain a maintenance contract with a qualified professional. The required preventative maintenance may vary in frequency and scope based on the unit's age, operational condition, or changes in technology. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Semi-annually:
  - Lubricate motors and bearings
  - Change or clean air filters as needed
  - Inspect condenser base and piping insulation
  - Inspect base pan, coil, cabinet and clear obstructions as necessary
- Annually:
  - Clean coils and drain pans, clean fan assembly, check refrigerant charge, inspect fan drive system and controls
  - Inspect and clean accessible ductwork as needed
  - Clean debris from inside cabinet, inspect condenser compressor and associated tubing for damage

Priority/Criticality: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. The condensing unit may require replacement prior to

replacement of the related interior forced air unit. For purposes of this Reserve Study, we assume coordination of replacement of the interior forced air unit, evaporator coil, refrigerant lines and exterior condensing unit.

Life Safety System

Line Item: 3.560

Quantity: The life safety system at the Tanyard Springs clubhouse includes the following components:

- Audio/visual fixtures
- Control panel
- Detectors
- Emergency light fixtures
- Exit light fixtures
- Pull stations
- Wiring

History: Original to 2010

Conditions: Reported satisfactory

Useful Life: Up to 25 years

Preventative Maintenance Notes: We recommend the Association obtain and adhere to the manufacturer's recommended maintenance plan. In accordance with *NFPA 72* (National Fire Alarm and Signaling Code) we also recommend the Association maintain a maintenance contract with a qualified professional. The required preventative maintenance may vary in frequency and scope based on the age of the components, operational condition, or changes in technology. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Semi-annually:
  - Inspect and test all components and devices, including, but not limited to, control panels, annunciators, detectors, audio/visual fixtures, signal transmitters and magnetic door holders
  - Test backup batteries
- As-needed:
  - Ensure clear line of access to components such as pull stations
  - Ensure detectors are properly positioned and clean of debris

Priority/Criticality: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. Changes in technology or building codes may make a replacement desirable prior to the end of the functional life. Our estimate of future cost considers only that amount necessary to duplicate the same functionality. Local codes or ordinances at the actual time of replacement may require a betterment as compared

to the existing system. A betterment could result in a higher, but at this time unknown, cost of replacement.

Security System

Line Item: 3.820

Quantity: Tanyard Springs utilizes the following security system components:

- Automated card reading system
- Cameras
- Multiplexer
- Recorder

History: Various ages

Condition: Reported satisfactory

Camera

Useful Life: 10- to 15-years

Preventative Maintenance Notes: We recommend the Association obtain and adhere to the manufacturer's recommended maintenance plan. The required preventative maintenance may vary in frequency and scope based on the unit's age, operational condition, or changes in technology. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Monthly:
  - Check cameras for proper focus, fields of view are unobstructed and camera and lenses are clean and dust-free
  - Check recording equipment for proper operation
  - Verify monitors are free from distortion with correct brightness and contrast
- Annually:

- Check exposed wiring and cables for wear, proper connections and signal transmission
- Check power connections, and if applicable, functionality of battery power supply systems

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. The Association should anticipate replacement of up to fifty percent (50%) of the security system components per event.

Property Site Elements

Asphalt Pavement, Repaving

Line Item: 4.040

Quantity: Approximately 3,370 square yards at the clubhouse parking area

History: Original to 2010

Condition: Good to fair overall with cracks and previously sealed cracks evident

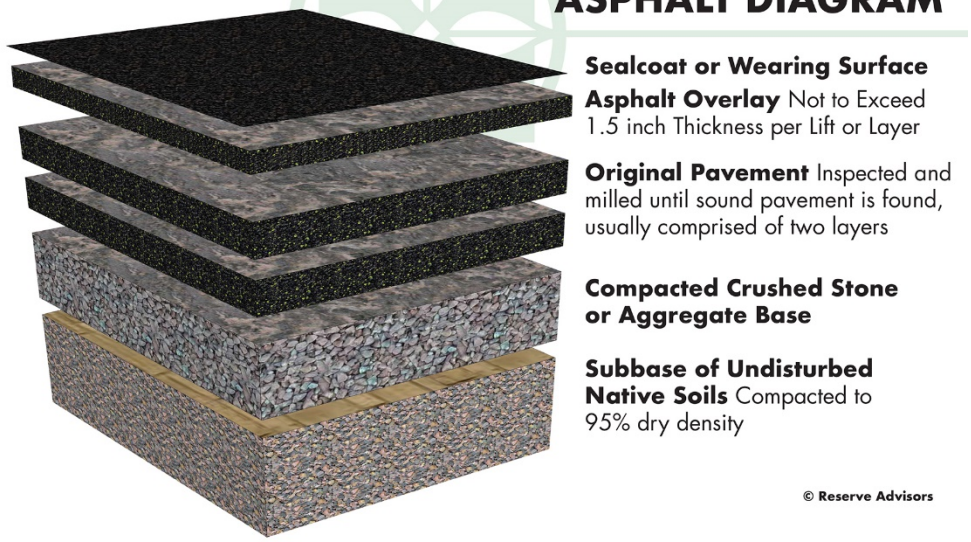
Clubhouse parking area overview
Note: Cracks.

Clubhouse parking area overview
Note: Previously sealed cracks.

Clubhouse parking area cracks

Useful Life: 15- to 20-years with the benefit of timely crack repairs and patching

Component Detail Notes: The initial installation of asphalt uses at least two lifts, or two separate applications of asphalt, over the base course. The first lift is the binder course. The second lift is the wearing course. The wearing course comprises a finer aggregate for a smoother more watertight finish. The following diagram depicts the typical components although it may not reflect the actual configuration at Tanyard Springs:



The manner of repaving is either a mill and overlay or total replacement. A mill and overlay is a method of repaving where cracked, worn and failed pavement is mechanically removed or milled until sound pavement is found. A new layer of asphalt is overlaid atop the remaining base course of pavement. Total replacement includes the removal of all existing asphalt down to the base course of aggregate and native soil followed by the

application of two or more new lifts of asphalt. We recommend mill and overlayment on asphalt pavement that exhibits normal deterioration and wear. We recommend total replacement of asphalt pavement that exhibits severe deterioration, inadequate drainage, pavement that has been overlaid multiple times in the past or where the configuration makes overlayment not possible. Based on the apparent visual condition and configuration of the asphalt pavement, we recommend the milling and overlayment method of repaving for the clubhouse parking area at Tanyard Springs.

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
    - Inspect for settlement, large cracks and trip hazards, and ensure proper drainage
    - Repair areas which could cause vehicular damage such as potholes
- As needed:
    - Perform crack repairs and patching

Priority/Criticality: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. Our cost for milling and overlayment includes repairs at the catch basins and area patching of up to ten percent (10%). The estimate of cost also includes repairs at the concrete curbs and catch basins.

Asphalt Pavement, Repaving, Walking Paths

Line Item: 4.080

Quantity: 5,030 square yards throughout the community

History: Original to between 2010 and 2018

Condition: Good to fair overall with isolated cracks and settlement evident

Asphalt pavement walking path overview

Walking path overview

Walking path crack

Walking path cracks and settlement

Useful Life: 15- to 20-years with the benefit of timely crack repairs and patching, and the need to maintain a safe pedestrian surface

Priority/Criticality: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3.

Basketball Court

Line Item: 4.090

Quantity: 170 square yards of concrete with a plastic mat

History: Original to 2017

Condition: Good overall

Basketball court overview

Useful Life: 10- to 15-years

Priority/Criticality: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. The estimate of cost includes replacement of the mat with an allowance for replacement of up to twenty percent (20%) of the underlying concrete surface.

Bridges, Pedestrian, Renovation

Line Item: 4.095

Quantity: Two bridges which comprise approximately 1,520 square feet of wood deck surface

History: Original to between 2010 and 2017

Condition: Good overall

Pedestrian bridge overview

Pedestrian bridge overview

Useful Life: Up to 25 years for replacement of the deck. The steel structures have an indefinite useful life.

Priority/Criticality: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. The estimate of cost includes replacement of the wood deck with an allowance for repairs to the steel structures.

Community Garden, Pergola, Wood

Line Item: 4.101

Quantity: Approximately 230 square feet of wood pergola

History: Original to 2012

Condition: Good to fair overall with minor wood deterioration evident

Wood pergola overview
Note: Minor wood deterioration.

Useful Life: 15- to 20-years with periodic maintenance

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
  - Inspect for wood deterioration, and loose or missing fasteners
- Every three years:
  - Power wash with algaecide and application of sealer/stain

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. We recommend the Association budget for repairs through the operating budget.

Community Garden, Raised Beds

Line Item: 4.102

Quantity: 32 raised beds

History: Original to 2012

Condition: Good overall

Community garden raised beds

Useful Life: Up to 15 years

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
  - Inspect and repair damaged areas
  - Inspect and repair erosion

Priority/Criticality: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3.

Community Garden, Shed

Line Item: 4.103

History: Original to 2012

Condition: Good overall

Community garden shed

Useful Life: 15- to 20-years

Priority/Criticality: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. We recommend the Association budget for replacement of the small plastic shed adjacent to the main shed on an as-needed basis through the operating budget.

Concrete Sidewalks

Line Item: 4.140

Quantity: Approximately 15,000 square feet at the clubhouse and common areas throughout the property

Condition: Good to fair overall with cracks evident

Clubhouse concrete sidewalks overview

Concrete walkway sidewalk

Scaling at Clubhouse sidewalk

Useful Life: Up to 65 years although interim deterioration of areas is common

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
  - Inspect and repair major cracks, spalls and trip hazards
  - Mark with orange safety paint prior to replacement or repair
  - Repair or perform concrete leveling in areas in immediate need of repair or possible safety hazard

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. We estimate that up to 4,500 square feet of concrete sidewalks, or thirty percent (30%) of the total, will require replacement during the next 30 years.

Fences, Chain Link

Line Items: 4.220 and 4.221

Quantity: 280 linear feet at the Archibald Drive dog park and 730 linear feet at the dog park near the clubhouse

History: The fences at the Archibald Drive dog park are original to around 2017. The fences at the Clubhouse dog park are original to around 2012.

Condition: Good overall

Archibald Drive dog park fences overview

Clubhouse dog park fence overview

Useful Life: Up to 25 years

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
  - Inspect and repair loose sections, and damage
  - Repair leaning sections and clear vegetation from fence areas which could cause damage

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3.

Fences, Vinyl

Line Item: 4.260

Quantity: Approximately 670 linear feet at the monuments throughout the property

History: Original to between 2010 and 2017

Condition: Good overall

Vinyl fences at monuments

Vinyl fence overview

Useful Life: 15- to 20-years

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
  - Inspect and repair loose panels, and damage
  - Repair leaning sections and clear vegetation from fence areas which could cause damage
  - Periodically clean vinyl fence as needed

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3.

Fences, Wood, Split Rail

Line Item: 4.286

Quantity: 1,730 linear feet at the Archibald Drive amenity area

History: Original to between 2010 and 2017

Condition: Good to fair overall with previous replacements evident

Split rail fence

Useful Life: Up to 25 years

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
  - Inspect and repair loose sections, and damage
  - Repair leaning sections and clear vegetation from fence areas which could cause damage

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. The Association should anticipate periodic partial replacements funded through the operating budget due to the non-uniform nature of wood deterioration.

Irrigation System

Line Item: 4.420

Quantity: 28 zones at the entrance to the community and the clubhouse area

History: Original to 2010

Condition: Reported satisfactory

Useful Life: Up to 40 years

Component Detail Notes: Irrigation systems typically include the following components:

- Electronic controls (timer)
- Impact rotors
- Network of supply pipes

- Pop-up heads
- Valves

Tanyard Springs should anticipate interim and partial replacements of the system network supply pipes and other components as normal maintenance to maximize the useful life of the irrigation system. The Association should fund these ongoing seasonal repairs through the operating budget.

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Semi-annually:
    - Conduct seasonal repairs which includes valve repairs, controller repairs, partial head replacements and pipe repairs
    - Blow out irrigation water lines and drain building exterior faucets each fall

Priority/Criticality: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3.

Landscape

Line Item: 4.500

Component Detail Notes: The Association contains a large quantity of trees, shrubbery and other landscape elements. Replacement of these elements is an ongoing need. Many associations budget for these replacements as normal maintenance. Other associations fund ongoing replacements from reserves. Large amounts of landscape may need replacement due to disease, drought or other forces of nature. If the cost of removal and replacement is substantial, funding from reserves is logical. The Association may also desire to periodically update the appearance of the community through major improvements to the landscape.

Useful Life: At the request of Management, we include a landscape allowance for partial replacements every five years.

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3.

Light Poles and Fixtures

Line Item: 4.560

Quantity: 10 poles with light fixtures at the area surrounding the clubhouse

History: Original to 2010

Condition: Good overall

Light pole and fixture

Useful Life: 15- to 20-years

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- As-needed:
  - Inspect and repair broken or dislodged fixtures, and leaning or damaged poles
  - Replaced burned out bulbs as needed

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3.

Pavilions, Renovation

Line Items: 4.625 and 4.626

Quantity: Two pavilions located at the Archibald Drive amenity area and clubhouse which comprise 400 square feet each.

History: The pavilion at the Archibald Drive amenity area is original to around 2017. The pavilion at the clubhouse is original to 2010.

Condition: The Archibald Drive pavilion is in good overall condition. The clubhouse pavilion is in good to fair overall condition with finish deterioration evident.

Archibald drive pavilion overview

Clubhouse pavilion overview

Useful Life: Indefinite with renovation including roof replacement up to every 30 years

Priority/Criticality: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. The estimate of cost includes replacement of the metal roofs with an allowance for paint finishes and repairs to the structures.

Playground Equipment

Line Items: 4.660 through 4.663

Quantity: The Association maintains four playgrounds located at the Archibald Drive amenity area, the clubhouse, Mockingbird Circle and Tanyard Knoll Lane

History: The Archibald Drive playground is original to 2017, the clubhouse playground is original to 2010, the Mockingbird Circle playground is original to 2010 and the Tanyard Knoll Lane playground is original to 2016.

Condition: The Archibald Drive and Tanyard Knoll Lane playgrounds are in good overall condition. The clubhouse and Mockingbird Circle playgrounds are in good to fair condition with finish deterioration evident.

Archibald Drive playground overview

Clubhouse playground overview
Note: Minor finish deterioration.

Mockingbird Circle playground overview
Note: Finish deterioration.

Tanyard Knoll Lane playground overview

Useful Life: 15- to 20-years

Component Detail Notes: Safety is the major purpose for maintaining playground equipment. We recommend an annual inspection of the playground equipment to identify and repair as normal maintenance loose connections and fasteners or damaged elements. We suggest the Association learn more about the specific requirements of playground equipment at PlaygroundSafety.org. We recommend the use of a specialist for the design or replacement of the playground equipment environment.

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
    - Inspect and repair loose connections and fasteners or damaged elements
    - Inspect for safety hazards and adequate coverage of ground surface cover

Priority/Criticality: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. The estimates of cost include an allowance for replacement of the safety surfaces and borders.

Signage, Entrance Monuments

Line Item: 4.800

Quantity: Six property identification entrance monuments. The signage includes the following elements:

- Clock tower
- Landscaping
- Light fixtures
- Letters
- Masonry, stone

History: Original to between 2010 and 2017

Condition: Good overall

Property identification entrance monument and landscaping

Entrance monument

Useful Life: 15- to 20-years

Component Detail Notes: Community signage contributes to the overall aesthetic appearance of the property to owners and potential buyers. Renovation or replacement of community signs is often predicated upon the desire to "update" the perceived identity of the community rather than for utilitarian concerns. Therefore, the specific times for replacement or renovation are discretionary.

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
    - Inspect and repair damage, vandalism and loose components
    - Verify lighting is working properly
    - Touch-up paint finish applications if applicable

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3.The estimate of cost includes repointing and repairs to the masonry and replacement of the remaining components listed above.

Site Furniture

Line Item: 4.820

Quantity:

- Benches
- Dog waste stations
- Grills
- Picnic tables
- Trash receptacles

History: Original to between Original and 2017; the grills will be replaced in 2022.

Condition: Good to fair overall with rust evident

Picnic tables

Rust at grill
Note: This grill will be replaced in 2022.

Useful Life: 15- to 25-years

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3.

Tennis Court, Color Coat

Line Item: 4.830

Quantity: 1,630 square yards comprising one Tennis court and a basketball court at the clubhouse

History: Original to 2010

Condition: Good to fair overall with minor cracks evident

Useful Life: Four- to six-years

Component Detail Notes: Prior to the application of the color coat, the Association should require the contractor to rout and fill all cracks with hot emulsion. This deters water infiltration and further deterioration of the asphalt playing surface.

Priority/Criticality: Not recommended to defer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3.

Tennis Court, Fence

Line Item: 4.840

Quantity: 520 linear feet

History: Original to 2010

Condition: Good to fair overall with finish deterioration evident

Basketball court fence overview

Tennis court fence overview

Finish deterioration at top of fence

Useful Life: Up to 25 years

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3.

Tennis Court, Surface

Line Item: 4.860

Quantity: 1,630 square yards of asphalt comprising one Tennis court and the basketball court

History: Original to 2010

Condition: Good to fair overall with minor cracks evident

Basketball court surface overview

Useful Life: Up to 25 years

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
  - Inspect and repair large cracks, trip hazards and possibly safety hazards
  - Verify gate and fencing is secure
  - Verify lighting is working properly if applicable
  - Inspect and repair standards and windscreens as needed

Priority/Criticality: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3.

Pool Elements

Concrete Deck

Line Item: 6.200

Quantity: 13,520 square feet

History: Original to 2010

Condition: Good overall

Concrete deck overview

Useful Life: The useful life of a concrete pool deck is up to 60 years or more with timely repairs. We recommend the Association conduct inspections, partial replacements and repairs to the deck every 8- to 12-years.

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Semi-annually:
    - Inspect and repair large cracks, trip hazards, and possible safety hazards
    - Inspect and repair pool coping for cracks, settlement, heaves or sealant deterioration
    - Schedule periodic pressure cleanings as needed

Priority/Criticality: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. We recommend the Association budget for the following per event:

- Selective cut out and replacements of up to ten percent (10%) of concrete
- Crack repairs as needed
- Mortar joint repairs
- Caulk replacement

Covers, Vinyl

Line Item: 6.300

Quantity: 7,170 square feet

History: Purchased in 2020

Condition: Good condition

Useful Life: Six- to eight-years

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3.

Fences, Aluminum

Line Item: 6.400

Quantity: 650 linear feet

History: Original to Original

Condition: Good to fair overall

Aluminum fence overview

Useful Life: Up to 25 years

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
    - Inspect and repair loose fasteners or sections, and damage

- Repair leaning sections and clear vegetation from fence areas which could cause damage

Priority/Criticality: Not recommended to defer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3.

Furniture

Line Item: 6.500

Quantity: The pool furniture includes the following:

- Chairs
- Lounges
- Tables
- Ladders and life safety equipment

History: Replaced in 2021

Condition: Good overall

Pool furniture

Useful Life: Up to 12 years

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. We recommend interim re-strapping, refinishing, cushion replacements, reupholstering and other repairs to the furniture as normal maintenance to maximize its useful life. The estimate of cost is based on the historical replacement cost furnished by Management.

Light Poles and Fixtures

Line Item: 6.550

Quantity: Four poles with 10 fixtures at the pool deck

History: Original to 2010

Condition: Good overall

Light pole and fixtures

Useful Life: Up to 25 years

Priority/Criticality: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3.

Mechanical Equipment

Line Item: 6.600

Quantity: The mechanical equipment includes the following:

- Automatic chlorinators
- Controls
- and exhaust fan
- Filters
- Interconnected pipe, fittings and valves
- Pumps
- Valves

History: Mostly original to 2010

Condition: Reported satisfactory

Pool filters and valves

Pump and filter

Useful Life: Up to 15 years

Preventative Maintenance Notes: We recommend the Association maintain a maintenance contract with a qualified professional and follow the manufacturer's specific recommended maintenance and local, state and/or federal inspection guidelines.

Priority/Criticality: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. Failure of the pool mechanical equipment as a single event is unlikely. Therefore, we include replacement of up to fifty percent (50%) of the equipment per event. We consider interim replacement of motors and minor repairs as normal maintenance.

Pool Finishes, Plaster and Tile

Line Items: 6.800 and 6.801

Quantity: 6,650 square feet of plaster based on the horizontal surface area and approximately 520 linear feet of tile

History: The plaster finishes were replaced in 2020 and the tile is original to original.

Condition: Good overall

Pool overview

Pool finishes

Useful Life: 8- to 12-years for the plaster and 15- to 25-years for the tile

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Semi-annually:
    - Inspect and patch areas of significant plaster delamination, coping damage and structure cracks
    - Inspect main drain connection and anti-entrapment covers, pressure test circulation piping and valves
    - Test handrails and safety features for proper operation

Priority/Criticality: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. We recommend the Association budget for full tile replacement every other plaster replacement event. Removal and replacement of the finish provides the opportunity to inspect the pool structures and to allow for partial repairs of the underlying concrete surfaces as needed. To maintain the integrity of the pool structures, we recommend the Association budget for the following:

- Removal and replacement of the plaster finishes

- Partial replacements of the scuppers and coping as needed
- Replacement of tiles as needed
- Replacement of joint sealants as needed
- Concrete structure repairs as needed

Shade Structures

Line Item: 6.870

Quantity: four each

History: Original to Original

Condition: Good to fair overall with fastener rust evident

Shade structures

Fastener rust at connection

Useful Life: Up to 25 years

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. We recommend the Association budget for replacement of the shades on an as-needed basis through the operating budget.

Townhomes

Asphalt Pavement, Crack Repair and Patch

Line Item: 5.020

Quantity: Approximately 88,000 square yards at the townhome streets and parking areas

History: Original to between 2009 and 2017

Condition: Varies from good to fair overall

Useful Life: Three- to five-years

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. The estimate of cost includes an allowance for crack repairs and patching of up to two percent (2%) of the pavement.

Asphalt Pavement, Repaving

Line Items: 5.040, 5.041 and 5.042

Quantity, History and Condition:

Location	Quantity (Square Yards)	Year(s) of Construction	Condition	Notes
Section A	20,350	2014-2015	Good	N/A
Sections B and C	46,350	2009-2011	Good to fair	Cracks.
Section D and Oak Pointe	21,300	2016-2018	Good	N/A

Section A comprises the townhomes west and north of the clubhouse. Sections B and C include the townhome streets near Archibald Drive, Stallings Drive, Ingraham Drive, Pultney Lane and Mockingbird Circle. Section D and The Pointe at Tanyard Springs comprise the townhome streets near Tanyard Knoll Lane and Warblers Perch Way.

Section A pavement overview

Section A pavement overview

Section B and C pavement overview

Section B and C pavement cracks

Section B and C pavement cracks

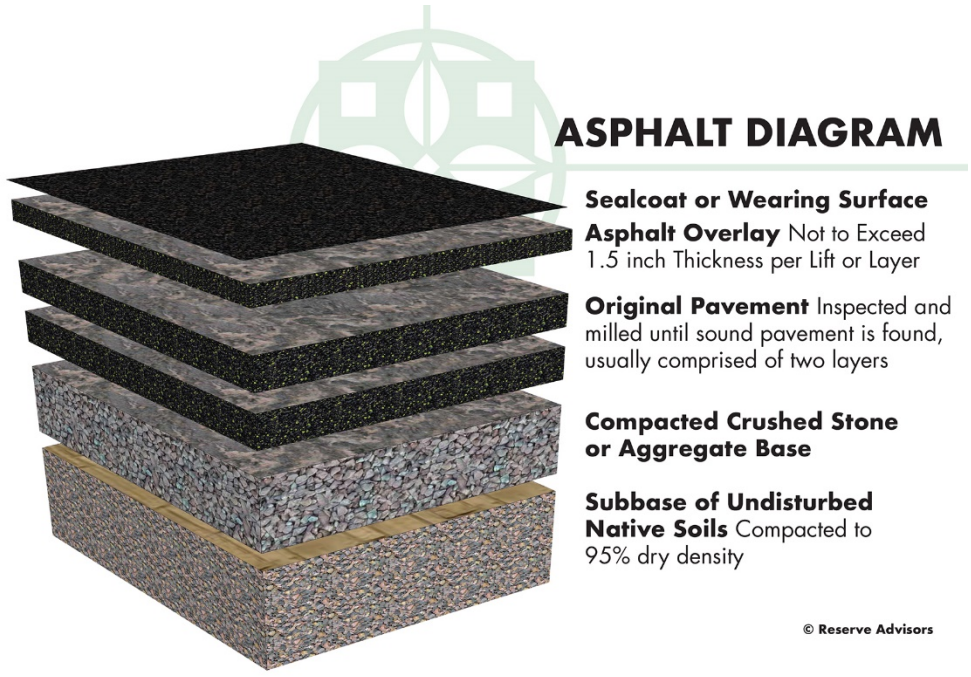
Section B and C pavement cracks

Section D and Oak Pointe pavement overview

Section D and Oak Pointe pavement overview

Useful Life: 15- to 20-years with the benefit of timely crack repairs and patching

Component Detail Notes: The initial installation of asphalt uses at least two lifts, or two separate applications of asphalt, over the base course. The first lift is the binder course. The second lift is the wearing course. The wearing course comprises a finer aggregate for a smoother more watertight finish. The following diagram depicts the typical components although it may not reflect the actual configuration at Tanyard Springs:



The manner of repaving is either a mill and overlay or total replacement. A mill and overlay is a method of repaving where cracked, worn and failed pavement is mechanically removed or milled until sound pavement is found. A new layer of asphalt is overlaid atop the remaining base course of pavement. Total replacement includes the removal of all existing asphalt down to the base course of aggregate and native soil followed by the application of two or more new lifts of asphalt. We recommend mill and overlayment on asphalt pavement that exhibits normal deterioration and wear. We recommend total replacement of asphalt pavement that exhibits severe deterioration, inadequate drainage, pavement that has been overlaid multiple times in the past or where the configuration makes overlayment not possible. Based on the apparent visual condition and configuration of the asphalt pavement, we recommend the milling and overlayment method of repaving for the townhome streets and parking areas at Tanyard Springs.

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
    - Inspect for settlement, large cracks and trip hazards, and ensure proper drainage
    - Repair areas which could cause vehicular damage such as potholes
- As needed:
    - Perform crack repairs and patching

Priority/Criticality: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. Our cost for milling and overlayment includes area patching of up to ten percent (10%).

Catch Basins

Line Item: 5.100

Quantity: 63 catch basins[2] at the townhome streets and parking areas

History: Original to between 2009 and 2018

Condition: Good overall without settlement visually apparent

Typical townhome street and parking area catch basin

Useful Life: The useful life of catch basins is up to 65 years. However, achieving this useful life usually requires interim capital repairs or partial replacements every 15- to 20-years.

Component Detail Notes: Erosion causes settlement around the collar of catch basins. Left unrepaired, the entire catch basin will shift and need replacement.

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
    - Inspect and repair any settlement and collar cracks
    - Ensure proper drainage and inlets are free of debris
    - If property drainage is not adequate in heavy rainfall events, typically bi-annual cleaning of the catch basins is recommended

[2] We utilize the terminology catch basin to refer to all storm water collection structures including curb inlets.

Priority/Criticality: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. We recommend the Association plan for inspections and capital repairs to the catch basins in conjunction with asphalt repaving.

Concrete Curbs and Gutters

Line Item: 5.110

Quantity: Approximately 54,900 linear feet at the townhome streets and parking areas

Condition: Good to fair overall with cracks evident

Concrete curb and gutter overview

Curb and gutter cracks

Useful Life: Up to 65 years although interim deterioration of areas is common

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
    - Inspect and repair major cracks, spalls and trip hazards
    - Mark with orange safety paint prior to replacement or repair
    - Repair or perform concrete leveling in areas in immediate need of repair or possible safety hazard

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. We estimate that up to 10,990 linear feet of curbs and gutters, or twenty percent (20%) of the total, will require replacement during the next 30 years.

Concrete Sidewalks

Line Item: 5.140

Quantity: Approximately 192,800 square feet along the townhome streets and parking areas

Condition: Good to fair overall cracks evident

Concrete sidewalk overview

Sidewalk overview

Sidewalk cracks

Sidewalk scaling

Useful Life: Up to 65 years although interim deterioration of areas is common

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
    - Inspect and repair major cracks, spalls and trip hazards
    - Mark with orange safety paint prior to replacement or repair
    - Repair or perform concrete leveling in areas in immediate need of repair or possible safety hazard

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. We estimate that up to 38,565 square feet of concrete sidewalks, or twenty percent (20%) of the total, will require replacement during the next 30 years.

Fences, Vinyl

Line Item: 5.260

Quantity: 1,050 linear feet at the north and south perimeters of The Pointe at Tanyard Springs

History: Original to 2016

Condition: Good overall

Vinyl fence overview

Useful Life: 15- to 20-years

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
    - Inspect and repair loose panels, and damage
    - Repair leaning sections and clear vegetation from fence areas which could cause damage
    - Periodically clean vinyl fence as needed

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3.

Mailbox Stations

Line Item: 5.600

Quantity: 80 stations

History: Original to between 2009 and 2017

Condition: Varies from good to fair overall with isolated finish deterioration and fastener rust evident

Typical mailbox stations

Mailbox stations

Useful Life: Up to 25 years

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- As-needed:
  - Inspect and repair damage, vandalism, and finish deterioration
  - Verify posts are anchored properly

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3.

Railings, Aluminum

Line Item: 5.731

Quantity: 410 linear feet along the retaining walls behind the homes on Hopkins Corner

History: Original to around 2011

Condition: Good to fair overall with finish deterioration evident

Aluminum railing overview
Note: Finish deterioration.

Useful Life: Up to 25 years

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
  - Inspect for damage, and excessive finish deterioration or corrosion
  - Test security of railings and inspect connection fasteners

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3.

Retaining Walls, Masonry, Greater than 4’ in Height, Capital Repairs

Line Item: 5.740

Quantity: 2,380 square feet at the retaining walls behind the homes on Hopkins Corner

History: Original to around 2011

Condition: Good overall

Retaining wall overview

Retaining wall overview

Useful Life: Masonry retaining walls of this size have indeterminate useful lives. However, we recommend the Association plan for inspections and capital repairs every 10- to 15-years to forestall deterioration.

Priority/Criticality: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. Our cost includes an allowance for an inspection, partial resetting and replacement of up to fifteen percent (15%).

Reserve Study Update

An ongoing review by the Board and an Update of this Reserve Study are necessary to ensure an equitable funding plan since a Reserve Study is a snapshot in time. Many variables change after the study is conducted that may result in significant overfunding or underfunding the reserve account. Variables that may affect the Reserve Funding Plan include, but are not limited to:

- Deferred or accelerated capital projects based on Board discretion
- Changes in the interest rates on reserve investments
- Changes in the *local* construction inflation rate
- Additions and deletions to the Reserve Component Inventory
- The presence or absence of maintenance programs
- Unusually mild or extreme weather conditions
- Technological advancements

Periodic updates incorporate these variable changes since the last Reserve Study or Update. We recommend the Board budget for an Update to this Reserve Study in two- to three-years. Budgeting for an Update demonstrates the Board's objective to continue fulfilling its fiduciary responsibility to maintain the commonly owned property and to fund reserves appropriately.

5. METHODOLOGY

Reserves for replacement are the amounts of money required for future expenditures to repair or replace Reserve Components that wear out before the entire facility or project wears out. Reserving funds for future repair or replacement of the Reserve Components is also one of the most reliable ways of protecting the value of the property's infrastructure and marketability.

Tanyard Springs can fund capital repairs and replacements in any combination of the following:

1. Increases in the operating budget during years when the shortages occur
2. Loans using borrowed capital for major replacement projects
3. Level monthly reserve assessments annually adjusted upward for inflation to increase reserves to fund the expected major future expenditures
4. Special assessments

We do not advocate special assessments or loans unless near term circumstances dictate otherwise. Although loans provide a gradual method of funding a replacement, the costs are higher than if the Association were to accumulate reserves ahead of the actual replacement. Interest earnings on reserves also accumulate in this process of saving or reserving for future replacements, thereby defraying the amount of gradual reserve collections. We advocate the third method of *Level Monthly Reserve Assessments* with relatively minor annual adjustments. The method ensures that Homeowners pay their "fair share" of the weathering and aging of the commonly owned property each year. Level reserve assessments preserve the property and enhance the resale value of the homes.

This Reserve Study is in compliance with and exceeds the National standards[1] set forth by the Association of Professional Reserve Analysts (APRA) fulfilling the requirements of a "Level II Reserve Study Update." These standards require a Reserve Component to have a "predictable remaining Useful Life." Estimating Remaining Useful Lives and Reserve Expenditures beyond 30 years is often indeterminate. Long-Lived Property Elements are necessarily excluded from this analysis. We considered the following factors in our analysis:

- The Cash Flow Method to compute, project and illustrate the 30-year Reserve Funding Plan
- Local[2] costs of material, equipment and labor
- Current and future costs of replacement for the Reserve Components
- Costs of demolition as part of the cost of replacement
- Local economic conditions and a historical perspective to arrive at our estimate of long-term future inflation for construction costs in Glen Burnie, Maryland at an annual inflation rate[3]. Isolated or regional markets of

[1] Identified in the APRA "Standards - Terms and Definitions" .
[2] See Credentials for additional information on our use of published sources of cost data.
[3] Derived from Marshall & Swift, historical costs and the Bureau of Labor Statistics.

greater construction (development) activity may experience slightly greater rates of inflation for both construction materials and labor.

- The past and current maintenance practices of Tanyard Springs and their effects on remaining useful lives
- Financial information provided by the Association pertaining to the cash status of the reserve fund and budgeted reserve contribution
- The anticipated effects of appreciation of the reserves over time in accord with a return or yield on investment of your cash equivalent assets. (We did not consider the costs, if any, of Federal and State Taxes on income derived from interest and/or dividend income).
- The Funding Plan excludes necessary operating budget expenditures. It is our understanding that future operating budgets will provide for the ongoing normal maintenance of Reserve Components.

Updates to this Reserve Study will continue to monitor historical facts and trends concerning the external market conditions.

6. CREDENTIALS

HISTORY AND DEPTH OF SERVICE

Founded in 1991, Reserve Advisors is the leading provider of reserve studies, insurance appraisals, developer turnover transition studies, expert witness services, and other engineering consulting services. Clients include community associations, resort properties, hotels, clubs, non-profit organizations, apartment building owners, religious and educational institutions, and office/commercial building owners in 48 states, Canada and throughout the world.

The **architectural engineering consulting firm** was formed to take a leadership role in helping fiduciaries, boards, and property managers manage their property like a business with a long-range master plan known as a Reserve Study.

Reserve Advisors employs the **largest staff of Reserve Specialists** with bachelor's degrees in engineering dedicated to Reserve Study services. Our founders are also founders of Community Associations Institute's (CAI) Reserve Committee that developed national standards for reserve study providers. One of our founders is a Past President of the Association of Professional Reserve Analysts (APRA). Our vast experience with a variety of building types and ages, on-site examination and historical analyses are keys to determining accurate remaining useful life estimates of building components.

No Conflict of Interest - As consulting specialists, our **independent opinion** eliminates any real or perceived conflict of interest because we do not conduct or manage capital projects.

TOTAL STAFF INVOLVEMENT

Several staff members participate in each assignment. The responsible advisor involves the staff through a Team Review, exclusive to Reserve Advisors, and by utilizing the experience of other staff members, each of whom has served hundreds of clients. We conduct Team Reviews, an internal quality assurance review of each assignment, including: the inspection; building component costing; lifing; and technical report phases of the assignment. Due to our extensive experience with building components, we do not have a need to utilize subcontractors.

OUR GOAL

To help our clients fulfill their fiduciary responsibilities to maintain property in good condition.

VAST EXPERIENCE WITH A VARIETY OF BUILDINGS

Reserve Advisors has conducted reserve studies for a multitude of different communities and building types. We've analyzed thousands of buildings, from as small as a 3,500-square foot day care center to a 2,600,000-square foot 98-story highrise. We also routinely inspect buildings with various types of mechanical systems such as simple electric heat, to complex systems with air handlers, chillers, boilers, elevators, and life safety and security systems.

We're familiar with all types of building exteriors as well. Our well-versed staff regularly identifies optimal repair and replacement solutions for such building exterior surfaces such as adobe, brick, stone, concrete, stucco, EIFS, wood products, stained glass and aluminum siding, and window wall systems.

OLD TO NEW

Reserve Advisors' experience includes ornate and vintage buildings as well as modern structures. Our specialists are no strangers to older buildings. We're accustomed to addressing the unique challenges posed by buildings that date to the 1800's. We recognize and consider the methods of construction employed into our analysis. We recommend appropriate replacement programs that apply cost effective technologies while maintaining a building's character and appeal.

MATTHEW D. CASEY, RS
Responsible Advisor

CURRENT CLIENT SERVICES

Matthew D. Casey, a Civil Engineer, is an Advisor for Reserve Advisors. Mr. Casey is responsible for the inspection and analysis of the condition of clients' property, and recommending engineering solutions to prolong the lives of the components. He also forecasts capital expenditures for the repair and/or replacement of the property components and prepares technical reports on assignments. He is responsible for conducting Life Cycle Cost Analysis and Capital Replacement Forecast services and the preparation of Reserve Study Reports for condominiums, townhomes and homeowner associations.

The following is a partial list of clients served by Matthew Casey demonstrating his breadth of experiential knowledge of community associations in construction and related buildings systems.

Cameron Station Community Association Cameron Station Community Association is a planned unit development in Alexandria, Virginia which maintains common elements shared by 1,769 homeowners. The development contains over five miles of private roads and an extensive network of masonry paver walkways.

Hudson Harbor I Condominium Located along the Hudson River in Tarrytown, New York, this community was built in 2009 and contains a three-story midrise building comprising 20 residential units and three commercial units as well as 36 townhome style units in five buildings. Residents of the midrise enjoy terraces and covered balconies. Each of the townhomes has a large rooftop terrace.

Old Farm Condominium, Inc. A condominium style development in Frederick, Maryland, this community includes 144 units in 12 three story buildings. This complex includes private balconies and shared stairwells at the entrances to the units.

Bay Crossing Homeowners Association An upscale homeowners association located in Lewes, Delaware comprised of 241 townhomes and single family homes. Residents enjoy amenities such as a bocce court, pool and clubhouse. The site contains asphalt pavement streets and parking areas as well as four ponds.

Palmer Landing This gated condominium community contains 78 units in seven buildings and is located on Long Island Sound in Stamford, Connecticut. The development features hardwood balconies and detached garages. The site is supported by extensive seawalls.

Ronald McDonald House Charities of Southern West Virginia Located on the Elk River in Charleston, West Virginia, this Ronald McDonald House was constructed in 2016 and contains 14 guest suites, an office area, a manager's apartment and common areas.

PRIOR RELEVANT EXPERIENCE

Before joining Reserve Advisors, Mr. Casey attended the University of Connecticut in Storrs, Connecticut where he attained his Bachelor of Science degree in Civil Engineering. His studies focused on transportation engineering and environmental engineering. Mr. Casey also worked as an intern for Fay, Spofford and Thorndike Engineers where he took part in design of small municipal infrastructure projects in Connecticut and Massachusetts.

EDUCATION

University of Connecticut - B.S. Civil Engineering

PROFESSIONAL AFFILIATIONS

Intern Engineer (I.E.) – New York State Education Department

ALAN M. EBERT, P.E., PRA, RS
Director of Quality Assurance

CURRENT CLIENT SERVICES

Alan M. Ebert, a Professional Engineer, is the Director of Quality Assurance for Reserve Advisors. Mr. Ebert is responsible for the management, review and quality assurance of reserve studies. In this role, he assumes the responsibility of stringent report review analysis to assure report accuracy and the best solution for Reserve Advisors' clients.

Mr. Ebert has been involved with thousands of Reserve Study assignments. The following is a partial list of clients served by Alan Ebert demonstrating his breadth of experiential knowledge of community associations in construction and related buildings systems.

Brownsville Winter Haven Located in Brownsville, Texas, this unique homeowners association contains 525 units. The Association maintains three pools and pool houses, a community and management office, landscape and maintenance equipment, and nine irrigation canals with associated infrastructure.

Rosemont Condominiums This unique condominium is located in Alexandria, Virginia and dates to the 1940's. The two mid-rise buildings utilize decorative stone and brick masonry. The development features common interior spaces, multi-level wood balconies and common asphalt parking areas.

Stillwater Homeowners Association Located in Naperville, Illinois, Stillwater Homeowners Association maintains four tennis courts, an Olympic sized pool and an upscale ballroom with commercial-grade kitchen. The community also maintains three storm water retention ponds and a detention basin.

Birchfield Community Services Association This extensive Association comprises seven separate parcels which include 505 townhome and single family homes. This Community Services Association is located in Mt. Laurel, New Jersey. Three lakes, a pool, a clubhouse and management office, wood carports, aluminum siding, and asphalt shingle roofs are a few of the elements maintained by the Association.

Oakridge Manor Condominium Association Located in Londonderry, New Hampshire, this Association includes 104 units at 13 buildings. In addition to extensive roads and parking areas, the Association maintains a large septic system and significant concrete retaining walls.

Memorial Lofts Homeowners Association This upscale high rise is located in Houston, Texas. The 20 luxury units include large balconies and decorative interior hallways. The 10-story building utilizes a painted stucco facade and TPO roof, while an on-grade garage serves residents and guests.

PRIOR RELEVANT EXPERIENCE

Mr. Ebert earned his Bachelor of Science degree in Geological Engineering from the University of Wisconsin-Madison. His relevant course work includes foundations, retaining walls, and slope stability. Before joining Reserve Advisors, Mr. Ebert was an oilfield engineer and tested and evaluated hundreds of oil and gas wells throughout North America.

EDUCATION

University of Wisconsin-Madison - B.S. Geological Engineering

PROFESSIONAL AFFILIATIONS/DESIGNATIONS

Professional Engineering License – Wisconsin, North Carolina, Illinois, Colorado
Reserve Specialist (RS) **-** Community Associations Institute
Professional Reserve Analyst (PRA) **-** Association of Professional Reserve Analysts

RESOURCES

Reserve Advisors utilizes numerous resources of national and local data to conduct its Professional Services. A concise list of several of these resources follows:

Association of Construction Inspectors, (ACI) the largest professional organization for those involved in construction inspection and construction project management. ACI is also the leading association providing standards, guidelines, regulations, education, training, and professional recognition in a field that has quickly become important procedure for both residential and commercial construction, found on the web at www.iami.org.

American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., (ASHRAE) the American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., devoted to the arts and sciences of heating, ventilation, air conditioning and refrigeration; recognized as the foremost, authoritative, timely and responsive source of technical and educational information, standards and guidelines, found on the web at www.ashrae.org. Reserve Advisors actively participates in its local chapter and holds individual memberships.

Community Associations Institute, (CAI) America's leading advocate for responsible communities noted as the only national organization dedicated to fostering vibrant, responsive, competent community associations. Their mission is to assist community associations in promoting harmony, community, and responsible leadership.

Marshall & Swift / Boeckh, (MS/B) the worldwide provider of building cost data, co-sourcing solutions, and estimating technology for the property and casualty insurance industry found on the web at www.marshallswift.com.

R.S. Means CostWorks, North America's leading supplier of construction cost information. As a member of the Construction Market Data Group, Means provides accurate and up-to-date cost information that helps owners, developers, architects, engineers, contractors and others to carefully and precisely project and control the cost of both new building construction and renovation projects found on the web at www.rsmeans.com.

Reserve Advisors' library of numerous periodicals relating to reserve studies, condition analyses, chapter community associations, and historical costs from thousands of capital repair and replacement projects, and product literature from manufacturers of building products and building systems.

7. DEFINITIONS

Definitions are derived from the standards set forth by the Community Associations Institute (CAI) representing America's 305,000 condominium and homeowners associations and cooperatives, and the Association of Professional Reserve Analysts, setting the standards of care for reserve study practitioners.

Cash Flow Method - A method of calculating Reserve Contributions where contributions to the reserve fund are designed to offset the variable annual expenditures from the reserve fund. Different Reserve Funding Plans are tested against the anticipated schedule of reserve expenses until the desired funding goal is achieved.

Component Method - A method of developing a Reserve Funding Plan with the total contribution is based on the sum of the contributions for individual components.

Current Cost of Replacement - That amount required today derived from the quantity of a *Reserve Component* and its unit cost to replace or repair a Reserve Component using the most current technology and construction materials, duplicating the productive utility of the existing property at current *local* market prices for *materials*, *labor* and manufactured equipment, contractors' overhead, profit and fees, but without provisions for building permits, overtime, bonuses for labor or premiums for material and equipment. We include removal and disposal costs where applicable.

Fully Funded Balance - The Reserve balance that is in direct proportion to the fraction of life "used up" of the current Repair or Replacement cost similar to Total Accrued Depreciation.

Funding Goal (Threshold) - The stated purpose of this Reserve Study is to determine the adequate, not excessive, minimal threshold reserve balances.

Future Cost of Replacement - *Reserve Expenditure* derived from the inflated current cost of replacement or current cost of replacement as defined above, with consideration given to the effects of inflation on local market rates for materials, labor and equipment.

Long-Lived Property Component - Property component of Tanyard Springs responsibility not likely to require capital repair or replacement during the next 30 years with an unpredictable remaining Useful Life beyond the next 30 years.

Percent Funded - The ratio, at a particular point of time (typically the beginning of the Fiscal Year), of the actual (or projected) Reserve Balance to the Fully Funded Balance, expressed as a percentage.

Remaining Useful Life - The estimated remaining functional or useful time in years of a *Reserve Component* based on its age, condition and maintenance.

Reserve Component - Property elements with: 1) Tanyard Springs responsibility; 2) limited Useful Life expectancies; 3) predictable Remaining Useful Life expectancies; and 4) a replacement cost above a minimum threshold.

Reserve Component Inventory - Line Items in ***Reserve Expenditures*** that identify a *Reserve Component*.

Reserve Contribution - An amount of money set aside or *Reserve Assessment* contributed to a *Reserve Fund* for future *Reserve Expenditures* to repair or replace *Reserve Components*.

Reserve Expenditure - Future Cost of Replacement of a Reserve Component.

Reserve Fund Status - The accumulated amount of reserves in dollars at a given point in time, i.e., at year end.

Reserve Funding Plan - The portion of the Reserve Study identifying the *Cash Flow Analysis* and containing the recommended Reserve Contributions and projected annual expenditures, interest earned and reserve balances.

Reserve Study - A budget planning tool that identifies the current status of the reserve fund and a stable and equitable Funding Plan to offset the anticipated future major common area expenditures.

Useful Life - The anticipated total time in years that a *Reserve Component* is expected to serve its intended function in its present application or installation.

8. PROFESSIONAL SERVICE CONDITIONS

Our Services - Reserve Advisors, LLC (RA) performs its services as an independent contractor in accordance with our professional practice standards and its compensation is not contingent upon our conclusions. The purpose of our reserve study is to provide a budget planning tool that identifies the current status of the reserve fund, and an opinion recommending an annual funding plan to create reserves for anticipated future replacement expenditures of the property.

Our inspection and analysis of the subject property is limited to visual observations, is noninvasive and is not meant to nor does it include investigation into statutory, regulatory or code compliance. RA inspects sloped roofs from the ground and inspects flat roofs where safe access (stairs or ladder permanently attached to the structure) is available. The report is based upon a "snapshot in time" at the moment of inspection. RA may note visible physical defects in our report. The inspection is made by employees generally familiar with real estate and building construction but in the absence of invasive testing RA cannot opine on, nor is RA responsible for, the structural integrity of the property including its conformity to specific governmental code requirements for fire, building, earthquake, and occupancy, or any physical defects that were not readily apparent during the inspection.

RA is not responsible for conditions that have changed between the time of inspection and the issuance of the report. RA does not investigate, nor assume any responsibility for any existence or impact of any hazardous materials, such as asbestos, urea-formaldehyde foam insulation, other chemicals, toxic wastes, environmental mold or other potentially hazardous materials or structural defects that are latent or hidden defects which may or may not be present on or within the property. RA does not make any soil analysis or geological study as part of its services; nor does RA investigate water, oil, gas, coal, or other subsurface mineral and use rights or such hidden conditions. RA assumes no responsibility for any such conditions. The Report contains opinions of estimated costs and remaining useful lives which are neither a guarantee of the actual costs of replacement nor a guarantee of remaining useful lives of any property element.

RA assumes, without independent verification, the accuracy of all data provided to it. You agree to indemnify and hold RA harmless against and from any and all losses, claims, actions, damages, expenses or liabilities, including reasonable attorneys' fees, to which we may become subject in connection with this engagement, because of any false, misleading or incomplete information which we have relied upon supplied by you or others under your direction, or which may result from any improper use or reliance on the Report by you or third parties under your control or direction. Your obligation for indemnification and reimbursement shall extend to any director, officer, employee, affiliate, or agent of RA. Liability of RA and its employees, affiliates, and agents for errors and omissions, if any, in this work is limited to the amount of its compensation for the work performed in this engagement.

Report - RA completes the services in accordance with the Proposal. The Report represents a valid opinion of RA's findings and recommendations and is deemed complete. RA, however, considers any additional information made available to us within 6 months of issuing the Report if a timely request for a revised Report is made. RA retains the right to withhold a revised Report if payment for services was not tendered in a timely manner. All information received by RA and all files, work papers or documents developed by RA during the course of the engagement shall remain the property of RA and may be used for whatever purpose it sees fit.

Your Obligations - You agree to provide us access to the subject property for an on-site visual inspection You agree to provide RA all available, historical and budgetary information, the governing documents, and other information that we request and deem necessary to complete the Report. You agree to pay actual attorneys' fees and any other costs incurred to collect on any unpaid balance for RA's services.

Use of Our Report and Your Name - Use of this Report is limited to only the purpose stated herein. You hereby acknowledge that any use or reliance by you on the Report for any unauthorized purpose is at your own risk and you shall hold RA harmless from any consequences of such use. Use by any unauthorized third party is unlawful. The Report in whole or in part ***is not and cannot be used*** *as a design specification for design engineering purposes or as an appraisal.* You may show our Report in its entirety to the following third parties: members of your organization, your accountant, attorney, financial institution and property manager who need to review the information contained herein. Without the written consent of RA, you shall not disclose the Report to any other third party. The Report contains intellectual property developed by RA and ***shall not be reproduced or distributed to any party that conducts reserve studies without the written consent of RA.***

RA will include your name in our client lists. RA reserves the right to use property information to obtain estimates of replacement costs, useful life of property elements or otherwise as RA, in its sole discretion, deems appropriate.

Payment Terms, Due Dates and Interest Charges - Retainer payment is due upon authorization and prior to inspection. The balance is due net 30 days from the report shipment date. Any balance remaining 30 days after delivery of the Report shall accrue an interest charge of 1.5% per month. Any litigation necessary to collect an unpaid balance shall be venued in Milwaukee County Circuit Court for the State of Wisconsin.