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**CAPITAL RESERVE ANALYSIS**  
FOR  
**BROOKSHADE**  
**MILTON, GEORGIA**

PREPARED FOR:

THE BROOKSHADE HOMEOWNERS ASSOCIATION, INC.

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## **I. CAPITAL RESERVE DETERMINATION**

### **A. METHODOLOGY AND ASSUMPTIONS**

A Capital Reserve Analysis is a report giving an estimate of the amount of money which must be put aside to replace or restore the common elements and building components that will require replacement before the community's use expires. Typically, the items included are limited to those with a useful life of 30 years or less.

The commonly accepted guidelines as established by governing statutes, the Community Associations Institute, and our engineering judgment and experience have been used as a basis for the reserve schedule in this report. The schedule, when implemented in conjunction with a well-planned preventive maintenance program, will provide adequate funds for the replacement of the community's common elements as they reach the end of their useful lives. In order to assure that this schedule remains current, a reassessment of the existing condition and replacement costs for each item is necessary at a regular interval as recommended within the report. Updating of the schedule, reduction of the useful lives, and inflation of the replacement costs may be executed with the benefit of re-inspection. The schedule must also be adjusted as common elements are added or modified.

It is important to note that a reserve item is a common element component which will require replacement on a recurring basis using a similar cost item. If an upgrade is necessitated due to a cost change or other extraordinary reason, the cost over and above the replacement cost is considered to be a capital improvement rather than a capital replacement. Capital improvements should not be funded from the reserves. After it has been upgraded, the item will then become part of the reserve schedule.

#### *Method of Accounting*

The Method used in the Capital Reserve Analysis is the "Cash Flow" Method and the funding plan utilized is the Baseline Funding. The goal of this funding method is to keep the reserve cash balance above zero. This means that while each individual component may not be fully funded, the reserve balance does not drop below zero during the projected period.

Level of Service

This reserve analysis was completed utilizing a Level I, Full Service Study as defined under the National Reserve Standards that have been adopted by the Community Association Institute. The common component inventory was established based on information provided by the association's representative, field measurements and/or drawing take-offs. The Full Service Study includes a review of the common property components and preparation of this report.

## B. SUMMARY OF REPLACEMENT RESERVE NEEDS

### 1. TECHNICAL DEFINITIONS

This page is a summary of each of the different categories within the detailed schedule. It shows the total dollar amounts for each category and is based on the full funding of each item.

Following are descriptions of the different variables, which are shown on the reserve schedule in the order in which they appear.

#### Description

This column on the schedule lists all of the components for which we recommend that reserves be accumulated. The basis for the selection of these items includes:

- Review of the governing documents regarding the common and limited common elements.
- Review of all available maintenance contracts.
- The type of component and its anticipated full useful life and condition.
- A review of applicable statutes dealing with reserve requirements.

#### Quantity

The quantities which are used as a basis for this report are calculated from field measurements and drawings which have been supplied to Ray Engineering, Inc. Ray Engineering, Inc. has not made extensive as-built measurements, and the quantities used are based primarily on the reference materials provided.

#### Unit Cost

The construction and replacement costs used in this report are based primarily on the various publications written by the R.S. Means Company and construction related experience of Ray Engineering. The publications are listed in the Bibliography.

### Reserve Requirements Present Dollars

This is calculated by multiplying the “quantity” by the “unit costs.”

### Existing Reserve Fund

This is an allocation of the total existing reserve funds to the individual line items using a weighing factor which is based on the total “reserve requirement present dollars,” the “estimated remaining life,” and other factors. An existing balance was submitted to Ray Engineering, Inc. This balance was used in developing our Reserve Analysis.

### Estimated Useful Life

The useful life values that are part of this report come from a variety of sources, some of which are listed in the Bibliography. In order to ensure that all items attain their anticipated useful lives, it is imperative that a well-planned maintenance schedule be adhered to. If an existing item is replaced with an upgraded product, the estimated remaining life has been listed for the new product.

### Estimated Remaining Life

The estimated remaining life is based on both the age of the component and the results of the field inspections conducted in June 2019.

### Annual Reserve Funding

The reserve requirement present value was converted to the future value for the time in which each replacement will occur. A 3% compounded inflation rate has been assumed. The future value was then converted to an annual reserve fund value. The arithmetic calculations and formulas are indicated later in this report.

## C. EXECUTIVE SUMMARY

Brookshade is a residential community that consists of 138 single-family homes. It is the Consultant's understanding that the property is approximately 21 years old. The community is located off Hopewell Road in Milton, Georgia. The common elements consist of an amenity area parking lot, curb and gutters, concrete sidewalks, common landscaped areas, entry monuments and signage, common area drainage, a swimming pool, a playground, a clubhouse, walking trail, two tennis courts, irrigation, accent lighting, and a security system.

The clubhouse is located off Brookshade Parkway at the amenity area. The clubhouse is a one-story structure that appears to be constructed utilizing monolithic concrete slab-on-grade with turned-down edges supporting the building structure that consists of conventional wood-framed construction. Exterior finishes consist of a painted cement board lap siding with painted soffit, trim, and fascia in combination with stone veneer accents. The roof is a moderately steep-sloped roof with fiberglass-based composition asphalt shingles. Roof runoff is controlled by gutters and downspouts around the perimeter eave of the roof. The interior of the clubhouse consists of a combination of painted gypsum board at the walls with painted wood bases, crown molding, doors, and trim. The interior of the clubhouse contains a great room, a kitchen with appliances, two restrooms, and an equipment room.

This reserve analysis was completed utilizing the "full" level of service, which included the property review and preparation of this report. This Reserve Analysis is prepared for the fiscal year starting January 1, 2020. It is our understanding that the property is undergoing a large assessment at the pool in 2019 with other expenses following. As a result, it has been requested that the starting balance be \$100,000 for 2020 and show the recommended annual contributions for 2020 based on the findings in this reserve. Based on our analysis and review of the property, it is recommended that the current annual contribution be \$75,000 a year in 2020 and then increased by \$10,000 every four years thereafter, for the remainder of this reserve. The annual contribution of \$75,000 is equivalent to an average contribution of \$543.48 per year per residential home. For a review of the funding requirements for the next 20 years, please refer to the "Cost and Funding Recap" included as a part of this report.

D. REPLACEMENT RESERVE REQUIREMENTS

**SCHEDULE I**

Sitework

**SCHEDULE II**

Exterior/Interior Building Maintenance

**SCHEDULE III**

Electrical/Mechanical/Plumbing Maintenance

**YEAR BY YEAR FUNDING RECAP - ALL ITEMS**

**COST AND FUNDING RECAP**

**ITEMIZED PROJECT COSTS BY YEAR**

PROJECT NAME	BROOKSHADE
INFLATION RATE	3.00%
YIELD ON RESERVE FUNDS	1.00%
BEGINNING YEAR OF FUNDING	2020
PLANNING HORIZON	20 yrs

**SCHEDULE Ia**  
**BROOKSHADE**  
**SITWORK ITEMS - PRELIMINARY DATA**

	Sitework Item Description	Units of Measure	Number of Units	Cost per Unit	Total Cost in Current Dollars	Estimated Useful Life	Estimated Remaining Life	Notes
1	Parking Lot - Sealcoat/Restripe/Repair	S.Y.	1150	\$2.50	\$2,875	6	6	2
2	Parking Lot - 1-1/2" Overlay	S.Y.	1150	\$24.50	\$28,175	20	0	2
3	Concrete Curb - Repair/Replace Cracked, Settled Sections	Allow	1	\$1,500.00	\$1,500	6	5	3
4	Sidewalk - Repair/Replace Cracked, Settled Sections	Allow	1	\$1,500.00	\$1,500	6	3	3
5	Entry Monuments and Signage - Repair/Paint/Tuck Point	Allow	1	\$10,000.00	\$10,000	8	10	4
6	Common Area Fencing - Repair/Paint/Partial Replace	Allow	1	\$3,000.00	\$3,000	6	2	4
7	Landscaping - Upgrade/Remove Trees, Shrubs/Trim	Allow	1	\$10,000.00	\$10,000	5	4	5
8	Walking Trail - Maintain/Remove Trees, Shrubs/Trim	Allow	1	\$2,500.00	\$2,500	5	0	5
9	Walking Trail - Maintain/Remove Trees, Shrubs/Trim	Allow	1	\$2,500.00	\$2,500	5	1	5
10	Walking Trail - Maintain/Remove Trees, Shrubs/Trim	Allow	1	\$2,500.00	\$2,500	5	2	5
11	Walking Trail - Maintain/Remove Trees, Shrubs/Trim	Allow	1	\$2,500.00	\$2,500	5	3	5
12	Walking Trail - Maintain/Remove Trees, Shrubs/Trim	Allow	1	\$2,500.00	\$2,500	5	4	5
13	Walking Trail Bridges - Repair/Paint/Partial Replace	Allow	1	\$10,000.00	\$10,000	8	2	5
14	Drainage/Slope Erosion/Storm System - Repair, Maintain	Allow	1	\$10,000.00	\$10,000	7	1	6
15	Concrete Yard Drains (3 per year) - Repair/Maintain/Clean	Allow	1	\$10,000.00	\$10,000	1	0	6
16	Detention Ponds - Remove Silt/Vegetation/Debris	Ea.	3	\$11,667.00	\$35,001	15	0	6
17	Detention Ponds - Repair/Partial Repl. Rip Rap/Concrete Culvert	Ea.	3	\$5,000.00	\$15,000	8	8	6
18	Swimming Pool - Replace	L.S.	1	\$300,000.00	\$300,000	30	9	7
19	Swimming Pool Surface - Resurface/Rep. Tiles	L.S.	1	\$25,000.00	\$25,000	10	18	7
20	Swimming Pool Deck - Repair/Seal Cracks	Allow	1	\$2,000.00	\$2,000	6	18	7
21	Swimming Pool Deck - Partial Replacement	Allow	1	\$5,000.00	\$5,000	15	18	7
22	Swimming Pool Furniture - Partial Replacement	Allow	1	\$10,000.00	\$10,000	5	1	7
23	Swimming Pool Fence/Gate - Repair/Paint	Allow	1	\$2,500.00	\$2,500	8	7	7
24	Swimming Pool Cover - Replace	Allow	1	\$4,000.00	\$4,000	10	9	7
25	Tennis Courts 1 & 2 - Resurface (Crack Repair)	Ea.	2	\$4,000.00	\$8,000	5	3	8
26	Tennis Courts 1 & 2 - Replace Surface/Fence	Ea.	2	\$35,000.00	\$70,000	25	11	8
27	Tennis Cts Fencing, Light Poles - Repair/Paint/Partial Replace	Allow	1	\$10,000.00	\$10,000	10	8	8
28	Tennis Courts Equipment - Partial Replace	Allow	1	\$3,000.00	\$3,000	7	2	8
29	Playground - Repair/Partial Replace Equipment	L.S.	1	\$2,000.00	\$2,000	8	0	9
30	Playground - Replace Equipment	L.S.	1	\$20,000.00	\$20,000	20	1	9

**SCHEDULE 1b**  
**BROOKSHADE**  
**SITWORK ITEMS - REPLACEMENT COST & FUNDING DATA**

Sitework Item Description	First Replacement			Second Replacement			Third Replacement			Fourth Replacement			Fifth Replacement		
	Yr Replaced	Adjusted Cost if Inflation is 3.00%	Annual Funding Thru Yr Replaced	Yr Replaced	Adjusted Cost if Inflation is 3.00%	Annual Funding Thru Yr Replaced	Yr Replaced	Adjusted Cost if Inflation is 3.00%	Annual Funding Thru Yr Replaced	Yr Replaced	Adjusted Cost if Inflation is 3.00%	Annual Funding Thru Yr Replaced	Yr Replaced	Adjusted Cost if Inflation is 3.00%	Annual Funding Thru Yr Replaced
1 Parking Lot - Sealcoat/Restripe/Repair	2026	3433	490	2032	4099	683	2038	4894	816	2044			2050		
2 Parking Lot - 1-1/2" Overlay	2020	28175	28175	2040			2060			2080			2100		
3 Concrete Curb - Repair/Replace Cracked, Settled Secti	2025	1739	290	2031	2076	346	2037	2479	413	2043			2049		
4 Sidewalk - Repair/Replace Cracked, Settled Sections	2023	1639	410	2029	1957	326	2035	2337	389	2041			2047		
5 Entry Monuments and Signage - Repair/Paint/Tuck Po	2030	13439	1222	2038	17024	2128	2046			2054			2062		
6 Common Area Fencing - Repair/Paint/Partial Replace	2022	3183	1061	2028	3800	633	2034	4538	756	2040			2046		
7 Landscaping - Upgrade/Remove Trees, Shrubs/Trim	2024	11255	2251	2029	13048	2610	2034	15126	3025	2039	17535	3507	2044		
8 Walking Trail - Maintain/Remove Trees, Shrubs/Trim	2020	2500	2500	2025	2898	580	2030	3360	672	2035	3895	779	2040		
9 Walking Trail - Maintain/Remove Trees, Shrubs/Trim	2021	2575	1288	2026	2985	597	2031	3461	692	2036	4012	802	2041		
10 Walking Trail - Maintain/Remove Trees, Shrubs/Trim	2022	2652	884	2027	3075	615	2032	3564	713	2037	4132	826	2042		
11 Walking Trail - Maintain/Remove Trees, Shrubs/Trim	2023	2732	683	2028	3167	633	2033	3671	734	2038	4256	851	2043		
12 Walking Trail - Maintain/Remove Trees, Shrubs/Trim	2024	2814	563	2029	3262	652	2034	3781	756	2039	4384	877	2044		
13 Walking Trail Bridges - Repair/Paint/Partial Replace	2022	10609	3536	2030	13439	1680	2038	17024	2128	2046			2054		
14 Drainage/Slope Erosion/Storm System - Repair, Maint	2021	10300	5150	2028	12668	1810	2035	15580	2226	2042			2049		
15 Concrete Yard Drains (3 per year) - Repair/Maintain/C	2020	10000	10000	2021	10300	10300	2022	10609	10609	2023	10927	10927	2024	11255	11255
16 Detention Ponds - Remove Silt/Vegetation/Debris	2020	35001	35001	2035	54530	3635	2050			2065			2080		
17 Detention Ponds - Repair/Partial Repl. Rip Rap/Concr	2028	19002	2111	2036	24071	3009	2044			2052			2060		
18 Swimming Pool - Replace	2029	391432	39143	2059			2089			2119			2149		
19 Swimming Pool Surface - Resurface/Rep. Tiles	2038	42561	2240	2048			2058			2068			2078		
20 Swimming Pool Deck - Repair/Seal Cracks	2038	3405	179	2044			2050			2056			2062		
21 Swimming Pool Deck - Partial Replacement	2038	8512	448	2053			2068			2083			2098		
22 Swimming Pool Furniture - Partial Replacement	2021	10300	5150	2026	11941	2388	2031	13842	2768	2036	16047	3209	2041		
23 Swimming Pool Fence/Gate - Repair/Paint	2027	3075	384	2035	3895	487	2043			2051			2059		
24 Swimming Pool Cover - Replace	2029	5219	522	2039	7014	701	2049			2059			2069		
25 Tennis Courts 1 & 2 - Resurface (Crack Repair)	2023	8742	2185	2028	10134	2027	2033	11748	2350	2038	13619	2724	2043		
26 Tennis Courts 1 & 2 - Replace Surface/Fence	2031	96896	8075	2056			2081			2106			2131		
27 Tennis Cts Fencing, Light Poles - Repair/Paint/Partial	2028	12668	1408	2038	17024	1702	2048			2058			2068		
28 Tennis Courts Equipment - Partial Replace	2022	3183	1061	2029	3914	559	2036	4814	688	2043			2050		
29 Playground - Repair/Partial Replace Equipment	2020	2000	2000	2028	2534	317	2036	3209	401	2044			2052		
30 Playground - Replace Equipment	2021	20600	10300	2041			2061			2081			2101		

**SCHEDULE IIa**  
**BROOKSHADE**  
**EXTERIOR/INTERIOR BUILDING MAINTENANCE ITEMS**  
**PRELIMINARY DATA**

	Exterior/Interior Building Maintenance Item Description	Units of Measure	Number of Units	Cost per Unit	Total Cost in Current Dollars	Estimated Useful Life	Estimated Remaining Life	Notes
1	Main Walking Trail Bridge - Replace	Allow	1	\$20,000.00	\$20,000	30	10	5
2	Clubhouse Roof - Replace Shingles	Sq.	20	\$375.00	\$7,500	20	7	10
3	Clubhouse Roof - Replace Gutters and Downspouts	L.F.	100	\$10.00	\$1,000	20	7	10
4	Clubhouse Exterior Finishes - Repair/Paint/Seal/Caulk	Allow	1	\$7,000.00	\$7,000	10	3	10
5	Clubhouse Interior Finishes - Repair/Paint	Allow	1	\$5,000.00	\$5,000	12	4	10
6	Clubhouse Bathrooms - Repair/Paint	Ea.	2	\$500.00	\$1,000	8	1	10
7	Clubhouse Bathrooms - Upgrade	Ea.	2	\$4,000.00	\$8,000	20	13	10
8	Clubhouse Kitchen Cabinets/Counter - Part. Replacement	Allow	1	\$4,000.00	\$4,000	25	6	10
9	Clubhouse Furnishings - Partial Replacement	Allow	1	\$10,000.00	\$10,000	10	4	10
10	Clubhouse Tile - Repair/Partial Replace	Allow	1	\$1,000.00	\$1,000	10	2	10
11	Pool Pavilion - Replace Fabric/Paint	Allow	1	\$1,500.00	\$1,500	10	2	10
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**SCHEDULE I**ib****  
**BROOKSHADE**  
**EXTERIOR/INTERIOR BUILDING MAINTENANCE ITEMS - REPLACEMENT COST & FUNDING DATA**

	Exterior/Interior Building Maintenance Item Description	First Replacement			Second Replacement			Third Replacement			Fourth Replacement			Fifth Replacement		
		Yr Replaced	Adjusted Cost if Inflation is 3.00%	Annual Funding Thru Yr Replaced	Yr Replaced	Adjusted Cost if Inflation is 3.00%	Annual Funding Thru Yr Replaced	Yr Replaced	Adjusted Cost if Inflation is 3.00%	Annual Funding Thru Yr Replaced	Yr Replaced	Adjusted Cost if Inflation is 3.00%	Annual Funding Thru Yr Replaced	Yr Replaced	Adjusted Cost if Inflation is 3.00%	Annual Funding Thru Yr Replaced
1	Main Walking Trail Bridge - Replace	2030	26878	2443	2060			2090			2120			2150		
2	Clubhouse Roof - Replace Shingles	2027	9224	1153	2047			2067			2087			2107		
3	Clubhouse Roof - Replace Gutters and Downspouts	2027	1230	154	2047			2067			2087			2107		
4	Clubhouse Exterior Finishes - Repair/Paint/Seal/Caulk	2023	7649	1912	2033	10280	1028	2043			2053			2063		
5	Clubhouse Interior Finishes - Repair/Paint	2024	5628	1126	2036	8024	669	2048			2060			2072		
6	Clubhouse Bathrooms - Repair/Paint	2021	1030	515	2029	1305	163	2037	1653	207	2045			2053		
7	Clubhouse Bathrooms - Upgrade	2033	11748	839	2053			2073			2093			2113		
8	Clubhouse Kitchen Cabinets/Counter - Part. Replacement	2026	4776	682	2051			2076			2101			2126		
9	Clubhouse Furnishings - Partial Replacement	2024	11255	2251	2034	15126	1513	2044			2054			2064		
10	Clubhouse Tile - Repair/Partial Replace	2022	1061	354	2032	1426	143	2042			2052			2062		
11	Pool Pavilion - Replace Fabric/Paint	2022	1591	530	2032	2139	214	2042			2052			2062		
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**SCHEDULE IIIa**  
**BROOKSHADE**  
**ELECTRICAL/MECHANICAL/PLUMBING ITEMS - PRELIMINARY DATA**

	Electrical Mechanical Item Description	Units of Measure	Number of Units	Cost per Unit	Total Cost in Current Dollars	Estimated Useful Life	Estimated Remaining Life	Notes
1	Swimming Pool Equipment - Replace Pumps/Motors	Allow	1	\$2,250.00	\$2,250	2	0	7
2	Swimming Pool Filtration System - Replace Filters	Allow	1	\$2,000.00	\$2,000	8	1	7
3	Clubhouse HVAC System - Replace Equipment	Allow	1	\$6,000.00	\$6,000	15	5	10
4	Clubhouse Electrical Fixtures - Partial Repl.	Allow	1	\$4,000.00	\$4,000	8	5	10
5	Clubhouse Plumbing & Fixtures - Partial Repl.	Allow	1	\$2,500.00	\$2,500	8	6	10
6	Clubhouse Water Heater - Replace	Allow	1	\$2,000.00	\$2,000	12	4	10
7	Clubhouse Drinking Fountain - Replace	L.S.	1	\$1,000.00	\$1,000	15	4	10
8	Accent Light Fixtures - Repair/Partial Replacement	Allow	1	\$2,000.00	\$2,000	7	1	11
9	Irrigation - System Repair	Allow	1	\$4,000.00	\$4,000	5	0	12
10	Security System - Upgrade	Allow	1	\$3,500.00	\$3,500	8	2	13
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**SCHEDULE IIIb**  
**BROOKSHADE**  
**ELECTRICAL/MECHANICAL/PLUMBING ITEMS - REPLACEMENT COST & FUNDING DATA**

Electrical Mechanical Item Description	First Replacement			Second Replacement			Third Replacement			Fourth Replacement			Fifth Replacement		
	Yr Replaced	Adjusted Cost if Inflation is 3.00%	Annual Funding Thru Yr Replaced	Yr Replaced	Adjusted Cost if Inflation is 3.00%	Annual Funding Thru Yr Replaced	Yr Replaced	Adjusted Cost if Inflation is 3.00%	Annual Funding Thru Yr Replaced	Yr Replaced	Adjusted Cost if Inflation is 3.00%	Annual Funding Thru Yr Replaced	Yr Replaced	Adjusted Cost if Inflation is 3.00%	Annual Funding Thru Yr Replaced
1 Swimming Pool Equipment - Replace Pumps/Motors	2020	2250	2250	2022	2387	1194	2024	2532	1266	2026	2687	1343	2028	2850	1425
2 Swimming Pool Filtration System - Replace Filters	2021	2060	1030	2029	2610	326	2037	3306	413	2045			2053		
3 Clubhouse HVAC System - Replace Equipment	2025	6956	1159	2040			2055			2070			2085		
4 Clubhouse Electrical Fixtures - Partial Repl.	2025	4637	773	2033	5874	734	2041			2049			2057		
5 Clubhouse Plumbing & Fixtures - Partial Repl.	2026	2985	426	2034	3781	473	2042			2050			2058		
6 Clubhouse Water Heater - Replace	2024	2251	450	2036	3209	267	2048			2060			2072		
7 Clubhouse Drinking Fountain - Replace	2024	1126	225	2039	1754	117	2054			2069			2084		
8 Accent Light Fixtures - Repair/Partial Replacement	2021	2060	1030	2028	2534	362	2035	3116	445	2042			2049		
9 Irrigation - System Repair	2020	4000	4000	2025	4637	927	2030	5376	1075	2035	6232	1246	2040		
10 Security System - Upgrade	2022	3713	1238	2030	4704	588	2038	5959	745	2046			2054		
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**BROOKSHADE  
COST & FUNDING RECAP**

Year	Annual Funds	Future Expenses	Net Accumulated Funds
Current Funds			100,000
2020	\$75,000	83,926	92,074
2021	\$75,000	59,225	108,770
2022	\$75,000	38,988	145,869
2023	\$75,000	31,689	190,639
2024	\$75,000	48,116	219,430
2025	\$85,000	32,460	274,164
2026	\$85,000	40,747	321,159
2027	\$85,000	28,902	380,469
2028	\$85,000	79,173	390,100
2029	\$95,000	435,794	53,207
2030	\$95,000	67,196	81,543
2031	\$95,000	116,276	61,083
2032	\$95,000	11,228	145,466
2033	\$105,000	43,322	208,599
2034	\$105,000	42,353	273,332
2035	\$105,000	89,585	291,481
2036	\$105,000	63,386	336,010
2037	\$115,000	11,570	442,800
2038	\$115,000	134,279	427,949
2039	\$115,000	30,686	516,542

BROOKSHADE  
ITEMIZED PROJECTED COSTS BY YEAR

<i>Year</i>	<i>Item</i>	<i>Cost</i>
<b>Grand Total</b>		<b>\$1,488,900</b>
<b>2020 Total</b>		<b>\$83,926</b>
2020	ConcreteYard Drains (3 per year) - Repair/Maintain/Clean	\$10,000
2020	Detention Ponds - Remove Silt/Vegetation/Debris	\$35,001
2020	Irrigation - System Repair	\$4,000
2020	Parking Lot - 1-1/2" Overlay	\$28,175
2020	Playground - Repair/Partial Replace Equipment	\$2,000
2020	Swimming Pool Equipment - Replace Pumps/Motors	\$2,250
2020	Walking Trail - Maintain/Remove Trees, Shrubs/Trim	\$2,500
<b>2021 Total</b>		<b>\$59,225</b>
2021	Accent Light Fixtures - Repair/Partial Replacement	\$2,060
2021	Clubhouse Bathrooms - Repair/Paint	\$1,030
2021	ConcreteYard Drains (3 per year) - Repair/Maintain/Clean	\$10,300
2021	Drainage/Slope Erosion/Storm System - Repair, Maintain	\$10,300
2021	Playground - Replace Equipment	\$20,600
2021	Swimming Pool Filtration System - Replace Filters	\$2,060
2021	Swimming Pool Furniture - Partial Replacement	\$10,300
2021	Walking Trail - Maintain/Remove Trees, Shrubs/Trim	\$2,575
<b>2022 Total</b>		<b>\$38,988</b>
2022	Clubhouse Tile - Repair/Partial Replace	\$1,061
2022	Common Area Fencing - Repair/Paint/Partial Replace	\$3,183
2022	ConcreteYard Drains (3 per year) - Repair/Maintain/Clean	\$10,609
2022	Pool Pavilion - Replace Fabric/Paint	\$1,591
2022	Security System - Upgrade	\$3,713
2022	Swimming Pool Equipment - Replace Pumps/Motors	\$2,387
2022	Tennis Courts Equipment - Partial Replace	\$3,183
2022	Walking Trail - Maintain/Remove Trees, Shrubs/Trim	\$2,652
2022	Walking Trail Bridges - Repair/Paint/Partial Replace	\$10,609
<b>2023 Total</b>		<b>\$31,689</b>
2023	Clubhouse Exterior Finishes - Repair/Paint/Seal/Caulk	\$7,649
2023	ConcreteYard Drains (3 per year) - Repair/Maintain/Clean	\$10,927
2023	Sidewalk - Repair/Replace Cracked, Settled Sections	\$1,639
2023	Tennis Courts 1 & 2 - Resurface (Crack Repair)	\$8,742
2023	Walking Trail - Maintain/Remove Trees, Shrubs/Trim	\$2,732
<b>2024 Total</b>		<b>\$48,116</b>
2024	Clubhouse Drinking Fountain - Replace	\$1,126
2024	Clubhouse Furnishings - Partial Replacement	\$11,255
2024	Clubhouse Interior Finishes - Repair/Paint	\$5,628
2024	Clubhouse Water Heater - Replace	\$2,251
2024	ConcreteYard Drains (3 per year) - Repair/Maintain/Clean	\$11,255
2024	Landscaping - Upgrade/Remove Trees, Shrubs/Trim	\$11,255
2024	Swimming Pool Equipment - Replace Pumps/Motors	\$2,532
2024	Walking Trail - Maintain/Remove Trees, Shrubs/Trim	\$2,814
<b>2025 Total</b>		<b>\$32,460</b>
2025	Clubhouse Electrical Fixtures - Partial Repl.	\$4,637
2025	Clubhouse HVAC System - Replace Equipment	\$6,956

2025 Concrete Curb - Repair/Replace Cracked, Settled Sections	\$1,739
2025 ConcreteYard Drains (3 per year) - Repair/Maintain/Clean	\$11,593
2025 Irrigation - System Repair	\$4,637
2025 Walking Trail - Maintain/Remove Trees, Shrubs/Trim	\$2,898
<b>2026 Total</b>	<b>\$40,747</b>
2026 Clubhouse Kitchen Cabinets/Counter - Part. Replacement	\$4,776
2026 Clubhouse Plumbing & Fixtures - Partial Repl.	\$2,985
2026 ConcreteYard Drains (3 per year) - Repair/Maintain/Clean	\$11,941
2026 Parking Lot - Sealcoat/Restripe/Repair	\$3,433
2026 Swimming Pool Equipment - Replace Pumps/Motors	\$2,687
2026 Swimming Pool Furniture - Partial Replacement	\$11,941
2026 Walking Trail - Maintain/Remove Trees, Shrubs/Trim	\$2,985
<b>2027 Total</b>	<b>\$28,902</b>
2027 Clubhouse Roof - Replace Gutters and Downspouts	\$1,230
2027 Clubhouse Roof - Replace Shingles	\$9,224
2027 ConcreteYard Drains (3 per year) - Repair/Maintain/Clean	\$12,299
2027 Swimming Pool Fence/Gate - Repair/Paint	\$3,075
2027 Walking Trail - Maintain/Remove Trees, Shrubs/Trim	\$3,075
<b>2028 Total</b>	<b>\$79,173</b>
2028 Accent Light Fixtures - Repair/Partial Replacement	\$2,534
2028 Common Area Fencing - Repair/Paint/Partial Replace	\$3,800
2028 ConcreteYard Drains (3 per year) - Repair/Maintain/Clean	\$12,668
2028 Detention Ponds - Repair/Partial Repl. Rip Rap/Concrete Cul	\$19,002
2028 Drainage/Slope Erosion/Storm System - Repair, Maintain	\$12,668
2028 Playground - Repair/Partial Replace Equipment	\$2,534
2028 Tennis Courts 1 & 2 - Resurface (Crack Repair)	\$10,134
2028 Tennis Cts Fencing, Light Poles - Repair/Paint/Partial Replac	\$12,668
2028 Walking Trail - Maintain/Remove Trees, Shrubs/Trim	\$3,167
<b>2029 Total</b>	<b>\$435,794</b>
2029 Clubhouse Bathrooms - Repair/Paint	\$1,305
2029 ConcreteYard Drains (3 per year) - Repair/Maintain/Clean	\$13,048
2029 Landscaping - Upgrade/Remove Trees, Shrubs/Trim	\$13,048
2029 Sidewalk - Repair/Replace Cracked, Settled Sections	\$1,957
2029 Swimming Pool - Replace	\$391,432
2029 Swimming Pool Cover - Replace	\$5,219
2029 Swimming Pool Filtration System - Replace Filters	\$2,610
2029 Tennis Courts Equipment - Partial Replace	\$3,914
2029 Walking Trail - Maintain/Remove Trees, Shrubs/Trim	\$3,262
<b>2030 Total</b>	<b>\$67,196</b>
2030 Entry Monuments and Signage - Repair/Paint/Tuck Point	\$13,439
2030 Irrigation - System Repair	\$5,376
2030 Main Walking Trail Bridge - Replace	\$26,878
2030 Security System - Upgrade	\$4,704
2030 Walking Trail - Maintain/Remove Trees, Shrubs/Trim	\$3,360
2030 Walking Trail Bridges - Repair/Paint/Partial Replace	\$13,439
<b>2031 Total</b>	<b>\$116,276</b>
2031 Concrete Curb - Repair/Replace Cracked, Settled Sections	\$2,076
2031 Swimming Pool Furniture - Partial Replacement	\$13,842
2031 Tennis Courts 1 & 2 - Replace Surface/Fence	\$96,896
2031 Walking Trail - Maintain/Remove Trees, Shrubs/Trim	\$3,461

<b>2032 Total</b>	<b>\$11,228</b>
2032 Clubhouse Tile - Repair/Partial Replace	\$1,426
2032 Parking Lot - Sealcoat/Restripe/Repair	\$4,099
2032 Pool Pavilion - Replace Fabric/Paint	\$2,139
2032 Walking Trail - Maintain/Remove Trees, Shrubs/Trim	\$3,564
<b>2033 Total</b>	<b>\$43,322</b>
2033 Clubhouse Bathrooms - Upgrade	\$11,748
2033 Clubhouse Electrical Fixtures - Partial Repl.	\$5,874
2033 Clubhouse Exterior Finishes - Repair/Paint/Seal/Caulk	\$10,280
2033 Tennis Courts 1 & 2 - Resurface (Crack Repair)	\$11,748
2033 Walking Trail - Maintain/Remove Trees, Shrubs/Trim	\$3,671
<b>2034 Total</b>	<b>\$42,353</b>
2034 Clubhouse Furnishings - Partial Replacement	\$15,126
2034 Clubhouse Plumbing & Fixtures - Partial Repl.	\$3,781
2034 Common Area Fencing - Repair/Paint/Partial Replace	\$4,538
2034 Landscaping - Upgrade/Remove Trees, Shrubs/Trim	\$15,126
2034 Walking Trail - Maintain/Remove Trees, Shrubs/Trim	\$3,781
<b>2035 Total</b>	<b>\$89,585</b>
2035 Accent Light Fixtures - Repair/Partial Replacement	\$3,116
2035 Detention Ponds - Remove Silt/Vegetation/Debris	\$54,530
2035 Drainage/Slope Erosion/Storm System - Repair, Maintain	\$15,580
2035 Irrigation - System Repair	\$6,232
2035 Sidewalk - Repair/Replace Cracked, Settled Sections	\$2,337
2035 Swimming Pool Fence/Gate - Repair/Paint	\$3,895
2035 Walking Trail - Maintain/Remove Trees, Shrubs/Trim	\$3,895
<b>2036 Total</b>	<b>\$63,386</b>
2036 Clubhouse Interior Finishes - Repair/Paint	\$8,024
2036 Clubhouse Water Heater - Replace	\$3,209
2036 Detention Ponds - Repair/Partial Repl. Rip Rap/Concrete Cul	\$24,071
2036 Playground - Repair/Partial Replace Equipment	\$3,209
2036 Swimming Pool Furniture - Partial Replacement	\$16,047
2036 Tennis Courts Equipment - Partial Replace	\$4,814
2036 Walking Trail - Maintain/Remove Trees, Shrubs/Trim	\$4,012
<b>2037 Total</b>	<b>\$11,570</b>
2037 Clubhouse Bathrooms - Repair/Paint	\$1,653
2037 Concrete Curb - Repair/Replace Cracked, Settled Sections	\$2,479
2037 Swimming Pool Filtration System - Replace Filters	\$3,306
2037 Walking Trail - Maintain/Remove Trees, Shrubs/Trim	\$4,132
<b>2038 Total</b>	<b>\$134,279</b>
2038 Entry Monuments and Signage - Repair/Paint/Tuck Point	\$17,024
2038 Parking Lot - Sealcoat/Restripe/Repair	\$4,894
2038 Security System - Upgrade	\$5,959
2038 Swimming Pool Deck - Partial Replacement	\$8,512
2038 Swimming Pool Deck - Repair/Seal Cracks	\$3,405
2038 Swimming Pool Surface - Resurface/Rep. Tiles	\$42,561
2038 Tennis Courts 1 & 2 - Resurface (Crack Repair)	\$13,619
2038 Tennis Cts Fencing, Light Poles - Repair/Paint/Partial Replac	\$17,024
2038 Walking Trail - Maintain/Remove Trees, Shrubs/Trim	\$4,256
2038 Walking Trail Bridges - Repair/Paint/Partial Replace	\$17,024
<b>2039 Total</b>	<b>\$30,686</b>
2039 Clubhouse Drinking Fountain - Replace	\$1,754
2039 Landscaping - Upgrade/Remove Trees, Shrubs/Trim	\$17,535
2039 Swimming Pool Cover - Replace	\$7,014
2039 Walking Trail - Maintain/Remove Trees, Shrubs/Trim	\$4,384

## E. NOTES

The accompanying notes are an integral part of the reserve schedule contained in this report. When reviewing the schedule, please be sure to read all notes pertaining to a particular line item. This will provide the most complete explanation of each line item and will provide any clarification where necessary.

1. These items were found to be in good condition and well maintained. The useful life reflects the age and overall condition of the respective item.
2. **Parking Lot** – The parking lot at the amenity area appears to consist of a graded aggregate base, asphalt base course, and asphalt surface course. From our review, the asphalt pavement appeared to be in fair condition and experiencing normal wear and tear. It should be noted that we did observe multiple linear and “alligatored” cracks at sections of the asphalt (reference photographs 1 & 2). It is our understanding that the asphalt will be resurfaced in 2020 after the pool remediation is completed. The resurfacing of the asphalt should remediate all existing conditions at the parking lot if installed properly.

*In order to prolong the useful life of the asphalt pavement, we recommend that the cracks be filled and the pavement be sealcoated and striped every six to eight years. The useful life of asphalt pavement is approximately 20 years, after which, a new layer of asphalt should be installed. Prior to overlay, any settled areas should be removed, the base then re-compacted, and a new layer of asphalt course installed. It is recommended that a budget be allocated for the resurfacing of the asphalt with a 1-1/2" overlay every 20 years. We recommend that the asphalt surface be inspected approximately every ten years to determine if the condition of asphalt is adequate and if the useful life can be prolonged.*

3. **Concrete Curb/Sidewalks** – The concrete curbs are located along the perimeter of the amenity area parking lot. From our review, the concrete curbs appeared to be in generally good condition; however, we did observe a few linear cracks and a section of the curb that is damaged (reference photographs 3 & 4). The sidewalks at the amenity area appeared to be in generally good condition with little to no cracks or settling observed; however, the section of the sidewalk at the beginning

of the walking trail is uprooted by the nearby trees resulting in a potential trip hazard (reference photograph 5).

*Any sections of curb and sidewalks that are settling should be monitored, and if they continue to settle, these sections should be replaced. We have provided a budget for the replacement of damaged, deteriorated, or settled sections of the concrete curbs and sidewalk at the property. The budgets are provided every six years and the funding can be used when necessary, during the estimated useful life. The budgets are not for complete replacement of the concrete curbs or sidewalks, only replacement of the sections that become trip hazards or safety concerns. Any vertical displacement at cracks that could potentially represent a trip hazard and liability should be replaced. The curbs should be repaired or replaced when the asphalt is resurfaced.*

4. **Entry Monuments and Signage/Fencing** – The entry monuments and signage are located at the front entrance to the property. The monuments consist of a stone veneer monument, piers, and walls. The entry sign consists of an engraved metal sign and is located at the center island at the entry to the property. Between the stone piers is a pre-finished aluminum fence. It is our understanding that the signage and monuments have undergone maintenance, as needed, for 20+ years. From our review, the entry monuments and signage appeared to be in generally good condition and structurally sound (reference photographs 6 & 7).

*Any mildew growth on the monuments and grout joints may be power washed as part of regular maintenance for a better appearance. It is recommended that \$10,000 be allocated for the repair, cleaning, and tuck pointing of the entry monuments and signage approximately every eight years. It is also recommended that \$3,000 be allotted for the repair, partial replacement, and painting of the common area fencing every six years. It has been requested that the budget for repair cleaning and tuck pointing of the entry monuments and signage be moved to 2030.*

5. **Landscaping/Walking Trail** - The landscaping at the common areas consists of small and large trees, shrubs, and common landscaped areas. There is a walking trail at the rear of the amenity area that consists of a man-made walking path,

large trees, and a creek that runs through the property. There are also three wood-framed bridges that are located at the entry and two areas of the walking trail. It is our understanding that some dead and fallen trees are projected to be removed in 2019. From our review, the common area landscaping appeared to be in generally good condition and maintained properly. The appearance of the community is very subjective, as is the allocation of funds for the upgrade of the landscape materials. From our experience with similar communities, upgrading of the community landscaping is typically done every five years.

The bridges at the walking trail appeared to be in generally good condition and structurally sound; however, we did observe some chipped paint at the main entry bridge (reference photographs 8-12).

*A budget of \$10,000 has been allocated for the replacement of any uprooting, damaged or diseased shrubs and trees, trimming of trees, and upgrading of the landscaping every five years. This is not designed for yearly or routine landscaping or annual flower installation. All trees that are located within 10' of a structure should be removed or monitored to prevent any damage. As requested, we have allotted a budget of \$2,500 every year for the removal and trimming of trees and maintenance at the walking trail. We have also allotted a budget for the repair, painting, and partial replacement of the bridges for approximately every eight years. A budget of \$20,000 has been allotted for the replacement of the large walking trail bridge to be completed in approximately 10 years.*

6. **Drainage** - The drainage at the property generally consists of surface flow to drain inlets and grassed swales located at the common landscaped areas. The stormwater is then piped underground to one of the three detention ponds located throughout the property. It is our understanding that there have been several drainage repairs in the past and has been maintained on a as needed basis. It is our understanding that the detention ponds are cleared and cleaned on an as needed basis.

From our review, the overall drainage at the amenity area appeared to be functioning adequately; however, we did observe areas where there is dead grass,

exposed soil, and minor erosion. We also observed a drain outlet structure that is blocked by accumulated silt at the beginning of the creek near the amenity area (reference photographs 13 & 14). Remediation of the erosion is necessary in order to prevent further erosion and damage to the surrounding landscape or structures. All drainage structures should be cleared to allow for proper water flow. It is our understanding that there are also 22 yard inlet structures between a few homes that are the Association's responsibility and will require maintenance in the near future.

*If there are any areas that appear to have poor drainage, it is recommended that swales and river rock be installed to improve the surface flow of water, as needed. It should be noted that it is possible to install French drains in landscaped areas to further improve the drainage. A budget of \$10,000 has been allotted for the maintenance and repair of the stormwater drainage every seven years. The budget for the drainage may decrease over time as a result of proper maintenance. As requested, we have allotted a budget of \$10,000 for the repair, maintenance, and cleaning of the yard inlets, as needed, every year for ten years. The budget for the yard inlets will cover three drains per year.*

*It is recommended that a budget be allotted for the removal of silt, vegetation and debris at the detention ponds every 15 years. It is also recommended that a budget be allotted for the repair and cleaning of the fencing and concrete drainage structures. The detention ponds should be monitored to determine if they are draining properly. If constructed properly, the detention ponds should drain within 48 hours after the last rain. If there is standing water at the ponds after 48 hours, the drainage at the ponds should be inspected. It is our understanding that the detention ponds will be cleared in 2020.*

7. **Swimming Pool/Deck/Equipment** - The swimming pool consists of an in-ground concrete pool with plaster finish. The pool deck consists of a concrete slab-on-grade and is surrounded by a chain-link fence. During our review, the pool area was undergoing restoration. As a result of a building defect at the pool, the Association is having the pool stabilized and repaired. The repair is to be completed in 2019. The current stabilization remediation of the pool is not a permanent repair and the pool will have to be completely replaced within ten

years. As a result, we have allotted a one-time budget for the replacement of the swimming pool and all corresponding components to be completed within ten years. For the purpose of the reserve, we have pushed back all swimming pool and deck items to be conducted after the swimming pool is projected to be replaced. The condition of the pool cover is also poor and should be replaced this year (reference photographs 15-17).

*Following are the estimated useful lives of the components of the swimming pool:*

<i>Swimming Pool - Replace .....</i>	<i>One-Time Payment</i>
<i>Swimming Pool Surface - Resurface/Repl. Tiles.....</i>	<i>Every 8-10 years</i>
<i>Swimming Pool Deck – Repair/Seal Cracks.....</i>	<i>Every 5-6 years</i>
<i>Swimming Pool Deck – Partial Replacement .....</i>	<i>Every 12-15 years</i>
<i>Swimming Pool Furniture – Partial Replacement.....</i>	<i>Every 4-5 years</i>
<i>Swimming Pool Fence/Gate – Repair/Paint.....</i>	<i>Every 7-8 years</i>
<i>Swimming Pool Cover - Replace .....</i>	<i>Every 9-10 years</i>
<i>Swimming Pool Equipment – Replace Pumps/Motors.....</i>	<i>Every 1-2 years</i>
<i>Swimming Pool Filtration System – Replace Filters .....</i>	<i>Every 7-8 years</i>

*We have provided budgets for each of the referenced items above and have included them in the reserve.*

- 8. **Tennis Courts** – There are two tennis courts at the amenity area. The tennis courts at the property consist of two hard-surfaced, lighted tennis courts surrounded by a metal chain link fence. There are small benches located at each side of the tennis court area. It is our understanding that the tennis courts were resurfaced in 2018. From our review, the tennis courts appeared to be in generally good condition with only minor linear cracks observed (reference photographs 18 & 19). The linear cracks appear to be the result of normal expansion and contraction of the tennis court surface materials.

*Following is the estimated useful life of the components of the tennis courts.*

<i>Tennis Courts 1 &amp; 2 – Resurface (Crack Repair).....</i>	<i>Every 4-5 years</i>
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*Tennis Courts 1 & 2 – Replace Surface/Fence.....Every 20-25 years*  
*Tennis Courts Fencing/Benches/Light Poles – Repair/Paint ..... Every 9-10 years*  
*Tennis Courts Equipment – Replace..... Every 6-7 years*

*We have provided budgets for each of the referenced items above and have included them in the reserve.*

9. **Playground** – The playground equipment is located at the amenity area, to the left of the club house. The playground equipment consists of a wood-framed structure with polyethylene equipment and slides. From our review, the playground equipment appears to be reaching the end of its useful life and should be replaced in the near future (reference photographs 20 & 21).

*It is recommended that \$2,000 be allotted for the repair and partial replacement of the playground equipment every eight years. It is also recommended that \$20,000 be allotted for the replacement of the playground equipment every 20 years.*

10. **Clubhouse** - The clubhouse is located off Brookshade Parkway at the amenity area. The clubhouse is a one-story structure that appears to be constructed utilizing monolithic concrete slab-on-grade with turned-down edges supporting the building structure that consists of conventional wood-framed construction. Exterior finishes consist of a painted cement board lap siding with painted soffit, trim, and fascia in combination with stone veneer accents. The roof is a moderately steep-sloped roof with fiberglass-based composition asphalt shingles. Roof runoff is controlled by gutters and downspouts around the perimeter eave of the roof. The interior of the clubhouse consists of a combination of painted gypsum board at the walls with painted wood bases, crown molding, doors, and trim. The interior of the clubhouse contains a great room, a kitchen with appliances, two restrooms, and an equipment room. It is our understanding that the following has been completed at the clubhouse since 2007:

- The roof was replaced in 2007.
- The A/C Unit was replaced in 2010.
- Decorations were bought for the clubhouse in 2011.

- New security system was installed in 2011.
- Bathrooms were renovated in 2013.
- Some furniture was purchased in 2017.

Based on our review, the clubhouse appeared to be in generally good condition and well maintained; however, we did observe damage at the men’s restroom wall above the urinal (reference photographs 22-26). It is difficult to determine the cause of the damage at the wall and may require some additional investigation to determine if it is a structural concern. It is our understanding that the men’s urinal does not work and will need to be repaired in the near future.

At the side of the clubhouse, on the pool deck, is a metal framed pavilion with a cloth fabric roof. From our review, the pavilion structure appears to be structural sound and in generally good condition with no remedial work required at this time (reference photograph 27).

*The following are the estimated useful lives of the clubhouse’s components:*

<i>Clubhouse Roof – Replace .....</i>	<i>Every 20-25 years</i>
<i>Clubhouse Roof – Repl. Gutters and Downspouts .....</i>	<i>Every 20-25 years</i>
<i>Clubhouse Ext. Surfaces – Rep./Paint/Seal/Caulk.....</i>	<i>Every 8-10 years</i>
<i>Clubhouse Interior Finishes– Repair/Paint/Stain.....</i>	<i>Every 10-12 years</i>
<i>Clubhouse Bathrooms – Repair/Paint/Repair Tile.....</i>	<i>Every 7-8 years</i>
<i>Clubhouse Bathrooms – Upgrade.....</i>	<i>Every 18-20 years</i>
<i>Clubhouse Kitchen Cabinets/Countertops Replace.....</i>	<i>Every 20-25 years</i>
<i>Clubhouse Furnishings– Partial Replacement.....</i>	<i>Every 8-10 years</i>
<i>Clubhouse Tile – Repair/Partial Replace.....</i>	<i>Every 9-10 years</i>
<i>Pool Pavilion – Replace Fabric/Paint.....</i>	<i>Every 9-10 years</i>
<i>Clubhouse HVAC System – Replace Equipment.....</i>	<i>Every 12-15 years</i>
<i>Clubhouse Electrical Fixtures – Partial Repl.....</i>	<i>Every 7-8 years</i>
<i>Clubhouse Plumbing Fixtures – Partial Repl.....</i>	<i>Every 7-8 years</i>
<i>Clubhouse Water Heater – Replace.....</i>	<i>Every 10-12 years</i>
<i>Clubhouse Drinking Fountain – Replace.....</i>	<i>Every 12-15 years</i>

*We have provided budgets for each of the referenced items above and have included them in the reserve.*

11. **Lighting** - The lighting at the property consists of small accent lighting along the entry monuments and at the clubhouse. From our review, the accent lighting appeared to be operating properly and in good condition for its age. Typically, this type of lighting has a useful life of 10 to 15 years, with proper maintenance.

*Due to the age and condition of the accent lighting, it is recommended that \$2,000 be allocated for the repair and partial replacement of the accent lighting fixtures every seven to eight years.*

12. **Irrigation** – It is our understanding that the irrigation system has had repairs in the past with the latest repair being in 2018. It should be noted that we did not operate or test each zone, as it was not part of the scope of work; however, we did visually observe all the irrigated areas to identify any obvious deficiencies.

*It is recommended that \$4,000 be allocated for the general repair and maintenance of the irrigation system, as needed, every four to five years.*

13. **Security System** – There is a security camera system at the clubhouse. It appears that there are approximately four security cameras at the building. From our review, the security system appeared to be functioning properly and in generally good condition; however, it is our understanding that the Association is planning on upgrading the system within the next four to five years.

*It is recommended that \$3,500 be allotted every seven to eight years for the upgrading of the security system.*

## **II. RESERVE CASH FLOW ANALYSIS**

### **A. INTRODUCTION**

The enclosed chart and graph contain a 20-year cash flow projection of the reserve requirements for the Association. The budget should be adjusted at the end of the 20-year period to readjust for changes in remaining life, inflation, and current costs of replacements. This cash flow analysis is based on the assumption that all of the items that make up the schedule are fully funded. By this, we mean that each item will accumulate its full replacement cost during its life span. At the end of this life, each item would be replaced and the funding would start aging for items with a long life. For items with a short useful life, the funding for the first replacement is budgeted in addition to future replacements due to the short life span. The future replacement funding is started in the first year; however, payments are less than the first replacement due to the extended time period allowed to accumulate funds. Taking all of the components that make up the reserve schedule, using this full funding analysis, there is typically an ongoing surplus in the reserve fund. This ensures that the Association will have a surplus at the end of the 10-year period. This is called the “pooling effect” and is represented by the upper line on the cash flow chart, which is designated as the “Net Cumulative Fund.” The “Net Cumulative Fund” is calculated by taking the existing amount in the reserve fund at the time the reserve schedule is prepared, adding to it the yearly contribution, and subtracting from it the annual expenditures.

The annual reserve funding required has been calculated by estimating the useful remaining life based on the current condition, age, and all other known factors of each item description. The present value replacement cost was estimated by either past quotations or other listed methods of estimation. The present value replacement cost was then converted to future value using a 3% annual compounded inflation rate. The future cost was calculated for the projected time when replacement will be required.

The future cost was then broken down into annual installments while still considering the 3% compounded annual inflation rate. The monthly reserve funding was calculated by a further breakdown of the annual reserve funding required.

1. Formulas

The following economic formulas were used in our calculations:

<b>DISCOUNTING FACTOR</b>	<b>FUNCTIONAL NOTATION</b>	<b>FORMULA</b>
Single Payment Compound Amount	(F/P, i %, n)	$(1+i)^n$
Uniform Series Sinking Fund	(A/F, i %, n)	$i/[(1+i)^{n-1}]$

2. Definitions

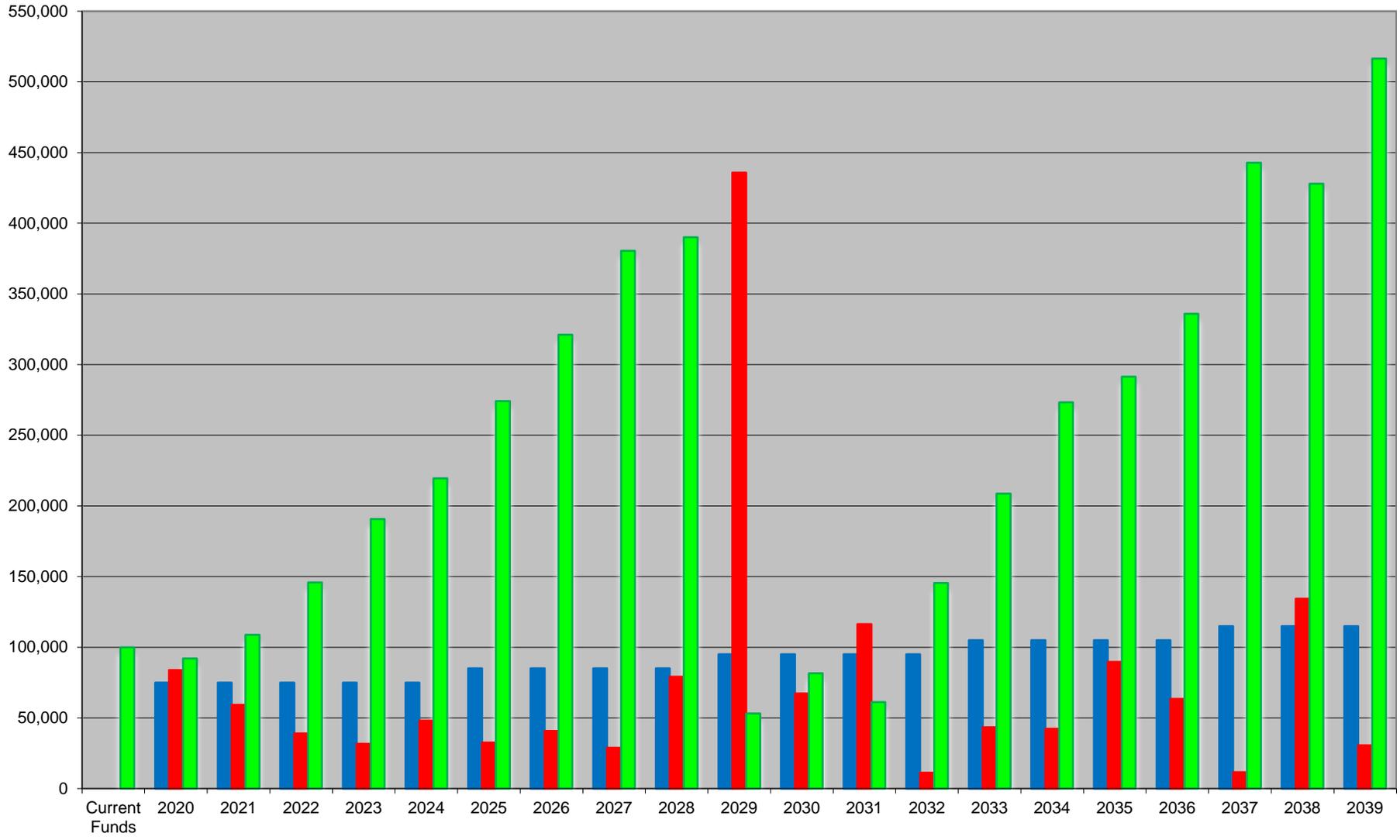
Definitions of the above-mentioned terms are as follows:

<b>TERM</b>	<b>DEFINITION</b>
Single Payment Compound Amount	Conversion of present worth to future value
Uniform Series Sinking Fund	Conversion of future value to annual value
F	Future worth of item in <i>n</i> years from present
P	Present Worth
A	Annual worth
I	Interest Rate (1.00% used)
N	# of years until each calculated replacement

B. PROJECTED CASH FLOW GRAPH AND CHART

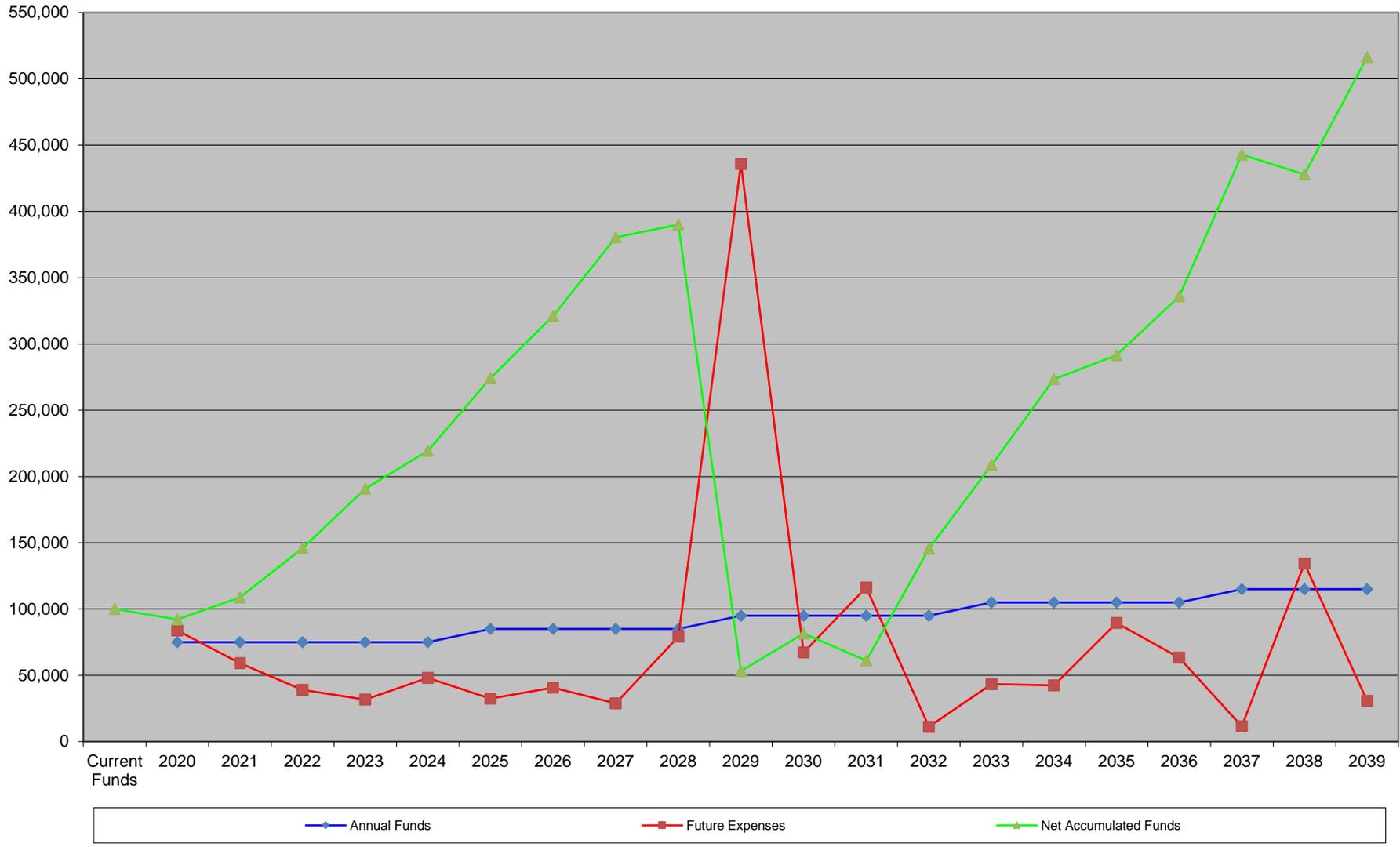
The projected cash flow for the Capital Reserve Analysis is illustrated by the bar graph and line chart on the following pages.

## BROOKSHADE - PROJECTED CASH FLOW



■ Annual Funds     
 ■ Future Expenses     
 ■ Net Accumulated Funds

# BROOKSHADE - PROJECTED CASH FLOW



C. RECOMMENDATIONS AND CONCLUSIONS

Based on our review, we would make the following recommendations. The Association should set aside the following amount for the specified year into the reserve fund:

**COST AND FUNDING RECAP**

Year	Annual Funds	Future Expenses	Net Accumulated Funds
Current Funds			100,000
2020	\$75,000	83,926	92,074
2021	\$75,000	59,225	108,770
2022	\$75,000	38,988	145,869
2023	\$75,000	31,689	190,639
2024	\$75,000	48,116	219,430
2025	\$85,000	32,460	274,164
2026	\$85,000	40,747	321,159
2027	\$85,000	28,902	380,469
2028	\$85,000	79,173	390,100
2029	\$95,000	435,794	53,207
2030	\$95,000	67,196	81,543
2031	\$95,000	116,276	61,083
2032	\$95,000	11,228	145,466
2033	\$105,000	43,322	208,599
2034	\$105,000	42,353	273,332
2035	\$105,000	89,585	291,481
2036	\$105,000	63,386	336,010
2037	\$115,000	11,570	442,800
2038	\$115,000	134,279	427,949
2039	\$115,000	30,686	516,542

The Association should update the reserve schedule a minimum of once every two years. It is especially important to update the schedule when using average contribution due to the fact that even a minor change in the estimated useful life can have a significant impact on adequate funding.

The Association should review each of the individual line items that make up the reserve schedule to make sure that there is no overlap between what is indicated in the schedule and any other portion of the budget. For example, we may show on the reserve schedule the replacement of fencing, but at the same time, the Association may be replacing the fencing out of their operating budget. If duplication like this exists, the item should either be removed from the reserve schedule or the operation budget. It should not be funded in two different locations.

The Association should review the items on the schedule to assure that their replacement is not covered under a maintenance contract. An example would be reserving for the replacement of mechanical equipment components while the Association has a maintenance contract for the item at the same time. The reserve schedule should be carefully reviewed to be sure that it does not fund the replacement of any portion of any item whose replacement is covered under a maintenance contract.

The Association should review the items on the schedule to be sure that they are all the Association's responsibility. As an example, if we have included site lighting on the reserve schedule, but at the same time the local municipality is responsible for the maintenance and repair of these connections, they should be removed from the schedule.

The Association should review the individual line items on the reserve schedule carefully to determine if a number of the smaller individual components can be consolidated into one line item which can be continuously funded.

For example, if there are five or six components with a total replacement cost of \$1,000 each, rather than reserving the full \$5,000 or \$6,000 for all of these items, the Association may want to consider funding all six components under one line item for a total of \$1,000. Should one of these six items have to be replaced, that line item would have to be brought current within a year or so after its expenditure. By doing this rather than

funding the full \$6,000, only a portion of the total would be funded. This would reduce the overall yearly contribution to reserves.

Depending on the size of the overall operating budget, the Association may decide that any line item of less than the given amount will be funded directly through the operating budget rather than through the reserve schedule. If this is the case, any item with the given value or less should be removed from the schedule. The schedule would then be footnoted accordingly.

### **III. RECOMMENDED MAINTENANCE SCHEDULE**

The following guidelines are intended to ensure that a program of preventive maintenance is implemented in order to assure that, as a minimum, the predicted useful lives of the major common elements is attained. A preventive maintenance program is made up of “a system of periodic inspections of existing facilities to uncover conditions leading to breakdown or harmful depreciation and the correction of these conditions while they are still minor.” It should be noted that experience has shown that a proper maintenance program can add 50% to the expected useful life of some items.

In any case, the proper determination of the useful lives of the items which make up your common elements is critical to the proper updating of the reserve schedule. The items included will only attain their anticipated useful lives if a proper maintenance program is implemented. For this reason, it is recommended that the reserve schedule be updated every two years to assure that all items are being properly maintained.

#### **A. ASPHALT PAVEMENT**

The early detection and repair of minor defects is the most important consideration in the preventive maintenance of pavements. Cracks and other surface breaks, which in their first stages are almost unnoticeable, may develop into serious defects if not repaired in a timely manner. For this reason, walking inspections of the pavement should be conducted in the fall and spring of each year, as a minimum.

The inspections should note small cracks or other surface breaks in the pavement. In addition, there are other signs, such as mud or water on the pavement surface or soil erosion along the edges of the pavement, which may indicate possible future problem areas.

Most small cracks or surface breaks can be repaired by sealing them with a good commercial-grade caulk. Areas which have settled and pose a possible trip hazard should be cut out and replaced to prevent a potential liability problem, as well as to prevent further deterioration of the surface. If large areas are observed

to be cracking or breaking up, this may be an indication of a problem with the base material and/or subsoils and would require further investigation to determine the cause and proper method of repair.

B. CONCRETE CURBING

Any soil erosion behind the curbing should be noted, and possible problems such as broken pipes, malfunctioning sprinkler heads, and/or improper grading should be investigated and any necessary repairs made.

C. SIDEWALKS

Sidewalks should be inspected at least twice a year (spring and fall). The inspection should note any cracked sections, uneven settlement between sections (which may result in tripping hazards), and surface damage. Undermining of sidewalks (caused by soil erosion) should also be noted. Proper replacement of any sections with the above noted problems is necessary to eliminate safety hazards and potential liability problems. These repairs will also allow the curbing to achieve its full useful life.

D. STORM DRAINAGE SYSTEMS

All storm drainage systems should be routinely inspected to ensure proper operation. Inspections should be scheduled for all facilities after major storms for routine maintenance. In addition, bi-annual structural inspections should be performed. The following are the recommended maintenance schedules for each individual section of a storm system:

1. Catch Basins

All catch basins should be routinely inspected after a major storm to ensure that they are working properly. During these inspections, any sediment

buildup or debris should be removed from catch basins to ensure that they continue to function properly.

## 2. Drainage Swales

The five most prevalent maintenance problems with swales are:

- Weed growth
- Grass maintenance
- Sediment control
- Soil deterioration
- Mosquito control

Drainage swales should be inspected on a routine basis to ensure that they are functioning properly. The grass located within the swales should be mowed on a weekly basis to prevent the accumulation of debris, which may impede the flow of the drainage. The trash racks attached to the outlet structures should be periodically checked and cleaned of debris to prevent blockage. The outlet structures should also be checked for deterioration and/or cracking of concrete.

## E. LANDSCAPING

A discussion regarding the preventive maintenance of the landscaped areas of the development would require an entire report. For this reason, it is recommended that a professional service specializing in this area be consulted. It should be noted that landscaping is not included as a reserve schedule item since, with proper maintenance, large-scale replacement should not become necessary.

## F. CROSS-TIE WALLS

Retaining wall surfaces should be inspected every spring as part of a preventive

maintenance program. Areas should be checked for signs of major cracking, splitting and warping. The retaining walls should be checked for soil erosion behind the retaining wall and undermining of the footings.

G. LAWN SPRINKLER SYSTEM

The preventive maintenance of the lawn sprinkler system would require an extensive report concerning the operation and servicing of the control valve, pumps, sprinkler heads, and water lines. For this reason, it is recommended that a professional sprinkler system contractor be consulted to provide the necessary services to properly maintain the sprinkler system.

H. TOT LOTS

Tot lots should be looked at a minimum of twice a year, with one inspection in the spring and one in the fall. Any splintering or cracking wood should be repaired or replaced as necessary to prevent any injury. Exposed bolts must not have sharp edges. The bolts should not be protruding excessively so as to cause unnecessary injuries.

I. ROOFS • PITCHED

The standard asphalt/fiberglass shingles available on the market today have an expected useful life of approximately 20 years. Proper maintenance in order to achieve this useful life requires periodic inspections to detect the need for repair or changes in the roof surface. In order to reduce maintenance and replacement costs, it is vital to detect problems when they are minor and prevent them from escalating into major problems.

Roof inspections should be conducted at least twice a year. These inspections should preferably occur in the early fall to prepare for winter and in the spring to assess any winter damage and prepare for the hot summer sun. In addition to

these seasonal inspections, the roofs should be carefully checked after violent rain or windstorms or nearby fires or after workmen have been on the roof.

The roof inspections should include:

- Examination of exterior walls for settlement.
- Checking interior walls and the underside of roofs for leakage. This is necessary since the majority of roof problems may not be detected by inspecting the outside roof surface.
- Inspection of the roof surface for missing, loose, lifted, cracked or deteriorated shingles.
- A review of the roof drainage, including any change in the roof and the condition and operation of roof drains, gutters, and scuppers.
- Examination of flashed areas. Most water infiltration problems are caused by flashing defects. Lifted, loose, torn, or missing flashing require immediate repair.
- A review of ventilation, since improper ventilation can cause ice damming conditions and accelerates the deterioration of the roof shingle.

## J. GUTTERS AND DOWNSPOUTS

The key to maintaining gutters and downspouts is to make sure they are kept clear of debris. A buildup of leaves and other plant material will block downspouts and prevent proper drainage. If this occurs, trapped water could weigh down the gutters and cause them to loosen or fall. Blocked gutters will also overflow along their length, resulting in the washing away of the mulch and/or soils adjacent to the sides of a building, which could result in premature deterioration of a building's exterior finish over time. Ice damming will also be evident in the winter if gutters are not able to drain.

At least twice a year, the gutters should be cleaned and inspected for damage. This should be done in late spring and late fall. Any loose or misaligned gutters

should be corrected at this time to prevent further damage. Splash blocks and downspout extension pipes should also be adjusted to prevent erosion and to direct water away from the building.

As the gutters age, the paint coating will oxidize and dull. When this occurs, an aluminum paint product should be used to restore the finish, or the gutters should be power washed to prevent deterioration.

K. BALCONIES/ DECKS

Deck surfaces should be inspected every spring as part of a preventive maintenance program. Areas should be checked for signs of major cracking. Railings and handrails should be inspected for signs of damage. They should also be checked to ensure that they are still sturdy and safe.

L. WOOD RAILINGS

All exterior wood surfaces should be inspected every spring as part of a preventive maintenance program. Areas should be checked for signs of major cracking, splitting and warping. Railings and handrails should be inspected for signs of damage. They should also be checked to ensure that they are still sturdy and safe.

M. SIDING

The proper maintenance of siding is critical to the effort to keep buildings weather-tight. Properly maintained, siding should last indefinitely. Siding should be regularly inspected for damage caused by gardening equipment, shrubs and tree limbs, improper attachments, abnormal wind conditions, and ice formation. Damaged, missing, or loose siding and trim should be replaced immediately. Lack of maintenance can result in water infiltration problems, as well as a poor appearance.

To maintain appearance and color, siding and trim should be pressure washed on a 3-4 year schedule depending on local conditions.

N. STONE VENEER

Stone veneer is subject to cracking and loosening from a variety of environmental and construction causes. Veneers on all buildings should be thoroughly inspected in early spring and late fall. The inspections should include checking for chipped, loose, cracked, deteriorated, and missing stones. Cracked and missing stones should be replaced. Cracked mortar should be re-pointed and caulked at intersections. Other surfaces should be repaired where necessary. Any evidence of moisture on an interior wall surface may indicate water absorption through the stone veneer. This condition may be corrected by applying a sealant to the exterior stone face.

Excessive settlement of the foundation may be evidenced by open cracks, especially around window and doorframes. Significant amounts of loose stone or bulging wall areas may indicate structural deficiencies or that large amounts of differential settlement have taken place at the foundation. These conditions should be investigated by a professional and the appropriate action taken to correct uncovered problems.

O. MECHANICAL EQUIPMENT

A well-established plan of preventive maintenance is essential to obtaining the maximum performance and life from your mechanical equipment. All work should be performed by qualified technicians specializing in the particular equipment.

The following guidelines are considered to be minimal procedures for maintaining the equipment:

## 1. FURNACES

### *Surrounding Areas:*

The flow of combustion and ventilating air must not be obstructed from reaching the furnace. Air openings provided in the casing of the furnace must be kept free of obstructions, which would restrict airflow, thereby affecting efficiency and safe operation of the furnace. Furnaces must have air for proper performance. In addition, warm air furnaces should not be operated in a corrosive atmosphere. Paint solvents, cleaning chemicals, spray propellants, and bleaches should not be used in the vicinity of the furnace during normal operation.

### *Thermostat:*

The thermostat is the heart of a warm air furnace center. Its operation depends on the surrounding air temperatures; therefore, it should be mounted on a draft-free inside wall for best operation. Because the thermostat is sensitive to heat, devices such as radios, televisions, or lamps should not be placed near it. The thermostat also accumulates lint, which affects its accuracy. For best operation, the thermostat should be cleaned annually.

### *Filters:*

The filters remove dust and debris from the air before it is heated and circulated to the living spaces. Filters must be changed when dirty. Inspections of the filters should be made on a monthly basis.

### *Blowers:*

The blower size and speed determine the air volume delivered by the furnace. The blower bearings are permanently lubricated and usually do not require servicing. Annual cleaning of the blower wheel and housing is recommended for maximum air output. It is recommended to consult a qualified service technician for this procedure.

### *Burners:*

Gas burners do not normally require scheduled servicing; however,

accumulation of lint may cause a yellowing flame or delay ignition. Either condition indicates that a service call is required. For best operation, burners must be cleaned annually using a brush and vacuum cleaner. It is recommended to consult a qualified service technician for this procedure.

*Flue Pipe:*

For best operation, these items should be inspected for signs of corrosion and/or deterioration and cleaned, if necessary, at the beginning of each heating season by a qualified service technician.

2. WATER HEATERS

The area near the water heater should be kept free of flammable liquids, such as gasoline, paint thinners, adhesives, and other combustible materials. Make certain that the flow of air to the water heater for adequate combustion (proper burner operation) and ventilation is not obstructed.

A water heater's tank can act as a settling basin for solids suspended in the water. It is, therefore, not uncommon for hard water deposits to accumulate in the bottom of the tank. It is suggested that a few quarts of water be drained from the water heater's tank every month to prevent this condition from occurring.

At least once a year, lift and release the level handle on the temperature pressure relief valve (located near the top of the water heater) to make certain that the valve operates freely, and allow several gallons to flush through discharge lines. Make certain that the discharge is directed to an open drain.

Visually inspect the burner annually, while firing, and pilot burner flame with the main burner off. If any unusual burner operation is noted, the water heater should be shut off until professional service assistance can be obtained.

The water heater's internal flue should be inspected annually to be certain that it is clean by removing the draft hood and flue baffle. When reinstalling the flue baffle, make certain that it is hung securely by its hanger at the top of the flue. Remove any scale that may have fallen on the burner or flood shield. Reinstall the draft hood. It is recommended that a professional service be consulted for this procedure.

## **DISCLOSURES**

Ray Engineering, Inc. does not have any other involvement with the association, which could result in actual or perceived conflicts of interest.

During our review of the property, visual review and field measurements, as needed, of each common element was performed. No destructive testing or drawing take-offs were performed.

Material issues which, if not disclosed, would cause a distortion of the association's situation.

Information provided by the official representative of the association regarding financial, physical, quantity, or historical issues will be deemed reliable by the consultant.

The Reserve Analysis will be a reflection of information provided to the consultant and assembled for the association's use, not for the purpose of performing an audit, quality/forensic analyses, or background checks of historical records.

Ray Engineering, Inc. did not perform an audit of the current or past budgets of the association.

Information provided to Ray Engineering, Inc. by the association representative about reserve projects will be considered reliable. Any on-site inspection(s) by Ray Engineering, Inc. should not be considered a project audit or quality inspection.

## **BIOGRAPHY**

**ROBERT “NICKO” ROMEO, R.S.**

**PROJECT ENGINEER**

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Mr. Romeo has a Bachelor of Science in Mechanical Engineering Technology, Southern Polytechnic State University, Marietta, Georgia, 2016. Mr. Romeo started his internship with Ray Engineering in 2015 through 2017. In 2017, upon obtaining his Bachelor of Science Degree in Mechanical Engineering, he obtained employment as a Project Engineer at Ray Engineering. Mr. Romeo provides consulting services for civil/structural and construction related problems for various condominium, apartment, single-family, residential, and commercial properties, as well as design and specifications for restoration of deficiencies. Mr. Romeo has four years of experience in the preparation of Capital Reserve Analyses.

## LIMITATION OF RESPONSIBILITY

The report represents a statement of the physical condition of the common elements of the property based upon our visual observation, professional analysis and judgment. The report applies only to those portions of the property and/or items and equipment which were capable of being visually observed. Unless specifically stated otherwise, no intrusive testing was performed nor were any materials removed or excavations made for further inspection. Drawings and specifications were available only to the extent described in the report.

The following activities are not included in the scope and are excluded from the scope of the reserve analysis described in the National Reserve Study Standards:

- *Utilities* – Operating condition of any underground system or infrastructure; accessing manholes or utility pits; the reserve analysis does not include any infrastructure with an estimated useful life of more than 30 years, unless specified otherwise in the report;
- *Structural Frame and Building Envelope* – Unless specifically defined in the proposal, entering of crawl, attic or confined space areas (however, the field observer will observe conditions to the extent easily visible from the point of access to the crawl or confined space if the access is at the exterior of the building or common space); determination of previous substructure flooding or water penetration unless easily visible or unless such information is provided;
- *Roofs* – Walking on pitched roofs or any roof areas that appear to be unsafe or roofs with no built-in access; determining roofing design criteria;
- *Plumbing* – Verifying the condition of any pipes underground, behind walls or ceilings; determining adequate pressure and flow rate, verifying pipe size or verifying the point of discharge for underground systems;
- *HVAC* – Observation of fire connections, interiors of chimneys, flues or boiler stacks, or tenant owned or tenant maintained equipment;
- *Electrical* – Removal of any electrical panels or device covers, except if removed by building staff; providing common equipment or tenant owned equipment.

- *Vertical Transportation* – Examining of cable, shears, controllers, motors, inspection tags or entering elevator/escalator pits;
- *Life Safety/Fire Protection* – Determining NFPA hazard classifications; classifying or testing fire rating of assemblies;
- Preparing engineering calculations to determine any system's components or equipment's adequacy or compliance with any specific or commonly accepted design requirements or building codes; preparing designs or specifications to remedy any physical deficiencies;
- Reporting on the presence or absence of pests or insects unless evidence of such presence is readily apparent during the field observer's walk-through survey or such information is provided to the Consultant;
- Entering or accessing any area of the property deemed by the engineer to pose a threat to the safety of any individual or to the integrity of the building system or material;
- Providing an opinion on the operation of any system or component that is shut down or not properly operating;
- Evaluating any acoustical or insulating characteristics of the property;
- Providing an opinion on matters regarding security and protection of its occupants or users;
- Providing an environmental assessment or opinion of the presence of any environmental issues such as asbestos, hazardous wastes, toxic materials, radon or the location of designated wetlands, unless specifically defined within the scope of work;
- Any representations regarding the status of ADA Title III Compliance.

The report is not a compliance inspection or certification for past or present governmental codes or regulations of any kind. Any reference made to codes in this report is to assist in identification of a specific problem.

## GLOSSARY OF TERMS

<u>Abbreviation</u>	<u>Definition</u>	<u>Abbreviation</u>	<u>Definition</u>
Allow.	Allowance	L.F.	Linear Foot
Avg.	Average	Lg.	Long Length
B.F.	Board Feet	L.S.	Lump Sum
Bit/Bitum.	Bituminous	Maint.	Maintenance
Bldg.	Building	Mat., Mat'l	Material
Brk.	Brick	Max	Maximum
Cal	Calculated	MBF	Thousand Board Feet
C.C.F.	Hundred Cubic Feet	M.C.F.	Thousand Cubic Feet
C.F.	Cubic Feet	Min.	Minimum
C.L.F.	Hundred Linear Feet	Misc.	Miscellaneous
Col.	Column	M.L.F.	Thousand Linear Feet
Conc.	Concrete	M.S.F.	Thousand Square Feet
Cont.	Continuous, continued	M.S.Y.	Thousand Square Yards
C.S.F.	Hundred Square Feet	NA	Not applicable/available
Cu. Ft.	Cubic Feet	No.	Number
C.Y.	Cubic Yard, 27 cubic feet	O.C.	On Center
DHW	Domestic Hot Water	P.E.	Professional Engineer
Diam.	Diameter	Ply.	Plywood
Ea.	Each	Pr.	Pair
Est.	Estimated	PVC	Polyvinyl Chloride
Ext.	Exterior	Pvmt.	Pavement
Fig.	Figure	Quan. Qty.	Quantity
Fin.	Finished	R.C.P.	Reinforced Concrete Pipe
Fixt	Fixture	Reinf.	Reinforced
Flr.	Floor	Req'd	Required
FRP	Fiberglass Reinforced Plastic	Sch., Sched.	Schedule
Ft.	Foot, Feet	S.F.	Square Foot
Galv.	Galvanized	Sq.	Square, 100 Square Feet
Ht.	Height	Std.	Standard
Htrs.	Heaters	Sys.	System
HVAC	Heating, Ventilation, A/C	S.Y.	Square Yard
HW	Hot Water	T&G	Tongue & Groove
In.	Inch	Th, Thk.	Thick
Int.	Interior	Tot.	Total
Inst.	Installation	Unfin.	Unfinished
Insul.	Insulation	V.C.T.	Vinyl Composition Tile
lb.	Pound	Vent.	Ventilator
		Yd.	Yard

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Electrical Cost Data  
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Open Shop Cost Data  
by R.S. Means Company, Inc.

## **PHOTOGRAPHS**

## BROOKSHADE

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1. View of cracked and settled sections of the asphalt parking lot.



2. View typical "alligatored" cracks at the parking lot.

## BROOKSHADE

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3. View of typical cracks at a section of the concrete curb.



4. View of damaged section of the concrete curb.

## BROOKSHADE

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5. View of uprooted section of sidewalk at the walking trail.



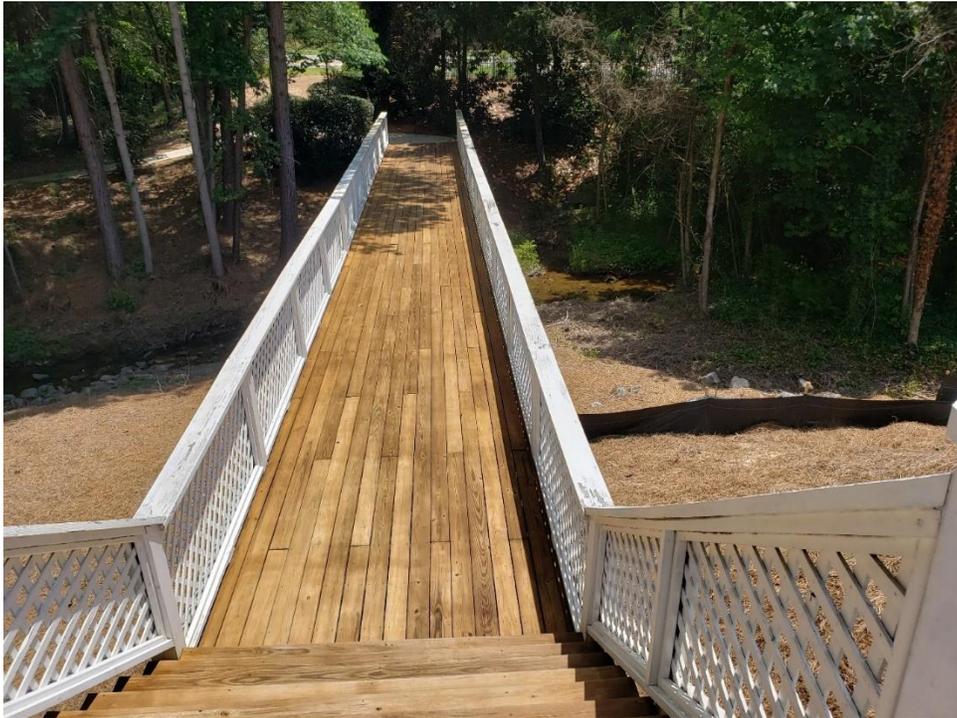
6. View of entry monument and signage.

## BROOKSHADE

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7. View of entry piers and fencing.



8. View of main bridge to walking trail.

## BROOKSHADE

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9. View of chipped paint at the main bridge railing.



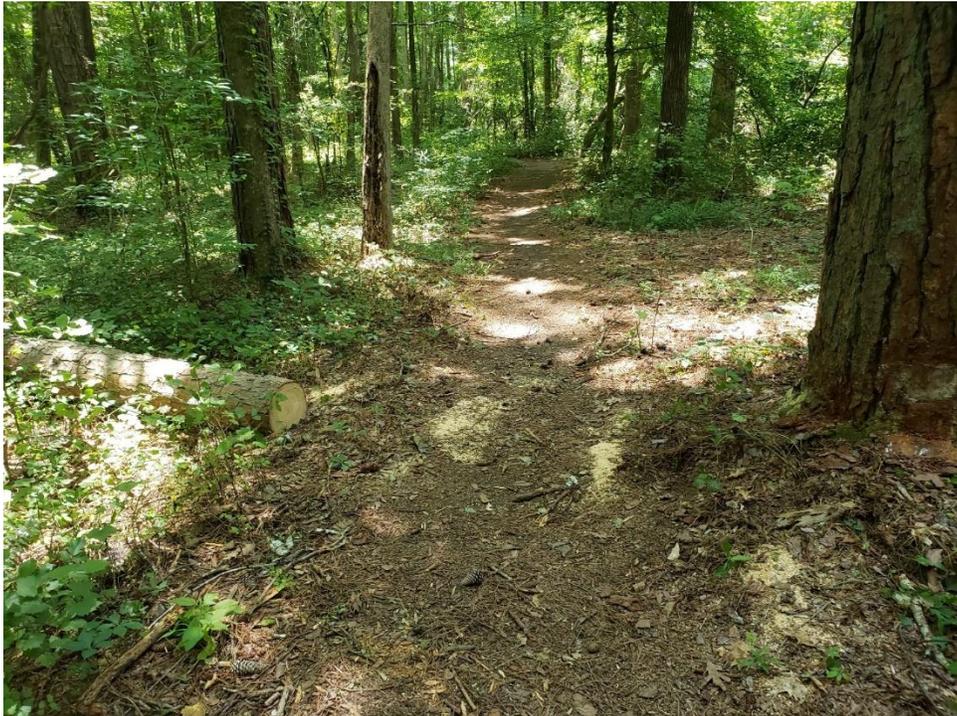
10. View of walking trail bridge.

## BROOKSHADE

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11. View of walking trail bridge.



12. View of walking trail.

## BROOKSHADE

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13. View of erosion and dead grass near the tennis courts at the amenity area.



14. View of silt accumulated in front of a drain outlet structure.

# BROOKSHADE

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15. View of construction around pool area.



16. View of construction around pool area.

## BROOKSHADE

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17. View of holes and tearing of the pool cover.



18. View of tennis courts.

## BROOKSHADE

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19. View of typical small linear crack at the tennis court.



20. View of the playground equipment.

## BROOKSHADE

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21. View of slide that is not attached to the playground equipment.



22. View of side elevation of clubhouse.

## BROOKSHADE

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23. View of poolside elevation of clubhouse.



24. View of kitchen at the clubhouse.

## BROOKSHADE

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25. View of clubhouse bathroom at interior finishes.



26. View of damaged wall at the men's restroom above the urinal.

## BROOKSHADE

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27. View of pool pavilion structure.