

FULL RESERVE STUDY

Harbor Oaks Townhouses Association, Inc.



Charleston, South Carolina
September 26, 2017



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Long-term thinking. Everyday commitment.

Harbor Oaks Townhouses Association, Inc.
Charleston, South Carolina

Dear Board of Directors of Harbor Oaks Townhouses Association, Inc.:

At the direction of the Board that recognizes the need for proper reserve planning, we have conducted a *Full Reserve Study* of Harbor Oaks Townhouses Association, Inc. in Charleston, South Carolina and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, September 26, 2017.

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

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 years. We look forward to continuing to help Harbor Oaks Townhouses Association, Inc. 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 13, 2017 by

Reserve Advisors, Inc.

Visual Inspection and Report by: Jennifer L. Berry and Ashley M. Forte, RS²
Review by: Alan M. Ebert, PRA¹, RS, Director of Quality Assurance



¹ 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>.

² 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.



Long-term thinking. Everyday commitment.

Table of Contents

1. RESERVE STUDY EXECUTIVE SUMMARY	1.1
2. RESERVE STUDY REPORT	2.1
3. RESERVE EXPENDITURES and FUNDING PLAN.....	3.1
4. RESERVE COMPONENT DETAIL.....	4.1
Property Site Elements	4.1
Asphalt Pavement, Crack Repair, Patch and Seal Coat.....	4.1
Asphalt Pavement, Repaving	4.1
Concrete Sidewalks	4.4
Irrigation System.....	4.5
Mailbox Stations	4.5
Signage, Replacement	4.6
Clubhouse Elements.....	4.8
Air Handling and Condensing Units, Split System	4.8
Decks, Wood	4.9
Exercise Equipment.....	4.11
Exercise Room	4.12
Kitchen	4.12
Rest Rooms.....	4.13
Roofs, Asphalt Shingles	4.14
Saunas	4.16
Walls, Stucco.....	4.17
Walls, Wood Siding, Replacement	4.19
Windows and Doors, Aluminum Frames	4.20
Pool Elements.....	4.22
Concrete Deck.....	4.22
Fence, Wood	4.23
Furniture	4.24
Light Poles and Fixtures	4.25
Mechanical Equipment	4.26
Pool Finish, Plaster.....	4.27
Reserve Study Update.....	4.28



5. METHODOLOGY	5.1
6. CREDENTIALS	6.1
7. DEFINITIONS	7.1
8. PROFESSIONAL SERVICE CONDITIONS	8.1

1. RESERVE STUDY EXECUTIVE SUMMARY

Client: Harbor Oaks Townhouses Association, Inc. (Harbor Oaks)

Location: Charleston, South Carolina

Reference: 170746

Property Basics: Harbor Oaks Townhouses Association, Inc. is a townhome style development of 32 units in six buildings. The buildings were built from 1986 to 2000.

Reserve Components Identified: 24 Reserve Components.

Inspection Date: September 26, 2017.

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 Funding Plan recognizes this threshold funding year in 2026 due to replacement of the irrigation system.

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
- 1.2% annual rate of return on invested reserves
- 2.4% 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 Reserve Fund:

- \$102,369 as of September 30, 2017
- 2017 budgeted Reserve Contributions of \$7,095
- A potential deficit in reserves might occur by 2020 based upon continuation of the most recent annual reserve contribution of \$7,095 and the identified Reserve Expenditures.

Project Prioritization: We recommend the Association prioritize the following projects in the next five years based on the conditions identified:

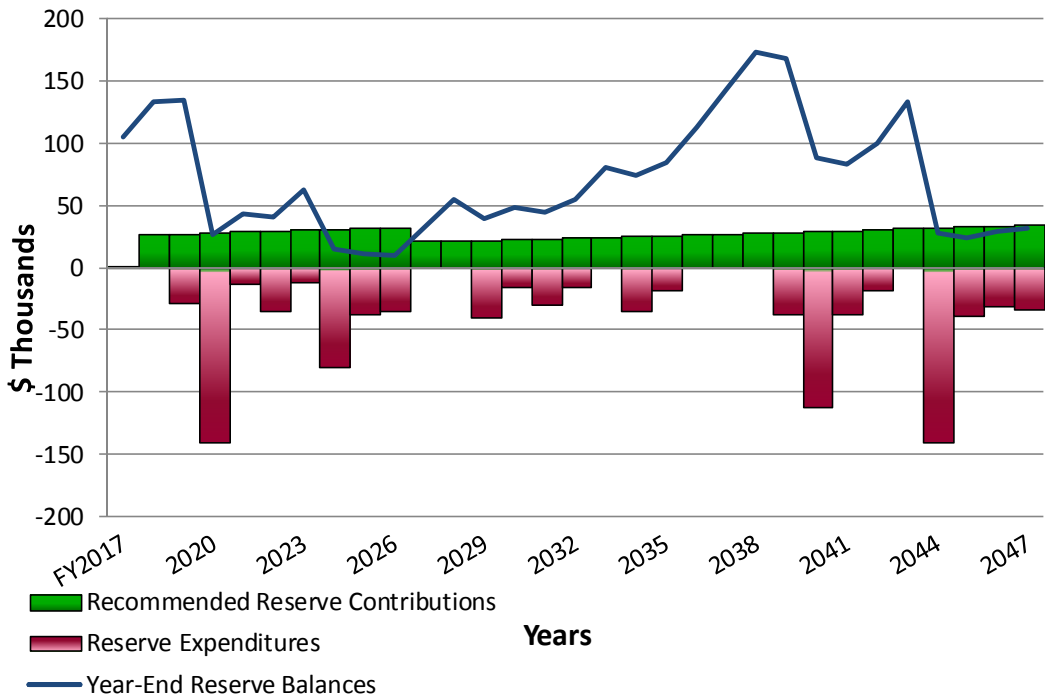
- Total replacement of asphalt pavement
- Exercise room renovation

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

- Increase to \$27,500 in 2018
- Inflationary increases from 2019 through 2026
- Reduced reserve budget of \$22,000 in 2027 due to fully funding for replacement of the irrigation system
- Inflationary increases from 2028 through 2047, the limit of this study's Cash Flow Analysis
- Initial adjustment in Reserve Contributions of \$20,405 represents an average monthly increase of \$53.14 per homeowner and about a thirty-one percent (31.3%) adjustment in the 2017 total Operating Budget of \$65,280.

Harbor Oaks Recommended Reserve Funding Table and Graph

Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)
2018	27,500	133,371	2028	22,500	55,239	2038	28,600	172,629
2019	28,200	134,964	2029	23,000	39,439	2039	29,300	167,224
2020	28,900	25,827	2030	23,600	48,413	2040	30,000	87,973
2021	29,600	43,609	2031	24,200	44,434	2041	30,700	83,581
2022	30,300	40,867	2032	24,800	54,417	2042	31,400	99,254
2023	31,000	62,105	2033	25,400	80,622	2043	32,200	132,838
2024	31,700	15,142	2034	26,000	73,869	2044	33,000	27,125
2025	32,500	10,585	2035	26,600	84,357	2045	33,800	23,774
2026	33,300	9,965	2036	27,200	112,732	2046	34,600	28,848
2027	22,000	32,217	2037	27,900	142,152	2047	35,400	32,018



2. RESERVE STUDY REPORT

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

Harbor Oaks Townhouses Association, Inc.

Charleston, South Carolina

and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, September 26, 2017.

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
- **Reserve Component Detail** - Describes the reserve components, includes photographic documentation of the condition of various property elements, describes our recommendations for repairs or replacement, and includes detailed solutions and procedures for replacements for the benefit of current and future board members
- **Methodology** - Lists the national standards, methods and procedures used to develop the Reserve Study
- **Definitions** - Contains definitions of terms used in the Reserve Study, consistent with national standards
- **Professional Service Conditions** - Describes Assumptions and Professional Service Conditions
- **Credentials and Resources**

IDENTIFICATION OF PROPERTY



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

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

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

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

- Harbor Oaks 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 reserve funding at this time.

- Electrical Systems, Common
- Foundations
- Pipes, Domestic Water, Sanitary Waste, Vent, Common
- Pipes, Subsurface Utilities
- Pool Structure
- Structural Frames

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 \$3,000 (These relatively minor expenditures have a limited effect on the recommended Reserve Contributions.)
- Curbs, Wood
- Drainage Swale, Maintenance
- Irrigation System, Controls
- Kitchen Appliances, Interim Replacements
- Landscape
- Lattice, Wood, Clubhouse Crawl Space
- Light Fixtures, Clubhouse, Exterior
- Paint Finishes, Touch Up
- Screens, Clubhouse Sun Room
- Wall Mirrors, Clubhouse
- Water Heater, Clubhouse
- Other Repairs normally funded through the Operating Budget

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

- Electrical Systems
- Gutters and Downspouts
- Heating, Ventilating and Air Conditioning (HVAC) Units
- Homes and Lots
- Interiors
- Patios
- Pipes (Within Units)
- Roofs
- Windows and Doors

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

- Light Poles and Fixtures (South Carolina Electric and Gas)

3. RESERVE EXPENDITURES and FUNDING PLAN

The tables following this introduction present:

Reserve Expenditures

- Line item numbers
- Total quantities
- Quantities replaced per phase (in a single year)
- Reserve component inventory
- Estimated first year of event (i.e., replacement, application, etc.)
- Life analysis showing
 - useful life
 - remaining useful life
- Unit cost of replacement
- 2017 local cost of replacement
- Total future costs of replacement anticipated during the next 30 years
- Schedule of estimated future costs for each reserve component including inflation

Reserve Funding Plan

- Reserves at the beginning of each year
- Total recommended reserve contributions
- Estimated interest earned from invested reserves
- Anticipated expenditures by year
- Anticipated reserves at year end
- Predicted reserves based on current funding level

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***.

RESERVE EXPENDITURES

**Harbor Oaks
Townhouses Association, Inc.**
Charleston, South Carolina

Explanatory Notes:

- 1) **2.4%** is the estimated future Inflation Rate for estimating Future Replacement Costs.
- 2) FY2017 is Fiscal Year beginning January 1, 2017 and ending December 31, 2017.

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years		Costs, \$				RUL = 0 FY2017	1 2018	2 2019	3 2020	4 2021	5 2022	6 2023	7 2024	8 2025	9 2026	10 2027	11 2028	12 2029	13 2030	14 2031	15 2032		
						Useful	Remaining	Unit (2017)	Per Phase (2017)	Total (2017)	30-Year Total (Inflated)																		
Property Site Elements																													
4.020	4,350	4,350	Square Yards	Asphalt Pavement, Crack Repair, Patch and Seal Coat	2025	3 to 5	8	1.80	7,830	7,830	47,334																		
4.040	4,350	4,350	Square Yards	Asphalt Pavement, Mill and Overlay	2040	15 to 20	23	14.00	60,900	60,900	105,079																		
4.045	4,350	4,350	Square Yards	Asphalt Pavement, Total Replacement	2020	15 to 20	3	29.00	126,150	126,150	135,453				135,453														
4.140	4,400	330	Square Feet	Concrete Sidewalks, Partial	2020	to 65	3 to 30+	10.00	3,300	44,000	29,186				3,543					3,989						4,492			
4.420	22	22	Zones	Irrigation System	2026	to 40	9	1,250.00	27,500	27,500	34,043										34,043								
4.600	6	6	Each	Mailbox Stations	2019	to 25	2	500.00	3,000	3,000	8,837			3,146															
4.810	1	1	Allowance	Signage, Replacement	2025	15 to 20	8	2,900.00	2,900	2,900	9,140										3,506								
Clubhouse Elements																													
2.150	1	1	Each	Air Handling and Condensing Units, Split System	2034	15 to 20	17	5,000.00	5,000	5,000	7,483																		
2.155	610	610	Square Feet	Decks, Wood	2031	15 to 25	14	20.00	12,200	12,200	17,004																	17,004	
2.160	1	1	Allowance	Exercise Equipment, Phased	2019	5 to 15	2 to 7	13,000.00	13,000	13,000	112,283			13,631					15,348							17,280			
2.180	1	1	Allowance	Exercise Room Renovation	2019	to 10	2	7,300.00	7,300	7,300	29,658			7,655												9,703			
2.520	1	1	Allowance	Kitchen, Renovation	2021	to 25	4	9,000.00	9,000	9,000	27,800					9,896													
2.545	2	2	Each	Rest Rooms, Renovation	2025	to 25	8	5,000.00	10,000	10,000	12,089										12,089								
2.550	20	20	Squares	Roofs, Asphalt Shingles	2023	15 to 20	6	450.00	9,000	9,000	26,278								10,376										
2.575	2	2	Each	Saunas	2022	to 25	5	8,000.00	16,000	16,000	50,607						18,014												
2.600	850	850	Square Feet	Walls, Stucco, Paint Finishes and Capital Repairs	2021	6 to 8	4	2.50	2,125	2,125	9,053					2,336												2,962	
2.650	700	700	Square Feet	Walls, Wood Siding, Replacement	2025	to 30	8	7.50	5,250	5,250	16,546										6,347								
2.700	170	170	Square Feet	Windows and Doors, Aluminum Frames	2031	to 40	14	37.00	6,290	6,290	8,767																	8,767	
Pool Elements																													
6.200	1,690	1,690	Square Feet	Concrete Deck, Textured Coating, Partial Replacements and Repairs	2022	8 to 12	5	5.50	9,295	9,295	40,548						10,465											13,266	
6.400	1,460	1,460	Linear Feet	Fence, Wood	2024	15 to 20	7	37.00	54,020	54,020	166,259									63,776									
6.500	1	1	Allowance	Furniture	2022	to 12	5	4,500.00	4,500	4,500	20,754						5,067												
6.560	2	2	Each	Light Poles and Fixtures	2019	to 25	2	1,800.00	3,600	3,600	10,605			3,775															
6.600	2	1	Allowance	Mechanical Equipment, Phased	2025	to 15	8 to 15	1,500.00	1,500	3,000	9,465										1,813							2,141	
6.800	810	810	Square Feet	Pool Finish, Plaster	2029	8 to 12	12	11.50	9,315	9,315	28,840															12,382			
Anticipated Expenditures, By Year											\$963,111	0	0	28,207	138,996	12,232	33,546	10,376	79,124	37,210	34,043	0	0	39,365	15,150	28,733	15,407		

RESERVE EXPENDITURES

**Harbor Oaks
Townhouses Association, Inc.**
Charleston, South Carolina

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years		Costs, \$				16 2033	17 2034	18 2035	19 2036	20 2037	21 2038	22 2039	23 2040	24 2041	25 2042	26 2043	27 2044	28 2045	29 2046	30 2047	
						Useful	Remaining	Unit (2017)	Per Phase (2017)	Total (2017)	30-Year Total (Inflated)																
Property Site Elements																											
4.020	4,350	4,350	Square Yards	Asphalt Pavement, Crack Repair, Patch and Seal Coat	2025	3 to 5	8	1.80	7,830	7,830	47,334			11,999											15,211		
4.040	4,350	4,350	Square Yards	Asphalt Pavement, Mill and Overlay	2040	15 to 20	23	14.00	60,900	60,900	105,079							105,079									
4.045	4,350	4,350	Square Yards	Asphalt Pavement, Total Replacement	2020	15 to 20	3	29.00	126,150	126,150	135,453																
4.140	4,400	330	Square Feet	Concrete Sidewalks, Partial	2020	to 65	3 to 30+	10.00	3,300	44,000	29,186			5,057				5,694							6,411		
4.420	22	22	Zones	Irrigation System	2026	to 40	9	1,250.00	27,500	27,500	34,043																
4.600	6	6	Each	Mailbox Stations	2019	to 25	2	500.00	3,000	3,000	8,837													5,691			
4.810	1	1	Allowance	Signage, Replacement	2025	15 to 20	8	2,900.00	2,900	2,900	9,140															5,634	
Clubhouse Elements																											
2.150	1	1	Each	Air Handling and Condensing Units, Split System	2034	15 to 20	17	5,000.00	5,000	5,000	7,483		7,483														
2.155	610	610	Square Feet	Decks, Wood	2031	15 to 25	14	20.00	12,200	12,200	17,004																
2.160	1	1	Allowance	Exercise Equipment, Phased	2019	5 to 15	2 to 7	13,000.00	13,000	13,000	112,283		19,456					21,905						24,663			
2.180	1	1	Allowance	Exercise Room Renovation	2019	to 10	2	7,300.00	7,300	7,300	29,658							12,300									
2.520	1	1	Allowance	Kitchen, Renovation	2021	to 25	4	9,000.00	9,000	9,000	27,800															17,904	
2.545	2	2	Each	Rest Rooms, Renovation	2025	to 25	8	5,000.00	10,000	10,000	12,089																
2.550	20	20	Squares	Roofs, Asphalt Shingles	2023	15 to 20	6	450.00	9,000	9,000	26,278								15,902								
2.575	2	2	Each	Saunas	2022	to 25	5	8,000.00	16,000	16,000	50,607															32,593	
2.600	850	850	Square Feet	Walls, Stucco, Paint Finishes and Capital Repairs	2021	6 to 8	4	2.50	2,125	2,125	9,053								3,755								
2.650	700	700	Square Feet	Walls, Wood Siding, Replacement	2025	to 30	8	7.50	5,250	5,250	16,546															10,199	
2.700	170	170	Square Feet	Windows and Doors, Aluminum Frames	2031	to 40	14	37.00	6,290	6,290	8,767																
Pool Elements																											
6.200	1,690	1,690	Square Feet	Concrete Deck, Textured Coating, Partial Replacements and Repairs	2022	8 to 12	5	5.50	9,295	9,295	40,548								16,817								
6.400	1,460	1,460	Linear Feet	Fence, Wood	2024	15 to 20	7	37.00	54,020	54,020	166,259														102,483		
6.500	1	1	Allowance	Furniture	2022	to 12	5	4,500.00	4,500	4,500	20,754		6,735													8,952	
6.560	2	2	Each	Light Poles and Fixtures	2019	to 25	2	1,800.00	3,600	3,600	10,605														6,830		
6.600	2	1	Allowance	Mechanical Equipment, Phased	2025	to 15	8 to 15	1,500.00	1,500	3,000	9,465							2,527								2,984	
6.800	810	810	Square Feet	Pool Finish, Plaster	2029	8 to 12	12	11.50	9,315	9,315	28,840								16,458								
Anticipated Expenditures, By Year											\$963,111	0	33,674	17,056	0	0	0	36,732	110,773	36,115	16,817	0	139,667	37,455	29,840	32,593	

RESERVE FUNDING PLAN

CASH FLOW ANALYSIS

Harbor Oaks

Townhouses Association, Inc.

Charleston, South Carolina

Individual Reserve Budgets & Cash Flows for the Next 30 Years

	FY2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Reserves at Beginning of Year (Note 1)	102,369	104,453	133,371	134,964	25,827	43,609	40,867	62,105	15,142	10,585	9,965	32,217	55,239	39,439	48,413	44,434
Total Recommended Reserve Contributions (Note 2)	1,774	27,500	28,200	28,900	29,600	30,300	31,000	31,700	32,500	33,300	22,000	22,500	23,000	23,600	24,200	24,800
Plus Estimated Interest Earned, During Year (Note 3)	310	1,418	1,600	959	414	504	614	461	153	123	252	522	565	524	554	590
Less Anticipated Expenditures, By Year	0	0	(28,207)	(138,996)	(12,232)	(33,546)	(10,376)	(79,124)	(37,210)	(34,043)	0	0	(39,365)	(15,150)	(28,733)	(15,407)
Anticipated Reserves at Year End	<u>\$104,453</u>	<u>\$133,371</u>	<u>\$134,964</u>	<u>\$25,827</u>	<u>\$43,609</u>	<u>\$40,867</u>	<u>\$62,105</u>	<u>\$15,142</u>	<u>\$10,585</u>	<u>\$9,965</u>	<u>\$32,217</u>	<u>\$55,239</u>	<u>\$39,439</u>	<u>\$48,413</u>	<u>\$44,434</u>	<u>\$54,417</u>
Predicted Reserves based on 2017 funding level of: \$7,095	104,453	112,844	92,959	(38,618)	(44,249)											

(NOTE 5)

(continued)

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

	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047
Reserves at Beginning of Year	54,417	80,622	73,869	84,357	112,732	142,152	172,629	167,224	87,973	83,581	99,254	132,838	27,125	23,774	28,848
Total Recommended Reserve Contributions	25,400	26,000	26,600	27,200	27,900	28,600	29,300	30,000	30,700	31,400	32,200	33,000	33,800	34,600	35,400
Plus Estimated Interest Earned, During Year	805	921	944	1,175	1,520	1,877	2,027	1,522	1,023	1,090	1,384	954	304	314	363
Less Anticipated Expenditures, By Year	0	(33,674)	(17,056)	0	0	0	(36,732)	(110,773)	(36,115)	(16,817)	0	(139,667)	(37,455)	(29,840)	(32,593)
Anticipated Reserves at Year End	<u>\$80,622</u>	<u>\$73,869</u>	<u>\$84,357</u>	<u>\$112,732</u>	<u>\$142,152</u>	<u>\$172,629</u>	<u>\$167,224</u>	<u>\$87,973</u>	<u>\$83,581</u>	<u>\$99,254</u>	<u>\$132,838</u>	<u>\$27,125</u>	<u>\$23,774</u>	<u>\$28,848</u>	<u>\$32,018</u>

(NOTE 4)

Explanatory Notes:

- 1) Year 2017 starting reserves are as of September 30, 2017; FY2017 starts January 1, 2017 and ends December 31, 2017.
- 2) Reserve Contributions for 2017 are the remaining budgeted 3 months; 2018 is the first year of recommended contributions.
- 3) 1.2% is the estimated annual rate of return on invested reserves; 2017 is a partial year of interest earned.
- 4) Accumulated year 2047 ending reserves consider the age, size, overall condition and complexity of the property.
- 5) Threshold Funding Year (reserve balance at critical point).

4. RESERVE COMPONENT DETAIL

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

Property Site Elements

Asphalt Pavement, Crack Repair, Patch and Seal Coat

Line Item: 4.020

Quantity: Approximately 4,350 square yards

History: Repaired and seal coated in 2014

Condition: Fair overall with cracks and deterioration evident

Useful Life: Three- to five-years

Component Detail Notes: Proposals for seal coat applications should include crack repairs and patching. The contractor should only apply seal coat applications after repairs are completed. A seal coat does not bridge or close cracks, therefore, unrepaired cracks render the seal coat applications useless.

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 one percent (1%) of the pavement.

Asphalt Pavement, Repaving

Line Items: 4.040 and 4.045

Quantity: Approximately 4,350 square yards

History: Repaired and seal coated in 2014

Condition: Fair overall with cracks and deterioration evident



Pavement overview



Pavement overview



Pavement overview



Pavement deterioration



Catch basins

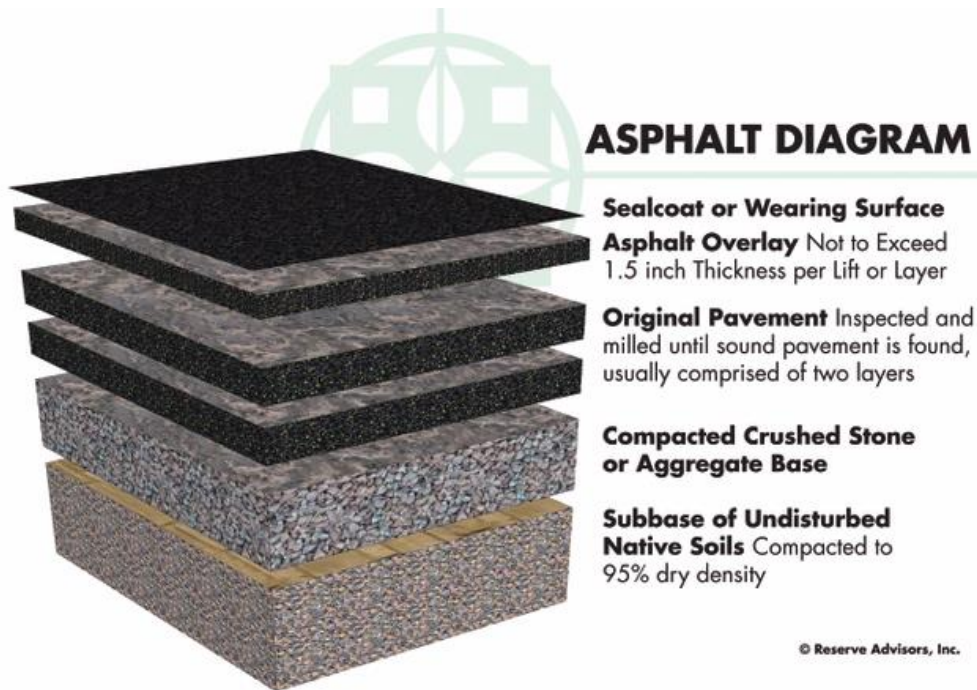


Concrete curb overview

Useful Life: 15- to 20-years

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 Harbor Oaks:



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

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%). Our estimate of cost includes repairs to the catch basins and repairs of up to twenty percent (20%) of the concrete curbs with each repaving event.

Concrete Sidewalks

Line Item: 4.140

Quantity: 4,400 square feet throughout the community and at the clubhouse

Condition: Good to fair overall with isolated cracks evident



Sidewalk overview



Sidewalk overview



Sidewalk crack at the clubhouse

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 1,980 square feet of concrete sidewalks, or forty-five percent (45%) of the total, will require replacement during the next 30 years.

Irrigation System

Line Item: 4.420

Quantity: 22 zones

History: Original

Condition: Satisfactory overall

Useful Life: Up to 40 years

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

- Electronic controls (timer)
- Impact rotors
- Network of supply pipes
- Pop-up heads
- Valves

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

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.

Mailbox Stations

Line Item: 4.600

Quantity: Six mailbox stations which comprise five- to six-mailboxes each

History: Unknown

Condition: Good to fair overall



Typical mailbox station

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.

Signage, Replacement

Line Item: 4.810

Quantity: One entrance sign, one street identification sign, and two traffic signs

History: Unknown

Condition: Good overall



Community entrance sign



Typical traffic sign



Street identification sign

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:

- Wood posts
- Wood 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 estimate of cost includes replacement of the components listed above.

Clubhouse Elements



Clubhouse overview

Air Handling and Condensing Units, Split System

Line Item: 2.150

Quantity: One split system at the clubhouse

History: Installed in 2014

Condition: Reported satisfactory



Clubhouse condensing unit



Rusted control box at condensing unit-maintain through operating budget

Useful Life: 15- to 20-years

Component Detail Notes: A split system air conditioner consists of an outside condensing unit, an interior evaporator coil, refrigerant lines and an interior air handling unit. The condensing unit has a cooling capacity of 2.5-tons and the split system uses R-22 refrigerant.

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.

Decks, Wood

Line Item: 2.155

Quantity: Approximately 610 square feet which comprises two wood decks at the clubhouse. This quantity includes the sun room deck.

History: Replaced in 2011

Condition: Good overall condition



Clubhouse deck overview



Clubhouse deck overview



Clubhouse deck surface



Sun room floor



Deck at clubhouse entrance



Stairs to clubhouse entrance

Useful Life: 15- to 25-years with proper maintenance.

Component Detail Notes: Deck construction includes the following:

- Deck boards fastened with screws
- Wood railings with vertical pickets
- Wood column supported frames

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. Proper maintenance should include the following activities funded through the operating budget:

- Annual inspections to identify and correct any unsafe conditions
- Securing of loose fasteners and replacement of deteriorated fasteners
- Replacement of deteriorated wood components
- Power washing with an algaecide and application of a sealer/stain

Exercise Equipment

Line Items: 2.160

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

- Stationary cycle
- Treadmills

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

- Dumbbells
- Weight training machine
- Pilates machine

History: Unknown; Management reports that the *Nordic Track* equipment (stationary cycle and one treadmill) were added in 2014.

Conditions: Fair overall



Weight training machine



Cardiovascular equipment

Useful Life: The useful life of cardiovascular equipment is up to five years. The useful life of strength training equipment is 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. We recommend Harbor Oaks anticipate replacement of all cardiovascular equipment and up to fifty percent (50%) of the strength training equipment per event.

Exercise Room

Line Item: 2.180

History: Unknown

Condition: Fair overall



Exercise room overview



Exercise room carpet

Useful Life: Renovations up to every 10 years

Component Detail Notes: The exercise room components include:

- Carpet floor covering
- Paint finishes on the walls and ceilings
- Furnishings (including sun room furnishings)

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We recommend Harbor Oaks anticipate replacement of all floor coverings, paint finishes and up to fifty percent (50%) of the furnishings per event.

Kitchen

Line Item: 2.520

History: Components are primarily original

Condition: Good to fair overall



Kitchen overview

Useful Life: Up to 25 years for renovations

Component Detail Notes: Components of the kitchen include:

- Vinyl floor covering
- Paint finishes on the walls and ceilings
- Light fixtures
- Stove
- Refrigerator
- Sink
- Cabinets
- Laminate countertops

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 fund interim appliances replacement through the operating budget as needed.

Rest Rooms

Line Item: 2.545

Quantity: Two common located at the clubhouse

History: Unknown

Condition: Good overall



Typical clubhouse rest room

Useful Life: Renovations up to 25 years

Component Detail Notes: Components include:

- Tile floor coverings and showers
- Paint finishes on the walls and ceilings
- 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.

Roofs, Asphalt Shingles

Line Item: 2.550

Quantity: 20 squares¹ comprise the clubhouse roof

History: Unknown

Condition: Good overall

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



Clubhouse roof overview



Clubhouse roof overview



Lifted shingle



Typical gutter and downspout assembly

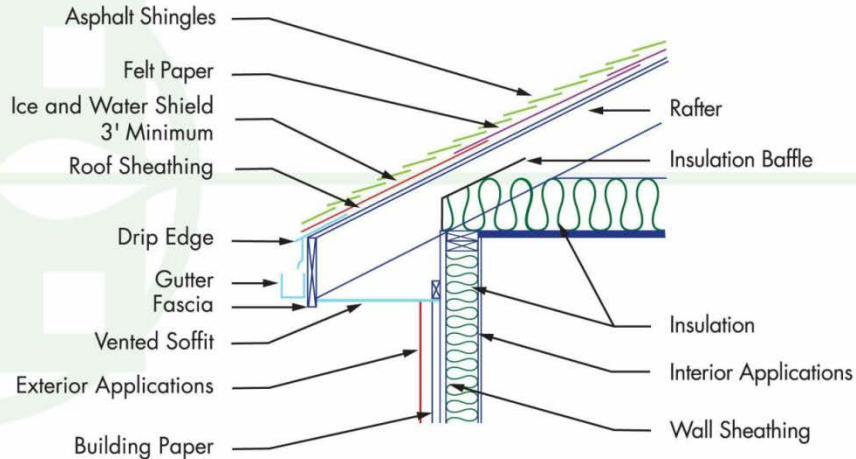
Useful Life: 15- to 20-years

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

- Laminate shingles
- Boston style ridge caps
- Rubber seal with plastic base boot flashing at waste pipes
- Soffit, gable and ridge vents

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

ROOF SCHEMATIC



© Reserve Advisors, Inc.

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

The Association should plan to coordinate the replacement of gutters and downspouts with the adjacent roofs. This will result in the most economical unit price and minimize the possibility of damage to other roof components as compared to separate replacements.

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 base our cost on replacement with standard laminate Class A 240-260-pounds per square shingles. Our estimate of cost includes replacement of the aluminum gutters and downspouts in conjunction with each roof replacement event.

Saunas

Line Item: 2.575

Quantity: Two each in the clubhouse

History: Unknown

Condition: Good to fair overall



Sauna overview



Vinyl flooring in the men's sauna



Sauna heating element

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.

Walls, Stucco

Line Item: 2.600

Quantity: Approximately 850 square feet of the clubhouse exterior

History: Unknown; Management informs that the north-facing clubhouse wall was repaired and replastered in 2011.

Condition: Good to fair overall with isolated cracks evident



Stucco overview



Stucco overview

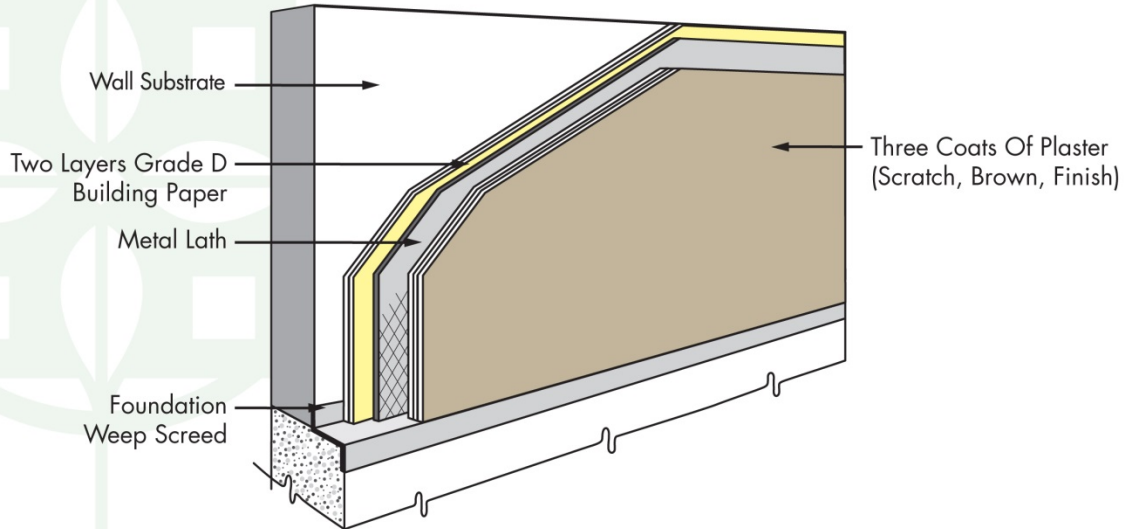


Stucco cracks and discoloration

Useful Life: We recommend inspections, repairs and paint finish applications every six- to eight-years.

Component Detail Notes: The following graphic details the typical components of a stucco wall system on frame construction although it may not reflect the actual configuration at Harbor Oaks:

STUCCO DETAIL



© Reserve Advisors, Inc.

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 application (Our estimate of cost includes paint finish applications to the sun room walls and ceiling.)
- Crack repairs as needed (Each paint product has the limited ability to cover and seal cracks but we recommend repair of all cracks which exceed the ability of the paint product to bridge.)
- Replacement of up to one percent (1%), of the stucco walls (The exact amount of area in need of replacement will be discretionary based on the actual future conditions and the desired appearance.)
- Replacement of up to fifty percent (50%) of the sealants in coordination with each paint finish application.

Walls, Wood Siding, Replacement

Line Item: 2.650

Quantity: Approximately 700 square feet of the clubhouse exterior walls and clubhouse sun room

History: Unknown

Condition: Fair overall



Clubhouse exterior wood siding overview



Clubhouse exterior wood siding overview



Sun room wood siding



Deflected wood ceiling of sun room

Useful Life: Up to 30 years. This useful life is dependent upon timely paint applications and partial replacements of deteriorated siding.

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.

Windows and Doors, Aluminum Frames

Line Item: 2.700

Quantity: 170 square feet

History: Unknown

Condition: Good overall



Typical clubhouse windows



Typical clubhouse doors

Useful Life: Up to 40 years

Component Detail Notes: Construction includes the following:

- Aluminum frames
- Single pane glass
- Fixed windows
- Hinged doors

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



Pool overview

Concrete Deck

Line Item: 6.200

Quantity: 1,690 square feet

History: Original; repaired and coated in 2004.

Condition: Good condition



Pool deck overview



Pool deck overview



Minor crack in deck

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 in conjunction with coating replacements.

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.

Fence, Wood

Line Item: 6.400

Quantity: 1,460 linear feet surrounding the pool area and two trash enclosures

History: Installed in 2004

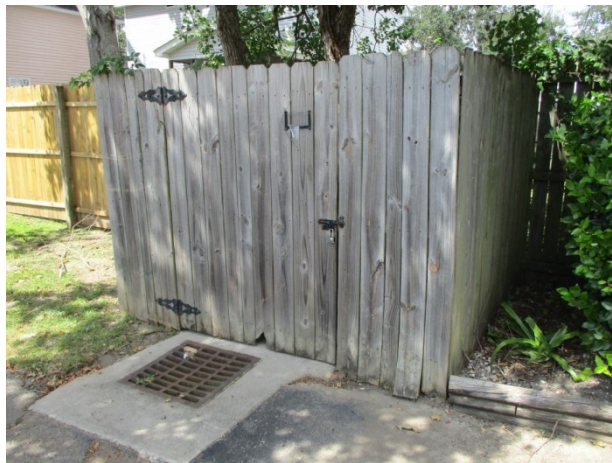
Condition: Good overall condition



Pool fence overview



Pool fence overview



Trash enclosure fence

Useful Life: 15- to 20-years

Component Detail Notes: The Association should anticipate periodic partial replacements due to the non-uniform nature of wood deterioration. Along with these partial replacements, the Association should apply periodic paint applications as needed and fund these activities 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: 6.500

Quantity:

- Chairs (18)
- Lounges (10)
- Tables (4)
- Cocktail Tables (6)

History: Unknown; Management informs that the metal and fabric chairs were added in 2016.

Condition: Good overall



Typical 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: 4.560

Quantity: Two each at the pool

History: Original

Condition: Good overall



Typical light pole and fixture

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: 6.600

Quantity:

- Controls
- Filter
- Interconnected pipe, fittings and valves
- Pump

History: Varies

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. Failure of the pool mechanical equipment as a single event is unlikely. We consider interim replacement of motors and minor repairs as normal maintenance.

Pool Finish, Plaster

Line Items: 6.800

Quantity: 810 square feet of plaster based on the horizontal surface area

History: The plaster finish and tile were replaced in 2017.

Condition: Good overall



Plaster finish and tile at pool entrance stairs

Useful Life: 8- to 12-years for the plaster

Component Detail Notes: Removal and replacement provides the opportunity to inspect the pool structure and to allow for partial repairs of the underlying concrete surfaces as needed. To maintain the integrity of the pool structure, we recommend the Association budget for the following:

- Removal and replacement of the plaster finish
- 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.

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 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.

Harbor Oaks can fund capital repairs and replacements in any combination of the following:

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

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

This Reserve Study is in compliance with and exceeds the National standards¹ set forth by the Community Associations Institute (CAI) and the Association of Professional Reserve Analysts (APRA) fulfilling the requirements of a "Full Reserve Study." 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
- Local² 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 Charleston, South Carolina at an annual inflation rate. Isolated or regional markets of

¹ Identified in the APRA "Standards - Terms and Definitions" and the CAI "Terms and Definitions".

² See Credentials for addition information on our use of published sources of cost data.

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

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

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

6. CREDENTIALS

HISTORY AND DEPTH OF SERVICE

Founded in 1991, Reserve Advisors, Inc. 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 principals are founders of Community Associations Institute's (CAI) Reserve Committee that developed national standards for reserve study providers. One of our principals 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.

QUALIFICATIONS

THEODORE J. SALGADO

Principal Owner

CURRENT CLIENT SERVICES

Theodore J. Salgado is a co-founder of Reserve Advisors, Inc., which is dedicated to serving community associations, city and country clubs, religious organizations, educational facilities, and public and private entities throughout the United States. He is responsible for the production, management, review, and quality assurance of all reserve studies, property inspection services and consulting services for a nationwide portfolio of more than 6,000 clients. Under his direction, the firm conducts reserve study services for community associations, apartment complexes, churches, hotels, resorts, office towers and vintage architecturally ornate buildings.



PRIOR RELEVANT EXPERIENCE

Before founding Reserve Advisors, Inc. with John P. Poehlmann in 1991, Mr. Salgado, a professional engineer registered in the State of Wisconsin, served clients for over 15 years through American Appraisal Associates, the world's largest full service valuation firm. Mr. Salgado conducted facilities analyses of hospitals, steel mills and various other large manufacturing and petrochemical facilities and casinos.

He has served clients throughout the United States and in foreign countries, and frequently acted as project manager on complex valuation, and federal and state tax planning assignments. His valuation studies led to negotiated settlements on property tax disputes between municipalities and property owners.

Mr. Salgado has authored articles on the topic of reserve studies and facilities maintenance. He also co-authored *Reserves*, an educational videotape produced by Reserve Advisors on the subject of Reserve Studies and maintaining appropriate reserves. Mr. Salgado has also written in-house computer applications manuals and taught techniques relating to valuation studies.

EXPERT WITNESS

Mr. Salgado has testified successfully before the Butler County Board of Tax Revisions in Ohio. His depositions in pretrial discovery proceedings relating to reserve studies of Crestview Estates Condominium Association in Wauconda, Illinois, Rivers Point Row Property Owners Association, Inc. in Charleston, South Carolina and the North Shore Club Associations in South Bend, Indiana have successfully assisted the parties in arriving at out of court settlements.

EDUCATION - Milwaukee School of Engineering - B.S. Architectural Engineering

PROFESSIONAL AFFILIATIONS/DESIGNATIONS

American Association of Cost Engineers - Past President, Wisconsin Section

Association of Construction Inspectors - Certified Construction Inspector

Association of Professional Reserve Analysts - Past President & Professional Reserve Analyst (PRA)

Community Associations Institute - Member and Volunteer Leader of multiple chapters

Concordia Seminary, St. Louis - Member, National Steering Committee

Milwaukee School of Engineering - Member, Corporation Board

Professional Engineer, Wisconsin (1982) and North Carolina (2014)

Ted continually maintains his professional skills through American Society of Civil Engineers, ASHRAE, Association of Construction Inspectors, and continuing education to maintain his professional engineer licenses.

JOHN P. POEHLMANN, RS
Principal

John P. Poehlmann is a co-founder of Reserve Advisors, Inc. He is responsible for the finance, accounting, marketing, and overall administration of Reserve Advisors, Inc. He also regularly participates in internal Quality Control Team Reviews of Reserve Study reports.



Mr. Poehlmann directs corporate marketing, including business development, advertising, press releases, conference and trade show exhibiting, and electronic marketing campaigns. He frequently speaks throughout the country at seminars and workshops on the benefits of future planning and budgeting for capital repairs and replacements of building components and other assets.

PRIOR RELEVANT EXPERIENCE

Mr. Poehlmann served on the national Board of Trustees of Community Associations Institute. An international organization, Community Associations Institute (CAI) is a nonprofit 501(c)(3) trade association created in 1973 to provide education and resources to America's 335,000 residential condominium, cooperative and homeowner associations and related professionals and service providers.

He is a founding member of the Institute's Reserve Committee. The Reserve Committee developed national standards and the Reserve Specialist (RS) Designation Program for Reserve Study providers. Mr. Poehlmann has authored numerous articles on the topic of Reserve Studies, including Reserve Studies for the First Time Buyer, Minimizing Board Liability, Sound Association Planning Parallels Business Concepts, and Why Have a Professional Reserve Study. He is also a contributing author in Condo/HOA Primer, a book published for the purpose of sharing a wide background of industry knowledge to help boards in making informed decisions about their communities.

INDUSTRY SERVICE AWARDS

CAI Wisconsin Chapter Award
CAI National Rising Star Award
CAI Michigan Chapter Award

EDUCATION

University of Wisconsin-Milwaukee - Master of Science Management
University of Wisconsin - Bachelor of Business Administration

PROFESSIONAL AFFILIATIONS

Community Associations Institute (CAI) - Founding member of Reserve Committee;
former member of National Board of Trustees; Reserve Specialist (RS) designation;
Member of multiple chapters

Association of Condominium, Townhouse, & Homeowners Associations (ACTHA) –
member

JENNIFER L. BERRY
Responsible Advisor

CURRENT CLIENT SERVICES

Jennifer L. Berry, a Mechanical Engineer, is an Advisor for **Reserve Advisors, Inc.** Ms. Berry is responsible for the inspection and analysis of the condition of clients' properties, and recommending engineering solutions to prolong the lives of the components. She also forecasts capital expenditures for the repair and/or replacement of the property components and prepares technical reports on assignments. She is responsible for conducting Life Cycle Cost Analyses and Capital Replacement Forecast services and the preparation of Reserve Study Reports for condominiums, townhomes and homeowner associations.

The following is a partial list of clients served by Jennifer Berry demonstrating her breadth of experiential knowledge of community associations in construction and related buildings systems.

The Farms Property Owners Association A well-maintained single family home community of over 400 homes located just outside of Charlotte, North Carolina. This community includes a clubhouse, tennis courts, asphalt pavement, and a playground.

Branch Creek Phase 2A Townhome Association This townhome community is located in Summerville, South Carolina and comprises 44 residential units in 11 buildings. The townhomes were constructed with fiber cement siding, asphalt shingle roofs, masonry facades, and screen-enclosed patios. The Association also maintains asphalt pavement, sidewalks, driveways, a pond, and a wood pedestrian bridge.

Turtle Point Villas II Horizontal Property Regime Located in Kiawah Island, South Carolina, this condominium style development consists of 53 units in eight buildings. Built in 1985, these buildings were constructed with wood siding, cedar shakes roofs, wood staircases, wood balconies, and five hydraulic elevators.

The Hamptons at Northcross Downs Homeowners Association This development in Huntersville, North Carolina is comprised of 371 single family homes. The Association maintains two clubhouses, two pools, two playgrounds, tennis courts, masonry perimeter walls and asphalt pavement.

Kensington South Condominium Association A townhome development comprised of 77 units in eight buildings that were constructed with fiber cements siding and asphalt shingle roofs. Located in Gainesville, Florida, this community also maintains a clubhouse, pool, multiple perimeter fences, a concrete retaining wall and asphalt pavement.

Cresswind at the Ponds Community Association This single family home community located just outside of Charleston, South Carolina will comprise over 600 homes upon its anticipated completion in 2025. Amenities in this community include a luxurious clubhouse, tennis and pickleball courts as well as a pool and spa. The Association also maintains asphalt pavement streets, masonry retaining walls throughout the community and multiple ponds.

PRIOR RELEVANT EXPERIENCE

Before joining **Reserve Advisors, Inc.**, Ms. Berry successfully completed the bachelors program in Mechanical Engineering from Virginia Tech. She has experience as a Mechanical Design Engineer for an industrial refrigeration company where she gained knowledge in the design and manufacturing of specialized large-scale refrigeration systems in coordination with building construction projects. During her undergraduate education, Ms. Berry also worked in product development specializing in high-horsepower diesel engines and commercial diesel turbocharger applications while working for Cummins, Inc. and BorgWarner Turbo Systems, respectively.

EDUCATION

Virginia Tech - B.S. Mechanical Engineering

PROFESSIONAL AFFILIATIONS / DESIGNATIONS

Engineer In Training (E.I.T.) – Virginia, 2016



ASHLEY M. FORTE, P.E., RS
Responsible Advisor

CURRENT CLIENT SERVICES

Ashley M. Forte, a Civil Engineer, is an Advisor for Reserve Advisors. Ms. Forte is responsible for the inspection and analysis of the condition of clients' properties, and recommending engineering solutions to prolong the lives of the components. She also forecasts capital expenditures for the repair and/or replacement of the property components and prepares technical reports on assignments. She is responsible for conducting Life Cycle Cost Analyses and Capital Replacement Forecast services and the preparation of Reserve Study Reports for condominiums, townhomes and homeowner associations. Ms. Forte frequently serves as the Quality Assurance Review Coordinator for all types of developments.

The following is a partial list of clients served by Ashley Forte demonstrating her breadth of experiential knowledge of community associations in construction and related buildings systems.

Gables Court Condominium Association Located in Miami, Florida, this distinguished condominium association contains multiple building styles comprising 159 units. The Association maintains a large pool, extensive clubhouse house, and common asphalt pavement parking areas.

Lake Forest Master Community Association This well-maintained single family home community is located in Sanford, Florida. This heavily sidewalked community consists of 732 single family homes. The community maintains one large pool, six tennis courts, two docks asphalt pavement streets and catch basins.

Edgehill Condominium Owners Association This 10 unit condominium located in Charlotte, North Carolina has masonry façade. Constructed in 1998, the community is comprised of concrete and metal balconies, a parking garage located under the building and an asphalt shingle roof.

Turtle Shores Homeowners Association This development is comprised of 298 single family homes overlooking the ocean located in Ponte Vedra, Florida. The association maintains a concrete tunnel to offer access to an extensive wood gazebo on the beach as well as a pool, cabanas and timber retaining walls.

River Marina Estates Homeowners Association Located in Stuart, Florida, this gated development includes 88 single family homes. The association maintains responsibility for 14 wood docks and associated shorelines, a large pond, mailboxes and gate entry system.

Meadow Pointe Condominium Association of Brevard County This condominium community comprises 78 units in 13 buildings in Rockledge, Florida. Amenities of this property include a large pool, sloped asphalt shingle roofs, perimeter walls, irrigation system, fountains and parking area.

Balcones Woods Club Located in pristine Austin, Texas, this association maintains an extensive recreation area. The community includes a large pool and wading pool, tennis courts, basketball court, volleyball court, large playground and an asphalt pavement parking area.

PRIOR RELEVANT EXPERIENCE

Before joining *Reserve Advisors*, Ms. Forte successfully completed the bachelors program in Civil Engineering from the University of Central Florida as well as the master's program in Engineering Management from the University of Florida. She also has three years of transportation design experience as a roadway engineer in Tampa, FL, where she gained knowledge in the design of roadways, associated drainage design, planning and plans production of engineering drawings.

EDUCATION

University of Florida – M.S. Engineering Management
University of Central Florida - B.S. Civil Engineering

PROFESSIONAL AFFILIATIONS/DESIGNATIONS

Professional Engineer (P.E.) - State of Florida, 2015
Reserve Specialist (RS) – Community Association Institute (CAI)



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

Reserve Specialist (RS) - Community Associations Institute

Professional Reserve Analyst (PRA) - Association of Professional Reserve Analysts

RESOURCES

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

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

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

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

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

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

Reserve Advisors, Inc., 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 Harbor Oaks 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) Harbor Oaks responsibility; 2) limited Useful Life expectancies; 3) predictable Remaining Useful Life expectancies; and 4) a replacement cost above a minimum threshold.

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

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

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

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

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

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

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

8. PROFESSIONAL SERVICE CONDITIONS

Our Services - Reserve Advisors, Inc. (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 and is noninvasive. RA inspects sloped roofs from the ground and inspects flat roofs where safe access (stairs or ladder permanently attached to the structure) is available. The report is based upon a “snapshot in time” at the moment of inspection. RA may note visible physical defects in our report. The inspection is made by employees generally familiar with real estate and building construction but in the absence of invasive testing RA cannot opine on, nor is RA responsible for, the structural integrity of the property including its conformity to specific governmental code requirements for fire, building, earthquake, and occupancy, or any physical defects that were not readily apparent during the inspection.

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

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

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

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

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

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

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