# RESERVE STUDY South Riding Proprietary



South Riding, Virginia August 11, 2020



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Reserve Advisors, LLC 735 N. Water Street, Suite 175 Milwaukee, WI 53202

South Riding Proprietary South Riding, Virginia

Dear Board of Directors of South Riding Proprietary:

At the direction of the Board that recognizes the need for proper reserve planning, we have conducted a *Reserve Study* of South Riding Proprietary in South Riding, Virginia and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, August 11, 2020.

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 threeyears. We look forward to continuing to help South Riding Proprietary 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.

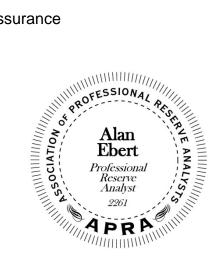
Respectfully submitted on October 1, 2020 by

Reserve Advisors, LLC

APRA

Association of Professional Reserve Analysts

Visual Inspection and Report by: Stephen E. Breski, RS<sup>1</sup> Review by: Alan M. Ebert, RS, PRA<sup>2</sup>, Director of Quality Assurance



<sup>1</sup> 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.

<sup>2</sup> 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.





Long-term thinking. Everyday commitment.



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# **1.RESERVE STUDY EXECUTIVE SUMMARY**

**Client:** South Riding Proprietary (SRP) **Location:** South Riding, Virginia **Reference:** 030190

**Property Basics:** South Riding Proprietary is a planned unit development which is responsible for the common elements shared by 6,564 units. The community was built from 1995 to 2013.

## **Reserve Components Identified:**

- 90 Common Reserve Components
- 98 Recreation Reserve Components
- 21 Townhome Reserve Components
- 13 Single Family Home Reserve Components

Inspection Date: August 11, 2020. We conducted the original inspection on June 12, 2014.

**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.

- Our recommended Common Funding Plan recognizes these threshold funding years in 2047 due to replacement of a portion of the playgrounds and concrete sidewalks and in 2050 due to replacement of a portion of the walking paths and concrete sidewalks.
- Our recommended Recreation Funding Plan recognizes this threshold funding year in 2047 due to replacement of the pool finishes at the Meadows Pool and renovations to the exterior and interior of the South Riding Center community building.
- Our recommended Townhome Funding Plan recognizes this threshold funding year in 2047 due to subsequent repaving of the asphalt pavement streets at the townhomes.
- Our recommended Single Family Home Funding Plan recognizes this threshold funding year in 2050 due subsequent repaying of the asphalt pavement streets at the single family homes.

**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
- 0.9% anticipated annual rate of return on invested reserves
- 2.0% 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.



# Cash Status of Common Reserve Fund:

- \$2,698,024 as of June 30, 2020
- 2020 budgeted reserve contributions of \$402,000

## Cash Status of Recreation Reserve Fund:

- \$1,636,088 as of June 30, 2020
- 2020 budgeted reserve contributions of \$269,000

## Cash Status of Townhome Reserve Fund:

- \$3,772,639 as of June 30, 2020
- 2020 budgeted reserve contributions of \$494,000

# Cash Status of Single Family Home Reserve Fund:

- \$1,399,291 as of June 30, 2020
- 2020 budgeted reserve contributions of \$210,000

**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:

- Replacement of a portion of the asphalt pavement walking paths (Common)
- Replacement of a portion of the concrete sidewalks (Common)
- Replacement of a portion of the playground equipment (Common)
- Replacement of a portion of the maintenance equipment (Common)
- Repaving of a portion of the asphalt pavement at the SRP streets (Townhome)
- Repaving of a portion of the asphalt pavement at the Townhome streets (Townhome)
- Replacement of a portion of the concrete curbs, gutters and sidewalks (Townhome)
- Repaving of a portion of the asphalt pavement at the single family homes (Single Family Homes)
- Replacement of a portion of the concrete curbs, gutters and sidewalks (Single Family Homes)

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

- Increase to \$420,000 in 2021
- Inflationary increases through 2050, the limit of this study's Cash Flow Analysis

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

- Reduced reserve budget of \$224,000 in 2021
- Inflationary increases through 2050, the limit of this study's Cash Flow Analysis

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

- Reduced reserve budget of \$437,000 in 2021
- Inflationary increases through 2050, the limit of this study's Cash Flow Analysis

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

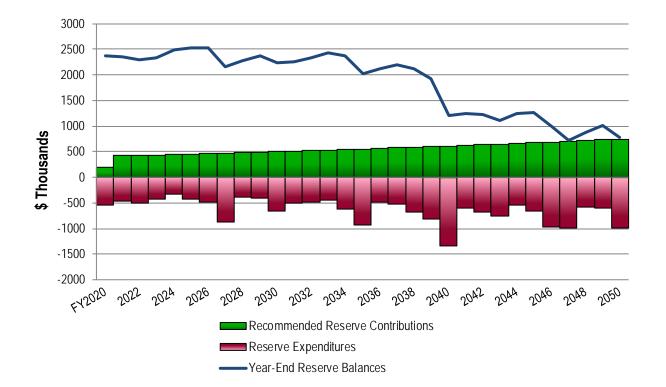
- Reduced reserve budget of \$137,000 in 2021
- Inflationary increases through 2050, the limit of this study's Cash Flow Analysis

### Page 1.2 - Executive Summary



SRP
Recommended Common Reserve Funding Table and Graph

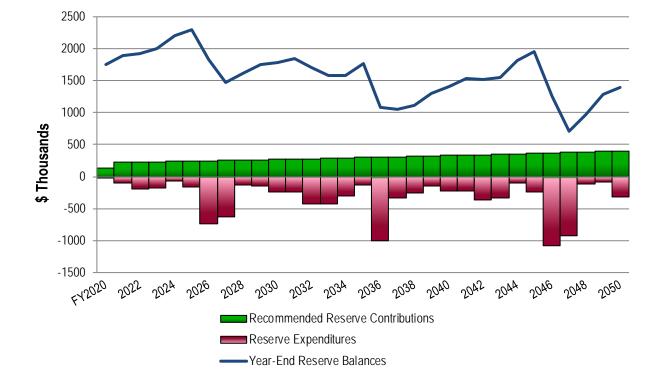
	Reserve	Reserve		Reserve	Reserve		Reserve	Reserve
Year	Contributions (\$)	Balances (\$)	Year	Contributions (\$)	Balances (\$)	Year	Contributions (\$)	Balances (\$)
2021	420,000	2,357,703	2031	512,000	2,266,636	2041	624,100	1,251,728
2022	428,400	2,295,195	2032	522,200	2,329,141	2042	636,600	1,217,716
2023	437,000	2,335,544	2033	532,600	2,438,966	2043	649,300	1,114,208
2024	445,700	2,480,673	2034	543,300	2,377,112	2044	662,300	1,252,683
2025	454,600	2,523,117	2035	554,200	2,023,763	2045	675,500	1,270,959
2026	463,700	2,527,927	2036	565,300	2,126,852	2046	689,000	998,091
2027	473,000	2,157,793	2037	576,600	2,193,967	2047	702,800	726,350
2028	482,500	2,276,909	2038	588,100	2,118,715	2048	716,900	877,464
2029	492,200	2,382,300	2039	599,900	1,925,109	2049	731,200	1,012,965
2030	502,000	2,240,114	2040	611,900	1,216,125	2050	745,800	784,065





	Reserve	Reserve		Reserve	Reserve Reserve		Reserve	Reserve
Year	Contributions (\$)	Balances (\$)	Year	Contributions (\$)	Balances (\$)	Year	Contributions (\$)	Balances (\$)
2021	224,000	1,883,044	2031	273,500	1,837,828	2041	333,400	1,531,549
2022	228,500	1,927,287	2032	279,000	1,699,710	2042	340,100	1,515,857
2023	233,100	2,003,284	2033	284,600	1,577,287	2043	346,900	1,549,400
2024	237,800	2,195,586	2034	290,300	1,581,840	2044	353,800	1,818,565
2025	242,600	2,299,889	2035	296,100	1,764,401	2045	360,900	1,954,049
2026	247,500	1,821,454	2036	302,000	1,074,266	2046	368,100	1,249,288
2027	252,500	1,465,241	2037	308,000	1,051,909	2047	375,500	702,423
2028	257,600	1,611,421	2038	314,200	1,116,224	2048	383,000	971,799
2029	262,800	1,744,866	2039	320,500	1,294,252	2049	390,700	1,288,272
2030	268,100	1,782,472	2040	326,900	1,407,453	2050	398,500	1,386,641

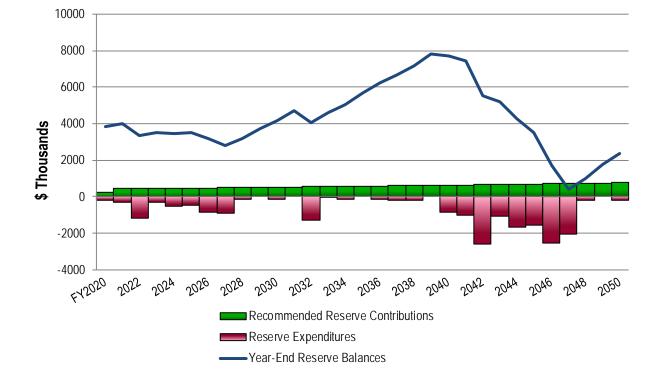
# Recommended Recreation Reserve Funding Table and Graph





	Reserve	Reserve		Reserve	Reserve		Reserve	Reserve
Year	Contributions (\$)	Balances (\$)	Year	Contributions (\$)	Balances (\$)	Year	Contributions (\$)	Balances (\$)
2021	437,000	4,008,992	2031	532,600	4,726,238	2041	649,300	7,417,467
2022	445,700	3,334,782	2032	543,300	4,034,920	2042	662,300	5,523,396
2023	454,600	3,496,020	2033	554,200	4,601,940	2043	675,500	5,183,400
2024	463,700	3,458,361	2034	565,300	5,061,091	2044	689,000	4,276,718
2025	473,000	3,513,370	2035	576,600	5,685,836	2045	702,800	3,483,049
2026	482,500	3,159,465	2036	588,100	6,210,426	2046	716,900	1,696,966
2027	492,200	2,785,699	2037	599,900	6,649,112	2047	731,200	411,888
2028	502,000	3,191,351	2038	611,900	7,132,430	2048	745,800	980,973
2029	512,000	3,734,377	2039	624,100	7,823,530	2049	760,700	1,753,925
2030	522,200	4,153,857	2040	636,600	7,692,330	2050	775,900	2,343,034

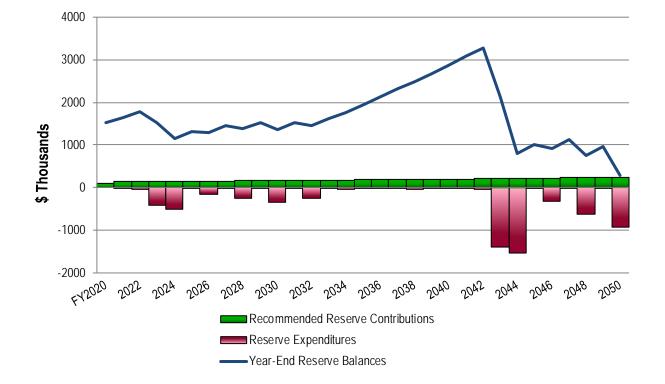
# Recommended Townhome Reserve Funding Table and Graph





	Reserve	Reserve		Reserve	Reserve Reserve		Reserve	Reserve
Year	Contributions (\$)	Balances (\$)	Year	Contributions (\$)	Balances (\$)	Year	Contributions (\$)	Balances (\$)
2021	137,000	1,646,689	2031	167,000	1,520,805	2041	203,500	3,082,916
2022	139,700	1,769,346	2032	170,300	1,442,469	2042	207,600	3,270,915
2023	142,500	1,510,940	2033	173,700	1,610,468	2043	211,800	2,120,806
2024	145,400	1,159,376	2034	177,200	1,761,752	2044	216,000	809,825
2025	148,300	1,302,164	2035	180,700	1,938,869	2045	220,300	1,013,718
2026	151,300	1,299,240	2036	184,300	2,120,792	2046	224,700	919,035
2027	154,300	1,448,643	2037	188,000	2,307,655	2047	229,200	1,131,854
2028	157,400	1,371,810	2038	191,800	2,476,483	2048	233,800	743,246
2029	160,500	1,527,396	2039	195,600	2,673,330	2049	238,500	962,787
2030	163,700	1,359,528	2040	199,500	2,875,429	2050	243,300	294,391

# Recommended Single Family Home Reserve Funding Table and Graph





# 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

# South Riding Proprietary

# South Riding, Virginia

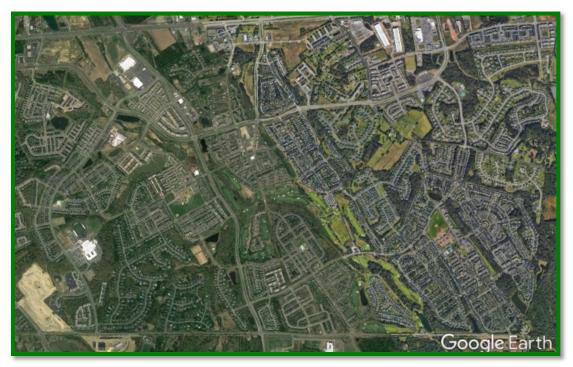
and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, August 11, 2020. We conducted the original inspection on June 12, 2014.

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 Unit Owners 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 and the Board. These classes of property include:

- Reserve Components
- Long-Lived Property Elements
- Operating Budget Funded Repairs and Replacements
- Property Maintained by Unit Owners
- 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:

- SRP 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 30year Reserve Expenditures at this time.

- Electrical Systems, Common
- Flag Poles
- Foundations, Common Buildings
- Inlet/Outlet Structures, Concrete, Storm Water Management System
- Pipes, Interior Building, Water and Sewer, Common Buildings
- Pipes, Subsurface Utilities
- Pool Structures
- Structural Frames, Common Buildings

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.)
- Asphalt Pavement, Repairs, Seal Coat and Striping, Parking Lots
- Catch Basins, Landscape
- Doors, Maintenance Building (Excluding Overhead Doors)
- Fences, Metal, Paint Finishes, Town Hall
- Fences, Wood, Paint Finishes and Partial Replacements
- Irrigation System, Maintenance
- Landscape
- Light Fixtures, South Riding Center Community Building
- Maintenance Building, Interior, Renovations
- Maintenance Equipment, Less Than \$1,000 Evaluation
- Mulch Replenishment, Playgrounds
- Nets and Standards, Tennis Courts
- Outdoor Grills
- Paint Finishes, Interiors, Common Buildings
- Paint Finishes, Touch Up
- Projection System, South Riding Center Community Building
- Standards, Basketball Court



Volleyball Courts



Volleyball court overview

- Water Feature, Interim Refinishing, Hyland Hills
- Water Heaters (Those Not Included in Study)
- Windows and Doors, Hyland Hills Pool House
- Other Repairs normally funded through the Operating Budget

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

• Homes and Lots

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

- Commercial Properties and Lots (Private Entities)
- Copiers (Leased)



• Light Poles and Fixtures, Excluding Those Included (Dominion)



# Dominion light pole and fixture overview

- Mailbox Stations (United States Postal Service)
- Ponds, Excluding Those Included (Municipality)
- Street Systems, Excluding Those Included (Virginia Department of Transportation)



# **3.RESERVE EXPENDITURES and FUNDING PLANS**

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
- 2020 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 Plans**

- 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 Outlooks**

- 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**.

# South Riding Proprietary South Riding, Virgini

### Explanatory Notes:

1) 2.0% is the estimated Inflation Rate for estimating Future Replacement Costs. 2) FY2020 is Fiscal Year beginning January 1, 2020 and ending December 31, 2020.

			South Riding, Virginia								,						J	
Line	Total	Per Phase		Estimated 1st Year o		ife Analysis, _ 'ears	Unit	Costs, \$ Per Phase	Total	Percentage of Future	RUL = 0	1	2	3	4	5	6	7
Item	Quantity		Reserve Component Inventory		Useful		(2020)	(2020)	(2020)	Expenditures		2021	2022	2023	2024	2025	2026	2027
			Property Site Elements															
1.101	19,800	9,900 Square Yard	s Asphalt Pavement, Walking Paths, Crack Repair and Patch, Phased	2021	3 to 5	1 to 3	0.70	6,930	13,860	0.7%		7,069		7,354		7,651		7,960
1.104	19,800	3,960 Square Yard	s Asphalt Pavement, Walking Paths, Total Replacement, Phased	2022	15 to 20	2 to 18	25.50	100,980	504,900	5.7%			105,060				113,720	
1.107	1	1 Each	Bandstand, Town Hall, Renovation	2038	15 to 25	18	12,000.00	12,000	12,000	0.1%								
1.110	1	1 Each	Bandstand, South Riding Center Park, Renovation	2032	15 to 25	12	18,500.00	18,500	18,500	0.1%								
1.113	1	1 Each	Bocce Ball Court, Renovation	2021	10 to 15	1	5,000.00	5,000	5,000	0.1%		5,100						
1.114	1	1 Each	Bridge, Wood, Fitness Course	2022	15 to 25	2	6,000.00	6,000	6,000	0.1%			6,242					
1.116	1,500,000	19,400 Square Feet	Concrete Sidewalks, Partial	2020	to 65	0 to 30+	10.00	194,000	15,000,000	41.8%	194,000	197,880	201,838	205,874	209,992	214,192	218,476	222,845
1.119	400	400 Linear Feet	Fence, Aluminum, Hyland Hills Park (2020 is Planned)	2020	to 25	0	44.00	17,600	17,600	0.2%	17,600							
1.120	940	940 Linear Feet	Fence, Chain Link, Elk Lick Dog Park	2037	to 25	17	15.00	14,100	14,100	0.1%								
1.122	3,000	1,000 Linear Feet	Fences, Vinyl, Phased	2025	15 to 20	5 to 9	20.00	20,000	60,000	0.9%						22,082		22,974
1.125	1	1 Each	Fishing Pier, Pond 6	2034	20 to 30	14	36,500.00	36,500	36,500	0.2%								
1.128	1	1 Each	Fishing Pier, Priesters Pond	2039	to 20	19	26,500.00	26,500	26,500	0.2%								
1.131	1	1 Each	Fitness Equipment	2028	15 to 20	8	19,000.00	19,000	19,000	0.3%								
1.134	17	17 Each	Irrigation System, Controls	2021	to 15	1	1,800.00	30,600	30,600	0.4%		31,212						
1.137	2	2 Each	Irrigation System, Pumps	2025	to 20	5	15,000.00	30,000	30,000	0.4%						33,122		
1.140	1	1 Allowance	Landscape, Street Trees and Enhancements	2021	ongoing	1	86,000.00	86,000	86,000	18.1%		87,720	89,474	91,264	93,089	94,951	96,850	98,787
1.143	4	4 Each	Light Poles and Fixtures, South Riding Center Park	2037	to 25	17	2,300.00	9,200	9,200	0.1%								
1.146	3,100	3,100 Square Feet	Pavers, Masonry, Resetting and Partial Replacements	2022	to 5	2	2.50	7,750	7,750	0.3%			8,063					8,902
1.149	1	1 Each	Pavilion, Murrey Park, Renovation	2040	to 30	20	30,500.00	30,500	30,500	0.2%								
1.152	1	1 Each	Pergola, Wood, Owen Park	2022	15 to 25	2	5,100.00	5,100	5,100	0.1%			5,306					
1.155	1	1 Allowance	Playground Equipment, America Square Park	2027	15 to 20	7	69,000.00	69,000	69,000	1.0%								79,259
1.156	1	1 Allowance	Playground Equipment, Bryson Park	2040	15 to 20		131,000.00	131,000	131,000									
1.157	1	1 Allowance	Playground Equipment, Burkedale Park	2040	15 to 20		22,000.00	22,000	22,000									
1.158	1	1 Allowance	Playground Equipment, Dunvegan Park (2020 is Planned)	2020	15 to 20		134,000.00	134,000	134,000		134,000							
1.159	1	1 Allowance	Playground Equipment, Edgewater Park	2040	15 to 20	20	39,000.00	39,000	39,000	0.3%								
1.160	1	1 Allowance	Playground Equipment, Freedom Park	2021	15 to 20		67,000.00	67,000	67,000	0.9%		68,340						
1.161	1	1 Allowance	Playground Equipment, Hyland Hills Park (2020 is Planned)	2020	15 to 20		158,000.00	158,000	158,000		158,000							
1.162	1	1 Allowance		2039	15 to 20		162,000.00	162,000	162,000									100.000
1.163	1	1 Allowance	Playground Equipment, South Riding Center Park	2027	15 to 20		93,000.00	93,000	93,000									106,828
1.164	1	1 Allowance	Playground Equipment, West Riding Park	2030	15 to 20		65,000.00	65,000	65,000		04.000							
1.167	1	1 Each	Ponds, Fountain (2020 is Budgeted)	2020	10 to 15		34,000.00	34,000	34,000		34,000					00.005		
1.170	4,370		Ponds, Erosion Control, Partial	2025	to 15	5	28.00	24,360	122,360							26,895		
1.173	28,960		s Ponds, Sediment Removal, Partial	2035	to 30	15	21.00	121,590	608,160									
1.176	1	1 Each	Shade Structure, South Riding Center Park	2043	to 30	23	14,000.00	14,000	14,000					26 106				
1.179 1.182	3 10		Signage, Entrance Monuments, Renovation, Phased Signage, Traffic Management, Street Identification and Community, Phased	2023 2021	15 to 20 15 to 20		24,600.00 26,800.00	24,600 26,800	73,800 268,000			27,336		26,106 28,440		29,589		30,785
1.185	460		s Sport Courts, Basketball Court, Elk Lick Park, Color Coat			6		4,140	4,140			27,550		20,440		29,309	4,662	50,705
1.188	460		s Sport Courts, Basketball Court, Elk Lick Park, Color Coat	2026 2021	4 to 6 to 25	1	9.00 42.00	4,140	19,320			19,706					-,00Z	
1.100	1,600		s Sport Courts, Tennis Courts, Murrey Park, Color Coat	2021	4 to 6	2	42.00 9.00	19,320	19,320			13,700	14,982					16,541
1.191	480	· ·	Sport Courts, Tennis Courts, Murrey Park, Color Coat	2022	4 to 0	15	45.00	21,600	21,600				14,002					10,041
1.194	400		Sport Courts, Tennis Courts, Murrey Park, Tence	2035	to 25	15	3,200.00	28,800	28,800									
1.200	1,600		s Sport Courts, Tennis Courts, Murrey Park, Eight Poles and Pixtures	2035	to 25	15	42.00	67,200	67,200									
1.200	1,000	1,000 Square ratus	o oport oourto, rennio oourto, muney Faik, ounate Neplacement	2000	10 20	10	42.00	07,200	01,200	0.3%								

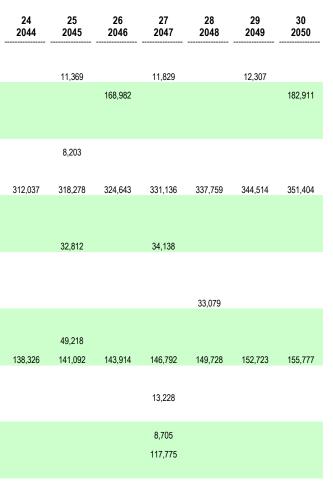
10 14 8 9 12 13 15 11 2028 2029 2030 2031 2032 2033 2034 2035 8,617 8,965 9,327 8,282 123,094 133,241 23,462 6,468 227,302 231,848 236,485 241,215 246,039 250,960 255,979 261,098 23,902 48,161 22,262 100,763 102,778 104,834 106,930 109,069 111,250 113,475 115,745 9,829 79,235 43,120 32,785 163,644 28,823 31,823 33,322 34,669 36,069 32,028 5,148 18,263 29,071 38,761

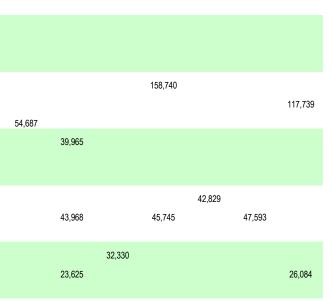
# South Riding

### Proprietary South Riding, Virginia

			South Riding, Virginia		Li	fe Analysis,		Costs, \$		Percentage								
Line		Per Phase		1st Year of	f <u>Y</u>	ears	Unit	Per Phase	Total	of Future	16	17	18	19	20	21	22	23
Item	Quantity	Quantity Units	Reserve Component Inventory	Event	Useful	Remaining	(2020)	(2020)	(2020)	Expenditures	2036	2037	2038	2039	2040	2041	2042	2043
			Property Site Elements															
1.101	19,800	9,900 Square Yards	s Asphalt Pavement, Walking Paths, Crack Repair and Patch, Phased	2021	3 to 5	1 to 3	0.70	6,930	13,860	0.7%		9,704		10,096		10,504		10,928
1.104	19,800	3,960 Square Yards	s Asphalt Pavement, Walking Paths, Total Replacement, Phased	2022	15 to 20	2 to 18	25.50	100,980	504,900	) 5.7%			144,224				156,113	
1.107	1	1 Each	Bandstand, Town Hall, Renovation	2038	15 to 25	18	12,000.00	12,000	12,000	0.1%			17,139					
1.110	1	1 Each	Bandstand, South Riding Center Park, Renovation	2032	15 to 25	12	18,500.00	18,500	18,500	0.1%								
1.113	1	1 Each	Bocce Ball Court, Renovation	2021	10 to 15	1	5,000.00	5,000	5,000	0.1%								
1.114	1	1 Each	Bridge, Wood, Fitness Course	2022	15 to 25	2	6,000.00	6,000	6,000	0.1%							9,276	
1.116	1,500,000	19,400 Square Feet	Concrete Sidewalks, Partial	2020	to 65	0 to 30+	10.00	194,000	15,000,000	) 41.8%	266,320	271,647	277,080	282,621	288,274	294,039	299,920	305,918
1.119	400	400 Linear Feet	Fence, Aluminum, Hyland Hills Park (2020 is Planned)	2020	to 25	0	44.00	17,600	17,600	0.2%					26,153			
1.120	940	940 Linear Feet	Fence, Chain Link, Elk Lick Dog Park	2037	to 25	17	15.00	14,100	14,100	0.1%		19,743						
1.122	3,000	1,000 Linear Feet	Fences, Vinyl, Phased	2025	15 to 20	5 to 9	20.00	20,000	60,000	0.9%								31,538
1.125	1	1 Each	Fishing Pier, Pond 6	2034	20 to 30	14	36,500.00	36,500	36,500	0.2%								
1.128	1	1 Each	Fishing Pier, Priesters Pond	2039	to 20	19	26,500.00	26,500	26,500	0.2%				38,605				
1.131	1	1 Each	Fitness Equipment	2028	15 to 20	8	19,000.00	19,000	19,000	) 0.3%								
1.134	17	17 Each	Irrigation System, Controls	2021	to 15	1	1,800.00	30,600	30,600	0.4%	42,007							
1.137	2	2 Each	Irrigation System, Pumps	2025	to 20	5	15,000.00	30,000	30,000	0.4%								
1.140	1	1 Allowance	Landscape, Street Trees and Enhancements	2021	ongoing	1	86,000.00	86,000	86,000	) 18.1%	118,060	120,421	122,829	125,286	127,791	130,347	132,954	135,613
1.143	4	4 Each	Light Poles and Fixtures, South Riding Center Park	2037	to 25	17	2,300.00	9,200	9,200	0.1%		12,882						
1.146	3,100	3,100 Square Feet	Pavers, Masonry, Resetting and Partial Replacements	2022	to 5	2	2.50	7,750	7,750	0.3%		10,852					11,981	
1.149	1	1 Each	Pavilion, Murrey Park, Renovation	2040	to 30	20	30,500.00	30,500	30,500	) <b>0.2%</b>					45,321			
1.152	1	1 Each	Pergola, Wood, Owen Park	2022	15 to 25	2	5,100.00	5,100	5,100	0.1%								
1.155	1	1 Allowance	Playground Equipment, America Square Park	2027	15 to 20	7	69,000.00	69,000	69,000	) 1.0%								
1.156	1	1 Allowance	Playground Equipment, Bryson Park	2040	15 to 20	20	131,000.00	131,000	131,000	) 1.0%					194,659			
1.157	1	1 Allowance	Playground Equipment, Burkedale Park	2040	15 to 20	20	22,000.00	22,000	22,000	0.2%					32,691			
1.158	1	1 Allowance	Playground Equipment, Dunvegan Park (2020 is Planned)	2020	15 to 20	0	134,000.00	134,000	134,000	) 1.7%					199,117			
1.159	1	1 Allowance	Playground Equipment, Edgewater Park	2040	15 to 20	20	39,000.00	39,000	39,000	0.3%					57,952			
1.160	1	1 Allowance	Playground Equipment, Freedom Park	2021	15 to 20	1	67,000.00	67,000	67,000	0.9%						101,550		
1.161	1	1 Allowance	Playground Equipment, Hyland Hills Park (2020 is Planned)	2020	15 to 20	0	158,000.00	158,000	158,000	2.0%					234,780			
1.162	1	1 Allowance	Playground Equipment, Owen Park	2039	15 to 20	19	162,000.00	162,000	162,000	) 1.2%				236,003				
1.163	1	1 Allowance	Playground Equipment, South Riding Center Park	2027	15 to 20	7	93,000.00	93,000	93,000	) 1.4%								
1.164	1	1 Allowance	Playground Equipment, West Riding Park	2030	15 to 20	10	65,000.00	65,000	65,000	) 1.0%								
1.167	1	1 Each	Ponds, Fountain (2020 is Budgeted)	2020	10 to 15	0	34,000.00	34,000	34,000	) 0.7%								
1.170	4,370	870 Linear Feet	Ponds, Erosion Control, Partial	2025	to 15	5	28.00	24,360	122,360	0.5%								
1.173	28,960	5,790 Square Yards	Ponds, Sediment Removal, Partial	2035	to 30	15	21.00	121,590	608,160	0.8%								
1.176	1	1 Each	Shade Structure, South Riding Center Park	2043	to 30	23	14,000.00	14,000	14,000	0.1%								22,077
1.179	3	1 Allowance	Signage, Entrance Monuments, Renovation, Phased	2023	15 to 20	3 to 13	24,600.00	24,600	73,800	) 1.0%			35,135					38,792
1.182	10	1 Allowance	Signage, Traffic Management, Street Identification and Community, Phased	2021	15 to 20	1 to 19	26,800.00	26,800	268,000	2.8%		37,526		39,043		40,620		42,261
1.185	460	460 Square Yards	s Sport Courts, Basketball Court, Elk Lick Park, Color Coat	2026	4 to 6	6	9.00	4,140	4,140	0.1%	5,683					6,275		
1.188	460	460 Square Yards	Sport Courts, Basketball Court, Elk Lick Park, Surface Replacement	2021	to 25	1	42.00	19,320	19,320	0.3%								
1.191	1,600	1,600 Square Yards	s Sport Courts, Tennis Courts, Murrey Park, Color Coat	2022	4 to 6	2	9.00	14,400	14,400	0.6%					21,398			
1.194	480	480 Linear Feet	Sport Courts, Tennis Courts, Murrey Park, Fence	2035	to 25	15	45.00	21,600	21,600	) <b>0.1%</b>								
1.197	9	9 Each	Sport Courts, Tennis Courts, Murrey Park, Light Poles and Fixtures	2035	to 25	15	3,200.00	28,800	28,800	0.2%								
1.200	1,600	1,600 Square Yards	s Sport Courts, Tennis Courts, Murrey Park, Surface Replacement	2035	to 25	15	42.00	67,200	67,200	0.5%								

Years 2036 to 2050





### South Riding Proprietary

### Explanatory Notes:

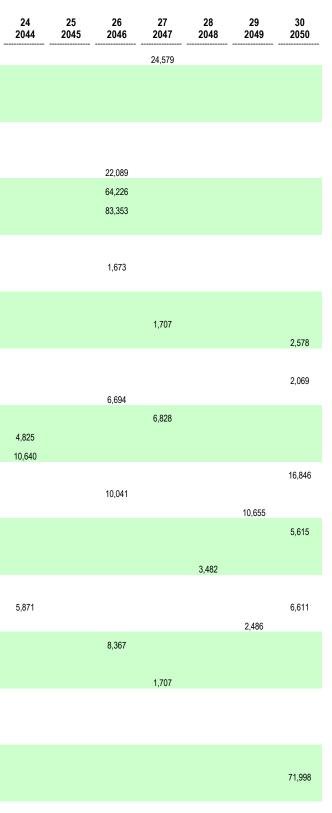
1) 2.0% is the estimated Inflation Rate for estimating Future Replacement Costs. 2) FY2020 is Fiscal Year beginning January 1, 2020 and ending December 31, 2020.

				South Riding, Virginia								,		FISCAI Yea		5	,	J		,							
ine	Tatel P	er Phase		oossi taangi tagana	Estimated 1st Year of		e Analysis, ears	Unit	Costs, \$ Per Phase	Total	Percentage of Future	RUL = 0	4	2	3	A	5	6	7	8	9	10	44	12	13	14	15
		Quantity	Units	Reserve Component Inventory	Event		Remaining	(2020)	(2020)		Expenditures		2021	2022	2023	4 2024	2025	2026	2027	° 2028	2029	2030	11 2031	2032	2033	2034	2035
.203	1,600	<b>1,600</b> So	quare Yards	Sport Courts, Tennis Courts, Town Hall, Color Coat	2022	4 to 6	2	9.00	14,400	14,400	0.5%			14,982										18,263			
.206	480	<b>480</b> Li	near Feet	Sport Courts, Tennis Courts, Town Hall, Fence	2027	to 25	7	45.00	21,600	21,600	0.1%								24,812								
.209	7	7 Ea	ach	Sport Courts, Tennis Courts, Town Hall, Light Poles and Fixtures	2027	to 25	7	3,700.00	25,900	25,900	0.2%								29,751								
.212	1,600	1,600 So	quare Yards	Sport Courts, Tennis Courts, Town Hall, Surface Replacement	2027	to 25	7	42.00	67,200	67,200	0.4%								77,192								
				Maintenance Building Elements																							
.301	3	<b>3</b> Ea		Garage Doors, Overhead	2031	10 to 15	11	4,400.00	13,200	13,200	0.2%												16,413				
.304	38		·	Roof Assembly, Metal	2046	to 30	26	1,010.00	38,380	38,380	0.3%																
.307	5,860	5,860 So	quare Feet	Walls, Siding, Metal	2046	to 30	26	8.50	49,810	49,810	0.4%																
				Maintenance Equipment																							
.501	1	1 Ea	ach	Attachments, 3-Point Hitch Auger, Woods , 1996	2021	to 25	1	1,000.00	1,000	1,000	0.0%		1,020														
.503	1	1 Ea		Attachments, Backhoe, Kubota , 2010	2021	to 10	1	5,000.00	5,000	5,000			5,100										6,217				
.505	1	1 Ea		Attachments, Bucket, Kubota , 2010	2021	to 10	1	4,700.00	4,700	4,700			4,794										5,844				
.507	1	<b>1</b> Ea		Attachments, Bucket, Kubota , 2017	2027	to 10	7	1,000.00	1,000	1,000			,						1,149				,				
.509	1	1 Ea	ach	Attachments, Bucket, Kubota, 2020	2030	to 10	10	1,423.00	1,423	1,423	0.0%											1,735					
.511	1	<b>1</b> Ea	ach	Attachments, Fork Lift, Woods , 2010	2021	to 10	1	1,000.00	1,000	1,000	0.0%		1,020										1,243				
.513	1	<b>1</b> Ea	ach	Attachments, Forks, Land Pride, 2020	2030	to 10	10	1,142.00	1,142	1,142	0.0%											1,392					
515	1	1 Ea	ach	Attachments, Salt Spreader, Fisher, 2016	2026	to 10	6	4,000.00	4,000	4,000	0.1%							4,505									
517	1	<b>1</b> Ea	ach	Attachments, Salt Spreader, Fisher, 2017	2027	to 10	7	4,000.00	4,000	4,000	0.1%								4,595								
.519	1	<b>1</b> Ea	ach	Attachments, Salt Spreader, Kubota	2024	to 10	4	3,000.00	3,000	3,000	0.1%					3,247										3,958	
521	1	<b>1</b> Ea	ach	Attachments, Snow Blower, Kubota	2024	to 10	4	6,615.00	6,615	6,615	0.1%					7,160										8,728	
.523	3	<b>3</b> Ea	ach	Attachments, Snow Plow, Straight Blade, Boss , 2020	2030	to 10	10	3,100.00	9,300	9,300	0.2%											11,337					
525	1	<b>1</b> Ea	ach	Attachments, Snow Plow, V Blade, Boss, 2016	2026	to 10	6	6,000.00	6,000	6,000	0.1%							6,757									
527	1	1 Ea	ach	Attachments, Snow Plow, V Blade, Boss, 2019	2029	to 10	9	6,000.00	6,000	6,000	0.1%										7,171						
529	1	<b>1</b> Ea		Attachments, Snow Plow, V Blade, Boss, 2020	2030	to 10	10	3,100.00	3,100	3,100	0.1%											3,779					
.531	1	1 Ea		Attachments, Snow Plow, V Blade, Protec , 2010	2022	to 10	2	5,000.00	5,000	5,000				5,202										6,341			
533	1	1 Ea		Generators, Honda EU2000	2024	to 15	4	2,000.00	2,000	2,000						2,165											
535	1	1 Ea		Grinders, Concrete, EDCO	2023	to 15	3	5,500.00	5,500	5,500					5,837									4 000			
537	1	1 Ea		Mowers, Woods BB600XW Bush Hog , 2020	2026	to 6	6	3,650.00	3,650	3,650								4,110			4 070			4,629			
539 541	1	1 Ea 1 Ea		Paint Sprayers, Single Head, <i>Titan</i> , 2019 Paint Sprayers, Dual Head, <i>Titan</i> , 2016	2029 2026	to 10 to 10	9	1,400.00 5,000.00	1,400 5,000	1,400 5,000								5,631			1,673						
543	1	1 Ea		Pole Saws, <i>Stihl</i> , 2012	2020		2	1,000.00	1,000	1,000				1,040				5,051						1,268			
545	1	1 Ea		Pole Saws, Stihl, 2017	2022		7	1,000.00	1,000	1,000				1,040					1,149					1,200			
547	1	1 Ea		Pressure Washers, Honda , 2009	2024		4	1,000.00	1,000	1,000						1,082			.,								
549	1	<b>1</b> Ea		Pressure Washers, Honda, 2012	2027	to 15	7	2,000.00	2,000	2,000						,			2,297								
551	1	1 Ea		Snow Blowers, Walk Behind, North Star, 2002	2023	to 15	3	1,000.00	1,000	1,000					1,061												
553	1	<b>1</b> Ea	ach	Snow Blowers, Walk Behind, Troy Built, 2008	2023	to 15	3	2,000.00	2,000	2,000					2,122												
555	1	1 Ea	ach	Tractors, Kubota LA3240 Loader, 2010	2030	to 25	10	39,748.00	39,748	39,748												48,453					
557	1	<b>1</b> Ea		Tractors, Kubota SVL65 Track Loader, 2020	2040	to 25	20	51,406.00	51,406	51,406	0.4%																
559	1	<b>1</b> Ea	ach	Trailers, Trailer w/ Sign and Generator, 2016	2036	to 20	16	18,500.00	18,500	18,500																	
561	1	1 Ea	ach	Vehicles, ATV, Kawasaki , 2010	2025	to 15	5	5,516.00	5,516	5,516	0.1%						6,090										
		<b>1</b> Ea	ach	Vehicles, Forklift, Toyota , 2016	2031	to 15	11	18,427.00	18,427	18,427	0.3%												22,912				

# South Riding

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South Riding	Virgini

			South Riding, Virginia															
Line	Total P	Per Phase		Estimated 1st Year o		₋ife Analysis, _ Years	Unit	Costs, \$ Per Phase	Total	Percentage of Future	16	17	18	19	20	21	22	23
Item		Quantity Units	Reserve Component Inventory	Event	Useful		(2020)	(2020)	(2020)	Expenditures	2036	2037	2038	2039	2040	2041	2042	2043
1.203	1,600	1,600 Square Yards	Sport Courts, Tennis Courts, Town Hall, Color Coat	2022	4 to 6	2	9.00	14,400	14,400	0.5%		20,163					22,262	
1.206	480	480 Linear Feet	Sport Courts, Tennis Courts, Town Hall, Fence	2027	to 25	7	45.00	21,600	21,600	0.1%								
1.209	7	7 Each	Sport Courts, Tennis Courts, Town Hall, Light Poles and Fixtures	2027	to 25	7	3,700.00	25,900	25,900	0.2%								
1.212	1,600	1,600 Square Yards	Sport Courts, Tennis Courts, Town Hall, Surface Replacement	2027	to 25	7	42.00	67,200	67,200	0.4%								
			Maintenance Building Elements															
1.301	3	3 Each	Garage Doors, Overhead	2031	10 to 15		4,400.00	13,200	13,200									
1.304	38	38 Squares	Roof Assembly, Metal	2046	to 30	26	1,010.00	38,380	38,380									
1.307	5,860	5,860 Square Feet	Walls, Siding, Metal	2046	to 30	26	8.50	49,810	49,810	0.4%								
			Maintenance Equipment															
1.501	1	1 Each	Attachments, 3-Point Hitch Auger, Woods , 1996	2021	to 25	1	1,000.00	1,000	1,000	0.0%								
1.503	1	1 Each	Attachments, Backhoe, Kubota , 2010	2021	to 10	1	5,000.00	5,000	5,000	0.1%						7,578		
1.505	1	1 Each	Attachments, Bucket, Kubota , 2010	2021	to 10	1	4,700.00	4,700	4,700	0.1%						7,124		
1.507	1	1 Each	Attachments, Bucket, Kubota, 2017	2027	to 10	7	1,000.00	1,000	1,000	0.0%		1,400						
1.509	1	1 Each	Attachments, Bucket, Kubota, 2020	2030	to 10	10	1,423.00	1,423	1,423	0.0%					2,115			
1.511	1	1 Each	Attachments, Fork Lift, Woods , 2010	2021	to 10	1	1,000.00	1,000	1,000	0.0%						1,516		
1.513	1	1 Each	Attachments, Forks, Land Pride, 2020	2030	to 10	10	1,142.00	1,142	1,142	0.0%					1,697			
1.515	1	1 Each	Attachments, Salt Spreader, Fisher, 2016	2026	to 10	6	4,000.00	4,000	4,000	0.1%	5,491							
1.517	1	1 Each	Attachments, Salt Spreader, Fisher, 2017	2027	to 10	7	4,000.00	4,000	4,000	0.1%		5,601						
1.519	1	1 Each	Attachments, Salt Spreader, Kubota	2024	to 10	4	3,000.00	3,000	3,000	0.1%								
1.521	1	1 Each	Attachments, Snow Blower, Kubota	2024	to 10	4	6,615.00	6,615	6,615	0.1%								
1.523	3	3 Each	Attachments, Snow Plow, Straight Blade, Boss, 2020	2030	to 10	10	3,100.00	9,300	9,300	0.2%					13,819			
1.525	1	1 Each	Attachments, Snow Plow, V Blade, Boss , 2016	2026	to 10	6	6,000.00	6,000	6,000	0.1%	8,237							
1.527	1	1 Each	Attachments, Snow Plow, V Blade, Boss , 2019	2029	to 10	9	6,000.00	6,000	6,000	0.1%				8,741				
1.529	1	1 Each	Attachments, Snow Plow, V Blade, Boss , 2020	2030	to 10	10	3,100.00	3,100	3,100	0.1%					4,606			
1.531	1	1 Each	Attachments, Snow Plow, V Blade, Protec, 2010	2022	to 10	2	5,000.00	5,000	5,000								7,730	
1.533	1	1 Each	Generators, Honda EU2000	2024	to 15	4	2,000.00	2,000	2,000		2,746							
1.535	1	1 Each	Grinders, Concrete, EDCO	2023	to 15	3	5,500.00	5,500	5,500				7,855					
1.537	1	1 Each	Mowers, Woods BB600XW Bush Hog , 2020	2026	to 6	6	3,650.00	3,650	3,650				5,213					
1.539	1	1 Each	Paint Sprayers, Single Head, <i>Titan</i> , 2019	2029	to 10	9	1,400.00	1,400	1,400					2,040				
1.541	1	1 Each	Paint Sprayers, Dual Head, <i>Titan</i> , 2016	2026	to 10	6	5,000.00	5,000	5,000		6,864							
1.543	1	1 Each	Pole Saws, Stihl , 2012	2022	to 10	2	1,000.00	1,000	1,000								1,546	
1.545	1	1 Each	Pole Saws, Stihl , 2017	2027	to 10	7	1,000.00	1,000	1,000			1,400						
1.547	1	1 Each	Pressure Washers, Honda , 2009	2024	to 15	4	1,000.00	1,000	1,000					1,457				
1.549	1	1 Each	Pressure Washers, Honda , 2012	2027	to 15	7	2,000.00	2,000	2,000				4 400				3,092	
1.551	1	1 Each	Snow Blowers, Walk Behind, North Star, 2002	2023	to 15	3	1,000.00	1,000	1,000				1,428					
1.553 1.555	1	1 Each	Snow Blowers, Walk Behind, <i>Troy Built</i> , 2008	2023	to 15	3	2,000.00	2,000	2,000				2,856					
	1	1 Each	Tractors, Kubota LA3240 Loader, 2010	2030	to 25	10 20	39,748.00	39,748	39,748						76 207			
1.557 1.559	1	1 Each 1 Each	Tractors, Kubota SVL65 Track Loader , 2020 Trailers, Trailer w/ Sign and Generator, 2016	2040 2036	to 25 to 20	20 16	51,406.00 18,500.00	51,406 18,500	51,406 18,500		25,397				76,387			
1.559	1	1 Each	Vehicles, ATV, Kawasaki , 2010	2036	to 20	5	5,516.00	5,516	5,516		23,331				8,196			
1.563	1	1 Each	Venicles, ATV, Kawasaki, 2010 Vehicles, Forklift, <i>Toyota</i> , 2016	2025	to 15 to 15	5 11	5,516.00	5,516 18,427	5,516						0,190			
1.000	I		venices, i UKilit, TUYUla, 2010	2031	10 10	11	10,427.00	10,427	10,427	0.3%								



### South Riding Proprietary

### Explanatory Notes:

1) 2.0% is the estimated Inflation Rate for estimating Future Replacement Costs. 2) FY2020 is Fiscal Year beginning January 1, 2020 and ending December 31, 2020.

				South Riding, Virginia								_, 0 _ 0		ar boginnin	ig canaary	1, 2020 all	a onanig i		., 2020.							
Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	۴ <u>۱</u>	ife Analysis, Years Remaining	Unit (2020)	Costs, \$ Per Phase (2020)	Total (2020)	Percentage of Future RUL = Expenditures FY202		2 2022	3 2023	4 2024	5 2025	6 2026	7 2027	8 2028	9 2029	10 2030	11 2031	12 2032	13 2033	14 2034	15 2035
1.565	ſ	1	Each	Vehicles, SUV, Ford Escape, 2018	2026	to 8	6	23,804.00	23,804	23,80	4 0.7%						26,807								31,409	
1.567	ſ	1	Each	Vehicles, Truck, Ford F-250, 2014	2022	to 8	2	44,750.00	44,750	44,75	0 <b>1.2%</b>		46,558								54,550					
1.569	í	1	Each	Vehicles, Truck, Ford F-250, 2015	2023	to 8	3	46,492.00	46,492	46,49	2 <b>1.3%</b>			49,338								57,807				
1.571	ſ	1	Each	Vehicles, Truck, Ford F-350, 2019	2027	to 8	7	54,487.00	54,487	54,48	7 1.1%							62,588								73,332
1.573	ſ	1	Each	Vehicles, Truck, Ford F-350, 2019	2027	to 8	7	57,205.00	57,205	57,20	5 <b>1.2%</b>							65,711								76,990
1.575	ŕ	1	Each	Vehicles, Utility, Kubota RTV 900 , 2005	2022	to 15	2	12,500.00	12,500	12,50	0 <b>0.2%</b>		13,005													
1.577	1	1	Each	Vehicles, Utility, Kubota RTV-X1100C, 2019	2034	to 15	14	19,084.00	19,084	19,08	4 0.3%														25,181	
1.579	1	1	Each	Welders, Hobart, 2018	2028	to 10	8	3,500.00	3,500	3,50	0 <b>0.1%</b>								4,101							
1.581	ł	1	Each	Wood Chippers, WoodMaxx	2024	to 10	4	5,000.00	5,000	5,00	0.1%				5,412										6,597	
				Anticipated Expenditures, By Year (\$19,665,839 over 30 years)							537,600	456,297	511,752	417,396	322,147	434,572	481,518	864,125	383,251	407,682	664,894	505,668	480,283	444,135	626,729	927,264

ticipated Expenditures, By Year (\$19,665,839 over 30 years)

# South Riding Proprietary South Ridina, Virain

				South Riding, Virginia																						
Line Item		Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	۱	fe Analysis, _ ears Remaining	Unit (2020)	Costs, \$ Per Phase (2020)	Total (2020)	Percentage of Future Expenditures	16 2036	17 2037	18 2038	19 2039	20 2040	21 2041	22 2042	23 2043	24 2044	25 2045	26 2046	27 2047	28 2048	29 2049	30 2050
										()																
1.565	1	1 E	Each	Vehicles, SUV, Ford Escape, 2018	2026	to 8	6	23,804.00	23,804	23,804	0.7%							36,801								43,118
1.567	1	1 8	Each	Vehicles, Truck, Ford F-250, 2014	2022	to 8	2	44,750.00	44,750	44,750	1.2%			63,914								74,885				
1.569	1	1 8	Each	Vehicles, Truck, Ford F-250, 2015	2023	to 8	3	46,492.00	46,492	46,492	1.3%				67,730								79,357			
1.571	1	<b>1</b> E	Each	Vehicles, Truck, Ford F-350, 2019	2027	to 8	7	54,487.00	54,487	54,487	1.1%								85,921							
1.573	1	<b>1</b> E	Each	Vehicles, Truck, Ford F-350, 2019	2027	to 8	7	57,205.00	57,205	57,205	1.2%								90,207							
1.575	1	<b>1</b> E	Each	Vehicles, Utility, Kubota RTV 900 , 2005	2022	to 15	2	12,500.00	12,500	12,500	0.2%		17,503													
1.577	1	1 8	Each	Vehicles, Utility, Kubota RTV-X1100C , 2019	2034	to 15	14	19,084.00	19,084	19,084	0.3%														33,890	
1.579	1	<b>1</b> E	Each	Welders, Hobart , 2018	2028	to 10	8	3,500.00	3,500	3,500	0.1%			4,999										6,094		
1.581	1	1 8	Each	Wood Chippers, WoodMaxx	2024	to 10	4	5,000.00	5,000	5,000	0.1%									8,042						
				Anticipated Expenditures, By Year (\$19,665,839 over 30 years)								480,805	528,842	682,672	811,622	1,334,956	599,553	681,675	763,255	534,428	668,530	972,033	982,266	572,971	604,168	982,750

Years 2036 to 2050

# **RESERVE FUNDING PLAN**

Common																	
CASH FLOW ANALYSIS																	
South Riding																	
Proprietary			Individual Re	serve Budget	s & Cash Flov	ws for the Nex	<u>kt 30 Years</u>										
South Riding, Virginia		FY2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Reserves at Beginning of Year	(Note 1)	2,698,024	2,372,808	2,357,703	2,295,195	2,335,544	2,480,673	2,523,117	2,527,927	2,157,793	2,276,909	2,382,300	2,240,114	2,266,636	2,329,141	2,438,966	2,377,112
Total Recommended Reserve Contributions	(Note 2)	201,000	420,000	428,400	437,000	445,700	454,600	463,700	473,000	482,500	492,200	502,000	512,000	522,200	532,600	543,300	554,200
Estimated Interest Earned, During Year	(Note 3)	11,384	21,192	20,844	20,745	21,576	22,416	22,628	20,991	19,867	20,873	20,708	20,190	20,588	21,360	21,575	19,715
Anticipated Expenditures, By Year		(537,600)	(456,297)	(511,752)	(417,396)	(322,147)	(434,572)	(481,518)	(864,125)	(383,251)	(407,682)	(664,894)	(505,668)	(480,283)	(444,135)	(626,729)	(927,264)
Anticipated Reserves at Year End		<u>\$2,372,808</u>	<u>\$2,357,703</u>	<u>\$2,295,195</u>	<u>\$2,335,544</u>	<u>\$2,480,673</u>	<u>\$2.523,117</u>	<u>\$2.527.927</u>	<u>\$2,157,793</u>	<u>\$2,276,909</u>	<u>\$2.382.300</u>	<u>\$2,240,114</u>	<u>\$2,266.636</u>	<u>\$2,329,141</u>	<u>\$2,438,966</u>	<u>\$2,377,112</u>	<u>\$2,023,763</u>

(continued)	Individual Re	serve Budget	s & Cash Flow	vs for the Nex	<u>t 30 Years, C</u>	ontinued									
	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050
Reserves at Beginning of Year	2,023,763	2,126,852	2,193,967	2,118,715	1,925,109	1,216,125	1,251,728	1,217,716	1,114,208	1,252,683	1,270,959	998,091	726,350	877,464	1,012,965
Total Recommended Reserve Contributions	565,300	576,600	588,100	599,900	611,900	624,100	636,600	649,300	662,300	675,500	689,000	702,800	716,900	731,200	745,800
Estimated Interest Earned, During Year	18,594	19,357	19,320	18,116	14,072	11,056	11,063	10,447	10,603	11,306	10,165	7,725	7,185	8,469	8,050
Anticipated Expenditures, By Year	(480,805)	(528,842)	(682,672)	(811,622)	(1,334,956)	(599,553)	(681,675)	(763,255)	(534,428)	(668,530)	(972,033)	(982,266)	(572,971)	(604,168)	(982,750)
Anticipated Reserves at Year End	<u>\$2,126,852</u>	<u>\$2,193,967</u>	<u>\$2,118,715</u>	<u>\$1,925,109</u>	<u>\$1,216,125</u>	<u>\$1,251,728</u>	<u>\$1,217,716</u>	<u>\$1,114,208</u>	<u>\$1,252,683</u>	<u>\$1,270,959</u>	<u>\$998,091</u>	<u>\$726,350</u>	<u>\$877,464</u>	<u>\$1,012,965</u>	<u>\$784,065</u>
												(NOTE 5)		1	NOTES 4&5)

# Explanatory Notes:

1) Year 2020 starting reserves are as of June 30, 2020; FY2020 starts January 1, 2020 and ends December 31, 2020.

2) Reserve Contributions for 2020 are the remaining budgeted 6 months; 2021 is the first year of recommended contributions.

3) 0.9% is the estimated annual rate of return on invested reserves; 2020 is a partial year of interest earned.

4) Accumulated year 2050 ending reserves consider the age, size, overall condition and complexity of the property.

5) Threshold Funding Years (reserve balance at critical point).

# Common FIVE-YEAR OUTLOOK

# South Riding

# Proprietary

South Riding, Virginia

Line Item	Reserve Component Inventory	RUL = 0 FY2020	1 2021	2 2022	3 2023	4 2024	5 2025
	Property Site Elements						
1.101	Asphalt Pavement, Walking Paths, Crack Repair and Patch, Phased		7,069		7,354		7,651
1.104	Asphalt Pavement, Walking Paths, Total Replacement, Phased			105,060			
1.113	Bocce Ball Court, Renovation		5,100				
1.114	Bridge, Wood, Fitness Course			6,242			
1.116	Concrete Sidewalks, Partial	194,000	197,880	201,838	205,874	209,992	214,192
1.119	Fence, Aluminum, Hyland Hills Park (2020 is Planned)	17,600					
1.122	Fences, Vinyl, Phased						22,082
1.134	Irrigation System, Controls		31,212				
1.137	Irrigation System, Pumps						33,122
1.140	Landscape, Street Trees and Enhancements		87,720	89,474	91,264	93,089	94,951
1.146	Pavers, Masonry, Resetting and Partial Replacements			8,063			
1.152	Pergola, Wood, Owen Park			5,306			
1.158	Playground Equipment, Dunvegan Park (2020 is Planned)	134,000					
1.160	Playground Equipment, Freedom Park		68,340				
1.161	Playground Equipment, Hyland Hills Park (2020 is Planned)	158,000					
1.167	Ponds, Fountain (2020 is Budgeted)	34,000					
1.170	Ponds, Erosion Control, Partial						26,895
1.179	Signage, Entrance Monuments, Renovation, Phased				26,106		
1.182	Signage, Traffic Management, Street Identification and Community, Phased		27,336		28,440		29,589
1.188	Sport Courts, Basketball Court, Elk Lick Park, Surface Replacement		19,706				
1.191	Sport Courts, Tennis Courts, Murrey Park, Color Coat			14,982			
1.203	Sport Courts, Tennis Courts, Town Hall, Color Coat			14,982			
	Maintenance Equipment						
1.501	Attachments, 3-Point Hitch Auger, Woods , 1996		1,020				
1.503	Attachments, Backhoe, Kubota , 2010		5,100				
1.505	Attachments, Bucket, Kubota , 2010		4,794				
1.511	Attachments, Fork Lift, Woods , 2010		1,020				
1.519	Attachments, Salt Spreader, Kubota					3,247	
1.521	Attachments, Snow Blower, Kubota					7,160	
1.531	Attachments, Snow Plow, V Blade, Protec, 2010			5,202			
1.533	Generators, Honda EU2000					2,165	

# Common FIVE-YEAR OUTLOOK

# South Riding

# Proprietary

South Riding, Virginia

Line Item	Reserve Component Inventory	RUL = 0 FY2020	1 2021	2 2022	3 2023	4 2024	5 2025
1.535	Grinders, Concrete, EDCO				5,837		
1.543	Pole Saws, Stihl , 2012			1,040			
1.547	Pressure Washers, Honda , 2009					1,082	
1.551	Snow Blowers, Walk Behind, North Star, 2002				1,061		
1.553	Snow Blowers, Walk Behind, Troy Built, 2008				2,122		
1.561	Vehicles, ATV, Kawasaki , 2010						6,090
1.567	Vehicles, Truck, Ford F-250, 2014			46,558			
1.569	Vehicles, Truck, Ford F-250, 2015				49,338		
1.575	Vehicles, Utility, Kubota RTV 900, 2005			13,005			
1.581	Wood Chippers, WoodMaxx					5,412	
	Anticipated Expenditures, By Year (\$19,665,839 over 30 years)	537,600	456,297	511,752	417,396	322,147	434,572

### South Riding Proprietary

Explanatory Notes: 1) 2.0% is the estimated Inflation Rate for estimating Future Replacement Costs. 2) FY2020 is Fiscal Year beginning January 1, 2020 and ending December 31, 2020.

				South Riding, Virginia							2	) FY2020 is	Fiscal Ye	ar beginnii	ng January	/ 1, 2020 ar	nd ending	December	31, 2020.							
Line	<b>T</b> . (.)			¥_¥	Estimated		ife Analysis		Costs, \$		Percentage		2	2		E	c	7	0	0	40		40	40	44	45
Line Item	Total I Quantity	Per Phase Quantity		Reserve Component Inventory	1st Year o Event	-	lears Remaining	Unit (2020)	Per Phase (2020)	Total (2020) E	of Future RUL = 0 Expenditures FY2020		2 2022	3 2023	4 2024	5 2025	2026	2027	8 2028	9 2029	10 2030	11 2031	12 2032	13 2033	14 2034	15 2035
				Pool House Elements																						
2.096	1,040	1 0 4 0 9	Squara Varda	Asphalt Pavement, Parking Lot, Mill and Overlay	2033	15 to 20	13	20.50	21,320	21,320	0.3%													27,580		
2.090	1,040				2033		18	9,000.00	9,000	9,000	0.3%													27,500		
2.097	2		Each	Life Safety System, Control Panel and Emergency Devices Rest Rooms, Main Pool, Renovation		to 25 15 to 20		27,000.00	54,000	54,000	1.5%							62,029								
2.098	2		Each	Rest Rooms, Splash Pool, Renovation	2027	15 to 20		6,000.00		12,000	0.4%							02,029				14,920				
2.099	2 17		Squares	Roof Assembly, Asphalt Shingles, Main Pool	2031	15 to 20		540.00	12,000 9,180		0.4%		9,551									14,920				
2.101	14				2022	15 to 20		540.00	9,180 7,560	9,180 7,560	0.2%		9,551											9,780		
			Squares	Roof Assembly, Asphalt Shingles, Splash Pool																				9,700	E 442	
2.103	550		Square Feet		2034	15 to 20		7.50	4,125	4,125	0.1%														5,443	
2.104	1			Roof Assembly, Metal, Main Pool	2041	to 30	21	12,000.00	12,000	12,000	0.2%	00.050					20.072					25 444				
2.105	8,900		Square Feet		2021	4 to 6	1	3.20	28,480	28,480	2.3%	29,050					32,073					35,411				
2.106	2	2 1	Each	Water Heaters, Main Pool, 200-MBH	2026	15 to 20	6	6,500.00	13,000	13,000	0.3%						14,640									
				0																						
0.404	00 750	00 774	0	Pool Elements	0000	0.1 . 10	•		00.050	00.050	4.00/			25.005										10.010		
2.121		· ·		Concrete Decks, Inspections, Partial Replacements and Repairs	2023	8 to 12		1.40	33,250	33,250	1.3%			35,285										43,012		
2.122	9,230			Covers, Vinyl	2023	6 to 8	3	3.00	27,690	27,690	1.5%			29,385								34,429				
2.125	600			Fences, Aluminum	2038	to 25	18	62.00	37,200	37,200	0.5%										10.007				10 - 10	
2.128	3			Furniture, Phased	2022		2 to 10	33,000.00	33,000	99,000	3.7%		34,333				37,163				40,227				43,543	
2.129	6		Each	Light Poles and Fixtures (Incl. Parking Lot)	2038	to 25	18	2,300.00	13,800	13,800	0.2%															
2.131	4		Allowance	Mechanical Equipment, Phased	2022		2 to 14	13,500.00	13,500	54,000	1.5%		14,045				15,203				16,456				17,813	
2.134	8,720			Pool Finishes, Main Pool, Plaster	2026	8 to 12		13.50	117,720	117,720	5.0%						132,572									
2.137	510			Pool Finishes, Main Pool, Tile and Coping	2026	15 to 25		95.00	48,450	48,450	1.4%						54,563									
2.138				Pool Finishes, Spalsh Pool, Plaster		8 to 12		9.70	21,049	21,049	1.0%										25,659					
2.139	240			Pool Finishes, Splash Pool, Tile and Coping	2030	15 to 25		80.00	19,200	19,200	0.6%										23,405					
2.140	4		Each	Shade Structures, Poolside Umbrellas	2021	5 to 10		5,800.00	23,200	23,200	1.2%	23,664								27,726						
2.143	3		Allowance	Water Features, Phased	2031		11 to 15	57,000.00	57,000	171,000	2.2%											70,872		73,736		76,714
2.146	1		Allowance	Water Feature, Splash Pad	2023	4 to 6	3	7,500.00	7,500	7,500	0.6%			7,959					8,787					9,702		
2.149	2		Each	Water Slides, Fiberglass, Refinishing	2022	5 to 10	2	23,000.00	46,000	46,000	1.8%		47,858								56,074					
2.152	2	2 1	Each	Water Slides, Fiberglass, Replacement	2036	to 25	16	187,000.00	374,000	374,000	5.2%															
				Meadows Recreational Area																						
0.001	1 000	4 000	0	Pool House Elements		45 1 25	•				0.00			05.400												
2.201				Asphalt Pavement, Parking Lot, Mill and Overlay		15 to 20		20.50	33,415	33,415	0.9%			35,460												
2.204	1			Life Safety System, Control Panel and Emergency Devices	2028	to 25	8	7,000.00	7,000	7,000	0.1%								8,202					100.075		
2.207	2		Each	Rest Rooms, Renovation (Incl. Entrance and Guard Room)		15 to 20		41,000.00	82,000	82,000	1.1%													106,076		
2.210	30		Squares	Roof Assembly, Metal	2033	to 30	13	1,770.00	53,100	53,100	0.7%													68,691		
2.213	3,800	,	•	Walls, Paint Finishes and Capital Repairs (Incl. Soffits and Perimeter Walls)	2023	4 to 6	3	3.20	12,160	12,160	1.0%			12,904					14,247					15,730		
2.216	230	230 \$	Square Feet	Windows and Doors	2038	to 35	18	50.00	11,500	11,500	0.2%															
				Pool Elements																						
2.231			-	Concrete Deck, Inspections, Partial Replacements and Repairs		8 to 12		1.50	19,590	19,590	0.8%		20,381										24,845			
2.234	9,520		-	Covers, Vinyl	2026	6 to 8	6	3.00	28,560	28,560	1.7%						32,163								37,684	
2.237	680			Fences, Aluminum	2032	to 25	12	62.00	42,160	42,160	0.5%								_				53,469			
2.240	2			Furniture, Phased	2022		2 to 8	32,000.00	32,000	64,000	2.2%		33,293						37,493						42,223	
2.243	9		Each	Light Poles and Fixtures (Incl. Parking Lot)	2028	to 25	8	2,300.00	20,700	20,700	0.2%								24,253							
2.246	2	1 /	Allowance	Mechanical Equipment, Phased	2025	12 to 18	5 to 12	29,000.00	29,000	58,000	1.6%					32,018							36,779			

# South Riding

Proprietary South Riding, Virgin

				South Riding, Virginia																					
Lina	<b>T</b> . ( . )	Der Dhees			Estimated	Life Ana	lysis, Unit	Costs, \$	Total	Percentage	46	47	40	40	20	24	22	22	24	25	26	27	20	20	20
Line Item		Per Phase Quantity	Units	Reserve Component Inventory	1st Year of Event	Years Useful Rema		Per Phase (2020)	(2020)	of Future Expenditures	16 2036	17 2037	18 2038	19 2039	20 2040	21 2041	22 2042	23 2043	24 2044	25 2045	26 2046	27 2047	28 2048	29 2049	30 2050
				Hyland Hills Recreational Area																					
				-																					
2.096	1,040	1 040 54	nuara Varda	Pool House Elements Asphalt Pavement, Parking Lot, Mill and Overlay	2033	15 to 20 1	20.5	21,320	21,320	0.3%															
	1,040	· · ·						,					10.054												
2.097	1			Life Safety System, Control Panel and Emergency Devices	2038	to 25 1	,		9,000				12,854												
2.098	2	<b>2</b> Ea		Rest Rooms, Main Pool, Renovation		15 to 20 7	27,000.0		54,000											88,593					
2.099	2	<b>2</b> Ea		Rest Rooms, Splash Pool, Renovation		15 to 20 1	,		12,000															21,310	
2.101	17	<b>17</b> Sq	quares	Roof Assembly, Asphalt Shingles, Main Pool	2022	15 to 20 2	540.0	9,180	9,180	0.2%							14,192								
2.102	14	<b>14</b> Sq	quares	Roof Assembly, Asphalt Shingles, Splash Pool	2033	15 to 20 1	540.0	7,560	7,560	) 0.1%															
2.103	550	<b>550</b> Sq	quare Feet	Roof Assembly, Flat, Main Pool	2034	15 to 20 1	7.5	4,125	4,125	5 <b>0.1%</b>															
2.104	1	1 Allo	lowance	Roof Assembly, Metal, Main Pool	2041	to 30 2	12,000.0	12,000	12,000	0.2%						18,188									
2.105	8,900	<b>8,900</b> Sq	quare Feet	Walls, Paint Finishes and Capital Repairs (Incl. Soffits)	2021	4 to 6 1	3.2	28,480	28,480	2.3%	39,097					43,166					47,659				
2.106	2	<b>2</b> Ea	ach	Water Heaters, Main Pool, 200-MBH	2026	15 to 20 6	6,500.0	13,000	13,000	0.3%						19,704									
				Pool Elements																					
2.121	23,750	<b>23,750</b> Sq	quare Feet	Concrete Decks, Inspections, Partial Replacements and Repairs	2023	8 to 12 3	1.4	33,250	33,250	) 1.3%								52,432							
2.122	9,230	<b>9,230</b> Sq	quare Feet	Covers, Vinyl	2023	6 to 8 3	3.0	27,690	27,690	) 1.5%				40,339								47,264			
2.125	600	600 Lin	near Feet	Fences, Aluminum	2038	to 25 1	62.0	37,200	37,200	0.5%			53,131												
2.128	3	1 Allo	lowance	Furniture, Phased	2022	to 12 2 to	10 33,000.0	33,000	99,000	3.7%			47,132				51,017				55,223				59,775
2.129	6	<b>6</b> Ea	ach	Light Poles and Fixtures (Incl. Parking Lot)	2038	to 25 1	2,300.0	13,800	13,800	0.2%			19,710												
2.131	4	1 Allo	lowance	Mechanical Equipment, Phased	2022	12 to 18 2 to	14 13,500.0	13,500	54,000	) 1.5%			19,281				20,871				22,591				24,453
2.134	8,720			Pool Finishes, Main Pool, Plaster	2026	8 to 12 6	13.5		117,720		161,604		,								196,995				
2.137	510		•	Pool Finishes, Main Pool, Tile and Coping		15 to 25	95.0		48,450		101,001										81,077				
2.137	2,170			Pool Finishes, Spalsh Pool, Plaster		8 to 12 1		,	21,049						31,278						01,077				38,127
2.130			-			15 to 25 1									51,270										34,778
	240			Pool Finishes, Splash Pool, Tile and Coping					19,200			20,400								20.000					34,110
2.140	4	4 Ea		Shade Structures, Poolside Umbrellas	2021	5 to 10 1	5,800.0		23,200			32,486								38,062					
2.143	3	1 Alle	lowance	Water Features, Phased	2031	15 to 25 11 to	15 57,000.0	57,000	171,000	) 2.2%															

7,500

46,000

0.6%

1.8%

10,712

creational Area	Meadows
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			Pool House Elements										
2.201	1,630	1,630 Square Yards	Asphalt Pavement, Parking Lot, Mill and Overlay	2023	15 to 20	3	20.50	33,415	33,415	0.9%			52,692
2.204	1	1 Allowance	Life Safety System, Control Panel and Emergency Devices	2028	to 25	8	7,000.00	7,000	7,000	0.1%			
2.207	2	2 Each	Rest Rooms, Renovation (Incl. Entrance and Guard Room)	2033	15 to 20	13	41,000.00	82,000	82,000	1.1%			
2.210	30	30 Squares	Roof Assembly, Metal	2033	to 30	13	1,770.00	53,100	53,100	0.7%			
2.213	3,800	3,800 Square Feet	Walls, Paint Finishes and Capital Repairs (Incl. Soffits and Perimeter Walls)	2023	4 to 6	3	3.20	12,160	12,160	1.0%	17,367		19,175
2.216	230	230 Square Feet	Windows and Doors	2038	to 35	18	50.00	11,500	11,500	0.2%	16,425		
			Pool Elements										
2.231	13,060	13,060 Square Feet	Concrete Deck, Inspections, Partial Replacements and Repairs	2022	8 to 12	2	1.50	19,590	19,590	0.8%		30,286	
2.234	9,520	9,520 Square Feet	Covers, Vinyl	2026	6 to 8	6	3.00	28,560	28,560	1.7%		44,153	
2.237	680	680 Linear Feet	Fences, Aluminum	2032	to 25	12	62.00	42,160	42,160	0.5%			
2.240	2	1 Allowance	Furniture, Phased	2022	to 12	2 to 8	32,000.00	32,000	64,000	2.2%	4	7,550	
2.243	9	9 Each	Light Poles and Fixtures (Incl. Parking Lot)	2028	to 25	8	2,300.00	20,700	20,700	0.2%			
2.246	2	1 Allowance	Mechanical Equipment, Phased	2025	12 to 18	5 to 12	29,000.00	29,000	58,000	1.6%	4	3,092	

2023 4 to 6 3 7,500.00 7,500

23,000.00

46,000

2036 to 25 16 187,000.00 374,000 374,000 **5.2%** 513,422

2022 5 to 10 2

2.146

2.149

2.152

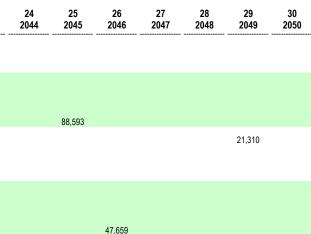
1 **1** Allowance Water Feature, Splash Pad

Water Slides, Fiberglass, Refinishing

Water Slides, Fiberglass, Replacement

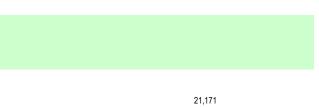
2 2 Each

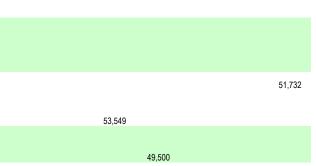
2 2 Each



11,827

	13,058
73,988	





# South Riding

Explanatory Notes: 1) 2.0% is the estimated Inflation Rate for estimating Future Replacement Costs.

			Proprietary South Riding, Virginia								2)	FY2020 is	Fiscal Yea	ar beginnin	g January	1, 2020 an	d ending l	December	31, 2020.							
				Estimated		ife Analysis,		Costs, \$		Percentage						_		_								
Line Item	Total Po Quantity C		Reserve Component Inventory	1st Year o Event		ears Remaining	Unit (2020)	Per Phase (2020)	Total (2020)	of Future Expenditures	RUL = 0 FY2020	1 2021	2 2022	3 2023	4 2024	5 2025	6 2026	7 2027	8 2028	9 2029	10 2030	11 2031	12 2032	13 2033	14 2034	15 2035
2.249	8,840	8 840 Square Feet	Pool Finishes, Plaster	2027	8 to 12	7	13.50	119,340	119,340	5.1%								137,084								
2.252	680		Pool Finishes, Tile and Coping	2027	15 to 25	•	93.00	63,240	63,240									72,643								
2.255	1	1 Each	Shade Structure. Cantilever	2042	to 30	22	18,400.00	18,400	18,400									,								
2.258	1	1 Each	Water Feature, Aqua Dome	2027	to 15	7	8,700.00	8,700	8,700									9,994								
			South Riding Center Recreational Area																							
			Community Building Exterior Elements																							
2.301	2,850	2,850 Square Yard	Is Asphalt Pavement, Parking Lot, Mill and Overlay	2027	15 to 20	7	20.50	58,425	58,425	1.7%								67,112								
2.304	600	600 Square Feet	Balconies, Composite	2032	20 to 25	12	44.00	26,400	26,400	0.3%													33,482			
2.307	65	65 Squares	Roof Assembly, Asphalt Shingles (Incl. Detached Garage)	2027	15 to 20	7	540.00	35,100	35,100	1.0%								40,319								
2.310	3	3 Each	Roof Assemblies, Metal	2037	to 30	17	3,000.00	9,000	9,000	0.1%																
2.313	6,500	6,500 Square Feet	Walls, Paint Finishes and Capital Repairs (Incl. Soffits, Perimeter Walls and Detached Garage)	2021	4 to 6	1	3.20	20,800	20,800	1.7%		21,216					23,424					25,862				
2.316	1,300	1,300 Square Feet	Windows and Doors (Incl. Detached Garage)	2042	to 35	22	50.00	65,000	65,000	1.0%																
			Community Building Interior Elements																							
2.331	2		Exercise Equipment, Phased	2021	5 to 10	1 to 5	12,000.00	12,000	24,000			12,240				13,249				14,341				15,523		
2.334	45		Is Floor Coverings, Carpet	2027	8 to 12		70.00	3,150	3,150									3,618								
2.337	340		Is Floor Coverings, Tile	2032	to 25	12	130.00	44,200	44,200														56,056			
2.340	205		Is Floor Coverings, Vinyl		10 to 15		50.00	10,250	10,250														12,999			
2.343	100	100 Each	Furnishings, Banquet Chairs	2031	10 to 15		200.00	20,000	20,000													24,867				
2.346	2	1 Allowance	Furnishings, Remaining, Phased	2027		7 to 17	19,000.00	19,000	38,000									21,825								
2.349	1	1 Allowance	Kitchen, Renovations	2027	to 20	7	42,000.00	42,000	42,000									48,245								
2.352	2	2 Each	Locker Rooms, Renovation	2027	15 to 20		30,000.00	60,000	60,000									68,921								
2.355 2.358	2	1 Allowance 2 Each	Partition Wall Rest Rooms, Renovation	2032	to 15	12	9,000.00 8,000.00	9,000 16,000	9,000 16,000									18,379					11,414			
2.330	2			2027	15 to 20	7	0,000.00	10,000	10,000	0.5%								10,379								
			Community Building Services Elements																							
2.371	8	8 Each	Air Handling and Condensing Units, Split Systems (Incl. Dehumidification Units)	2025	15 to 20	5	8,000.00	64,000	64,000	1.7%						70,661										
2.374	1		Life Safety System, Control Panel and Emergency Devices	2032	to 25	12	15,000.00	15,000	15,000														19,024			
2.377	1		Security System		10 to 15		6,800.00	6,800	6,800												8,289		.,.			
2.380	2		Sound Systems, Phased	2024	10 to 15	4 to 10	6,000.00	6,000	12,000						6,495						7,314					
			Pool Elements																							
2.401	13,220	13,220 Square Feet	Concrete Deck, Inspections, Partial Replacements and Repairs	2026	8 to 12	6	1.50	19,830	19,830	0.8%							22,332									
2.404	5,470	5,470 Square Feet	Covers, Vinyl	2024	6 to 8	4	3.00	16,410	16,410	0.9%					17,763								20,812			
2.407	720	720 Linear Feet	Fences, Aluminum	2032	to 25	12	62.00	44,640	44,640	0.6%													56,614			
2.410	1	1 Allowance	Furniture	2029	to 12	9	54,000.00	54,000	54,000	1.5%										64,535						
2.413	1	1 Each	Gazebo	2029	to 25	9	10,000.00	10,000	10,000	0.1%										11,951						
2.416	10	10 Each	Light Poles and Fixtures (Incl. Parking Lot)	2032	to 25	12	2,300.00	23,000	23,000	0.3%													29,170			
2.419	2	1 Allowance	Mechanical Equipment, Phased	2022	to 15	2 to 9	10,000.00	10,000	20,000	0.7%			10,404							11,951						
2.422	5,100	5,100 Square Feet	Pool Finishes, Plaster	2026	8 to 12	6	13.50	68,850	68,850	2.9%							77,536									
2.425	370	370 Linear Feet	Pool Finishes, Tile and Coping	2026	15 to 25	6	135.50	50,135	50,135	1.4%							56,460									
2.428	1	1 Each	Shade Structure, Cantilever	2043	to 30	23	22,000.00	22,000	22,000	0.3%																

Town Hall Recreational Area

Community Building Exterior Elements

### South Riding Proprietary

			South Riding, Virginia																						
<del>.</del>		Disco	,	Estimated		e Analysis,	1114	Costs, \$	T . 4 . 1	Percentage	40	47	40	40	20			00		05	20	07	00	20	20
	Fotal P Jantity (	er Phase Quantity Units	Reserve Component Inventory	1st Year o Event	-	ars Remaining	Unit (2020)	Per Phase (2020)	Total (2020)	of Future Expenditures	16 2036	17 2037	18 2038	19 2039	20 2040	21 2041	22 2042	23 2043	24 2044	25 2045	26 2046	27 2047	28 2048	29 2049	30 2050
2.249	8,840	8.840 Square Fe	et Pool Finishes, Plaster	2027	8 to 12	7	13.50	119,340	119,340	5.1%		167,105										203,700			
2.252	680	680 Linear Fee		2027	15 to 25	7	93.00		63,240			,										107,944			
2.255	1	1 Each	Shade Structure, Cantilever	2042	to 30	22	18,400.00	18,400	18,400	0.3%							28,446								
2.258	1	1 Each	Water Feature, Aqua Dome	2027	to 15	7	8,700.00	8,700	8,700	0.2%							13,450								
			South Riding Center Recreational Area																						
			Community Building Exterior Elements																						
2.301	2,850	2,850 Square Ya	rds Asphalt Pavement, Parking Lot, Mill and Overlay	2027	15 to 20	7	20.50	58,425	58,425	1.7%												99,725			
2.304	600	600 Square Fe	et Balconies, Composite	2032	20 to 25	12	44.00	26,400	26,400	0.3%															
2.307	65	65 Squares	Roof Assembly, Asphalt Shingles (Incl. Detached Garage)	2027	15 to 20	7	540.00	35,100	35,100	1.0%												59,912			
2.310	3	3 Each	Roof Assemblies, Metal	2037	to 30	17	3,000.00	9,000	9,000	0.1%		12,602													
2.313	6,500		et Walls, Paint Finishes and Capital Repairs (Incl. Soffits, Perimeter Walls and Detached Garage)	2021	4 to 6	1	3.20	20,800	20,800		28,554					31,526					34,807				
2.316	1,300	1,300 Square Fe	et Windows and Doors (Incl. Detached Garage)	2042	to 35	22	50.00	65,000	65,000	1.0%							100,489								
0.004			Community Building Interior Elements	0004	51 40	4.5	40,000,00	10.000	04.000	4.00/		10.000				10.100				40.007				04.040	
2.331	2		Exercise Equipment, Phased	2021	5 to 10	1 to 5	12,000.00	12,000	24,000			16,803				18,188				19,687		E 077		21,310	
2.334 2.337	45 340		rds Floor Coverings, Carpet rds Floor Coverings, Tile	2027	8 to 12	7 12	70.00 130.00		3,150 44,200			4,411										5,377			
	340 205	·	rds Floor Coverings, The	2032 2032	to 25 10 to 15	12	50.00		44,200													17,496			
2.340 2.343	100	100 Each	Furnishings, Banquet Chairs	2032	10 to 15	11	200.00		20,000											32,812		17,450			
2.346	2	1 Allowance	Furnishings, Remaining, Phased	2031		7 to 17	19,000.00	19,000	38,000			26,605								52,012		32,431			
2.349		1 Allowance	Kitchen, Renovations	2027	to 20	7	42,000.00	42,000	42,000			20,000										71,689			
2.352	2	2 Each	Locker Rooms, Renovation	2027	15 to 20	7	30,000.00	60,000	60,000													102,413			
2.355	-	1 Allowance	Partition Wall	2032	to 15	12	9,000.00	9,000	9,000													15,362			
2.358	2	2 Each	Rest Rooms, Renovation	2027	15 to 20	7	8,000.00	16,000	16,000													27,310			
			Community Building Services Elements																						
2.371	8	8 Each	Air Handling and Condensing Units, Split Systems (Incl. Dehumidification Units)	2025	15 to 20	5	8,000.00	64,000	64,000	1.7%								100,922							
2.374	1	1 Allowance	Life Safety System, Control Panel and Emergency Devices	2032	to 25	12	15,000.00	15,000	15,000	0.2%															
2.377	1	1 Allowance	Security System	2030	10 to 15	10	6,800.00	6,800	6,800	0.2%							10,513								
2.380	2	1 Allowance	Sound Systems, Phased	2024	10 to 15	4 to 10	6,000.00	6,000	12,000	0.4%	8,237						9,276						10,446		
			Pool Elements																						
2.401	13,220	13,220 Square Fe	et Concrete Deck, Inspections, Partial Replacements and Repairs	2026	8 to 12	6	1.50	19,830	19,830	0.8%	27,222										33,184				
2.404	5,470	5,470 Square Fe		2024	6 to 8	4	3.00		16,410	0.9%					24,384								28,570		
2.407	720		t Fences, Aluminum	2032	to 25	12	62.00		44,640																
2.410	1	1 Allowance		2029		9	54,000.00		54,000							81,846									
2.413	1	1 Each	Gazebo	2029	to 25	9	10,000.00		10,000																
2.416	10	10 Each	Light Poles and Fixtures (Incl. Parking Lot)	2032	to 25	12	2,300.00		23,000		10														
2.419	2	1 Allowance		2022	to 15	2 to 9	10,000.00		20,000		13,728							15,769							18,11
2.422			et Pool Finishes, Plaster			6	13.50		68,850		94,516										115,215				
2.425	370		t Pool Finishes, Tile and Coping	2026	15 to 25	6	135.50		50,135									04.000			83,897				
2.428	1	1 Each	Shade Structure, Cantilever	2043	to 30	23	22,000.00	22,000	22,000	0.3%								34,692							

Town Hall Recreational Area

Community Building Exterior Elements

Years 2036 to 2050

### South Riding Proprietary

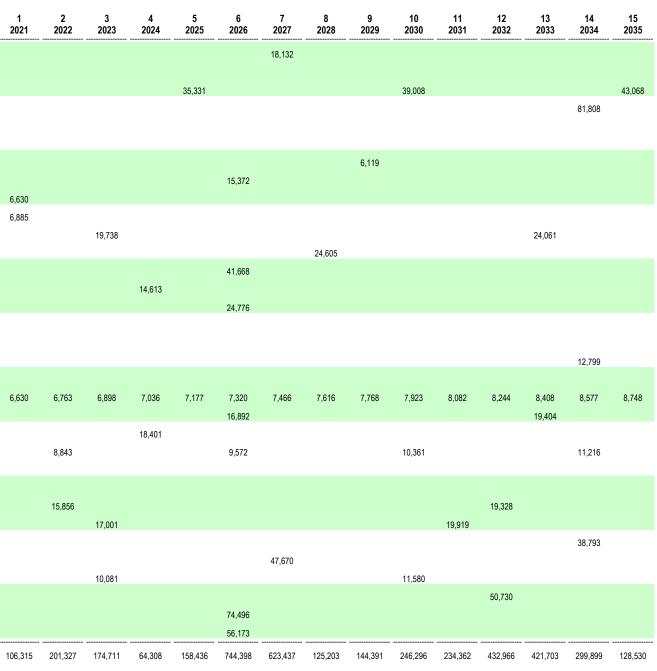
Explanatory Notes:

1) 2.0% is the estimated Inflation Rate for estimating Future Replacement Costs. 2) FY2020 is Fiscal Year beginning January 1, 2020 and ending December 31, 2020.

			South Riding, Virginia								2)	FY2020 is	FISCAL Yea	ar beginnir	ng January	1, 2020 an	nd ending I	Jecember
Line		Per Phase		Estimated 1st Year o	of	Life Analysis, Years	Unit	Costs, \$ Per Phase	Total	Percentage of Future	RUL = 0	1	2	3	4	5	6	7
Item	Quantity	·····	Reserve Component Inventory	Event		Remaining	(2020)	(2020)		Expenditures	F 1 2020	2021	2022	2023	2024	2025	2026	2027
2.501	770		S Asphalt Pavement, Mill and Overlay	2027	15 to 20		20.50	15,785	15,785									18,132
2.504	76	76 Squares	Roof Assembly, Asphalt Shingles	2037	15 to 20		540.00	41,040	41,040							25 224		
2.507 2.510	10,000 1,240		Walls, Paint Finishes and Capital Repairs (Incl. Soffits and Perimeter Walls) Windows and Doors	2025 2034	4 to 6 to 35	5 14	3.20 50.00		32,000 62,000							35,331		
2.510	1,240	1,240 Square Feet	windows and Doors	2034	10 35	14	50.00	62,000	62,000	0.8%								
			Community Building Interior Elements															
2.521	640	640 Square Feet	Ceilings, Acoustical Tiles, Grid and Lighting	2029	to 30	9	8.00	5,120	5,120	0.1%								
2.524	195	195 Square Yards	Floor Coverings, Carpet	2026	8 to 12	6	70.00	13,650	13,650	0.6%							15,372	
2.527	50	50 Square Yards	Floor Coverings, Tile	2021	to 25	1	130.00	6,500	6,500	0.2%		6,630						
2.530	75	75 Square Yards	Floor Coverings, Wood Laminate	2021	18 to 25	1	90.00	6,750	6,750	0.2%		6,885						
2.533	2	1 Allowance	Furnishings, Phased	2023	to 20	3 to 13	18,600.00	18,600	37,200	0.7%				19,738				
2.536	1	1 Allowance	Kitchen, Renovation	2028	15 to 20	8	21,000.00	21,000	21,000	0.6%								
2.539	2	2 Each	Locker Rooms, Renovation	2026	15 to 20	6	18,500.00	37,000	37,000	1.0%							41,668	
2.542	1	1 Allowance	Partition Wall	2024	to 15	4	13,500.00	13,500	13,500	0.3%					14,613			
2.545	2	2 Each	Rest Rooms, Renovation	2026	15 to 20	6	11,000.00	22,000	22,000	0.6%							24,776	
			Community Building Services Elements															
2.601	1	1 Each	Air Handling and Condensing Units, Split Systems, 2016	2034	15 to 20	14	9,700.00	9,700	9,700	0.1%								
2.604	3	3 Each	Air Handling and Condensing Units, Split Systems, Planned for 2020	2020	15 to 20	0	9,700.00	29,100	29,100	0.7%	29,100							
2.607	4	1 Allowance	Computers, Phased	2021	to 4	1 to 4	6,500.00	6,500	26,000	2.7%		6,630	6,763	6,898	7,036	7,177	7,320	7,466
2.610	1	1 Allowance	Event Equipment, Movie Screen, Projection System and Sound System	2026	5 to 10	6	15,000.00	15,000	15,000	0.8%							16,892	
2.613	1	1 Allowance	Life Safety System, Control Panel and Emergency Devices	2024	to 25	4	17,000.00	17,000	17,000	0.5%					18,401			
2.616	1	1 Allowance	Website Design	2022	to 4	2	8,500.00	8,500	8,500	1.0%			8,843				9,572	
			Pool Elements															
2.701	10,160	10,160 Square Feet	Concrete Deck, Inspections, Partial Replacements and Repairs	2022	8 to 12	2	1.50	15,240	15,240	0.6%			15,856					
2.704	5,340	5,340 Square Feet	Covers, Vinyl	2023	6 to 8	3	3.00	16,020	16,020	0.9%				17,001				
2.710	420	420 Linear Feet	Fences, Metal	2034	to 35	14	70.00	29,400	29,400	0.4%								
2.713	1	1 Allowance	Furniture	2027	to 12	7	41,500.00	41,500	41,500	1.1%								47,670
2.716	2	1 Allowance	Mechanical Equipment, Phased	2023	to 15	3 to 10	9,500.00	9,500	19,000	0.5%				10,081				
2.719	1	1 Allowance	Pergolas, Wood	2032	15 to 25	12	40,000.00	40,000	40,000	0.5%								
2.722	4,900	4,900 Square Feet	Pool Finishes, Plaster	2026	8 to 12	6	13.50	66,150	66,150	2.8%							74,496	
2.725	430	430 Linear Feet	Pool Finishes, Tile and Coping	2026	15 to 25	6	116.00	49,880	49,880	1.4%							56,173	
			Anticipated Expenditures, By Year (\$9,915,739 over 30 years)								29,100	106,315	201,327	174,711	64,308	158,436	744,398	623,437

Anticipated Expenditures, By Year (\$9,915,739 over 30 years)

29,100



# South Riding

Proprietary South Riding, Virgini

					South Riding, Virginia																						
						Estimate	ed L	ife Analysis,		Costs, \$		Percentage															
Li	ne	Total	Per Phase			1st Year	of <u> </u>	ears	Unit	Per Phase	Total	of Future	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
lte	em (	Quantity	Quantity	Units	Reserve Component Inventory	Event	Useful	Remaining	(2020)	(2020)	(2020)	Expenditures	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050
2.5	501	770	770	Square Yards Asp	halt Pavement, Mill and Overlay	2027	15 to 20	7	20.50	15,785	15,785	0.5%												26,943			
2.5	504	76	76	Squares Roc	of Assembly, Asphalt Shingles	2037	15 to 20	17	540.00	41,040	41,040	0.6%		57,466													
2.5	507	10,000	10,000	Square Feet Wal	lls, Paint Finishes and Capital Repairs (Incl. Soffits and Perimeter Walls)	2025	4 to 6	5	3.20	32,000	32,000	2.8%					47,550					52,499					57,964
2.5	510	1,240	1,240	Square Feet Win	dows and Doors	2034	to 35	14	50.00	62,000	62,000	0.8%															
					Community Building Interior Elements																						
2.5	521	640	640	Square Feet Ceil	lings, Acoustical Tiles, Grid and Lighting	2029	to 30	9	8.00	5,120	5,120	0.1%															
0.0		405	405		0	0000	0 1- 40	<u>^</u>	70.00	40.050	40.050	0.00/	40 700										00.040				

2.521	640	640 Square Feet Ceilings, Acoustical Tiles, Grid and Lighting	2029	to 30	9	8.00	5,120	5,120	0.1%	%
2.524	195	195 Square Yards Floor Coverings, Carpet	2026	8 to 12	6	70.00	13,650	13,650	0.6%	<b>18</b> ,739 22,842
2.527	50	50 Square Yards Floor Coverings, Tile	2021	to 25	1	130.00	6,500	6,500	0.2%	10,877
2.530	75	75 Square Yards Floor Coverings, Wood Laminate	2021	18 to 25	1	90.00	6,750	6,750	0.2%	% 11,296
2.533	2	1 Allowance Furnishings, Phased	2023	to 20	3 to 13	18,600.00	18,600	37,200	0.7%	29,330
2.536	1	1 Allowance Kitchen, Renovation	2028	15 to 20	8	21,000.00	21,000	21,000	0.6%	36,562
2.539	2	2 Each Locker Rooms, Renovation	2026	15 to 20	6	18,500.00	37,000	37,000	1.0%	61,916
2.542	1	1 Allowance Partition Wall	2024	to 15	4	13,500.00	13,500	13,500	0.3%	% 19,667
2.545	2	2 Each Rest Rooms, Renovation	2026	15 to 20	6	11,000.00	22,000	22,000	0.6%	36,815

			Community Building Services Elements																						
2.601	1	1 Each	Air Handling and Condensing Units, Split Systems, 2016	2034	15 to 20	14	9,700.00	9,700	9,700	0.1%															
2.604	3	3 Each	Air Handling and Condensing Units, Split Systems, Planned for 2020	2020	15 to 20	0	9,700.00	29,100	29,100	0.7%			41,562												
2.607	4	1 Allowance	Computers, Phased	2021	to 4	1 to 4	6,500.00	6,500	26,000	2.7%	8,923	9,102	9,284	9,469	9,659	9,852	10,049	10,250	10,455	10,664	10,877	11,095	11,317	11,543	11,774
2.610	1	1 Allowance	Event Equipment, Movie Screen, Projection System and Sound System	2026	5 to 10	6	15,000.00	15,000	15,000	0.8%					22,289							25,603			
2.613	1	1 Allowance	Life Safety System, Control Panel and Emergency Devices	2024	to 25	4	17,000.00	17,000	17,000	0.5%														30,189	
2.616	1	1 Allowance	Website Design	2022	to 4	2	8,500.00	8,500	8,500	1.0%			12,140				13,141				14,224				15,397
			Pool Elements																						
2.701	10,160	10,160 Square Feet	Concrete Deck, Inspections, Partial Replacements and Repairs	2022	8 to 12	2	1.50	15,240	15,240	0.6%							23,561								
2.704	5,340	5,340 Square Feet	Covers, Vinyl	2023	6 to 8	3	3.00	16,020	16,020	0.9%				23,338								27,344			
2.710	420	420 Linear Feet	Fences, Metal	2034	to 35	14	70.00	29,400	29,400	0.4%															
2.713	1	1 Allowance	Furniture	2027	to 12	7	41,500.00	41,500	41,500	1.1%				60,458											
2.716	2	1 Allowance	Mechanical Equipment, Phased	2023	to 15	3 to 10	9,500.00	9,500	19,000	0.5%		13,302							15,280						
2.719	1	1 Allowance	Pergolas, Wood	2032	15 to 25	12	40,000.00	40,000	40,000	0.5%															
2.722	4,900	4,900 Square Feet	Pool Finishes, Plaster	2026	8 to 12	6	13.50	66,150	66,150	2.8%	90,810										110,697				
2.725	430	430 Linear Feet	Pool Finishes, Tile and Coping	2026	15 to 25	6	116.00	49,880	49,880	1.4%											83,470				
			Anticipated Expenditures, By Year (\$9,915,739 over 30 years)								1,004,852	339,882	259,598	153,271	225,802	222,470	369,444	327,089	99,723	242,317	1,087,211	931,108	121,124	84,352	312,114

Years 2036 to 2050

# **RESERVE FUNDING PLAN**

Recreation																	
CASH FLOW ANALYSIS																	
South Riding																	
Proprietary			Individual Re	serve Budget	ts & Cash Flo	ws for the Nex	<u>xt 30 Years</u>										
South Riding, Virginia		FY2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Reserves at Beginning of Year	(Note 1)	1,636,088	1,749,088	1,883,044	1,927,287	2,003,284	2,195,586	2,299,889	1,821,454	1,465,241	1,611,421	1,744,866	1,782,472	1,837,828	1,699,710	1,577,287	1,581,840
Total Recommended Reserve Contributions	(Note 2)	134,500	224,000	228,500	233,100	237,800	242,600	247,500	252,500	257,600	262,800	268,100	273,500	279,000	284,600	290,300	296,100
Estimated Interest Earned, During Year	(Note 3)	7,600	16,271	17,070	17,608	18,810	20,139	18,463	14,724	13,783	15,036	15,802	16,218	15,848	14,680	14,152	14,991
Anticipated Expenditures, By Year		(29,100)	(106,315)	(201,327)	(174,711)	(64,308)	(158,436)	(744,398)	(623,437)	(125,203)	(144,391)	(246,296)	(234,362)	(432,966)	(421,703)	(299,899)	(128,530)
Anticipated Reserves at Year End		<u>\$1.749.088</u>	<u>\$1.883.044</u>	<u>\$1,927,287</u>	<u>\$2.003.284</u>	<u>\$2.195.586</u>	<u>\$2.299.889</u>	<u>\$1,821,454</u>	<u>\$1,465,241</u>	<u>\$1,611,421</u>	<u>\$1,744,866</u>	<u>\$1,782,472</u>	<u>\$1.837.828</u>	<u>\$1.699.710</u>	<u>\$1,577,287</u>	<u>\$1.581.840</u>	<u>\$1,764,401</u>

(continued)	Individual Re	serve Budget	s & Cash Flov	ws for the Nex	<u>tt 30 Years, C</u>	ontinued									
	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050
Reserves at Beginning of Year	1,764,401	1,074,266	1,051,909	1,116,224	1,294,252	1,407,453	1,531,549	1,515,857	1,549,400	1,818,565	1,954,049	1,249,288	702,423	971,799	1,288,272
Total Recommended Reserve Contributions	302,000	308,000	314,200	320,500	326,900	333,400	340,100	346,900	353,800	360,900	368,100	375,500	383,000	390,700	398,500
Estimated Interest Earned, During Year	12,717	9,525	9,713	10,799	12,103	13,166	13,652	13,732	15,088	16,901	14,350	8,743	7,500	10,125	11,983
Anticipated Expenditures, By Year	(1,004,852)	(339,882)	(259,598)	(153,271)	(225,802)	(222,470)	(369,444)	(327,089)	(99,723)	(242,317)	(1,087,211)	(931,108)	(121,124)	(84,352)	(312,114)
Anticipated Reserves at Year End	<u>\$1,074,266</u>	<u>\$1,051,909</u>	<u>\$1,116,224</u>	<u>\$1,294,252</u>	<u>\$1,407,453</u>	<u>\$1,531,549</u>	<u>\$1,515,857</u>	<u>\$1,549,400</u>	<u>\$1,818,565</u>	<u>\$1,954,049</u>	<u>\$1,249,288</u>	<u>\$702,423</u>	<u>\$971,799</u>	<u>\$1,288,272</u>	<u>\$1,386,641</u>
												(NOTE 5)			(NOTE 4)

#### Explanatory Notes:

1) Year 2020 starting reserves are as of June 30, 2020; FY2020 starts January 1, 2020 and ends December 31, 2020.

2) Reserve Contributions for 2020 are the remaining budgeted 6 months; 2021 is the first year of recommended contributions.

3) 0.9% is the estimated annual rate of return on invested reserves; 2020 is a partial year of interest earned.

4) Accumulated year 2050 ending reserves consider the need to fund for replacement of the pool structures and decks shortly after 2050, and the age, size, overall condition and complexity of the property.

5) Threshold Funding Year (reserve balance at critical point).

## Recreation FIVE-YEAR OUTLOOK

South Riding Proprietary South Riding, Virginia

Line		RUL = 0	1	2	3	4	5
Item	Reserve Component Inventory	FY2020	2021	2022	2023	2024	2025
	Hyland Hills Recreational Area						
	Pool House Elements						
2.101	Roof Assembly, Asphalt Shingles, Main Pool			9,551			
2.105	Walls, Paint Finishes and Capital Repairs (Incl. Soffits)		29,050				
	Pool Elements						
	Concrete Decks, Inspections, Partial Replacements and Repairs				35,285		
	Covers, Vinyl				29,385		
	Furniture, Phased			34,333			
2.131	Mechanical Equipment, Phased			14,045			
	Shade Structures, Poolside Umbrellas		23,664		- 0-0		
	Water Feature, Splash Pad			47.050	7,959		
2.149	Water Slides, Fiberglass, Refinishing			47,858			
	Meadows Recreational Area						
	Pool House Elements						
2.201					35,460		
	Walls, Paint Finishes and Capital Repairs (Incl. Soffits and Perimeter Walls)				12,904		
					,		
	Pool Elements						
2.231	Concrete Deck, Inspections, Partial Replacements and Repairs			20,381			
2.240	Furniture, Phased			33,293			
2.246	Mechanical Equipment, Phased						32,018
	South Riding Center Recreational Area						
	Community Building Exterior Elements						
2.313	Walls, Paint Finishes and Capital Repairs (Incl. Soffits, Perimeter Walls and Detached Garage)		21,216				
	Community Building Interior Elements						
2.331	Exercise Equipment, Phased		12,240				13,249
0.074	Community Building Services Elements						
2.371	Air Handling and Condensing Units, Split Systems (Incl. Dehumidification Units)					0.405	70,661
2.380	Sound Systems, Phased					6,495	
	Pool Elements						
2 404	Covers, Vinyl					17,763	
2.404	00000, 1119					11,100	

## Recreation FIVE-YEAR OUTLOOK

South Riding Proprietary South Riding, Virginia

Line Item	Reserve Component Inventory	RUL = 0 FY2020	1 2021	2 2022	3 2023	4 2024	5 2025
2.419	Mechanical Equipment, Phased			10,404			
	Town Hall Recreational Area						
	Community Building Exterior Elements						
2.507	Walls, Paint Finishes and Capital Repairs (Incl. Soffits and Perimeter Walls)						35,331
	Community Building Interior Elements						
2.527	Floor Coverings, Tile		6,630				
2.530	Floor Coverings, Wood Laminate		6,885				
2.533	Furnishings, Phased				19,738		
2.542	Partition Wall					14,613	
	Community Building Services Elements						
2.604	Air Handling and Condensing Units, Split Systems, Planned for 2020	29,100					
2.607	Computers, Phased		6,630	6,763	6,898	7,036	7,177
2.613	Life Safety System, Control Panel and Emergency Devices					18,401	
2.616	Website Design			8,843			
	Pool Elements						
2.701	Concrete Deck, Inspections, Partial Replacements and Repairs			15,856			
2.704	Covers, Vinyl				17,001		
2.716	Mechanical Equipment, Phased				10,081		
	Anticipated Expenditures, By Year (\$9,915,739 over 30 years)	29,100	106,315	201,327	174,711	64,308	158,436

# Townhome RESERVE EXPENDITURES

#### South Riding Proprietary

#### Explanatory Notes:

1) 2.0% is the estimated Inflation Rate for estimating Future Replacement Costs. 2) FY2020 is Fiscal Year beginning January 1, 2020 and ending December 31, 2020.

				South Riding, Virginia						2)	F 1 2020 18	s Fiscal Yea	ar beginnii	ig January	y 1, 2020 ai	ia enaing	December	31, 2020.							
Line Item	Total Quantity	Per Phase Quantity	Units		Estimated 1st Year o Event		Unit	Costs, \$ Per Phase (2020)	Total (2020)	Percentage of Future RUL = 0 Expenditures FY2020	1 2021	2 2022	3 2023	4 2024	5 2025	6 2026	7 2027	8 2028	9 2029	10 2030	11 2031	12 2032	13 2033	14 2034	15 2035
				SRP Street Elements																					
3.101	23,700	<b>11,850</b> Sq	uare Yards	Asphalt Pavement, Crack Repair and Patch, Phased	2022	3 to 5 2 to 4	0.70	8,295	16,590	0.8%		8,630		8,979		9,342		9,719		10,112		10,520		10,945	
3.102	23,700	<b>11,850</b> Sq	uare Yards	Asphalt Pavement, Mill and Overlay, Phased	2022	15 to 20 2 to 6	13.95	165,308	330,615	5 <b>1.7%</b>		171,986				186,163									
3.103	23,700	<b>11,850</b> Sq	uare Yards	Asphalt Pavement, Total Replacement, Phased	2042	15 to 20 22 to 26	32.00	379,200	758,400	) <b>5.9%</b>															
3.111	50	<b>25</b> Ea	ch	Catch Basins, Inspections and Capital Repairs, Phased	2022	15 to 20 2 to 6	850.00	21,250	42,500	0.6%		22,108				23,931									
3.121	20,400	1,840 Lin	ear Feet	Concrete Curbs and Gutters, Partial	2022	to 65 2 to 30+	34.00	62,560	693,600	1.6%		65,087				70,453									
3.131	71,500	<b>3,130</b> Sq	uare Feet	Concrete Sidewalks, Partial	2022	to 65 2 to 30+	9.00	28,170	643,500	) 1.5%		29,308				31,724				34,339				37,170	
				Townhome Street Elements																					
3.201	219,400	<b>109,700</b> Sq	uare Yards	Asphalt Pavement, Crack Repair and Patch, Phased	2022	3 to 5 2 to 4	0.70	76,790	153,580	0 7.8%		79,892		83,120		86,478		89,972		93,607		97,388		101,323	
3.210	14,950	<b>14,950</b> Sq	uare Yards	Asphalt Pavement, Mill and Overlay, Phase 1 (2020 is Planned)	2020	15 to 20 0	13.95	208,553	208,553	3 <b>1.0%</b> 208,835															
3.211	61,350	<b>20,450</b> Sq	uare Yards	Asphalt Pavement, Mill and Overlay, Phase 1, Remaining, Phased	2021	15 to 20 1 to 3	13.95	285,278	855,833	<b>4.3%</b>	290,983	296,803	302,739												
3.212	87,500	<b>29,167</b> Sq	uare Yards	Asphalt Pavement, Mill and Overlay, Phase 2, Phased	2024	15 to 20 4 to 6	13.95	406,875	1,220,625	5 <b>6.6%</b>				440,415	449,223	458,207									
3.213	22,700	<b>22,700</b> Sq	uare Yards	Asphalt Pavement, Mill and Overlay, Phase 3	2027	15 to 20 7	13.95	316,665	316,665	5 1.8%							363,749								
3.214	32,900	<b>32,900</b> Sq	uare Yards	Asphalt Pavement, Mill and Overlay, Phase 4	2032	15 to 20 12	13.95	458,955	458,955	5 <b>2.8%</b>												582,066			
3.220	14,950	<b>14,950</b> Sq	uare Yards	Asphalt Pavement, Total Replacement, Phased	2040	15 to 20 20	32.00	478,400	478,400	) 3.5%															
3.221	61,350	<b>20,450</b> Sq	uare Yards	Asphalt Pavement, Total Replacement, Phase 1, Remaining, Phased	2041	15 to 20 21 to 23	32.00	654,400	1,963,200	) 14.8%															
3.222	87,500	<b>29,167</b> Sq	uare Yards	Asphalt Pavement, Total Replacement, Phase 2, Phased	2044	15 to 20 24 to 26	32.00	933,333	2,800,000	) 22.3%															
3.223	22,700	<b>22,700</b> Sq	uare Yards	Asphalt Pavement, Total Replacement, Phase 3	2047	15 to 20 27	32.00	726,400	726,400	6.0%															
3.231	280	<b>93</b> Ea	ch	Catch Basins, Inspections and Capital Repairs, Phased	2022	15 to 20 2 to 12	850.00	79,331	238,000	2.6%		82,535					91,126					100,610			
3.241	96,600	7,085 Lin	ear Feet	Concrete Curbs and Gutters, Partial	2022	to 65 2 to 30+	34.00	240,890	3,284,400	) 7.9%		250,622					276,707					305,507			
3.251	267,000	<b>15,575</b> Sq	uare Feet	Concrete Sidewalks, Partial	2022	to 65 2 to 30+	9.00	140,175	2,403,000	) 5.5%		145,838					161,017					177,776			
				Property Site Elements																					
3.301	7	7 Ea	ch	Light Poles and Fixtures, Creekmore Terrace	2037	to 25 17	2,300.00	16,100	16,100	0.1%															
3.302	100	<b>20</b> Ea	ch	Mailbox Station Enclosures, Phased	2023	to 25 3 to 23	1,000.00	20,000	100,000	0.8%			21,224					23,433					25,872		
				Anticipated Expenditures, By Year (\$20,569,804 over 30 years)						208,835	290,983	1,152,809	323,963	532,514	449,223	866,298	892,599	123,124	0	138,058	0	1,273,867	25,872	149,438	0

# Townhome RESERVE EXPENDITURES

## South Riding Proprietary South Riding Virgini

				South Riding, Virginia	_																					
Line	Tatal	Per Pha			Estimated 1st Year o		ife Analysis, _ /ears	Unit	Costs, \$ Per Phase	Total	Percentage of Future	16	17	40	10	20	24	22	22	24	25	26	97	20	20	20
Item	Total Quantity			Reserve Component Inventory		-	Remaining	(2020)	(2020)	(2020)	Expenditures	2036	2037	18 2038	19 2039	20 2040	21 2041	22 2042	23 2043	24 2044	25 2045	2046	27 2047	28 2048	29 2049	30 2050
				SRP Street Elements																						
3.101	23,70	0 11,8	50 Square Yards	Asphalt Pavement, Crack Repair and Patch, Phased	2022	3 to 5	2 to 4	0.70	8,295	16,590	0.8%	11,387		11,847		12,326		12,824		13,342		13,881		14,442		15,025
3.102	23,70	0 11,85	50 Square Yards	Asphalt Pavement, Mill and Overlay, Phased	2022	15 to 20	2 to 6	13.95	165,308	330,615	1.7%															
3.103	23,70	0 11,8	50 Square Yards	Asphalt Pavement, Total Replacement, Phased	2042	15 to 20	22 to 26	32.00	379,200	758,400	5.9%							586,235				634,560				
3.111	5	0 2	25 Each	Catch Basins, Inspections and Capital Repairs, Phased	2022	15 to 20	2 to 6	850.00	21,250	42,500	0.6%							32,852				35,560				
3.121	20,40	0 <b>1,8</b> 4	40 Linear Feet	Concrete Curbs and Gutters, Partial	2022	to 65	2 to 30+	34.00	62,560	693,600	1.6%							96,716				104,689				
3.131	71,50	0 3,13	30 Square Feet	Concrete Sidewalks, Partial	2022	to 65	2 to 30+	9.00	28,170	643,500	1.5%			40,234				43,550				47,140				51,026
				Townhome Street Elements																						
3.201	219,40	0 <b>109,70</b>	00 Square Yards	Asphalt Pavement, Crack Repair and Patch, Phased	2022	3 to 5	2 to 4	0.70	76,790	153,580	7.8%	105,416		109,675		114,106		118,716		123,512		128,502		133,693		139,094
3.210	14,95	0 <b>14,9</b>	50 Square Yards	Asphalt Pavement, Mill and Overlay, Phase 1 (2020 is Planned)	2020	15 to 20	0	13.95	208,553	208,553	1.0%															
3.211	61,35	0 <b>20,4</b> 5	50 Square Yards	Asphalt Pavement, Mill and Overlay, Phase 1, Remaining, Phased	2021	15 to 20	1 to 3	13.95	285,278	855,833	4.3%															
3.212	87,50	0 <b>29,16</b>	67 Square Yards	Asphalt Pavement, Mill and Overlay, Phase 2, Phased	2024	15 to 20	4 to 6	13.95	406,875	1,220,625	6.6%															
3.213	22,70	0 <b>22,70</b>	00 Square Yards	Asphalt Pavement, Mill and Overlay, Phase 3	2027	15 to 20	7	13.95	316,665	316,665	1.8%															
3.214	32,90	0 <b>32,90</b>	00 Square Yards	Asphalt Pavement, Mill and Overlay, Phase 4	2032	15 to 20	12	13.95	458,955	458,955	2.8%															
3.220	14,95	0 <b>14,9</b>	50 Square Yards	Asphalt Pavement, Total Replacement, Phased	2040	15 to 20	20	32.00	478,400	478,400	3.5%					710,877										
3.221	61,35	0 <b>20,4</b> 5	50 Square Yards	Asphalt Pavement, Total Replacement, Phase 1, Remaining, Phased	2041	15 to 20	21 to 23	32.00	654,400	1,963,200	14.8%						991,852	1,011,689	1,031,923							
3.222	87,50	0 <b>29,16</b>	67 Square Yards	Asphalt Pavement, Total Replacement, Phase 2, Phased	2044	15 to 20	24 to 26	32.00	933,333	2,800,000	22.3%									1,501,208	1,531,232	1,561,857				
3.223	22,70	0 22,70	00 Square Yards	Asphalt Pavement, Total Replacement, Phase 3	2047	15 to 20	27	32.00	726,400	726,400	6.0%												1,239,882			
3.231	28	0 9	93 Each	Catch Basins, Inspections and Capital Repairs, Phased	2022	15 to 20	2 to 12	850.00	79,331	238,000	2.6%							122,643					135,408			
3.241	96,60	0 <b>7,0</b> 8	85 Linear Feet	Concrete Curbs and Gutters, Partial	2022	to 65	2 to 30+	34.00	240,890	3,284,400	7.9%							372,411					411,172			
3.251	267,00	0 15,57	75 Square Feet	Concrete Sidewalks, Partial	2022	to 65	2 to 30+	9.00	140,175	2,403,000	5.5%		196,279					216,708					239,263			
				Property Site Elements																						
3.301		7	7 Each	Light Poles and Fixtures, Creekmore Terrace	2037	to 25	17	2,300.00	16,100	16,100	0.1%		22,544													
3.302	10	0 2	20 Each	Mailbox Station Enclosures, Phased	2023	to 25	3 to 23	1,000.00	20,000	100,000	0.8%			28,565					31,538					34,820		
				Anticipated Expenditures, By Year (\$20,569,804 over 30 years)								116,803	218,823	190,321	0	837,309	991,852	2,614,344	1,063,461	1,638,062	1,531,232	2,526,189	2,025,725	182,955	0	205,145

Years 2036 to 2050

# RESERVE FUNDING PLAN

lownhome																	
CASH FLOW ANALYSIS																	
South Riding																	
Proprietary			Individual Re	serve Budget	s & Cash Flov	ws for the Nex	<u>kt 30 Years</u>										
South Riding, Virginia		FY2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Reserves at Beginning of Year	(Note 1)	3,772,639	3,827,867	4,008,992	3,334,782	3,496,020	3,458,361	3,513,370	3,159,465	2,785,699	3,191,351	3,734,377	4,153,857	4,726,238	4,034,920	4,601,940	5,061,091
Total Recommended Reserve Contributions	(Note 2)	247,000	437,000	445,700	454,600	463,700	473,000	482,500	492,200	502,000	512,000	522,200	532,600	543,300	554,200	565,300	576,600
Estimated Interest Earned, During Year	(Note 3)	17,063	35,108	32,899	30,601	31,155	31,232	29,893	26,633	26,776	31,026	35,338	39,781	39,249	38,692	43,289	48,145
Anticipated Expenditures, By Year		(208,835)	(290,983)	(1,152,809)	(323,963)	(532,514)	(449,223)	(866,298)	(892,599)	(123,124)	0	(138,058)	0	(1,273,867)	(25,872)	(149,438)	0
Anticipated Reserves at Year End		<u>\$3.827.867</u>	<u>\$4.008.992</u>	<u>\$3.334.782</u>	<u>\$3,496,020</u>	<u>\$3.458.361</u>	<u>\$3.513.370</u>	<u>\$3,159,465</u>	<u>\$2.785.699</u>	<u>\$3,191,351</u>	<u>\$3.734.377</u>	<u>\$4.153.857</u>	<u>\$4.726.238</u>	<u>\$4.034.920</u>	<u>\$4.601.940</u>	<u>\$5.061.091</u>	<u>\$5.685.836</u>

(continued)	Individual Re	serve Budget	s & Cash Flov	ws for the Nex	<u>kt 30 Years, C</u>	<u>continued</u>									
	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050
Reserves at Beginning of Year	5,685,836	6,210,426	6,649,112	7,132,430	7,823,530	7,692,330	7,417,467	5,523,396	5,183,400	4,276,718	3,483,049	1,696,966	411,888	980,973	1,753,925
Total Recommended Reserve Contributions	588,100	599,900	611,900	624,100	636,600	649,300	662,300	675,500	689,000	702,800	716,900	731,200	745,800	760,700	775,900
Estimated Interest Earned, During Year	53,293	57,609	61,739	67,000	69,509	67,689	57,973	47,965	42,380	34,763	23,206	9,447	6,240	12,252	18,354
Anticipated Expenditures, By Year	(116,803)	(218,823)	(190,321)	0	(837,309)	(991,852)	(2,614,344)	(1,063,461)	(1,638,062)	(1,531,232)	(2,526,189)	(2,025,725)	(182,955)	0	(205,145)
Anticipated Reserves at Year End	<u>\$6,210,426</u>	<u>\$6,649,112</u>	<u>\$7,132,430</u>	<u>\$7,823,530</u>	<u>\$7,692,330</u>	<u>\$7,417,467</u>	<u>\$5,523,396</u>	<u>\$5,183,400</u>	<u>\$4,276,718</u>	<u>\$3,483,049</u>	<u>\$1,696,966</u>	<u>\$411,888</u>	<u>\$980,973</u>	<u>\$1,753,925</u>	<u>\$2,343,034</u>
												(NOTE 5)			(NOTE 4)

#### Explanatory Notes:

1) Year 2020 starting reserves are as of June 30, 2020; FY2020 starts January 1, 2020 and ends December 31, 2020.

2) Reserve Contributions for 2020 are the remaining budgeted 6 months; 2021 is the first year of recommended contributions.

3) 0.9% is the estimated annual rate of return on invested reserves; 2020 is a partial year of interest earned.

4) Accumulated year 2050 ending reserves consider the age, size, overall condition and complexity of the property.

5) Threshold Funding Year (reserve balance at critical point).

# Townhome **FIVE-YEAR OUTLOOK**

# South Riding Proprietary South Riding, Virginia

Line Item	Reserve Component Inventory	RUL = 0 FY2020	1 2021	2 2022	3 2023	4 2024	5 2025
	SRP Street Elements						
3.101	Asphalt Pavement, Crack Repair and Patch, Phased			8,630		8,979	
3.102	Asphalt Pavement, Mill and Overlay, Phased			171,986			
3.111	Catch Basins, Inspections and Capital Repairs, Phased			22,108			
3.121	Concrete Curbs and Gutters, Partial			65,087			
3.131	Concrete Sidewalks, Partial			29,308			
	Townhome Street Elements						
3.201	Asphalt Pavement, Crack Repair and Patch, Phased			79,892		83,120	
3.210	Asphalt Pavement, Mill and Overlay, Phase 1 (2020 is Planned)	208,835					
3.211	Asphalt Pavement, Mill and Overlay, Phase 1, Remaining, Phased		290,983	296,803	302,739		
3.212	Asphalt Pavement, Mill and Overlay, Phase 2, Phased					440,415	449,223
3.231	Catch Basins, Inspections and Capital Repairs, Phased			82,535			
3.241	Concrete Curbs and Gutters, Partial			250,622			
3.251	Concrete Sidewalks, Partial			145,838			
	Property Site Elements						
3.302	Mailbox Station Enclosures, Phased				21,224		
	Anticipated Expenditures, By Year (\$20,569,804 over 30 years)	208,835	290,983	1,152,809	323,963	532,514	449,223

# Single Family Home RESERVE EXPENDITURES

# South Riding Proprietary South Riding, Virginia

#### Explanatory Notes:

1) 2.0% is the estimated Inflation Rate for estimating Future Replacement Costs. 2) FY2020 is Fiscal Year beginning January 1, 2020 and ending December 31, 2020.

			_	South Riding, Virginia																					
Line		Per Phase		Decemic Common ant Inventory	Estimated 1st Year of		Unit	Costs, \$ Per Phase	Total	Percentage of Future RUL = (		2 2022	3 2023	4	5 2025	6 2026	7 2027	8 2028	9 2029	10 2030	11 2031	12 2032	13 2033	14 2034	15 2035
Item	Quantity	Quantity	Units	Reserve Component Inventory	Event	Useful Remaining	(2020)	(2020)	(2020)	Expenditures FY2020	2021	2022	2023	2024	2025	2020	2027	2028	2029	2030	2031	2032	2033	2034	2030
				Property Site Elements																					
4.101	85,600	<b>21,400</b> S	Square Yards	Asphalt Pavement, Crack Repair and Patch, Phased	2021	3 to 5 1 to 4	0.70	14,980	59,920	8.6%	15,280	15,585	15,897	16,215	16,539	16,870	17,207	17,551	17,902	18,261	18,626	18,998	19,378	19,766	20,16
4.201	54,000	<b>27,000</b> S	Square Yards	Asphalt Pavement, Mill and Overlay, Phase 1, Phased	2023	15 to 20 3 to 4	13.95	376,650	753,300	11.2%			399,704	407,698											
4.202	2,700	<b>2,700</b> S	Square Yards	Asphalt Pavement, Mill and Overlay, Phase 2	2026	15 to 20 6	13.95	37,665	37,665	0.6%						42,417									
4.203	8,400	8,400 S	Square Yards	Asphalt Pavement, Mill and Overlay, Phase 3	2028	15 to 20 8	13.95	117,180	117,180	1.9%								137,295							
4.204	12,400	<b>12,400</b> S	Square Yards	Asphalt Pavement, Mill and Overlay, Phase 4	2030	15 to 20 10	13.95	172,980	172,980	2.9%										210,862					
4.205	8,100	<b>8,100</b> S	Square Yards	Asphalt Pavement, Mill and Overlay, Phase 5	2032	15 to 20 12	13.95	112,995	112,995	2.0%												143,305			
4.301	54,000	27,000 S	Square Yards	Asphalt Pavement, Total Replacement, Phase 1, Phased	2043	15 to 20 23 to 24	32.00	864,000	1,728,000	38.1%															
4.302	2,700	<b>2,700</b> S	Square Yards	Asphalt Pavement, Total Replacement, Phase 2	2046	15 to 20 26	32.00	86,400	86,400	2.0%															
4.303	8,400	8,400 S	Square Yards	Asphalt Pavement, Total Replacement, Phase 3	2048	15 to 20 28	32.00	268,800	268,800	6.5%															
4.304	12,400	<b>12,400</b> S	Square Yards	Asphalt Pavement, Total Replacement, Phase 4	2050	15 to 20 30	32.00	396,800	396,800	10.0%															
4.401	180	<b>36</b> E	Each	Catch Basins, Inspections and Capital Repairs, Phased	2024	15 to 20 4 to 12	850.00	30,600	153,000	5.4%				33,122		34,461		35,853		37,301		38,808			
4.501	39,100	1,410 L	inear Feet	Concrete Curbs and Gutters, Partial	2024	to 65 4 to 30+	34.00	47,940	1,329,400	8.4%				51,892		53,988		56,169		58,439		60,800			
1.601	41,000	1,790 S	Square Feet	Concrete Sidewalks, Partial	2022	to 65 2 to 30+	9.00	16,110	369,000	2.5%		16,761				18,142				19,638				21,257	
				Anticipated Expenditures, By Year (\$7,222,041 over 30 years)						0	15 280	32 346	415 601	508 927	16 539	165 878	17 207	246 868	17 902	344 501	18 626	261 911	19 378	41 023	20 16

Anticipated Expenditures, By Year (\$7,222,041 over 30 years)

0 15,280 32,346 415,601 508,927 16,539 165,878 17,207 246,868 17,902 344,501 18,626 261,911 19,378 41,023 20,161

#### Single Family Home **RESERVE EXPÉNDITURES**

#### South Riding Proprietary

#### South Riding, Virginia Life Analysis, Estimated Costs, \$ Percentage Total Per Phase 1st Year of Years Unit Per Phase Total of Future 16 17 18 19 20 21 22 23 Line 2041 2042 2043 Quantity Quantity Units **Reserve Component Inventory** Event Useful Remaining (2020) (2020) (2020) Expenditures 2036 2037 2038 2039 2040 Item **Property Site Elements** 85,600 21,400 Square Yards Asphalt Pavement, Crack Repair and Patch, Phased 4.101 14,980 2021 1 to 4 0.70 59,920 8.6% 20,564 20,976 21,395 21,823 22,705 23,159 23,622 3 to 5 22,259 4.201 54,000 27,000 Square Yards Asphalt Pavement, Mill and Overlay, Phase 1, Phased 2023 15 to 20 3 to 4 13.95 376,650 753,300 11.2% 4.202 2,700 **2,700** Square Yards Asphalt Pavement, Mill and Overlay, Phase 2 2026 15 to 20 13.95 37,665 37,665 0.6% 6 8,400 Square Yards Asphalt Pavement, Mill and Overlay, Phase 3 4.203 8,400 2028 15 to 20 8 13.95 117,180 117,180 1.9% 4.204 12,400 **12,400** Square Yards Asphalt Pavement, Mill and Overlay, Phase 4 2030 15 to 20 10 13.95 172,980 172,980 2.9% 4.205 8,100 8,100 Square Yards Asphalt Pavement, Mill and Overlay, Phase 5 2032 15 to 20 12 13.95 112,995 112,995 2.0% 4.301 54,000 27,000 Square Yards Asphalt Pavement, Total Replacement, Phase 1, Phased 2043 15 to 20 23 to 24 32.00 864,000 1,728,000 38.1% 1,362,441 1,389,690 4.302 2,700 2,700 Square Yards Asphalt Pavement, Total Replacement, Phase 2 2046 15 to 20 32.00 86,400 2.0% 26 86,400 4.303 8,400 8,400 Square Yards Asphalt Pavement, Total Replacement, Phase 3 2048 15 to 20 28 32.00 268,800 268,800 6.5% 4.304 12,400 12,400 Square Yards Asphalt Pavement, Total Replacement, Phase 4 2050 15 to 20 30 32.00 396,800 396,800 10.0% 4.401 180 36 Each Catch Basins, Inspections and Capital Repairs, Phased 2024 15 to 20 4 to 12 850.00 30,600 153,000 5.4% 39,100 4.501 1,410 Linear Feet Concrete Curbs and Gutters, Partial 2024 to 65 4 to 30+ 34.00 47,940 1,329,400 8.4% 4.601 41,000 1,790 Square Feet Concrete Sidewalks, Partial 2022 to 65 2 to 30+ 9.00 16,110 369,000 2.5% 23,009 24,906

Anticipated Expenditures, By Year (\$7,222,041 over 30 years)

22,705 20,564 20,976 44,404 21,823 22,259 48,065 1,386,063 1,

24 2044	25 2045	26 2046	27 2047	28 2048	29 2049	30 2050
24,094	24,576	25,068	25,569	26,081	26,602	27,134

		144,583				
				467,987		
						718,748
49,218		51,207		53,275		55,428
77,108		80,224		83,465		86,837
		26,959				29,181
1,540,110	24,576	328,041	25,569	630,808	26,602	917,328

# **RESERVE FUNDING PLAN**

# Single Family Home

CASH FLOW ANALYSIS South Riding																	
Proprietary			Individual Re	eserve Budget	s & Cash Flow	vs for the Nex	t <u>t 30 Years</u>										
South Riding, Virginia		FY2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Reserves at Beginning of Year	(Note 1)	1,399,291	1,510,824	1,646,689	1,769,346	1,510,940	1,159,376	1,302,164	1,299,240	1,448,643	1,371,810	1,527,396	1,359,528	1,520,805	1,442,469	1,610,468	1,761,752
Total Recommended Reserve Contributions	(Note 2)	105,000	137,000	139,700	142,500	145,400	148,300	151,300	154,300	157,400	160,500	163,700	167,000	170,300	173,700	177,200	180,700
Estimated Interest Earned, During Year	(Note 3)	6,533	14,145	15,303	14,695	11,963	11,027	11,654	12,310	12,635	12,988	12,933	12,903	13,275	13,677	15,107	16,578
Anticipated Expenditures, By Year		0	(15,280)	(32,346)	(415,601)	(508,927)	(16,539)	(165,878)	(17,207)	(246,868)	(17,902)	(344,501)	(18,626)	(261,911)	(19,378)	(41,023)	(20,161)
Anticipated Reserves at Year End		<u>\$1,510,824</u>	<u>\$1,646,689</u>	<u>\$1,769,346</u>	<u>\$1,510,940</u>	<u>\$1,159,376</u>	<u>\$1,302,164</u>	<u>\$1,299,240</u>	<u>\$1,448,643</u>	<u>\$1.371.810</u>	<u>\$1,527,396</u>	<u>\$1,359,528</u>	<u>\$1.520.805</u>	<u>\$1,442,469</u>	<u>\$1.610.468</u>	<u>\$1.761.752</u>	<u>\$1,938,869</u>

(continued)	Individual Reserve Budgets & Cash Flows for the Next 30 Years, Continued														
	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050
Reserves at Beginning of Year	1,938,869	2,120,792	2,307,655	2,476,483	2,673,330	2,875,429	3,082,916	3,270,915	2,120,806	809,825	1,013,718	919,035	1,131,854	743,246	962,787
Total Recommended Reserve Contributions	184,300	188,000	191,800	195,600	199,500	203,500	207,600	211,800	216,000	220,300	224,700	229,200	233,800	238,500	243,300
Estimated Interest Earned, During Year	18,187	19,839	21,432	23,070	24,858	26,692	28,464	24,154	13,129	8,169	8,658	9,188	8,400	7,643	5,632
Anticipated Expenditures, By Year	(20,564)	(20,976)	(44,404)	(21,823)	(22,259)	(22,705)	(48,065)	(1,386,063)	(1,540,110)	(24,576)	(328,041)	(25,569)	(630,808)	(26,602)	(917,328)
Anticipated Reserves at Year End	<u>\$2,120,792</u>	<u>\$2,307,655</u>	<u>\$2,476,483</u>	<u>\$2,673,330</u>	<u>\$2,875,429</u>	<u>\$3,082,916</u>	<u>\$3,270,915</u>	<u>\$2,120,806</u>	<u>\$809,825</u>	<u>\$1,013,718</u>	<u>\$919,035</u>	<u>\$1,131,854</u>	<u>\$743,246</u>	<u>\$962,787</u>	<u>\$294,391</u>
														1	<b>VOTES 4&amp;5)</b>

#### Explanatory Notes:

1) Year 2020 starting reserves are as of June 30, 2020; FY2020 starts January 1, 2020 and ends December 31, 2020.

2) Reserve Contributions for 2020 are the remaining budgeted 6 months; 2021 is the first year of recommended contributions.

3) 0.9% is the estimated annual rate of return on invested reserves; 2020 is a partial year of interest earned.

4) Accumulated year 2050 ending reserves consider the age, size, overall condition and complexity of the property.

5) Threshold Funding Year (reserve balance at critical point).

# Single Family Home FIVE-YEAR OUTLOOK

## South Riding Proprietary

South Riding, Virginia

Line Item	Reserve Component Inventory	RUL = 0 FY2020	1 2021	2 2022	3 2023	4 2024	5 2025
	Property Site Elements						
4.101	Asphalt Pavement, Crack Repair and Patch, Phased		15,280	15,585	15,897	16,215	16,539
4.201	Asphalt Pavement, Mill and Overlay, Phase 1, Phased				399,704	407,698	
4.401	Catch Basins, Inspections and Capital Repairs, Phased					33,122	
4.501	Concrete Curbs and Gutters, Partial					51,892	
4.601	Concrete Sidewalks, Partial			16,761			
	Anticipated Expenditures, By Year (\$7,222,041 over 30 years)	0	15,280	32,346	415,601	508,927	16,539



# **4.RESERVE COMPONENT DETAIL**

Reserve Component Detail of this Reserve The 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.

# COMMON EXPENDITURES

# **Property Site Elements**

# Asphalt Pavement, Walking Paths, Crack Repair and Patch

Line Item: 1.101

*Quantity:* Approximately 19,800 square yards of asphalt pavement walking paths throughout SRP

*History:* Varied ages with paths repaired and repaved as needed

Condition: Varied 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. Our cost includes an allowance for crack repairs and patching of up to two percent (2%) of the pavement.

# Asphalt Pavement, Walking Paths, Repaving

*Line Item:* 1.104

*Quantity:* Approximately 19,800 square yards of asphalt pavement walking paths throughout SRP

*History:* Varied ages with paths repaired and repaved as needed

*Condition:* Varied good to fair overall





Asphalt pavement walking path overview



Asphalt pavement walking path overview



Asphalt pavement walking path overview



Asphalt pavement walking path crack



Asphalt pavement walking path cracks and deterioration



Asphalt pavement walking path cracks and deterioration





Asphalt pavement walking path cracks and deterioration

Asphalt pavement walking path cracks and deterioration

**Useful Life:** The need to maintain a safe pedestrian surface results in a useful life of 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.

## **Bandstands**

*Line Items:* 1.107 and 1.110

*Quantity:* Two bandstands; one located near the Town Hall building and one located at South Riding Center Park area

*History:* The Town Hall bandstand was installed in 2018 and the South Riding Center Park bandstand was installed in 2012

*Condition:* Good to fair overall







Town Hall bandstand overview

South Riding Center Park bandstand overview

Useful Life: 15- to 25-years

*Priority/Criticality:* Not recommended to defer

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

# **Bocce Ball Court, Renovation**

Line Item: 1.113

Quantity: One bocce ball court located at Stinger Drive

*History:* Original

Condition: Fair to poor overall with surface and border deterioration evident



Bocce ball court overview

Surface deterioration







**Border deterioration** 

**Border deterioration** 

Useful Life: 10- 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.

# Bridge, Wood

*Line Item:* 1.114

Quantity: One wood bridge located along the Fitness Course

History: Original

Condition: Fair to poor overall with organic growth and deterioration evident



Wood bridge overview

**Deck board deterioration** 





Organic growth and railing deterioration

**Damaged pickets** 



Organic growth and railing deterioration

Useful Life: 15- 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. We recommend the Association budget for interim repairs as needed through the operating budget.

## **Concrete Sidewalks**

*Line Item:* 1.116

*Quantity:* Approximately 1,500,000 square feet of concrete sidewalks along the VDOT maintained streets

*Condition:* Good to fair overall with trip hazards, scaling, heave and cracks evident





Concrete sidewalk trip hazard





Concrete sidewalk trip hazard



Concrete sidewalk trip hazard



Sidewalk heave



Concrete sidewalk scaling





Concrete sidewalk cracks

Concrete sidewalk crack

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

*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 601,400 square feet of concrete sidewalks, or approximately forty percent (40.1%) of the total, will require replacement during the next 30 years.

## Fence, Aluminum

*Line Item:* 1.119

*Quantity:* 400 linear feet of aluminum fences at the Hyland Hills Park

*History:* Original

*Condition:* Fair overall with damage, finish deterioration and lean evident





Aluminum fence overview

Aluminum fence damage and finish deterioration



Aluminum fence damage and finish deterioration

Aluminum fence lean

**Useful Life:** Up to 20 years in conjunction with replacement of the Hyland Hills Park playground equipment

Priority/Criticality: Per Board discretion

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

### Fence, Chain Link

*Line Item:* 1.120

*Quantity:* 940 linear feet of aluminum fences at the Elk Lick dog park

*History:* Installed in 2015



Condition: Good to fair overall with finish deterioration evident





Chain link fence overview

Chain link fence finish deterioration



Chain link fence finish deterioration

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.

# Fences, Vinyl

*Line Item:* 1.122

Quantity: 3,000 linear feet of vinyl fences near the entrances to the community

*History:* Varied ages



**Condition:** Varied good to fair overall condition with rail displacement and missing post caps evident





Vinyl fence overview

**Rail displacement** 

**Rail displacement** 



Missing post cap

Useful Life: 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.

## Fishing Pier, Pond 6

*Line Item:* 1.125

Quantity: One wood finishing pier located at pond 6

*History:* Installed in 2012



*Condition:* Good to fair overall with railing deterioration, replaced sections of railing and fastener rust evident.





Fishing pier overview

**Finish pier decking** 





Finish pier railing deterioration and fastener rust

Useful Life: 20- to 30-years

Replaced section of railing

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 estimate of cost assumes replacement of the entire finish pier and partial replacement of up to fifteen percent (15%) of the piles.

# **Fishing Pier, Priesters Pond**

*Line Item:* 1.128

Quantity: One fishing pier located at Priesters Pond.



*History:* Installed in 2019

*Condition:* Good overall



**Fishing pier** 

Fishing pier

Useful Life: 15- to 20-years

**Component Detail Notes:** This fishing pier utilize encapsulated polystyrene billets (floatation devices), aluminum railings and composite decking. The docks automatically adjust to fluctuations in water levels.

*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.

# **Fitness Equipment**

*Line Item:* 1.131

*Quantity:* Nine fitness equipment stations

History: Installed in 2008

Condition: Good to fair overall with damage and finish deterioration evident





Fitness station overview

**Fitness stations overview** 



**Damaged border** 

**Finish deterioration** 

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.

# Irrigation System, Controls

*Line Item:* 1.134

Quantity: 17 each

History: Original with repairs conducted as needed

Condition: Reported satisfactory

Useful Life: Up 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.

# Irrigation System, Pumps

*Line Items:* 1.137

Quantity: Two each

History: Original

Condition: Reported satisfactory

Useful Life: Up 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.

#### Landscape

*Line Item:* 1.140

**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 an annual landscape allowance for partial street trees and enhancements.

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:* 1.143

Quantity: Four poles with light fixtures located at South Riding Center Park

History: Installed in 2012

*Condition:* Good overall



Light poles and fixtures overview

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.

### Pavers, Masonry

*Line Item:* 1.146

Quantity: 3,100 square feet of masonry pavers located at a portion of the parks

History: Varied ages

Condition: Good to fair overall with isolated areas of displacement evident







Masonry pavers overview

**Paver displacement** 

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. Our estimate of cost includes removal of up to twenty percent (20%) of the pavers, replacement of up to ten percent (10%) of the pavers and resetting of up to ten percent (10%) of the pavers per event.

# **Pavilion, Murrey Park**

*Line Item:* 1.149

*Quantity:* One metal frame pavilion located at Murrey Park

*History:* Installed in 2010

Condition: Good to fair overall with rust evident







**Pavilion overview** 

Metal frame and light fixtures overview



Rust

Useful Life: Renovations 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. Renovation should include replacement of the metal roof and repairs to the metal frame and concrete base.

# Pergolas, Wood, Owen Park

*Line Item:* 1.152

*Quantity:* One wood pergola located at Owen Park

History: Original

Condition: Fair overall with deterioration evident





Pergola overview

Deterioration



Deterioration

Useful Life: 15- to 25-years with periodic maintenance

Priority/Criticality: Per Board discretion

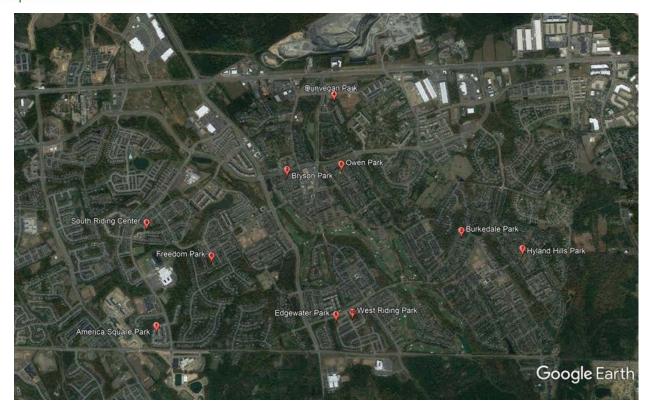
**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We recommend the Association budget for paint applications and repairs through the operating budget.

# **Playground Equipment**

Line Items: 1.155 through 1.164

**Location, History and Condition:** The following aerial images depicts the location of each of the parks with playground equipment and the following table depicts the location, history and condition of each playground:

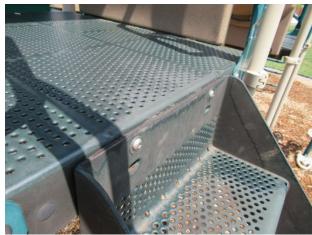




Location	History	Condition				
America Square Park	2007	Fair				
Bryson Park	2020	Good				
Burkedale Park	2020	Good				
Dunvegan Park	2001	Fair to Poor				
Edgewater Park	2020	Good				
Freedom Park	2001	Fair to Poor				
Hyland Hills Park	2001	Fair				
Owen Park	2019	Good				
South Riding Center Park	2007	Fair				
West Riding Park	2010	Fair				







America Square Park playground overview

**Finish deterioration** 



Bryson Park playground overview



Burkedale Park playground overview



Dunvegan Park playground overview



Finish deterioration and rust







Finish deterioration and rust





Freedom Park playground overview



Finish deterioration and rust



Hyland Hills Park playground overview



Shade structure fabric deterioration





Owen Park playground overview



Panel crack



South Riding Center Park playground overview



West Riding Park playground overview



Border fade



Finish deterioration and rust

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.

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. Management informs us the Association plans to replace the playground equipment at Dunvegan Park and Hyland Hills Park in 2020. We include an allowance in the unit cost for replacement of the safety surface and border.

### Ponds, Fountain

Line Item: 1.167

*Quantity:* One pond fountain located at the pond along South Riding Boulevard

*History:* Installed in 2020

Condition: Reported in good condition

Useful Life: 10- to 15-years

**Component Detail Notes:** The use of small pumps, motors and aerators circulates pond water and increases the amount of entrained oxygen in the water, increasing water quality and reducing algae growths.

*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 estimate of cost is based on information provided to us by the Association.

# Ponds, Erosion Control

*Line Item:* 1.170

*Quantity:* 4,370 linear feet of shorelines at the pond along South Riding Boulevard and the pond located at Mink Meadows Park.

*Condition:* Good to fair overall with some minor erosion evident







South Riding Boulevard pond overview

South Riding Boulevard pond shoreline – Note: minor erosion



Mink Meadows Park pond overview

Mink Meadows Park pond shoreline

**Useful Life:** Shorelines are subject to fluctuations in water levels, increased plant growth and migrating storm and ground water resulting in the need for erosion control measures up to every 10 years.

**Component Detail Notes:** The use and maintenance of landscape, natural vegetation and/or stone rip rap along the pond shoreline will help maintain an attractive appearance and prevent soil erosion.

Shoreline plantings are referred to as buffer zones. Buffer zones provide the following advantages:

- Control insects naturally
- Create an aesthetically pleasing shoreline
- Enhance water infiltration and storage
- Filter nutrients and pollutants
- Increase fish and wildlife habitat
- Reduce lawn maintenance
- Stabilize shoreline and reduce erosion



• Trap sediments

*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 to install a combination of plantings and rip rap around the ponds along 870 linear feet, or approximately twenty percent (20%), of the shorelines per event.

## Ponds, Sediment Removal

Line Item: 1.173

Quantity: Approximately 28,960 square yards of water surface area

Condition: Good to fair overall with sediment accumulation evident





South Riding Boulevard pond overview

Mink Meadows Park pond overview



Sediment accumulation at South Riding Boulevard Pond



**Useful Life:** Based on the visual condition, construction and adjacent deciduous trees, we recommend the Association anticipate the need to remove pond sediment up to every 30 years.

**Component Detail Notes:** The gradual build-up of natural debris, including tree leaves, branches and silt, may eventually change the topography of areas of the pond. Silt typically accumulates at inlets, outlets and areas of shoreline erosion. Sediment removal of ponds becomes necessary if this accumulation alters the quality of pond water or the functionality of the ponds as storm water management structures. Sediment removal is the optimal but also the most capital intensive method of pond management.

*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. For reserve budgeting purposes, we estimate the need to remove an average depth of one yard from approximately twenty percent (20%) of the surface area. However, the actual volume of material to remove may vary dependent upon an invasive analysis at the time of removal. A visual inspection of a body of water cannot reveal the amount of accumulated silt. This is especially true on larger bodies of water. It is therefore inaccurate to assume an entire body of water will require sediment removal. It is more cost effective to spot remove in areas of intense silt accumulation as noted through bathymetric surveys. The amount or depth of silt is determined through prodding into the silt until a relatively solid base is found or through bathymetric surveys. A bathymetric survey establishes a base of data about the depth of the body of water over many locations against which the data of future surveys is compared. These invasive procedures are beyond the scope of a Reserve Study and require multiple visits to the site. We recommend SRP contract with a local engineer for periodic bathymetric surveys. Future updates of the Reserve Study can incorporate future anticipated expenditures based on the results of the bathymetric surveys.

Unit costs per cubic yard to remove can vary significantly based on the type of equipment used, quantity of removed material and disposal of removed material. Sediment removal costs must also include mobilization, or getting the equipment to and from the site. Also, the portion of the overall cost to remove associated with mobilization varies based on the volume removed. Costs for sediment disposal also vary depending on the site. Compact sites will require hauling and in some cases disposal fees.

## Shade Structure, South Riding Center Park

Line Item: 1.176

*Quantity:* One shade structure located at the playground at South Riding Center Park

*History:* Installed in 2018

*Condition:* Good overall





Shade structure support posts

**Useful Life:** Up to 30 years with interim replacement of the fabric shades as needed through the operating budget

Priority/Criticality: Per Management discretion

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

## Signage, Entrance Monuments

Line Item: 1.179

History: Varied ages

Condition: Good to fair overall with mortar deterioration evident



Entrance monument overview



**Entrance monument overview** 





Entrance monument overview

**Entrance monument overview** 



Mortar deterioration

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. The signage includes the following elements:

- Landscaping
- Light fixtures
- Letters
- Masonry
- Signs

Priority/Criticality: Per Board discretion



**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Our cost for renovation includes repointing and repairs to the masonry, landscaping as needed and replacement of the remaining components listed above.

## Signage, Traffic Management, Street Identification and Community

*Line Item:* 1.182

History: Varied ages of up to 20 years

Condition: Varied good to fair overall condition



Street identification and traffic management signage

**Community signage** 

Useful Life: 15- to 20-years

**Component Detail Notes:** The community signs contribute to the overall aesthetic appearance of the property to owners and potential buyers. 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 time for replacement of the signs is discretionary.

Priority/Criticality: Per Board discretion

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

## **Sport Courts, Color Coat**

*Line Items:* 1.185, 1.191 and 1.203

**Quantity and Location:** The Association maintains the following sport courts:



- 460 square yards of a basketball court at Elk Lick Park
- 1,600 square yards of tennis courts at Murrey Park
- 1,600 square yards of tennis courts near the Town Hall

*History:* The basketball court was last color coated in 2015. The tennis courts were last color coated in 2017.

**Condition:** The basketball court is in fair to poor overall condition with repairs, cracks and deterioration evident. The tennis courts are in fair overall condition with color coat deterioration and cracks evident.



Basketball court overview



Repairs, cracks and color coat deterioration



Town Hall tennis court color coat deterioration



Murrey Park tennis court color coat deterioration and cracks

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.

### Sport Courts, Surface

*Line Items:* 1.188, 1.200 and 1.212

Quantity and Location: The Association maintains the following sport courts:

- 460 square yards of a basketball court at Elk Lick Park
- 1,600 square yards of tennis courts at Murrey Park
- 1,600 square yards of tennis courts near the Town Hall

*History:* The basketball court is at an approximate age of 20 years. The Murrey Park tennis courts are at an age of 10 years and the Town Hall tennis courts are at an approximate age of 20 years.

**Condition:** The basketball court is in fair to poor overall condition with repairs, cracks and deterioration evident. The Murrey Park tennis courts are in good to fair overall condition with centerline cracks evident. The Town Hall tennis courts are in fair overall condition with cracks evident.



Basketball court crack and deterioration



Basketball court crack and deterioration





Murrey Park tennis court centerline crack

Town Hall tennis court crack



Town Hall tennis court crack

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.

## **Sport Courts, Fences**

*Line Items:* 1.194 and 1.206

*Quantity:* 480 linear feet of fence at the Murrey Park tennis courts and at the Town Hall tennis courts

*History:* The Murrey Park tennis court fence was installed in 2010 and the Town Hall tennis court fence is at an approximate age of 20 years.



Condition: Good to fair overall with finish deterioration evident



Murrey Park tennis court fence overview



**Finish deterioration** 



Town Hall tennis court fence overview

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.

## **Sport Courts, Light Poles and Fixtures**

Line Items: 1.197 and 1.209

**Quantity:** 9 light poles with 12 fixtures at the Murrey Park tennis courts and 7 light poles with 16 fixtures at the Town Hall tennis courts.

*History:* The Murrey Park light poles and fixtures were installed in 2010 and the Town Hall light poles and fixtures are at an approximate age of 20 years.



## Condition: Good overall

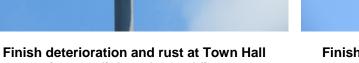


Murrey Park tennis court light poles and fixtures



Town Hall tennis court light poles and fixtures





tennis court light poles and fixtures

Useful Life: Up to 25 years

Priority/Criticality: Per Board discretion



Finish deterioration and rust at Town Hall tennis court light poles and fixtures

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



## **Maintenance Building Elements**



Maintenance building overview

## Garage Doors, Overhead

Line Item: 1.301

Quantity: Three overhead garage doors at the maintenance building

History: Original to construction of the maintenance building in 2016

*Condition:* Good overall

Useful Life: 10- to 15-years

Priority/Criticality: Per Management discretion

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

### **Roof Assembly, Metal**

*Line Item:* 1.304

Quantity: 38 squares<sup>1</sup>, 260 linear feet of gutters and downspouts and four skylights

*History:* Original to construction of the maintenance building in 2016

Condition: Good overall

Useful Life: Up to 30 years

<sup>1</sup> We quantify the roof area in squares where one square is equal to 100 square feet of surface area.



*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, Metal

Line Item: 1.307

Quantity: 5,860 square feet of metal siding

History: Original to construction of the maintenance building in 2016

**Condition:** Good overall with isolated dents evident

Siding dent

Useful Life: Up to 30 years

Priority/Criticality: Not recommended to defer

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



## **Maintenance Equipment**

## **Maintenance Equipment**

*Line Item:* 1.501 through 1.581



Maintenance truck

Maintenance utility vehicles



Maintenance tractor and trailer

**Maintenance attachments** 

**Component Detail Notes:** The Association maintains various pieces of maintenance equipment in order to properly maintain the community. Specific discussion of each piece of maintenance equipment is beyond the scope of this study. For budgetary purposes, we reviewed the age, condition and remaining useful lives of each piece of maintenance equipment with Management and the Staff to determine the estimate times of replacement based on existing use and condition.

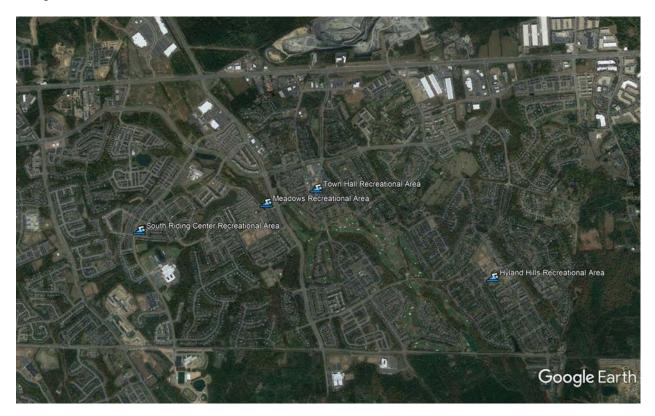
Priority/Criticality: Per Management discretion

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



## **RECREATION EXPENDITURES**

South Riding Proprietary is responsible for the four recreational areas, Hyland Hills, Meadows, South Riding Center and Town Hall, identified on the following aerial image:



# **Hyland Hills Recreational Area**

## **Pool House Elements**

## Asphalt Pavement, Repaving

Line Item: 2.096

Quantity: Approximately 1,040 square yards at the parking lot

History: Original to 2013

Condition: Good to fair overall with cracks evident





Asphalt pavement parking lot

Asphalt pavement cracks



Asphalt pavement cracks

Asphalt pavement cracks

Useful Life: 15- to 20-years with the benefit of timely 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%) and repairs and partial replacements of the curbs.

## Life Safety System

Line Item: 2.097

History: Upgrade in 2013

Conditions: Reported satisfactory

**Useful Life:** Up to 25 years with interim replacement of the control panel as needed through the operating budget.



**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.

### **Rest Rooms**

Line Items: 2.098 and 2.099

**Quantity:** Two rest rooms located at the main pool and two rest rooms located at the splash pool

*History:* Main pool rest rooms were partially renovated in 2015 and the splash pool rest rooms are original to construction in 2013

*Condition:* Good to fair overall





Main pool rest room overview

Main pool rest room floor

Useful Life: Renovation every 15- to 20-years

Component Detail Notes: Components include:

- Epoxy coated concrete floors
- Paint finishes on the walls and ceilings
- Light fixtures
- Plumbing fixtures
- Countertops

Priority/Criticality: Per Board discretion

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Renovation should include paint finish applications, epoxy floor coating applications and replacement of all the remaining components listed above.

### **Roof Assemblies, Asphalt Shingles**

*Line Items:* 2.101 and 2.102

**Quantity:** The asphalt shingle roof assembly at the main pool comprises 17 squares of asphalt shingle roofing and 170 linear feet of gutters and downspouts. The asphalt single roof assembly at the splash pool comprises 14 squares of asphalt shingles and 240 linear feet of gutters and downspouts.

*History:* The main pool asphalt shingle roof assembly is at an approximate age of 20 years. The splash pool asphalt shingle roof assembly is original to construction in 2013.

**Condition:** The main pool roof is in fair overall condition with downspout fastener rust and damage evident. The splash pool roof is in good to fair overall condition.





Splash pool roof assembly overview

Main pool roof assembly overview



Downspout fastener rust and damage

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.

## **Roof Assemblies, Flat and Metal**

*Line Items:* 2.103 and 2.104

*Quantity:* 550 square feet of a flat roof assembly at the main pool and one section of metal roofing accent the main pool building.

*History:* The flat roof was replaced in 2014 and the metal roof was replaced in 2011.

Condition: Good to fair overall





Metal roof overview

Useful Life: 15- to 20-years for the flat roof and up to 30 years for the metal roof

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, Paint Finishes and Capital Repairs

Line Item: 2.105

Quantity: Approximately 8,900 square feet of siding, trim, soffit and fascia

History: Last applications of a paint finish was in 2016

*Condition:* Fair overall with finish deterioration evident



Siding finish deterioration

Useful Life: Four- to six-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 assume the following activities per event:

- Paint finish applications
- Replacement of up to ten percent (10%) of the siding, trim, soffit and fascia (The exact amount of material in need of replacement will depend on the actual future conditions and desired appearance. We recommend replacement wherever holes, cracks and deterioration impair the ability of the material to prevent water infiltration.)
- Replacement of sealants as needed

### Water Heaters, Main Pool

*Line Item:* 2.106

*Quantity:* Two gas-fired water heaters with an input capacity of 200-MBH (thousand British Thermal Units per hour) to produce domestic hot water at the main pool building

*History:* Replaced in 2011

*Condition:* Reported satisfactory without operational deficiencies

Useful Life: 15 to 20-years

*Component Detail Notes:* The useful life is dependent on use, demand per unit and the quality of water.

**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:

- Weekly:
  - Inspect for leaking water
  - Verify area around water heater is free from obstruction, including flammable liquids and combustible materials
  - Listen for any unusual vibrations or noises
- Monthly:
  - Verify relief valve is working properly and discharged water is directed to an open drain
  - Check controls and switches for proper operations
  - Conduct blowdown to minimize corrosion and remove suspended solids within the system



*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 Decks**

*Line Item:* 2.121

*Quantity:* 23,750 square feet of concrete pool decks at the main pool and splash pool

*History:* The concrete deck at the main pool is at an approximate age of 20 years. The pool deck at the splash pool was constructed in 2013.

#### *Condition:* Good overall



Concrete pool deck overview

Concrete pool 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.

*Component Detail Notes:* We recommend the Association budget for the following:

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

*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.

### Covers, Vinyl

*Line Item:* 2.122

Quantity: 9,230 square feet

History: Replaced in 2015

Condition: Reported in satisfactory 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:* 2.125

Quantity: 600 linear feet

History: Replaced in 2013

Condition: Good to fair overall



Aluminum fence overview

Aluminum fence overview

**Useful Life:** Up to 25 years

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: 2.128

*Quantity:* The pool furniture includes the following:

- Chairs
- Lounges
- Tables
- Umbrellas
- Guard chairs
- Ladders and life safety equipment

History: Varied ages

*Condition:* Varied in good to fair overall condition



Pool furniture

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.



## **Light Poles and Fixtures**

Line Item: 2.129

Quantity: Six each

History: Replaced in 2013

Condition: Good overall



Light pole and fixture overview

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.

## **Mechanical Equipment**

Line Item: 2.131

*Quantity:* The mechanical equipment includes the following:

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

History: Varied ages

*Condition:* Reported satisfactory





Pool mechanical equipment

Pool mechanical equipment

Useful Life: Up 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. Failure of the pool mechanical equipment as a single event is unlikely. Therefore, we include replacement of up to twenty-five percent (25%) of the equipment per event. We consider interim replacement of motors and minor repairs as normal maintenance.

## Pool Finishes, Plaster, Tile and Coping

Line Items: 2.134 through 2.139

**Quantity:** 8,720 square feet of plaster based on the horizontal surface area and approximately 510 linear feet of tile and coping at the main pool and 2,170 square feet of plaster based on the horizontal surface area and approximately 240 linear feet of tile and coping at the splash pool

*History:* The main pool plaster finish was replaced in 2016 and the age of the tile and coping is unknown. The splash pool plaster finish was replaced in 2020 and the tile and coping is original to construction in 2013.

*Condition:* Good to fair overall with coping cracks as the main pool evident





Main pool overview

Main pool overview



Main pool coping cracks

Splash pool overview

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

**Component Detail Notes:** Removal and replacement 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

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 estimate of cost for replacement of the plaster finish at the splash pool is based on information provided to us by the Association. We



recommend the Association budget for full tile and coping replacement every other plaster replacement event.

### Shade Structures, Poolside Umbrellas

*Line Item:* 2.140

Quantity: Four each

History: Installed in 2013

Condition: Reported in fair overall condition with deterioration evident

Useful Life: 5- to 10-years

*Priority/Criticality:* Per Board discretion

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

### Water Features

*Line Items:* 2.143 and 2.146

*History:* The water features at the splash pool are original to construction in 2013 and the age of splash pad at the main pool is unknown.

*Conditions:* Good overall



Water feature overview

**Useful Life:** 15- to 25-years for the water features at the splash pool and 4- to 6-years for coating applications and repairs to the splash pad at the main pool



Priority/Criticality: Per Board discretion

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

## Water Slide, Fiberglass

*Line Items:* 2.149 and 2.152

Quantity: Two slides

*History:* The slide at the main pool was installed in 2012 and the slide at the splash pool is original to construction in 2013

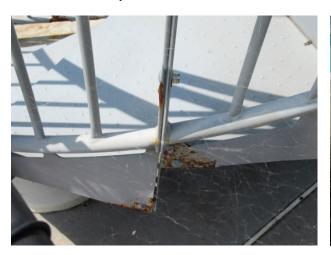
**Conditions:** Good to fair overall with finish deterioration and rust at the main pool slide staircase evident



Main pool slide overview



Finish deterioration at main pool slide



Main pool slide staircase rust



Splash pool slide overview

Useful Life: Replacement at up to 25 years and refinishing every 5- to 10-years



**Component Detail Notes:** Safety is the major purpose for maintaining the water slide. We recommend an annual inspection of the water slide to identify and repair as normal maintenance loose connections and fasteners or damaged elements. We recommend the use of a specialist for the design or replacement of the water slide environment.

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.

## **Meadows Recreational Area**

Pool House Elements

## Asphalt Pavement, Repaving

Line Item: 2.201

Quantity: Approximately 1,630 square yards at the parking lot

History: Original to 2003

*Condition:* Fair to poor overall with cracks and deterioration evident



Asphalt pavement overview

Asphalt pavement cracks





Asphalt pavement cracks and deterioration







Asphalt pavement cracks and deterioration

Concrete curb and gutter crack

Useful Life: 15- to 20-years with the benefit of timely 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%) and repairs and partial replacements of the curbs.

### Life Safety System

*Line Item:* 2.204

History: Original to 2003

Conditions: Reported satisfactory

**Useful Life:** Up to 25 years with interim replacement of the control panel as needed through the operating budget.



**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.

### **Rest Rooms**

Line Item: 2.207

*Quantity:* Two rest rooms located at the pool house

*History:* Renovated last in 2015

*Condition:* Good to fair overall with epoxy floor coating deterioration and stains and rust evident







Pool house rest room overview





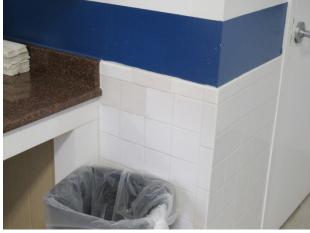
Pool house entrance overview



Epoxy floor coating deterioration



Stains and rust



**Replaced tiles** 

Useful Life: Renovation every 15- to 20-years

Component Detail Notes: Components include:



- Epoxy coated concrete floors
- Tile walls coverings on a portion of the walls
- Paint finishes on the ceilings and a portion of the walls
- Light fixtures
- Plumbing fixtures
- Countertops

#### Priority/Criticality: Per Board discretion

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Our estimate of cost includes an allowance for renovations to the entrance and guard room. Renovation should include paint finish applications, epoxy floor coating applications and replacement of all the remaining components listed above.

### **Roof Assembly, Metal**

*Line Item:* 2.210

Quantity: 30 squares of metal roofs and 260 linear feet of gutters and downspouts

History: Original to construction in 2003

Condition: Good to fair overall with finish deterioration evident



Metal roof assembly overview

Metal roof assembly overview





Metal roof finish deterioration

Useful Life: Up to 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.

## Walls, Paint Finishes and Capital Repairs

Line Item: 2.213

Quantity: Approximately 3,800 square feet of trim, soffit and fascia

*History:* Last applications of a paint finish was in 2018

Condition: Good to fair overall with trim deterioration evident



Trim deterioration

**Useful Life:** Four- to six-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 assume the following activities per event:

- Paint finish applications
- Replacement of up to ten percent (10%) of the trim, soffit and fascia (The exact amount of material in need of replacement will depend on the actual future conditions and desired appearance. We recommend replacement wherever holes, cracks and deterioration impair the ability of the material to prevent water infiltration.)
- Replacement of sealants as needed

#### Windows and Doors

*Line Item:* 2.216

Quantity: 230 square feet

*History:* Original to construction in 2003

Condition: Good to fair overall



Entrance door overview

Useful Life: Up to 35 years

Priority/Criticality: Not recommended to defer

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



## Pool Elements

## **Concrete Deck**

Line Item: 2.231

Quantity: 13,060 square feet

History: Mostly original to 2003 with expansion in 2012

Condition: Good overall with isolated cracks evident



**Concrete deck overview** 



Concrete deck overview



**Concrete deck overview** 



Concrete deck crack

**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.

*Component Detail Notes:* We recommend the Association budget for the following:



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

*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.

### Covers, Vinyl

*Line Item:* 2.234

Quantity: 9,520 square feet

History: Replaced in 2018

*Condition:* Reported in satisfactory 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: 2.237

Quantity: 680 linear feet

*History:* Mostly original to 2003 with a portion replaced in 2012







Aluminum fence overview

Aluminum fence overview

Useful Life: Up to 25 years

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: 2.240

*Quantity:* The pool furniture includes the following:

- Chairs
- Lounges
- Tables
- Umbrellas
- Guard chairs
- Ladders and life safety equipment

History: Replaced in 2012

Condition: Varied in good to fair overall condition





**Pool furniture** 

**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.

## **Light Poles and Fixtures**

*Line Item:* 2.243

Quantity: Nine each

*History:* Original to 2003





Light pole and fixture overview

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.

## **Mechanical Equipment**

*Line Item:* 2.246

*Quantity:* The mechanical equipment includes the following:

- Automatic chlorinators
- Controls
- Filters
- Heater
- Interconnected pipe, fittings and valves
- Pumps

*History:* Varied ages

Condition: Reported satisfactory





Pool mechanical equipment

Pool mechanical equipment

Useful Life: Up 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. Failure of the pool mechanical equipment as a single event is unlikely. Therefore, we include replacement of up to twenty-five percent (25%) of the equipment per event. We consider interim replacement of motors and minor repairs as normal maintenance.

## Pool Finishes, Plaster, Tile and Coping

*Line Items:* 2.249 and 2.252

*Quantity:* 8,840 square feet of plaster based on the horizontal surface areas and approximately 680 linear feet of tile and coping

*History:* The plaster finishes were replaced in 2017 and the age of the coping and tile is unknown





Main pool overview

Main pool finishes



Wading pool overview

Spa pool overview

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

**Component Detail Notes:** Removal and replacement 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

*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 estimate of cost for replacement of the plaster finish at the splash pool is based on information provided to us by the Association. We



recommend the Association budget for full tile and coping replacement every other plaster replacement event.

#### Shade Structures, Cantilever

Line Item: 2.255

Quantity: One each

History: Installed in 2017

Condition: Good overall



#### Shade structure overview

**Useful Life:** Up to 30 years with interim replacement of the fabric conducted as needed through the operating budget

Priority/Criticality: Per Board discretion

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

#### Water Features

Line Item: 2.258

*History:* Installed in 2012





Water feature overview

Useful Life: 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.

# South Riding Center Recreational Area

Community Building Exterior Elements

# Asphalt Pavement, Repaving

Line Item: 2.301

Quantity: Approximately 2,580 square yards at the parking lot

History: Original to 2007

*Condition:* Fair overall with cracks evident





Asphalt pavement overview

Asphalt pavement cracks



Asphalt pavement cracks

Concrete curb and gutter crack

Useful Life: 15- to 20-years with the benefit of timely 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%) and repairs and partial replacements of the curbs.

### **Balconies, Composite**

*Line Item:* 2.304

*Quantity:* Two composite balconies comprising 600 square feet of horizontal surface area and 50 linear feet of vinyl railings.

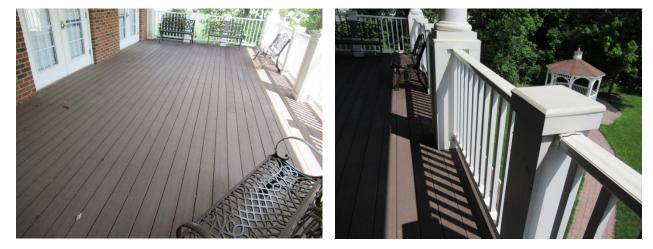
History: Original to construction in 2007





Composite balcony at entrance

Composite balcony at rear



**Composite decking** 

Vinyl railings

Useful Life: 20- to 25-years

**Component Detail Notes:** The wood components in the composite material will absorb moisture. When dispelled, black mold spots can appear that will require chemical cleaning. However, these spots will reappear resulting in the need for cleaning every other month as needed during humid months. The Association should fund these expenses through the operating budget.

*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.



## **Roof Assembly, Asphalt Shingles**

#### Line Item: 2.307

*Quantity:* 65 squares of asphalt shingles and 340 linear feet of gutters and downspouts. This quantity includes the detached garage.

History: Original to construction in 2007

*Condition:* Good to fair overall





Asphalt shingle roof assembly overview

Asphalt shingle roof assembly overview

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.

### **Roof Assemblies, Metal**

Line Item: 2.310

Quantity: Three sections of metal roofs

History: Original to construction in 2007





Metal roof overview

Useful Life: Up to 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.

# Walls, Paint Finishes and Capital Repairs

*Line Item:* 2.313

**Quantity:** Approximately 6,500 square feet of trim, soffit and fascia. This quantity includes the detached garage and the stone masonry perimeter walls and stucco gables.

*History:* Unknown age

Condition: Fair overall with finish deterioration evident





Finish deterioration at trim

Useful Life: Four- to six-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 assume the following activities per event:

- Paint finish applications
- Replacement of up to ten percent (10%) of the siding, trim, soffit and fascia (The exact amount of material in need of replacement will depend on the actual future conditions and desired appearance. We recommend replacement wherever holes, cracks and deterioration impair the ability of the material to prevent water infiltration.)
- Replacement of sealants as needed

### Windows and Doors

Line Item: 2.316

Quantity: 1,300 square feet at the community building and the detached garage

History: Original to construction in 2007





Windows and doors

Doors

Useful Life: Up to 35 years

*Priority/Criticality:* Not recommended to defer

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

# Community Building Interior Elements

## **Exercise Equipment**

#### Line Item: 2.331

Quantity: The exercise room contains the following types of equipment:

- Elliptical machines
- Stationary cycles
- Treadmills

History: Varied ages

Conditions: Reported in satisfactory condition





Exercise equipment overview

Useful Life: 5- to 10-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: 2.334

**Quantity:** Approximately 45 square yards (Contractor measurements will vary from the actual floor area due to standard roll lengths, patterns and installation waste.)

History: Replaced in 2017

Condition: Good to fair overall with stains evident



**Carpet stains** 

Carpet stains

**Exercise equipment overview** 



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: 2.337

Quantity: 340 square yards

History: Original to 2007

*Condition:* Good to fair overall



#### Tile floor covering overview

**Useful Life:** Up to 25 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.

### Floor Coverings, Vinyl

*Line Item:* 2.340

Quantity: 205 square yards

History: Installed in 2017



Condition: Good overall



Vinyl floor covering overview

Useful Life: 10- 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.

## **Furnishings**

Line Items: 2.343 and 2.346

History: Mostly date to 2017

Condition: Good overall



**Banquet chairs** 

**Banquet chairs and tables** 





Furnishings

**Useful Life:** We recommend the Association budget for replacement of the banquet chairs every 10- to 15-years. The remaining furnishings have varied useful lives of up to 20 years

*Component Detail Notes:* Furnishings in the community building include but are not limited to the following elements:

- Bureaus
- Chairs
- Chandeliers
- Desks
- File cabinets
- Folding chairs and tables
- Lamps
- Televisions
- Window treatments

#### Priority/Criticality: Per Board discretion

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We estimate the present replacement cost of the remaining furnishings at approximately \$38,000. Due to varied uses, ages and useful lives, we recommend the Association budget \$19,000 plus inflation for phased replacements of up to fifty percent (50%) of the furnishings per event.

### Kitchen

#### *Line Item:* 2.349

*History:* Mostly original to construction in 2007 with replacement of the appliances conducted as needed



#### Condition: Good to fair overall



Kitchen overview

Useful Life: Renovation every 20 years

Component Detail Notes: Components of the kitchen include:

- Tile floor covering
- Paint finishes on the walls and ceilings
- Appliances
- Cabinets and countertops
- Light fixtures

Priority/Criticality: Per Board discretion

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Renovation should include paint finish applications and replacement of all the remaining components listed above. We recommend the Association continue to budget for interim replacement of the appliances as needed through the operating budget.

### Locker Rooms

Line Item: 2.352

Quantity: Two lockers rooms located at the lower level of the community building

History: Mostly original to construction in 2007

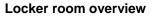




Locker room overview



Locker room overview





Locker room overview

Useful Life: Renovation every 15- to 20-years

Component Detail Notes: Components include:

- Tile floor coverings
- Tile wall coverings on a portion of the walls
- Paint finishes on the ceilings and a portion of the walls
- Lockers
- Light fixtures
- Plumbing fixtures
- Countertops

Priority/Criticality: Per Board discretion

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Renovation should include paint finish applications and replacement of all the remaining components listed above.



## **Partition Wall**

Line Item: 2.355

History: Installed in 2017

*Condition:* Good overall

Useful Life: 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.

### **Rest Rooms**

Line Item: 2.358

Quantity: Two rest rooms located at the upper level of the community building

History: Mostly original to construction in 2007

Condition: Good to fair overall



Rest room overview

Useful Life: Renovation 15- to 20-years

Component Detail Notes: Components include:

- Tile floor coverings
- · Paint finishes on the walls and ceilings
- Light fixtures
- Plumbing fixtures
- Countertops



Priority/Criticality: Per Board discretion

*Expenditure Detail Notes:* Expenditure timing and costs are depicted in the *Reserve Expenditures* table in Section 3. Renovation should include paint finish applications and replacement of all the remaining components listed above.

# Community Building Services Elements

# Air Handling and Condensing Units, Split Systems

Line Item: 2.371

Quantity: Eight splits systems

History: Original to construction in 2007

*Condition:* Reported satisfactory without operational deficiencies



Interior air handling unit

Useful Life: 15- to 20-years



Dehumidification units

**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.

**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. Our estimate of cost includes an allowance for replacement of the dehumidification systems.

## Life Safety System

*Line Item:* 2.374

History: Original to construction in 2007

**Conditions:** Reported satisfactory



Life safety system control panel

**Useful Life:** Up to 25 years with interim replacement of the control panel as needed through the operating budget.

**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: 2.377

*Quantity:* SRP utilizes the following security system components at the community building:

- Cameras
- Recorder
- Monitor

*History:* Upgraded in 2018

*Condition:* Reported satisfactory





#### Security cameras

#### 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.

### Sound System

*Line Item:* 2.380

History: Upgraded in 2018

Condition: Reported satisfactory



Useful Life: 10- 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.

# Pool Elements

# **Concrete Deck**

Line Item: 2.401

Quantity: 13,220 square feet

History: Original to construction in 2007

Condition: Good to fair overall



Concrete deck overview

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.

*Component Detail Notes:* We recommend the Association budget for the following:

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

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.

## Covers, Vinyl

Line Item: 2.404

Quantity: 5,470 square feet

History: Replaced in 2018

Condition: Reported in satisfactory 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: 2.407

Quantity: 720 linear feet

History: Original to 2007

Condition: Fair overall with finish deterioration evident



Aluminum fence overview

**Finish deterioration** 

Useful Life: Up to 25 years

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: 2.410

*Quantity:* The pool furniture includes the following:

- Chairs
- Lounges
- Tables
- Umbrellas
- Guard chairs
- Pool lift
- Ladders and life safety equipment

History: Replaced in 2017

*Condition:* Varied in good to fair overall condition



Pool furniture overview

Pool lift

**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.



## Gazebo

*Line Item:* 2.413

Quantity: One each

History: Original to 2007

Condition: Good to fair overall with a displaced picket evident



Gazebo overview

**Displaced picket** 

Useful Life: Up to 25 years with periodic maintenance

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 paint applications and repairs through the operating budget.

## **Light Poles and Fixtures**

Line Item: 2.416

Quantity: 10 each

History: Original to construction in 2007





Light pole and fixture overview

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.

## **Mechanical Equipment**

*Line Item:* 2.419

*Quantity:* The mechanical equipment includes the following:

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

*History:* Varied ages

Condition: Reported satisfactory





Pool mechanical equipment

Pool mechanical equipment

Useful Life: Up 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. Failure of the pool mechanical equipment as a single event is unlikely. Therefore, we include replacement of up to twenty-five percent (25%) of the equipment per event. We consider interim replacement of motors and minor repairs as normal maintenance.

## Pool Finishes, Plaster, Tile and Coping

*Line Items:* 2.422 and 2.425

*Quantity:* 5,100 square feet of plaster based on the horizontal surface areas and approximately 370 linear feet of tile and coping

*History:* The plaster finishes were replaced in 2016 and the age of the coping and tile is unknown

*Condition:* Good to fair overall with deterioration evident





Main pool overview





**Pool finishes** 

**Pool finish deterioration** 

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

**Component Detail Notes:** Removal and replacement 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

*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 estimate of cost for replacement of the plaster finish at the splash pool is based on information provided to us by the Association. We



recommend the Association budget for full tile and coping replacement every other plaster replacement event.

#### Shade Structures, Cantilever

*Line Item:* 2.428

Quantity: One each

History: Installed in 2018

Condition: Good overall



#### Shade structure overview

**Useful Life:** Up to 30 years with interim replacement of the fabric conducted as needed through the operating budget

Priority/Criticality: Per Board discretion

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

# **Town Hall Recreational Area**

Community Building Exterior Elements

## **Asphalt Pavement, Repaving**

*Line Item:* 2.501

Quantity: Approximately 770 square yards at the parking lot

*History:* Reported at an age of three years



Condition: Fair overall with cracks evident



Asphalt pavement overview

Asphalt pavement cracks

Useful Life: 15- to 20-years with the benefit of timely 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%) and repairs and partial replacements of the curbs.

## **Roof Assembly, Asphalt Shingles**

*Line Item:* 2.504

*Quantity:* 76 squares of asphalt shingles and 640 linear feet of gutters and downspouts

*History:* Replaced in 2017





Asphalt shingle roof assembly

Asphalt shingle roof assembly

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.

# Walls, Paint Finishes and Capital Repairs

Line Item: 2.507

*Quantity:* Approximately 10,000 square feet of trim, soffit and fascia. This quantity includes stone masonry perimeter walls.

*History:* Last application of a paint finish was conducted in 2020

*Condition:* Good overall



Trim, soffit and fascia overview



Useful Life: Four- to six-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 assume the following activities per event:

- Paint finish applications
- Replacement of up to ten percent (10%) of the siding, trim, soffit and fascia (The exact amount of material in need of replacement will depend on the actual future conditions and desired appearance. We recommend replacement wherever holes, cracks and deterioration impair the ability of the material to prevent water infiltration.)
- Replacement of sealants as needed

## Windows and Doors

Line Item: 2.510

*Quantity:* 1,240 square feet at the community building

History: Original to construction in the late 90's

Condition: Good to fair overall



Windows overview

Windows overview

Useful Life: Up to 35 years

Priority/Criticality: Not recommended to defer

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



# Community Building Interior Elements

# Ceilings, Acoustical Tiles, Grid and Lighting

Line Item: 2.521

*Quantity:* 640 square feet

History: Original to construction of the Town Hall community building in the late 90's

Condition: Good to fair overall



Acoustical ceiling tile and grid system

Useful Life: Up to 30 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:* 2.524

**Quantity:** Approximately 195 square yards (Contractor measurements will vary from the actual floor area due to standard roll lengths, patterns and installation waste.)

*History:* Unknown age

Condition: Good to fair overall





Carpet floor coverings overview

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: 2.527

Quantity: 50 square yards

History: Original to construction in the late 90's

Condition: Fair overall with wear evident



Tile floor covering overview



**Useful Life:** Up to 25 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.

## Floor Coverings, Wood Laminate

*Line Item:* 2.530

Quantity: 75 square yards

*History:* Original to construction in the late 90's

*Condition:* Fair overall with wear evident

Useful Life: 18- 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.

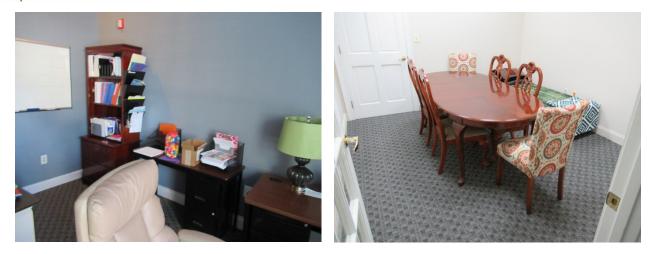
### **Furnishings**

Line Item: 2.533

*History:* Varied ages

**Condition:** Varied good to fair overall condition





Furnishings

Furnishings

Useful Life: Varies significantly up to 20 years

*Component Detail Notes:* Furnishings in the community building include but are not limited to the following elements:

- Bookcases
- Cabinets
- Chairs
- Chandeliers
- Countertops
- Desks
- File cabinets
- Folding tables and chairs
- Tables

Priority/Criticality: Per Board discretion

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We estimate the present replacement cost of these elements at approximately \$37,200. Due to varied uses, ages and useful lives, we recommend the Association budget \$18,600 plus inflation for phased replacements of up to fifty percent (50%) of the furnishings per event.

### Kitchen

Line Item: 2.536

History: Partially renovated in 2018

Condition: Good to fair overall







Kitchen overview

Kitchen break room overview

Useful Life: Renovation 15- to 20-years

Component Detail Notes: Components of the kitchen include:

- Vinyl floor covering
- Paint finishes on the walls and ceilings
- Appliances
- Cabinets and countertops
- Light fixtures
- Plumbing fixtures

Priority/Criticality: Per Board discretion

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Renovation should include paint finish applications and replacement of the remaining components listed above.

### **Locker Rooms**

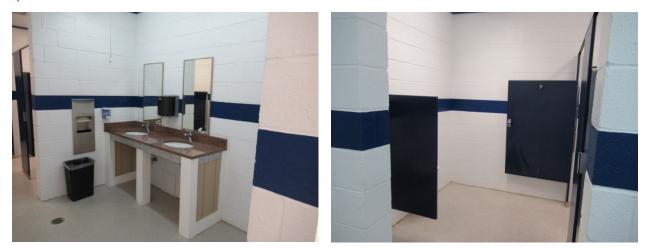
*Line Item:* 2.539

Quantity: Two locker rooms

History: Partially renovated in 2015

Condition: Good to fair overall





Locker room overview

Locker room overview



**Epoxy floor deterioration** 

**Epoxy floor deterioration** 

Useful Life: Renovation 15- to 20-years

Component Detail Notes: Components include:

- Epoxy coated and tile floor coverings
- Paint finishes on the walls and ceilings
- Light fixtures
- Plumbing fixtures
- Countertops

Priority/Criticality: Per Board discretion

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Renovation should include paint finish and epoxy coating applications and replacement of the remaining components listed above.



# **Partition Wall**

Line Item: 2.542

History: Unknown age

Condition: Fair overall with stains and deterioration evident



Partition wall overview

Stains



Deterioration

Useful Life: 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.



# **Rest Rooms**

Line Item: 2.545

Quantity: Two rest rooms

- History: Unknown age
- Condition: Good to fair overall



**Rest room overview** 

Useful Life: Renovation 15- to 20-years

Component Detail Notes: Components include:

- Tile floor coverings
- Wall coverings on a portion of the walls
- Paint finishes on the ceilings and a portion of the walls
- Light fixtures
- Plumbing fixtures
- Countertops

Priority/Criticality: Per Board discretion

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Renovation should include paint finish applications and replacement of all the remaining components listed above.



# Community Building Services Elements

# Air Handling and Condensing Units, Split Systems

Line Items: 2.601 and 2.604

Quantity: Four splits systems

*History:* One split system was replaced in 2016 and the remaining three are budgeted for replacement in 2020

*Condition:* The 2016 split system is reported in satisfactory condition. The remaining three are reported in unsatisfactory condition.



Outdoor 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.

**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. Our estimate of cost is based on information provided to us by the Association. 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.

### Computers

Line Item: 2.607

*History:* Varied ages

*Condition:* Reported in varied operational conditions

**Useful Life:** Up to four years

Priority/Criticality: Per Management discretion

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Our estimates of timing and cost are based on information provided to us by the Association.

### **Event Equipment**

*Line Item:* 2.610

History: Replaced in 2019

*Condition:* Reported in good operational condition

Useful Life: 5- to 10-years

Priority/Criticality: Per Management discretion

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Our estimates of timing and cost are based on information provided to us by the Association



# Life Safety System

Line Item: 2.613

History: Original to construction in the late 90's

Conditions: Reported satisfactory



Life safety system control panel



**Useful Life:** Up to 25 years with interim replacement of the control panel as needed through the operating budget.

**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
  - o 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.

## Website Design

Line Item: 2.616

History: Last completed in 2019

Condition: Reported satisfactory

Useful Life: Up to four years

Priority/Criticality: Per Management discretion

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Our estimates of timing and cost are based on information provided to us by the Association.

# Pool Elements

# **Concrete Deck**

Line Item: 2.701

Quantity: 10,160 square feet

History: Original to construction in the late 90's

Condition: Good to fair overall with cracks evident



Concrete deck overview

Concrete deck crack



**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.

*Component Detail Notes:* We recommend the Association budget for the following:

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

*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.

# Covers, Vinyl

*Line Item:* 2.704

Quantity: 5,340 square feet

History: Replaced in 2015

*Condition:* Reported in satisfactory 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, Metal

*Line Item:* 2.710

Quantity: 420 linear feet

*History:* Original to construction in the late 90's

Condition: Good to fair overall with finish deterioration evident





Metal fence overview

Finish deterioration

**Useful Life:** Up to 35 years with paint finish applications conducted as needed through the operating budget.

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: 2.713

Quantity: The pool furniture includes the following:

- Chairs
- Lounges
- Tables
- Umbrellas
- Guard chairs
- Ladders and life safety equipment

History: Replaced in 2015

**Condition:** Varied in good to fair overall condition with finish deterioration and damage evident





Pool furniture overview

**Pool furniture overview** 



**Finish deterioration** 



Damage

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.

# **Mechanical Equipment**

*Line Item:* 2.716

*Quantity:* The mechanical equipment includes the following:

- Automatic chlorinators
- Controls
- Filters



- Interconnected pipe, fittings and valves
- Pumps

*History:* Varied ages

*Condition:* Reported satisfactory



Pool mechanical equipment

**Pool mechanical equipment** 

Useful Life: Up 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. Failure of the pool mechanical equipment as a single event is unlikely. Therefore, we include replacement of up to twenty-five percent (25%) of the equipment per event. We consider interim replacement of motors and minor repairs as normal maintenance.

### Pergolas, Wood

*Line Item:* 2.719

History: Unknown ages

Condition: Good to fair overall





Pergola overview

Pergola overview



Pergola overview

Useful Life: Up to 25 years with periodic maintenance

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 paint applications and repairs through the operating budget.

# Pool Finishes, Plaster, Tile and Coping

Line Items: 2.722 and 2.725

**Quantity:** 4,900 square feet of plaster based on the horizontal surface areas and approximately 430 linear feet of tile and coping

*History:* The plaster finishes were replaced in 2016 and the age of the coping and tile is unknown



# Condition: Good to fair overall with cracks evident



Main pool overview



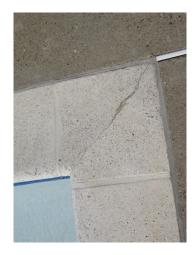
Pool finishes overview



Wading pool overview



**Plaster finish cracks** 



Coping crack

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



**Component Detail Notes:** Removal and replacement 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

*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 estimate of cost for replacement of the plaster finish at the splash pool is based on information provided to us by the Association. We recommend the Association budget for full tile and coping replacement every other plaster replacement event.

# TOWNHOME EXPENDITURES

# **SRP Street Elements**

# Asphalt Pavement, Crack Repair and Patch

Line Item: 3.101

*Quantity:* Approximately 23,700 square yards of SRP streets throughout the community

*History:* Varied ages

*Condition:* 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. Our cost includes an allowance for crack repairs and patching of up to two percent (2%) of the pavement.

# Asphalt Pavement, Repaving

*Line Items:* 3.102 and 3.103



*Quantity:* Approximately 23,700 square yards of SRP streets throughout the community

*History:* Varied ages

Condition: Fair overall with cracks evident



SRP street overview

SRP street overview



Asphalt pavement cracks



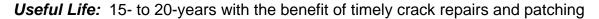
Asphalt pavement cracks



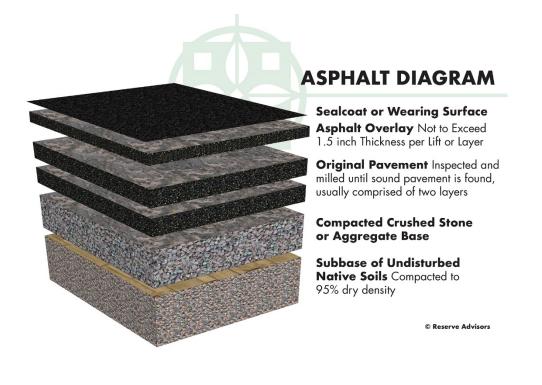


Asphalt pavement cracks

Asphalt pavement cracks



**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 SRP:



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 mill and overlay method for initial repaving followed by the total replacement method for subsequent repaving at SRP.

*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 estimate of cost for mill and overlay is based on information provided to us by the Association.

# **Catch Basins**

Line Item: 3.111

Quantity: 50 catch basins<sup>2</sup> at the SRP streets

*History:* Original

Condition: Good to fair overall without settlement visually apparent



### Catch basin overview

Catch basin overview

**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.

<sup>2</sup> We utilize the terminology catch basin to refer to all stormwater collection structures including curb inlets.



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

*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 repaying.

# **Concrete Curbs and Gutters**

Line Item: 3.121

Quantity: Approximately 20,400 linear feet

Condition: Good to fair overall with spalls evident



Concrete curb and gutter overview



**Concrete curb spall** 



Concrete curb spall

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



### 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 7,360 linear feet of curbs and gutters, or approximately thirty-six percent (36.1%) of the total, will require replacement during the next 30 years.

## **Concrete Sidewalks**

*Line Item:* 3.131

Quantity: Approximately 71,450 square feet

Condition: Good to fair overall with trip hazards and heave evident



Concrete sidewalk overview

Concrete sidewalk trip hazard



Concrete sidewalk trip hazard

Concrete sidewalk heave

*Useful Life:* Up to 65 years although interim deterioration of areas is common *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 25,040 square feet of concrete sidewalks, or thirty-five percent (35%) of the total, will require replacement during the next 30 years.

# **Townhome Street Elements**

# Asphalt Pavement, Crack Repair and Patch

Line Item: 3.201

**Quantity:** Approximately 219,400 square yards of asphalt pavement streets, alleys and parking areas at the townhomes

*History:* Varied ages

*Condition:* Varied in good to fair condition

**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. Our cost includes an allowance for crack repairs and patching of up to two percent (2%) of the pavement.

# Asphalt Pavement, Repaving

*Line Items:* 3.210 through 3.223

*Quantity:* The following table depicts the quantity (in square yards) for each phase of the pavement:

Phase	Quantity
1 (2020 Budgeted)	14,950
1 (Remaining)	61,350
2	87,500
3	22,700
4	32,900

### History: Varied ages

*Condition:* Varied in good to fair condition with cracks and deterioration evident





Asphalt pavement overview



Asphalt pavement overview – Note: cracks



Asphalt pavement overview



Asphalt pavement cracks



Asphalt pavement cracks



Asphalt pavement cracks and deterioration

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



**Component Detail Notes:** See the previous narrative, "Asphalt Pavement, **Repaving**" in the previous section "SRP Street Elements" for additional details on asphalt pavement. Based on the apparent visual condition and configuration of the asphalt pavement, we recommend the mill and overlay method for initial repaving followed by the total replacement method for subsequent repaving at SRP.

*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. Management informs us the Association budgeted for mill and overlayment at 14,950 square yards of asphalt pavement in 2020. Our estimate of cost for mill and overlay is based on information provided to us by the Association.

# **Catch Basins**

Line Item: 3.231

Quantity: 280 catch basins at the townhome streets

*History:* Original

*Condition:* Good to fair overall without settlement visually apparent

**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.

*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 repaying.

# **Concrete Curbs and Gutters**

*Line Item:* 3.241

*Quantity:* Approximately 96,600 linear feet

*Condition:* Good to fair overall

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

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 35,425 linear feet of curbs and gutters, or approximately thirty-seven percent (36.7%) of the total, will require replacement during the next 30 years.

### **Concrete Sidewalks**

Line Item: 3.251

*Quantity:* Approximately 267,000 square feet

Condition: Good to fair overall with trip hazards and replaced sections evident





Concrete sidewalk overview

Concrete sidewalk trip hazard



Replaced section of concrete sidewalk

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

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 93,450 square feet of concrete sidewalks, or thirty-five percent (35%) of the total, will require replacement during the next 30 years.

# **Property Site Elements**

# Light Poles and Fixtures

Line Item: 3.301

Quantity: Seven poles with light fixtures at Creekmore Terrace

*History:* Original to construction in 2012

Condition: Good to fair overall



Light pole and fixture overview

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.

### **Mailbox Station Enclosures**

*Line Item:* 3.302

Quantity: Approximately 100 mailbox station enclosures throughout the townhomes

*History:* Varied unknown ages



Condition: Varied good to fair with metal roof finish deterioration evident





Mailbox station enclosure

Mailbox station enclosure



Metal roof finish deterioration

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.

# SINGLE FAMILY HOME EXPENDITURES

# **Property Site Elements**

# Asphalt Pavement, Crack Repair and Patch

Line Item: 4.101



*Quantity:* Approximately 85,600 square yards of streets and alleys at the single family homes

*History:* Varied ages

Condition: 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. Our cost includes an allowance for crack repairs and patching of up to two percent (2%) of the pavement.

## **Asphalt Pavement, Repaving**

*Line Items:* 4.201 through 4.304

**Quantity:** The following table depicts the quantity (in square yards) for each phase of the pavement:

Phase	Quantity
1	54,000
2	2,700
3	8,400
4	12,400
5	8,100

History: Varied ages

*Condition:* Good to fair condition with cracks and deterioration evident



Asphalt pavement overview

Asphalt pavement overview





Asphalt pavement crack

Asphalt pavement crack

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

**Component Detail Notes:** See the previous narrative, "Asphalt Pavement, **Repaving**" in the previous section "SRP Street Elements" for additional details on asphalt pavement. Based on the apparent visual condition and configuration of the asphalt pavement, we recommend the mill and overlay method for initial repaving followed by the total replacement method for subsequent repaving at SRP.

*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 estimate of cost for mill and overlay is based on information provided to us by the Association.

# **Catch Basins**

*Line Item:* 4.401

*Quantity:* 180 catch basins at the single-family home streets and alleys

*History:* Original

*Condition:* Good to fair overall without settlement visually apparent





Catch basin overview

**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.

*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 repaving.

# **Concrete Curbs and Gutters**

Line Item: 4.501

*Quantity:* Approximately 39,100 linear feet

Condition: Good to fair overall





Concrete curb and gutter overview

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

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 12,690 linear feet of curbs and gutters, or approximately thirty-three percent (32.5%) of the total, will require replacement during the next 30 years.

# **Concrete Sidewalks**

*Line Item:* 4.601

*Quantity:* Approximately 41,000 square feet

Condition: Good to fair overall with cracks evident



Concrete sidewalk crack

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



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 14,320 square feet of concrete sidewalks, or approximately thirty-five percent (34.9%) of the total, will require replacement during the next 30 years.



# **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.

SRP 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 Unit Owners 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<sup>1</sup> 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<sup>2</sup> 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 South

<sup>&</sup>lt;sup>1</sup> Identified in the APRA "Standards - Terms and Definitions" and the CAI "Terms and Definitions".

<sup>&</sup>lt;sup>2</sup> See Credentials for additional information on our use of published sources of cost data.



Riding, Virginia at an annual inflation rate<sup>3</sup>. Isolated or regional markets of greater construction (development) activity may experience slightly greater rates of inflation for both construction materials and labor.

- The past and current maintenance practices of SRP 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.

<sup>3</sup> Derived from Marshall & Swift, historical costs and the Bureau of Labor Statistics.



# **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 the 2,600,000-square foot 98-story Trump International Hotel and Tower in Chicago. 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.



#### STEPHEN E. BRESKI, RS Manager of Product Development Responsible Advisor

#### **CURRENT CLIENT SERVICES**

Stephen E. Breski, a Senior Civil Engineer, is an Advisor for Reserve Advisors. Mr. Breski is responsible for the inspection and analysis of the condition of clients' properties, 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 Analyses and Capital Replacement Forecast services and the preparation of Reserve Study Reports for condominiums, townhomes, planned unit developments and homeowner associations.



The following is a partial list of clients served by Stephen Breski demonstrating the breadth of experiential knowledge of community associations in construction and related systems.

- **30 Park Place Condominium Association, Inc. -** Located in downtown Manhattan in New York City, this 82-story luxury tower offers 157 private residences and 189 hotel guest suites. The building was designed by renowned architect Robert A.M. Stern and is operated by the Four Seasons staff. On the 37<sup>th</sup> floor the residences enjoy their private amenity area complete with a fitness center and film screening room. The hotel includes a spa and indoor swimming pool.
- Merion Golf Club Located in the suburbs of Philadelphia, PA, this club was founded in 1865 as the Merion Cricket Club. Later, the Merion Cricket Club founded the Merion Golf Club in 1896 and has been an iconic golf club since. Merion Golf Club's East Course is consistently ranked as one of the top golf courses and has hosted five U.S. Opens featuring champions Ben Hogan (1950), Lee Trevino and his playoff victory over Jack Nicklaus (1971) and, most recently, Justin Rose (2013).
- Saint Sophia Greek Orthodox Cathedral Located in Northwest Washington, D.C., the cornerstone of this cathedral was laid by President Dwight D. Eisenhower in 1956. A second building was constructed in addition to the cathedral in 2004. This building, known as the Education and Activities Center, includes classrooms and a library.
- **Big Bass Lake Community Association, Inc.** -Located in Gouldsboro, Pennsylvania, this community features three dams which provide the 1,655 single family homes with over 850,000 square yards of surface area for boating and recreation. Residents enjoy a clubhouse, a recreational center, a ski hill, docks, recreational courts, beaches and playgrounds. The Association also maintains an administration building, maintenance shop, sales office and library.
- **Woodmont Country Club -** This exclusive club was established more than 100 years ago. The elegant design of Woodmont's Clubhouse, incorporates several dining venues, a grand ballroom and an expansive fitness and wellness center. The clubhouse overlooks Woodmont's two premiere golf courses, swimming complex and 22 *Har-Tru* tennis courts.

#### PRIOR RELEVANT EXPERIENCE

Before joining Reserve Advisors, Mr. Breski worked for a private construction management company in Pittsburgh, Pennsylvania, where he was working as a cost estimator. Prior to working as an estimator, Mr. Breski also worked for the nation's largest provider of wireless infrastructure, where he assisted in the structural analysis of cell phone towers. Mr. Breski attended the Swanson School of Engineering at the University of Pittsburgh where he attained his Bachelor of Science degree in Civil and Environmental Engineering. His studies focused on structural engineering.

#### EDUCATION

University of Pittsburgh - B.S. Civil and Environmental Engineering

#### **PROFESSIONAL AFFILIATIONS**

Reserve Specialist (RS) – Community Association Institute Engineer in Training (E.I.T.) – State of Maryland



#### 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:

<u>Association of Construction Inspectors</u>, (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.

<u>American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.</u>, (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.

<u>Community Associations Institute</u>, (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.

<u>Marshall & Swift / Boeckh.</u> (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 SRP 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) SRP 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.

#### Page 7.1 - Definitions



# 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 <u>prior to inspection</u>. <u>The balance is due net 30 days from the report shipment date</u>. 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.