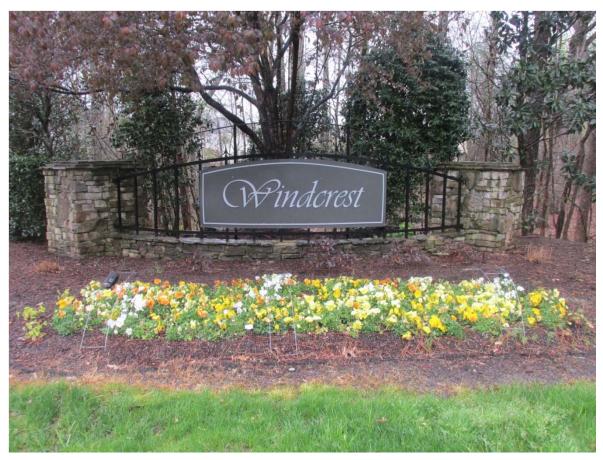
RESERVE STUDY

Windcrest Community Association



Holly Springs, North Carolina April 2, 2019



Long-term thinking. Everyday commitment.

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

Windcrest Community Association Holly Springs, North Carolina

Dear Board of Directors of Windcrest Community Association:

At the direction of the Board that recognizes the need for proper reserve planning, we have conducted a *Reserve Study* of Windcrest Community Association in Holly Springs, North Carolina and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, April 2, 2019.

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

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

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

Respectfully submitted on April 24, 2019 by

Reserve Advisors Engineering, PLLC (P-1327)

Visual Inspection and Report by: Colin Niemeyer Alan M. Ebert, P.E. (NC-043524) RS¹, PRA², Director of Quality Assurance

² PRA (Professional Reserve Analyst) is the professional designation of the Association of Professional Reserve Analysts. Learn more about APRA at http://www.apra-usa.com.





¹ RS (Reserve Specialist) is the reserve provider professional designation of the Community Associations Institute (CAI) representing America's more than 300,000 condominium, cooperative and homeowners associations.
² PRA (Professional Reserve Analyst) is the professional designation of the Association of Professional



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 Curbs and Gutters	.4.3
	Concrete Sidewalks	.4.4
	Fences, Aluminum	.4.4
	Irrigation System	.4.5
	Playground Equipment	.4.6
	Retaining Walls, Masonry	.4.7
	Signage, Entrance Monuments	.4.9
	Pool House Elements	.4.10
	Doors, Entrances	.4.10
	Roofs, Asphalt Shingles	.4.10
	Rest Rooms	.4.13
	Walls, Siding, Fiber Cement	.4.14
	Pool Elements	.4.17
	Concrete Deck	.4.17
	Fences, Aluminum	.4.18
	Furniture	.4.19
	Light Poles and Fixtures	.4.20
	Mechanical Equipment	.4.21
	Pergolas, Wood	.4.22
	Pool Finishes, Plaster and Tile	.4.23
	Reserve Study Update	.4.25
5.	METHODOLOGY	.5.1
6.	CREDENTIALS	.6.1
7	DEFINITIONS	7 1

.8.1



1.RESERVE STUDY EXECUTIVE SUMMARY

Client: Windcrest Community Association (Windcrest)

Location: Holly Springs, North Carolina

Reference: 061043

Property Basics: Windcrest Community Association is a planned unit development which is responsible for the common elements shared by 397 single family homes. The common elements of the Association were built in 2004.

Reserve Components Identified: 21 Reserve Components.

Inspection Date: April 2, 2019. We conducted the original inspection on November 29, 2006.

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 these threshold funding years in 2029 and 2044 due to replacement of the pool finish and aluminum fences, and total replacement of the asphalt pavement at the pool parking lot, respectively.

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
- 1.7% anticipated annual rate of return on invested reserves
- 3.0% future Inflation Rate for estimating Future Replacement Costs

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

Cash Status of Reserve Fund:

- \$205,186 as of January 31, 2019
- 2019 budgeted Reserve Contributions of \$26,000

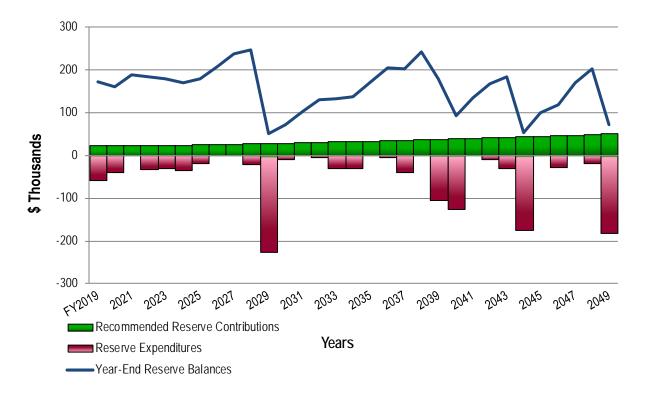
Recommended Reserve Funding: We recommend the following in order to achieve a stable and equitable Funding Plan:

- Reduced reserve budget of \$24,000 in 2020
- Stable contributions of \$24,000 from 2020 through 2024
- Inflationary increases from 2025 through 2049, the limit of this study's Cash Flow Analysis
- 2020 Reserve Contribution of \$24,000 is equivalent to an average monthly contribution of \$5.04 per homeowner.



WindcrestRecommended Reserve Funding Table and Graph

	Reserve	Reserve		Reserve	Reserve		Reserve	Reserve
Year	Contributions (\$)	Balances (\$)	Year	Contributions (\$)	Balances (\$)	Year	Contributions (\$)	Balances (\$)
2020	24,000	160,787	2030	28,600	71,773	2040	38,500	93,515
2021	24,000	187,724	2031	29,500	102,744	2041	39,700	135,142
2022	24,000	182,820	2032	30,400	130,506	2042	40,900	168,138
2023	24,000	180,131	2033	31,300	133,431	2043	42,100	182,847
2024	24,000	170,617	2034	32,200	136,435	2044	43,400	52,964
2025	24,700	178,649	2035	33,200	172,237	2045	44,700	98,944
2026	25,400	207,302	2036	34,200	204,430	2046	46,000	119,015
2027	26,200	237,249	2037	35,200	203,187	2047	47,400	168,841
2028	27,000	247,938	2038	36,300	243,250	2048	48,800	202,780
2029	27,800	51,821	2039	37,400	178,192	2049	50,300	73,069





2.RESERVE STUDY REPORT

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

Windcrest Community Association

Holly Springs, North Carolina

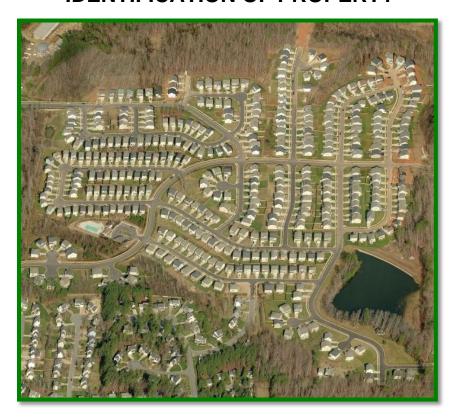
and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, April 2, 2019. We conducted the original inspection on November 29, 2006.

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

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



IDENTIFICATION OF PROPERTY



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

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



- Windcrest 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
- Foundation, Pool House
- Pipes, Interior Building, Domestic Water, Sanitary Waste, Vent, Pool House
- Pipes, Subsurface Utilities
- Pool Structure
- Structural Frame, Pool House
- Walls, Siding, Fiber Cement, Replacement, Pool House

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

- General Maintenance to the Common Elements
- Expenditures less than \$1,500 (These relatively minor expenditures have a limited effect on the recommended Reserve Contributions.)
- Concrete Wheel Stops
- Hand Pumps
- Irrigation System, Controls
- Landscape
- Masonry, Inspections and Capital Repairs, Pool Deck
- Paint Finishes, Touch Up
- Pond Maintenance
- Shutters, Vinyl, Pool House
- Water Heater
- 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:

Homes and Lots



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

- Asphalt Pavement, Walking Path (Park)
- Exercise Equipment, Outdoor (Park)
- Light Poles and Fixtures (Leased)
- Pond, Southwest of Property (Park)
- Street Systems (Municipality)



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
- 2019 local cost of replacement
 - Per unit
 - Per phase
 - Replacement of total quantity
- 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

Five-Year Outlook

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

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

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

RESERVE EXPENDITURES

Windcrest Community Association Holly Springs, North Carolina

Explanatory Notes:

1) 3.0% is the estimated Inflation Rate for estimating Future Replacement Costs.

2) FY2019 is Fiscal Year beginning January 1, 2019 and ending December 31, 2019.

			Trony Springs, North Caronia	Estimated	Life A	nalysis, _		Costs																		
Line Item Q	Total Per uantity Qu	r Phase uantity Units 	Reserve Component Inventory	1st Year of Event		Remaining	Unit (2019)	Per Phase (2019)	Total (2019)	30-Year Total (Inflated)	RUL = 0 FY2019	2020	2 2021	3 2022	4 2023	5 2024	6 2025	7 2026	8 2027	9 2028	10 2029	11 2030	12 2031	13 2032	14 2033	15 2034
			Property Site Elements																							
4.020	1,650	1,650 Square Yards	S Asphalt Pavement, Crack Repair, Patch and Seal Coat	2020	3 to 5	1	1.90	3,135	3,135	30,325		3,229								4,090				4,604		
4.040	1,650	1,650 Square Yards	s Asphalt Pavement, Mill and Overlay	2024	15 to 20	5	14.00	23,100	23,100	26,779						26,779										
4.045	1,650	1,650 Square Yards	s Asphalt Pavement, Total Replacement	2044	15 to 20	25	33.00	54,450	54,450	114,006																
4.110	900	90 Linear Feet	Concrete Curbs and Gutters, Partial	2024	to 65	5 to 30+	34.00	3,060	30,600	9,954						3,547										
4.140	1,900	190 Square Feet	Concrete Sidewalks, Partial	2023	to 65	4 to 30+	9.50	1,805	18,050	8,431					2,032										2,730	
4.200	1,000	1,000 Linear Feet	Fences, Aluminum	2029	to 25	10	45.00	45,000	45,000	60,476											60,476					
4.420	12	12 Zones	Irrigation System	2044	to 40	25	1,600.00	19,200	19,200	40,201																
4.660	1	1 Allowance	Playground Equipment	2020	15 to 20	1	35,000.00	35,000	35,000	101,160		36,050														
4.740	3,650	3,650 Square Feet	Retaining Walls, Masonry, Inspection and Capital Repairs	2025	10 to 15	6	4.50	16,425	16,425	87,442							19,612									
4.800	1	1 Allowance	Signage, Entrance Monuments, Renovation	2022	15 to 20	3	8,200.00	8,200	8,200	24,214				8,960												
			Pool House Elements																							
5.255	7	7 Each	Doors, Metal	2034	to 30	15	1,100.00	7,700	7,700	11,996																11,996
5.600	21	21 Squares	Roofs, Asphalt Shingles (Includes Gutters and Downspouts and Metal Roof	2022	15 to 20	3	410.00	8,610	8,610	25,425				9,408												
5.590	2	2 Each	Rest Rooms, Renovation	2029	to 25	10	11,000.00	22,000	22,000	29,566											29,566					
5.840	1	1 Allowance	Walls, Siding, Fiber Cement, Paint Finishes	2024	8 to 10	5	5,300.00	5,300	5,300	24,621						6,144									8,017	
			Pool Elements																							
5.200		· ·	Concrete Deck, Inspections, Partial Replacements and Repairs	2023	8 to 12	4	1.50	13,125	13,125	61,305					14,772										19,853	
5.400	640		Fences, Aluminum	2029	to 25	10	45.00	28,800	28,800	38,705											38,705					
5.500	2	1 Allowance	Furniture, Phased	2022	to 12	3 to 9	12,500.00	12,500	25,000	100,464				13,659						16,310						19,475
5.550	9	9 Each	Light Fixtures, Bollard	2023	to 25	4	500.00	4,500	4,500	15,670					5,065											
5.600	2	1 Allowance	Mechanical Equipment, Phased	2023	to 15	4 to 11	7,000.00	7,000	14,000	44,142					7,879							9,690				
5.630	1	1 Allowance	Pergolas, Wood	2029	to 25	10	14,000.00	14,000	14,000	18,815											18,815					
5.801	2,730	2,730 Square Feet	Pool Finish, Plaster and Tile	2019	8 to 12	0	21.50	58,695	58,695	386,054	58,695										78,881					
			Anticipated Expenditures, By Year							\$1,259,751	58,695	39,279	0	32,027	29,748	36,470	19,612	0	0	20,400	226,443	9,690	0	4,604	30,600	31,471

RESERVE EXPENDITURES

Windcrest Community Association

			Holly Springs, North Carolina																						
Lino	Total P	er Phase		Estimated Ist Year of		Analysis, ears	Unit	Cost Per Phase	s, \$ Total	30-Year Total	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Item		Quantity Units	Reserve Component Inventory	Event		Remaining	(2019)	(2019)	(2019)	(Inflated)	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049
			Property Site Elements																						
4.020	1,650	1,650 Square Yards	Asphalt Pavement, Crack Repair, Patch and Seal Coat	2020	3 to 5	1	1.90	3,135	3,135	30,325		5,182				5,832								7,388	
4.040	1,650	1,650 Square Yards	Asphalt Pavement, Mill and Overlay	2024	15 to 20	5	14.00	23,100	23,100	26,779															
4.045	1,650	1,650 Square Yards	Asphalt Pavement, Total Replacement	2044	15 to 20	25	33.00	54,450	54,450	114,006										114,006					
4.110	900	90 Linear Feet	Concrete Curbs and Gutters, Partial	2024	to 65	5 to 30+	34.00	3,060	30,600	9,954										6,407					
4.140	1,900	190 Square Feet	Concrete Sidewalks, Partial	2023	to 65	4 to 30+	9.50	1,805	18,050	8,431									3,669						
4.200	1,000	1,000 Linear Feet	Fences, Aluminum	2029	to 25	10	45.00	45,000	45,000	60,476															
4.420	12	12 Zones	Irrigation System	2044	to 40	25	1,600.00	19,200	19,200	40,201										40,201					
4.660	1	1 Allowance	Playground Equipment	2020	15 to 20	1	35,000.00	35,000	35,000	101,160						65,110									
4.740	3,650	3,650 Square Feet	Retaining Walls, Masonry, Inspection and Capital Repairs	2025	10 to 15	6	4.50	16,425	16,425	87,442			27,962												39,868
4.800	1	1 Allowance	Signage, Entrance Monuments, Renovation	2022	15 to 20	3	8,200.00	8,200	8,200	24,214						15,254									
			Pool House Elements																						
5.255	7	7 Each	Doors, Metal	2034	to 30	15	1,100.00	7,700	7,700	11,996															
5.600	21	21 Squares	Roofs, Asphalt Shingles (Includes Gutters and Downspouts and Metal Roof)	2022	15 to 20	3	410.00	8,610	8,610	25,425						16,017									
5.590	2	2 Each	Rest Rooms, Renovation	2029	to 25	10	11,000.00	22,000	22,000	29,566															
5.840	1	1 Allowance	Walls, Siding, Fiber Cement, Paint Finishes	2024	8 to 10	5	5,300.00	5,300	5,300	24,621								10,460							
			<u>Pool Elements</u>																						
6.200	8,750	8,750 Square Feet	Concrete Deck, Inspections, Partial Replacements and Repairs	2023	8 to 12	4	1.50	13,125	13,125	61,305									26,680						
6.400	640	640 Linear Feet	Fences, Aluminum	2029	to 25	10	45.00	28,800	28,800	38,705															
6.500	2	1 Allowance	Furniture, Phased	2022	to 12	3 to 9	12,500.00	12,500	25,000	100,464						23,254						27,766			
6.550	9	9 Each	Light Fixtures, Bollard	2023	to 25	4	500.00	4,500	4,500	15,670														10,605	
6.600	2	1 Allowance	Mechanical Equipment, Phased	2023	to 15	4 to 11	7,000.00	7,000	14,000	44,142			11,917							14,656					
6.630	1	1 Allowance	Pergolas, Wood	2029	to 25	10	14,000.00	14,000	14,000	18,815															
6.801	2,730	2,730 Square Feet	Pool Finish, Plaster and Tile	2019	8 to 12	0	21.50	58,695	58,695	386,054					106,010										142,468
			Anticipated Expenditures, By Year							\$1,259,751	0	5,182	39,879	0	106,010	125,467	0	10,460	30,349	175,270	0	27,766	0	17,993	182,336

Reserve Advisors Engineering, PLLC

RESERVE FUNDING PLAN

CASH FLOW ANALYSIS

Windc	rest
munity A	ssociation

Community Association		<u>Individual Res</u>	<u>erve Budgets</u>	& Cash Flow	<u>s for the Next</u>	<u>30 Years</u>										
Holly Springs, North Carolina	FY2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Reserves at Beginning of Year (Note 1)	205,186	173,251	160,787	187,724	182,820	180,131	170,617	178,649	207,302	237,249	247,938	51,821	71,773	102,744	130,506	133,431
Total Recommended Reserve Contributions (Note 2)	23,833	24,000	24,000	24,000	24,000	24,000	24,700	25,400	26,200	27,000	27,800	28,600	29,500	30,400	31,300	32,200
Plus Estimated Interest Earned, During Year (Note 3)	2,926	2,815	2,937	3,123	3,059	2,956	2,944	3,253	3,747	4,089	2,526	1,042	1,471	1,966	2,225	2,275
Less Anticipated Expenditures, By Year	(58,695)	(39,279)	0	(32,027)	(29,748)	(36,470)	(19,612)	0	0	(20,400)	(226,443)	(9,690)	0	(4,604)	(30,600)	(31,471)
Anticipated Reserves at Year End	<u>\$173,251</u>	<u>\$160,787</u>	<u>\$187,724</u>	<u>\$182,820</u>	<u>\$180,131</u>	<u>\$170,617</u>	<u>\$178,649</u>	<u>\$207,302</u>	<u>\$237,249</u>	<u>\$247,938</u>	<u>\$51,821</u>	<u>\$71,773</u>	<u>\$102,744</u>	<u>\$130,506</u>	<u>\$133,431</u>	<u>\$136,435</u>
											(NOTE 5)					

(continued)															
	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049
Reserves at Beginning of Year	136,435	172,237	204,430	203,187	243,250	178,192	93,515	135,142	168,138	182,847	52,964	98,944	119,015	168,841	202,780
Total Recommended Reserve Contributions	33,200	34,200	35,200	36,300	37,400	38,500	39,700	40,900	42,100	43,400	44,700	46,000	47,400	48,800	50,300
Plus Estimated Interest Earned, During Year	2,602	3,175	3,436	3,763	3,552	2,290	1,927	2,556	2,958	1,987	1,280	1,837	2,426	3,132	2,325
Less Anticipated Expenditures, By Year	0	(5,182)	(39,879)	0	(106,010)	(125,467)	0	(10,460)	(30,349)	(175,270)	0	(27,766)	0	(17,993)	(182,336)
Anticipated Reserves at Year End	<u>\$172,237</u>	<u>\$204,430</u>	<u>\$203,187</u>	<u>\$243,250</u>	<u>\$178,192</u>	<u>\$93,515</u>	<u>\$135,142</u>	<u>\$168,138</u>	<u>\$182,847</u>	<u>\$52,964</u>	<u>\$98,944</u>	<u>\$119,015</u>	<u>\$168,841</u>	<u>\$202,780</u>	<u>\$73,069</u>
										(NOTE 5)					(NOTE 4)

Explanatory Notes:

- 1) Year 2019 starting reserves are as of January 31, 2019; FY2019 starts January 1, 2019 and ends December 31, 2019.
- 2) Reserve Contributions for 2019 are the remaining budgeted 11 months; 2020 is the first year of recommended contributions.
- 3) 1.7% is the estimated annual rate of return on invested reserves; 2019 is a partial year of interest earned.
- 4) Accumulated year 2049 ending reserves consider the age, size, overall condition and complexity of the property.
- 5) Threshold Funding Years (reserve balance at critical point).

Funding Plan - Section 3

FIVE-YEAR OUTLOOK

Windcrest Community Association Holly Springs, North Carolina

Line Item	Reserve Component Inventory	RUL = 0 FY2019	1 2020	2 2021	3 2022	4 2023	5 2024
	Property Site Elements						
4.020	Asphalt Pavement, Crack Repair, Patch and Seal Coat		3,229				
4.040	Asphalt Pavement, Mill and Overlay						26,779
4.110	Concrete Curbs and Gutters, Partial						3,547
4.140	Concrete Sidewalks, Partial					2,032	
4.660	Playground Equipment		36,050				
4.800	Signage, Entrance Monuments, Renovation				8,960		
	Pool House Elements						
5.600	Roofs, Asphalt Shingles (Includes Gutters and Downspouts and Metal Roof)				9,408		
5.840	Walls, Siding, Fiber Cement, Paint Finishes						6,144
	Pool Elements						
6.200	Concrete Deck, Inspections, Partial Replacements and Repairs					14,772	
6.500	Furniture, Phased				13,659		
6.550	Light Fixtures, Bollard					5,065	
6.600	Mechanical Equipment, Phased					7,879	
6.801	Pool Finish, Plaster and Tile	58,695					
	Anticipated Expenditures, By Year	58,695	39,279	0	32,027	29,748	36,470

Printed on 4/25/2019 Five-Year Outlook - 1 of 1



4.RESERVE COMPONENT DETAIL

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

Property Site Elements

Asphalt Pavement, Crack Repair, Patch and Seal Coat

Line Item: 4.020

Quantity: Approximately 1,650 square yards

History: Original

Condition: Good overall

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 two percent (2%) of the pavement.

Asphalt Pavement, Repaving

Line Items: 4.040 and 4.045

Quantity: Approximately 1,650 square yards

History: Original

Condition: Good to fair overall with surface cracks evident







Parking lot overview

Parking lot overview

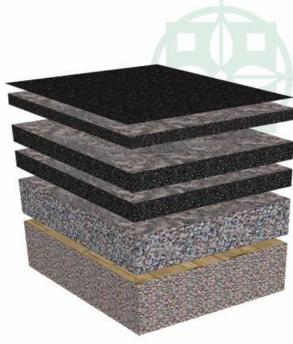


Parking lot overview

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

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





ASPHALT DIAGRAM

Sealcoat or Wearing Surface Asphalt Overlay Not to Exceed 1.5 inch Thickness per Lift or Layer

Original Pavement Inspected and milled until sound pavement is found, usually comprised of two layers

Compacted Crushed Stone or Aggregate Base

Subbase of Undisturbed Native Soils Compacted to 95% dry density

© Reserve Advisors, Inc.

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

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%).

Concrete Curbs and Gutters

Line Item: 4.110

Quantity: Approximately 900 linear feet

Condition: Good to fair overall with cracks evident



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 180 linear feet of curbs and gutters, or twenty percent (20%) of the total, will require replacement during the next 30 years.

Concrete Sidewalks

Line Item: 4.140

Quantity: Approximately 1,900 square feet

Condition: Good to fair overall with cracks evident





Concrete sidewalk at the pool parking lot

Cracks evident

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 570 square feet of concrete sidewalks, or thirty percent (30%) of the total, will require replacement during the next 30 years.

Fences, Aluminum

Line Item: 4.200

Quantity: 1,000 linear feet at the retaining walls



History: Original

Condition: Good to fair overall with bent pickets evident





Bent pickets evident

Aluminum fence at masonry retaining wall



Aluminum fence

Useful Life: Up to 25 years

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the Reserve

Expenditures table in Section 3.

Irrigation System

Line Item: 4.420

Quantity: Approximately 12 zones

History: Original



Condition: Good overall and Management and the Board does not report any

deficiencies

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

Windcrest 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.

Playground Equipment

Line Item: 4.660

History: Original

Condition: Fair overall with cracks in the structure evident





Playground equipment

Cracks evident

Useful Life: 15- to 20-years



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

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

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We include an allowance in the unit cost for replacement of the safety surface and border.

Retaining Walls, Masonry

Line Item: 4.740

Quantity: Approximately 3,650 square feet at the culverts

History: Original

Condition: Good to fair overall







Masonry retaining wall



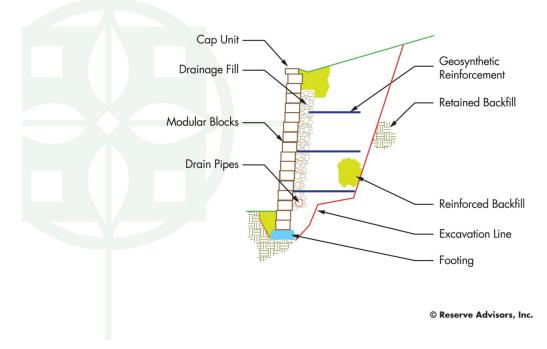


Masonry retaining wall

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

Component Detail Notes: Properly constructed interlocking masonry retaining walls utilize geosynthetic reinforcement and a drainage system to stabilize the wall and prevent the buildup of hydrostatic pressure behind the wall. Water stains may indicate inadequate drainage or blocked drainage from behind the wall. The following schematic depicts the typical components of a retaining wall system although it may not reflect the actual configuration at Windcrest:

MASONRY RETAINING WALL DETAIL



Page 4.8 - Reserve Component Detail



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

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Our cost includes an allowance for an inspection, partial resetting and replacement of up to ten percent (10%).

Signage, Entrance Monuments

Line Item: 4.800

Quantity: Two property identification signs

History: Original

Condition: Good to fair overall



Property identification monument

Useful Life: 15- to 20-years

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

- Light fixtures
- Fences
- Masonry

Priority/Criticality: Per Board discretion



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

Pool House Elements



Front elevation

Doors, Entrances

Line Item: 5.255

Quantity: Seven metal doors

History: Original

Condition: Good to fair overall

Useful Life: Up to 30 years

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

Expenditure Detail Notes: Expenditure timing and costs are depicted in the Reserve

Expenditures table in Section 3.

Roofs, Asphalt Shingles

Line Item: 5.600

Quantity: Approximately 21 squares¹

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



History: Original

Condition: Good to fair overall with shingle lift evident from our visual inspection from

the ground.





Shingle lift evident

Asphalt shingle roof overview and metal cupola



Shingle lift evident

Useful Life: 15- to 20-years

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

- Three tab shingles
- Boston style ridge caps
- Rubber seal with plastic base boot flashing at waste pipes
- Soffit and ridge vents
- Metal drip edge

Insulation and ventilation are two major components of a sloped roof system. Together, proper insulation and ventilation help to control attic moisture and maintain an energy efficient building. Both insulation and ventilation prevent moisture buildup which can cause wood rot, mold and mildew growth, warp sheathing, deteriorate shingles, and



eventually damage building interiors. Sufficient insulation helps to minimize the quantity of moisture that enters the attic spaces and adequate ventilation helps to remove any moisture that enters the attic spaces. These two roof system components also help to reduce the amount of energy that is required to heat and cool a building. Proper attic insulation minimizes heat gain and heat loss between the residential living spaces and attic spaces. This reduces energy consumption year-round. Proper attic ventilation removes excessive heat from attic spaces that can radiate into residential living spaces and cause air conditioners to work harder. Properly installed attic insulation and ventilation work together to maximize the useful life of sloped roof systems.

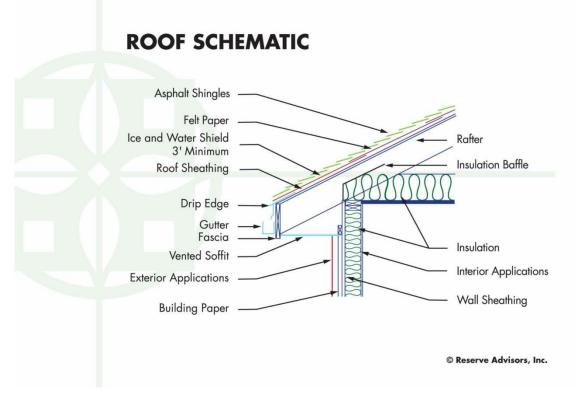
The Association should periodically ensure that the vents are clear of debris and are not blocked from above by attic insulation. If the soffit vents are blocked from above, the Association should install polystyrene vent spaces or baffles between the roof joists at these locations to ensure proper ventilation. Windcrest should fund this ongoing maintenance through the operating budget.

Certain characteristics of condition govern the times of replacement. Replacement of an asphalt shingle roof becomes necessary when there are multiple or recurring leaks and when the shingles begin to cup, curl and lift. These conditions are indications that the asphalt shingle roof is near the end of its useful life. Even if the shingles are largely watertight, the infiltration of water in one area can lead to permanent damage to the underlying roof sheathing. This type of deterioration requires replacement of saturated sections of sheathing and greatly increases the cost of roof replacement. Roof leaks may occur from interrelated roof system components, i.e., flashings. Therefore, the warranty period, if any, on the asphalt shingles, may exceed the useful life of the roof system.

Warranties are an indication of product quality and are not a product guarantee. Asphalt shingle product warranties vary from 20- to 50-years and beyond. However, the scope is usually limited to only the material cost of the shingles as caused by manufacturing defects. Warranties may cover defects such as thermal splitting, granule loss, cupping, and curling. Labor cost is rarely included in the remedy so if roof materials fail, the labor to tear off and install new shingles is extra. Other limitations of warranties are exclusions for "incidental and consequential" damages resulting from age, hurricanes, hail storms, ice dams, severe winds, tornadoes, earthquakes, etc. There are some warranties which offer no dollar limit for replacement at an additional cost (effectively an insurance policy) but again these warranties also have limits and may not cover all damages other than a product defect. We recommend a review of the manufacturers' warranties as part of the evaluation of competing proposals to replace a roof system. This evaluation should identify the current costs of remedy if the roof were to fail in the near future. A comparison of the costs of remedy to the total replacement cost will assist in judging the merits of the warranties.

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





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.

Rest Rooms

Line Item: 5.590

Quantity: Two common located at the pool house



History: Components are original

Condition: Good to fair overall. We note isolated damage to the countertop and recommend funding repairs through the operating budget.





Rest room finishes and fixtures

Damaged countertop

Useful Life: Renovation every 25 years

Component Detail Notes: Components include:

Paint finishes

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.

Walls, Siding, Fiber Cement

Line Item: 5.840

Quantity: Approximately 1,925 square feet of the exterior walls. This quantity includes

the soffit, fascia and trim.

History: Paint finishes last applied in 2015

Condition: Good to fair overall







Fiber cement siding

Fiber cement siding

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

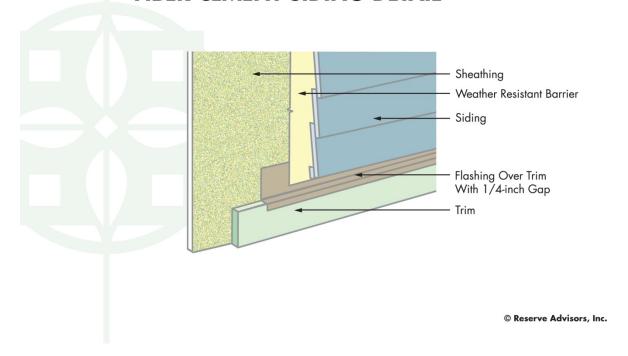
Component Detail Notes: Fiber cement siding is made from a combination of cement, sand and cellulose fiber. Manufacturing of the siding utilizes a steam curing process to increase strength and dimensional stability. The siding is also manufactured in layers forming a sheet of desired thickness. A wood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

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

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



FIBER CEMENT SIDING DETAIL



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 estimate for paint is based on information provided to us by the Association.



Pool Elements



Pool overview

Concrete Deck

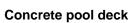
Line Item: 6.200

Quantity: 8,750 square feet

History: Original

Condition: Good to fair overall with cracks evident







Concrete pool deck





Cracks evident

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

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

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

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

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

Fences, Aluminum

Line Item: 6.400

Quantity: 640 linear feet at the pool and playground

History: Original

Condition: Good overall





Fence at pool perimeter

Useful Life: Up to 25 years

Priority/Criticality: Not recommended to defer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the Reserve

Expenditures table in Section 3.

Furniture

Line Item: 6.500

Quantity:

• Chairs (30)

- Lounges (25)
- Tables (6)

• Ladders and life safety equipment

History: Varies

Condition: Good overall





Pool Furniture stored

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. Our cost estimate for replacement is based on information provided to us by the Association.

Light Poles and Fixtures

Line Item: 6.550

Quantity: 9 bollard poles with light fixtures

History: Original

Condition: Good overall





Bollard light 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:

- Automatic chlorinators
- Controls
- Filters
- Interconnected pipe, fittings and valves
- Pump
- Exhaust fan

History: Varies

Condition: Reported in satisfactory operational condition





Pool pumps and filters

Useful Life: Up to 15 years

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

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

Pergolas, Wood

Line Item: 6.630

Quantity: Approximately 535 square feet

History: Original

Condition: Good overall







Wood pergola

Wood pergola



Pergola structure

Useful Life: Up to 25 years with periodic maintenance

Priority/Criticality: Per Board discretion

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

Pool Finishes, Plaster and Tile

Line Item: 6.801

Quantity: 2,730 square feet of plaster based on the horizontal surface area

History: The plaster finish and the tile are unknown age. The Association informs us of plans to do refinish the plaster at the end of this season.

Condition: Fair overall







Plaster and tile at the pool perimeter

Plaster and tile at the pool perimeter

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

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. We recommend the Association budget for full tile replacement every plaster replacement event. Our cost estimate for plaster and tile replacement is based on information provided to us by the Association.



Reserve Study Update

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

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

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



5.METHODOLOGY

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

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

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

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

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

- The Cash Flow Method to compute, project and illustrate the 30-year Reserve Funding Plan
- 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 Holly

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

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



Springs, North Carolina at an annual inflation rate³. Isolated or regional markets of greater construction (development) activity may experience slightly greater rates of inflation for both construction materials and labor.

- The past and current maintenance practices of Windcrest 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.

2

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



6.CREDENTIALS

HISTORY AND DEPTH OF SERVICE

Reserve Advisors Engineering, PLLC is the leading provider of reserve studies and other engineering consulting services.

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, and routinely inspects 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 the founder of Reserve Advisors Engineering, PLLC. He is responsible for the production, management, review, and quality assurance of all reserve studies, property inspection services and consulting services. Under his direction, the firm conducts reserve study services for community associations.



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.



COLIN A. NIEMEYER Responsible Advisor

CURRENT CLIENT SERVICES

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

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

- Heron Lake Villas at Homeowners Association, Inc. This apartment community located in Myrtle Beach, South Carolina was constructed in 1995 and comprises three buildings constructed with fiber cement siding, asphalt shingle roofs, and wood decks. The property is situated in the middle of a golf course allowing for wonderful views.
- **Brookhaven Citizens Assembly, Inc.** This single family home community contains over 550 residential homes and is located in Matthews, North Carolina. The Master Association maintains the shared common elements including a luxurious clubhouse, a pool featuring a massive waterslide, as well as multiple recreational courts.
- Rozzelles Landing Homeowners Association, Inc. This townhome and single family home community in Huntersville, North Carolina comprises 157 townhome units in 27 buildings in addition to 129 single family homes. Expenditures of this property include large quantities parking areas and streets, large retaining walls, a pool with an adjoining pool house, and retention pond. The townhomes comprise a combination of brick and vinyl siding construction, featuring multiple different styles. Several of the townhomes feature attached garages.
- **Del Webb Carolina Orchards Community Association** A lavish single family home community located just outside of Rock Hill, South Carolina. Features of this property include an extravagant amenities center, including multiple conference rooms, a spa, yoga and fitness rooms. This property includes both an indoor and outdoor pool with pool house.
- The Cape Townhomes Owners Association, Inc. This townhome community built in the early 2000's is located in Hickory, NC that is adjacent to a public park. The property contains 12 units comprising 8 buildings, featuring multiple different style units, ranging from single family homes to triplexes.
- Atlantic Towers Condominium Located next to the sandy beaches of Carolina Beach, North Carolina, this apartment building contains 137 residential units. The townhomes are comprised of brick, fiber cement siding, asphalt shingle roofs and wood balconies at the unit rears. The community includes a pool, pool house, ponds, and a large quantity of stone retaining walls.

PRIOR RELEVANT EXPERIENCE

Before joining Reserve Advisors, Mr. Niemeyer successfully completed the bachelors program in Chemical Engineering at West Virginia University. In the past, he has worked for multiple engineering companies covering a wide variety of roles but with a concentration in improving efficiency and optimization with a focus on Lean and Six Sigma strategies. He has also spent time working in design engineering for one the Nation's leading construction companies.

EDUCATION

West Virginia University – B.S. in Chemical Engineering



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

CURRENT CLIENT SERVICES

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

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

- **Brownsville Winter Haven** Located in Brownsville, Texas, this unique homeowners association contains 525 units. The Association maintains three pools and pool houses, a community and management office, landscape and maintenance equipment, and nine irrigation canals with associated infrastructure.
- **Rosemont Condominiums** This unique condominium is located in Alexandria, Virginia and dates to the 1940's. The two mid-rise buildings utilize decorative stone and brick masonry. The development features common interior spaces, multi-level wood balconies and common asphalt parking areas.
- Stillwater Homeowners Association Located in Naperville, Illinois, Stillwater Homeowners Association maintains four tennis courts, an Olympic sized pool and an upscale ballroom with commercial-grade kitchen. The community also maintains three storm water retention ponds and a detention basin.
- **Birchfield Community Services Association** This extensive Association comprises seven separate parcels which include 505 townhome and single family homes. This Community Services Association is located in Mt. Laurel, New Jersey. Three lakes, a pool, a clubhouse and management office, wood carports, aluminum siding, and asphalt shingle roofs are a few of the elements maintained by the Association.
- Oakridge Manor Condominium Association Located in Londonderry, New Hampshire, this Association includes 104 units at 13 buildings. In addition to extensive roads and parking areas, the Association maintains a large septic system and significant concrete retaining walls.
- **Memorial Lofts Homeowners Association** This upscale high rise is located in Houston, Texas. The 20 luxury units include large balconies and decorative interior hallways. The 10-story building utilizes a painted stucco facade and TPO roof, while an on-grade garage serves residents and guests.

PRIOR RELEVANT EXPERIENCE

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

EDUCATION

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

PROFESSIONAL AFFILIATIONS/DESIGNATIONS

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



RESOURCES

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

<u>Association of Construction Inspectors</u>, (ACI) the largest professional organization for those involved in construction inspection and construction project management. ACI is also the leading association providing standards, guidelines, regulations, education, training, and professional recognition in a field that has quickly become important procedure for both residential and commercial construction, found on the web at www.iami.org. Several advisors and a Principal of Reserve Advisors Engineering, PLLC 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 Engineering, PLLC actively participates in its local chapter and holds individual memberships.

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

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

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

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

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

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

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

Report - RA completes the services in accordance with the Proposal. The Engineering 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 Engineering 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 Engineering Report is limited to only the purpose stated herein. You hereby acknowledge that any use or reliance by you on the Engineering 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 Engineering 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 Engineering 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 Engineering Report to any other third party. The Engineering Report contains intellectual property developed by RA and shall not be reproduced or distributed to any party that conducts reserve studies without the written consent of RA.

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

Payment Terms, Due Dates and Interest Charges - Retainer payment is due upon authorization and <u>prior to inspection</u>. The balance is due net 30 days from the report shipment date. Any balance remaining 30 days after delivery of the Engineering 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.