

FULL RESERVE STUDY

Hedgerow Homeowners Association, Inc.



**Downingtown, Pennsylvania
September 12, 2017**



This Report contains intellectual property developed by Reserve Advisors, Inc. and cannot be reproduced or distributed to those who conduct reserve studies without their written consent.

Hedgerow Homeowners Association, Inc.
Downingtown, Pennsylvania

Dear Board of Directors of Hedgerow Homeowners Association, Inc.:

At the direction of the Board that recognizes the need for proper reserve planning, we have conducted a *Full Reserve Study* of Hedgerow Homeowners Association, Inc. in Downingtown, Pennsylvania and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, September 12, 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 Hedgerow Homeowners 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 10, 2017 by

Reserve Advisors, Inc.

Visual Inspection and Report by: Matthew D. Casey, RS¹
Review by: Alan M. Ebert, PRA², RS, Director of Quality Assurance



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

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



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
Common Reserve Expenditures	4.1
Property Site Elements	4.1
Asphalt Pavement, Crack Repair and Patch	4.1
Asphalt Pavement, Repaving	4.1
Catch Basins	4.7
Pipes, Subsurface Utilities	4.8
Playground Equipment	4.9
Pond, Sediment Removal	4.9
Signage	4.11
Tennis Court, Fence	4.12
Tennis and Basketball Courts, Surfaces.....	4.12
Clubhouse Elements.....	4.14
Balcony and Stairs, Composite.....	4.14
Floor Coverings, Carpet	4.15
Floor Coverings, Ceramic Tile	4.15
Kitchen, Renovation	4.16
Rest Rooms, Fixtures	4.17
Retaining Walls, Timber	4.18
Roof Assembly, Asphalt Shingles.....	4.20
Walls, Vinyl Siding	4.20
Windows and Doors	4.22
Pool Elements.....	4.23
Concrete Deck.....	4.23
Covers, Vinyl	4.24
Fence, Aluminum.....	4.24
Mechanical Equipment	4.25
Pool Finishes, Plaster and Tile	4.26

Structures and Deck	4.27
Townhome Reserve Expenditures	4.27
Concrete Entrance Walks	4.27
Fences, Wood, Trash Corrals	4.28
Light Poles and Fixtures	4.29
Mailbox Stations	4.30
Retaining Walls, Timber	4.31
Reserve Study Update	4.32
5. METHODOLOGY	5.1
6. CREDENTIALS	6.1
7. DEFINITIONS	7.1
8. PROFESSIONAL SERVICE CONDITIONS	8.1



1. RESERVE STUDY EXECUTIVE SUMMARY

Client: Hedgerow Homeowners Association, Inc. (Hedgerow)

Location: Downingtown, Pennsylvania

Reference: 171423

Property Basics: Hedgerow Homeowners Association, Inc. is a planned unit development of 143 single family homes and 33 townhomes. The buildings were built from 1975 to 1979.

Reserve Components Identified: 31 Common Reserve Components and six Townhome Reserve Components.

Inspection Date: September 12, 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 Common Funding Plan recognizes these threshold funding years in 2022 due to asphalt repaving, in 2028 due to replacement of the pool structure and deck, in 2043 due to subsequent repaving and in 2047 due to subsequent replacement of the tennis and basketball court surfaces.

Our recommended Townhome Funding Plan recognizes these threshold funding years in 2021 due to replacement of the fences at the trash corrals and in 2045 due to replacement of the mailbox stations.

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
- 2.5% future Inflation Rate for estimating Future Replacement Costs

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

Cash Status of Common Reserve Fund:

- \$51,586 as of August 31, 2017
- The Association did not budget for reserves in 2017

Cash Status of Townhome Reserve Fund:

- \$4,370 as of August 31, 2017
- The Association did not budget for reserves in 2017

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

- Repaving of the streets and parking areas
- Replacement of the plaster and tile finishes at the pools
- Replacement of the roof at the clubhouse
- Replacement of the fixtures at the clubhouse rest rooms

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

- Increase to \$129,000 in 2018
- Inflationary increases from 2019 through 2023
- Decrease to \$100,000 by 2024 due to fully funding for asphalt repaving
- Inflationary increases from 2025 through 2028
- Decrease to \$44,000 by 2029 due to fully funding for replacement of the pool structures and deck
- Inflationary increases through 2047, the limit of this study's Cash Flow Analysis

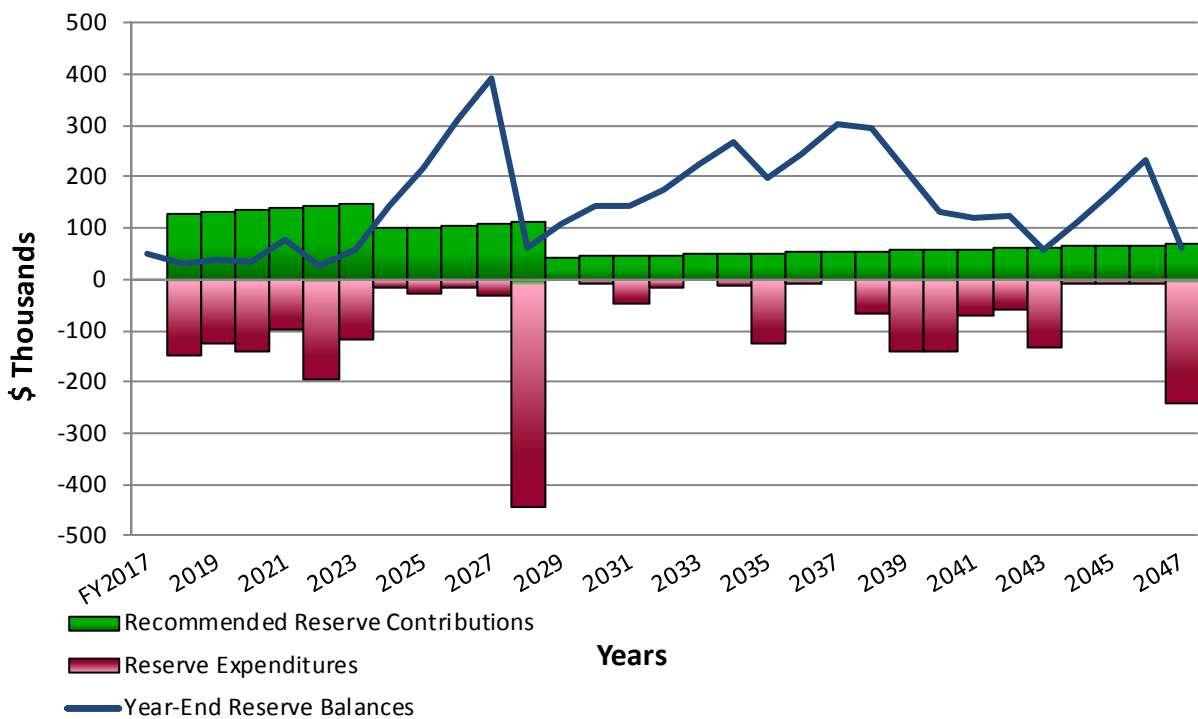
Recommended Townhome Reserve Funding: We recommend the following in order to achieve a stable and equitable Funding Plan:

- Increase to \$6,500 in 2018
- Inflationary increases from 2019 through 2021
- Decrease to \$2,200 by 2022 due to fully funding for replacement of the fences at the trash corrals
- Inflationary increases through 2047, the limit of this study's Cash Flow Analysis

Hedgerow

Recommended Common Reserve Funding Table and Graph

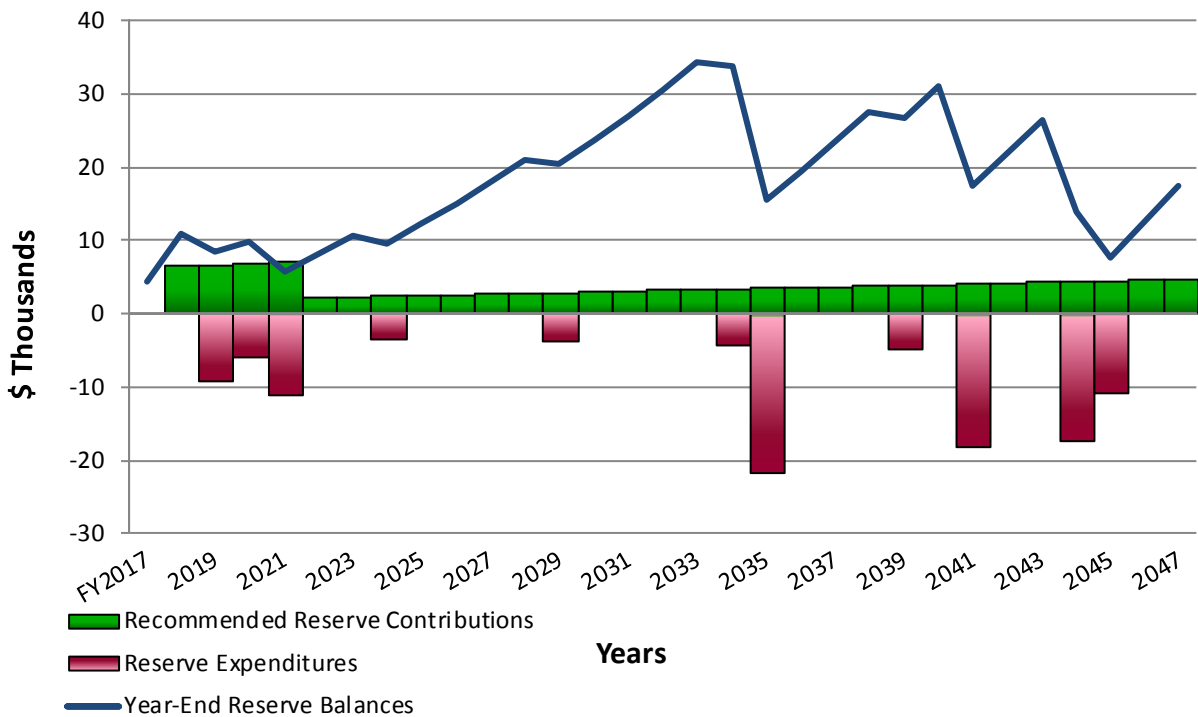
Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)
2018	129,000	32,353	2028	110,400	62,043	2038	54,900	294,324
2019	132,200	39,687	2029	44,000	107,052	2039	56,300	212,586
2020	135,500	33,519	2030	45,100	143,411	2040	57,700	130,035
2021	138,900	76,089	2031	46,200	143,280	2041	59,100	121,508
2022	142,400	25,713	2032	47,400	175,199	2042	60,600	125,704
2023	146,000	56,757	2033	48,600	226,193	2043	62,100	57,539
2024	100,000	143,329	2034	49,800	268,291	2044	63,700	112,171
2025	102,500	218,808	2035	51,000	198,159	2045	65,300	171,175
2026	105,100	310,832	2036	52,300	244,828	2046	66,900	233,119
2027	107,700	392,646	2037	53,600	301,688	2047	68,600	62,978



Hedgerow

Recommended Townhome Reserve Funding Table and Graph

Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)
2018	6,500	11,014	2028	2,800	21,037	2038	3,800	27,542
2019	6,700	8,533	2029	2,900	20,351	2039	3,900	26,860
2020	6,900	9,727	2030	3,000	23,613	2040	4,000	31,206
2021	7,100	5,882	2031	3,100	27,015	2041	4,100	17,510
2022	2,200	8,166	2032	3,200	30,558	2042	4,200	21,945
2023	2,300	10,578	2033	3,300	34,244	2043	4,300	26,534
2024	2,400	9,711	2034	3,400	33,712	2044	4,400	13,937
2025	2,500	12,343	2035	3,500	15,672	2045	4,500	7,786
2026	2,600	15,107	2036	3,600	19,482	2046	4,600	12,507
2027	2,700	18,004	2037	3,700	23,438	2047	4,700	17,385



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

Hedgerow Homeowners Association, Inc.

Downingtown, Pennsylvania

and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, September 12, 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 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 the Municipality

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:

- Hedgerow 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, Clubhouse
- Pipes, Interior Building, Clubhouse
- Retaining Wall, Masonry, Wyndham Court
- Structural Frames, Clubhouse

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 \$2,000 (These relatively minor expenditures have a limited effect on the recommended Reserve Contributions.)
- Concrete Flatwork, Clubhouse
- Fence, Wood, Wyndham Court Retaining Wall
- Landscape
- Light Fixtures, Clubhouse
- Paint Finishes, Clubhouse Interior
- Paint Finishes, Touch Up
- Pond, Erosion Control
- Retaining Wall, Masonry, Wyndham Court, Inspections and Capital Repairs
- Tennis and Basketball Courts, Striping
- 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:

- Homes and Lots

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

- Street System, Hawthorne Drive

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

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***.

Common

RESERVE EXPENDITURES

Hedgerow
Homeowners Association, Inc.
Downingtown, Pennsylvania

Explanatory Notes:

- 1) 2.5% 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, \$			30-Year Total (Inflated)	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)																		
Property Site Elements																												
4.020	20,000	20,000	Square Yards	Asphalt Pavement, Crack Repair and Patch	2019	3 to 5	2	0.70	14,000	14,000	170,555			14,709			16,236				17,921					19,782		
4.040	10,450	3,483	Square Yards	Asphalt Pavement, Mill and Overlay, Phase I, Phased	2038	15 to 20	21 to 23	11.25	39,187	117,563	202,434																	
4.041	5,550	2,775	Square Yards	Asphalt Pavement, Mill and Overlay, Phase II, Phased	2041	15 to 20	24 to 25	11.25	31,219	62,438	114,344																	
4.042	2,900	2,900	Square Yards	Asphalt Pavement, Mill and Overlay, Phase III	2043	15 to 20	26	11.25	32,625	32,625	61,997																	
4.045	10,450	3,483	Square Yards	Asphalt Pavement, Total Replacement, Phase I, Phased	2018	15 to 20	1 to 3	29.50	102,758	308,275	323,946		105,327	107,960	110,659													
4.046	5,550	2,775	Square Yards	Asphalt Pavement, Total Replacement, Phase II, Phased	2021	15 to 20	4 to 5	29.50	81,863	163,725	182,981					90,361	92,620											
4.047	2,900	2,900	Square Yards	Asphalt Pavement, Total Replacement, Phase III	2023	15 to 20	6	29.50	85,550	85,550	99,212						99,212											
4.048	1,100	1,100	Square Yards	Asphalt Pavement, Total Replacement, Phase IV	2035	15 to 20	18	29.50	32,450	32,450	50,611																	
4.100	9	3	Each	Catch Basins, Inspections and Capital Repairs, Phased	2020	15 to 20	3 to 5	800.00	2,400	7,200	7,949				2,585	2,649	2,715											
4.650	1	1	Allowance	Pipes, Subsurface Utilities	2031	to 85+	14	20,000.00	20,000	20,000	173,840														28,259			
4.660	1	1	Allowance	Playground Equipment	2032	15 to 20	15	12,000.00	12,000	12,000	17,380																	
4.730	2,080	520	Square Yards	Pond, Sediment Removal, Partial	2026	to 30	9	25.00	13,000	52,000	16,235									16,235								
4.810	2	2	Each	Signage	2025	15 to 20	8	2,000.00	4,000	4,000	12,860								4,874									
4.840	470	470	Linear Feet	Tennis Court, Fence	2022	to 25	5	43.00	20,210	20,210	65,258						22,866											
4.860	1,550	1,550	Square Yards	Tennis and Basketball Courts, Surface Replacement	2022	to 25	5	39.00	60,450	60,450	195,192						68,394											
Clubhouse Elements																												
5.200	210	210	Square Feet	Balcony and Stairs, Composite	2035	20 to 25	18	50.00	10,500	10,500	16,376																	
5.300	50	50	Square Yards	Floor Coverings, Carpet	2019	6 to 10	2	50.00	2,500	2,500	14,477			2,627							3,200							
5.310	18	18	Square Yards	Floor Coverings, Ceramic Tile	2024	to 25	7	100.00	1,800	1,800	2,140								2,140									
5.400	1	1	Allowance	Kitchen, Renovation	2024	to 25	7	10,500.00	10,500	10,500	12,481								12,481									
5.500	1	1	Allowance	Rest Rooms, Fixtures	2021	to 25	4	3,600.00	3,600	3,600	11,341					3,974												
5.550	120	120	Square Feet	Retaining Walls, Timber (Replace with Masonry)	2022	15 to 20	5	50.00	6,000	6,000	6,788						6,788											
5.600	12	12	Squares	Roof Assembly, Asphalt Shingles	2020	15 to 20	3	600.00	7,200	7,200	20,459				7,754													
5.800	1,600	1,600	Square Feet	Walls, Vinyl Siding	2025	to 35	8	6.00	9,600	9,600	11,697									11,697								
5.900	230	230	Square Feet	Windows and Doors	2025	to 35	8	45.00	10,350	10,350	12,610									12,610								
Pool Elements																												
6.200	4,950	4,950	Square Feet	Concrete Deck, Inspections, Partial Replacements and Repairs	2020	8 to 12	3	1.50	7,425	7,425	31,333				7,996										10,235			
6.300	2,070	2,070	Square Feet	Covers, Vinyl	2020	6 to 8	3	2.50	5,175	5,175	30,716				5,573						6,790							
6.400	350	350	Linear Feet	Fence, Aluminum	2039	to 25	22	25.00	8,750	8,750	15,064																	
6.600	2	1	Allowance	Mechanical Equipment, Phased	2020	to 15	3 to 10	7,000.00	7,000	14,000	39,811				7,538						8,961							
6.800	1,850	1,850	Square Feet	Pool Finishes, Plaster	2040	8 to 12	23	14.50	26,825	26,825	47,336																	
6.801	1,850	1,850	Square Feet	Pool Finishes, Plaster and Tile	2018	15 to 25	1	23.00	42,550	42,550	43,614		43,614															
6.900	1,850	1,850	Square Feet	Structures and Deck, Total Replacement	2028	to 60	11	180.00	333,000	333,000	436,925										436,925							
Anticipated Expenditures, By Year											\$2,447,962	0	148,941	125,296	142,105	96,984	193,383	115,448	14,621	29,181	16,235	30,082	443,715	0	10,235	48,041	17,380	

Common

RESERVE EXPENDITURES

Hedgerow
Homeowners Association, Inc.
Downingtown, Pennsylvania

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	20,000	20,000 Square Yards	Asphalt Pavement, Crack Repair and Patch		2019	3 to 5	2	0.70	14,000	14,000	170,555			21,835			24,102				26,604					29,366	
4.040	10,450	3,483 Square Yards	Asphalt Pavement, Mill and Overlay, Phase I, Phased		2038	15 to 20	21 to 23	11.25	39,187	117,563	202,434					65,819	67,464	69,151									
4.041	5,550	2,775 Square Yards	Asphalt Pavement, Mill and Overlay, Phase II, Phased		2041	15 to 20	24 to 25	11.25	31,219	62,438	114,344								56,466	57,878							
4.042	2,900	2,900 Square Yards	Asphalt Pavement, Mill and Overlay, Phase III		2043	15 to 20	26	11.25	32,625	32,625	61,997										61,997						
4.045	10,450	3,483 Square Yards	Asphalt Pavement, Total Replacement, Phase I, Phased		2018	15 to 20	1 to 3	29.50	102,758	308,275	323,946																
4.046	5,550	2,775 Square Yards	Asphalt Pavement, Total Replacement, Phase II, Phased		2021	15 to 20	4 to 5	29.50	81,863	163,725	182,981																
4.047	2,900	2,900 Square Yards	Asphalt Pavement, Total Replacement, Phase III		2023	15 to 20	6	29.50	85,550	85,550	99,212																
4.048	1,100	1,100 Square Yards	Asphalt Pavement, Total Replacement, Phase IV		2035	15 to 20	18	29.50	32,450	32,450	50,611			50,611													
4.100	9	3 Each	Catch Basins, Inspections and Capital Repairs, Phased		2020	15 to 20	3 to 5	800.00	2,400	7,200	7,949																
4.650	1	1 Allowance	Pipes, Subsurface Utilities		2031	to 85+	14	20,000.00	20,000	20,000	173,840			31,193			34,431				38,006					41,951	
4.660	1	1 Allowance	Playground Equipment		2032	15 to 20	15	12,000.00	12,000	12,000	17,380																
4.730	2,080	520 Square Yards	Pond, Sediment Removal, Partial		2026	to 30	9	25.00	13,000	52,000	16,235																
4.810	2	2 Each	Signage		2025	15 to 20	8	2,000.00	4,000	4,000	12,860												7,986				
4.840	470	470 Linear Feet	Tennis Court, Fence		2022	to 25	5	43.00	20,210	20,210	65,258															42,392	
4.860	1,550	1,550 Square Yards	Tennis and Basketball Courts, Surface Replacement		2022	to 25	5	39.00	60,450	60,450	195,192															126,798	
Clubhouse Elements																											
5.200	210	210 Square Feet	Balcony and Stairs, Composite		2035	20 to 25	18	50.00	10,500	10,500	16,376			16,376													
5.300	50	50 Square Yards	Floor Coverings, Carpet		2019	6 to 10	2	50.00	2,500	2,500	14,477			3,899							4,751						
5.310	18	18 Square Yards	Floor Coverings, Ceramic Tile		2024	to 25	7	100.00	1,800	1,800	2,140																
5.400	1	1 Allowance	Kitchen, Renovation		2024	to 25	7	10,500.00	10,500	10,500	12,481																
5.500	1	1 Allowance	Rest Rooms, Fixtures		2021	to 25	4	3,600.00	3,600	3,600	11,341														7,367		
5.550	120	120 Square Feet	Retaining Walls, Timber (Replace with Masonry)		2022	15 to 20	5	50.00	6,000	6,000	6,788																
5.600	12	12 Squares	Roof Assembly, Asphalt Shingles		2020	15 to 20	3	600.00	7,200	7,200	20,459							12,705									
5.800	1,600	1,600 Square Feet	Walls, Vinyl Siding		2025	to 35	8	6.00	9,600	9,600	11,697																
5.900	230	230 Square Feet	Windows and Doors		2025	to 35	8	45.00	10,350	10,350	12,610																
Pool Elements																											
6.200	4,950	4,950 Square Feet	Concrete Deck, Inspections, Partial Replacements and Repairs		2020	8 to 12	3	1.50	7,425	7,425	31,333							13,102									
6.300	2,070	2,070 Square Feet	Covers, Vinyl		2020	6 to 8	3	2.50	5,175	5,175	30,716			8,273								10,080					
6.400	350	350 Linear Feet	Fence, Aluminum		2039	to 25	22	25.00	8,750	8,750	15,064						15,064										
6.600	2	1 Allowance	Mechanical Equipment, Phased		2020	to 15	3 to 10	7,000.00	7,000	14,000	39,811		10,651						12,661								
6.800	1,850	1,850 Square Feet	Pool Finishes, Plaster		2040	8 to 12	23	14.50	26,825	26,825	47,336							47,336									
6.801	1,850	1,850 Square Feet	Pool Finishes, Plaster and Tile		2018	15 to 25	1	23.00	42,550	42,550	43,614																
6.900	1,850	1,850 Square Feet	Structures and Deck, Total Replacement		2028	to 60	11	180.00	333,000	333,000	436,925																
Anticipated Expenditures, By Year											\$2,447,962	0	10,651	123,914	8,273	0	65,819	141,061	142,294	69,127	57,878	131,358	10,080	7,986	7,367	240,507	

RESERVE FUNDING PLAN

Common

CASH FLOW ANALYSIS

Hedgerow

Homeowners Association, Inc.

Downingtown, Pennsylvania

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)	51,586	51,792	32,353	39,687	33,519	76,089	25,713	56,757	143,329	218,808	310,832	392,646	62,043	107,052	143,411	143,280
Total Recommended Reserve Contributions (Note 2)	0	129,000	132,200	135,500	138,900	142,400	146,000	100,000	102,500	105,100	107,700	110,400	44,000	45,100	46,200	47,400
Plus Estimated Interest Earned, During Year (Note 3)	206	502	430	437	654	607	492	1,193	2,160	3,159	4,196	2,712	1,009	1,494	1,710	1,899
Less Anticipated Expenditures, By Year	0	(148,941)	(125,296)	(142,105)	(96,984)	(193,383)	(115,448)	(14,621)	(29,181)	(16,235)	(30,082)	(443,715)	0	(10,235)	(48,041)	(17,380)
Anticipated Reserves at Year End	<u>\$51,792</u>	<u>\$32,353</u>	<u>\$39,687</u>	<u>\$33,519</u>	<u>\$76,089</u>	<u>\$25,713</u> (NOTE 5)	<u>\$56,757</u>	<u>\$143,329</u>	<u>\$218,808</u>	<u>\$310,832</u>	<u>\$392,646</u>	<u>\$62,043</u> (NOTE 5)	<u>\$107,052</u>	<u>\$143,411</u>	<u>\$143,280</u>	<u>\$175,199</u>

(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	175,199	226,193	268,291	198,159	244,828	301,688	294,324	212,586	130,035	121,508	125,704	57,539	112,171	171,175	233,119
Total Recommended Reserve Contributions	48,600	49,800	51,000	52,300	53,600	54,900	56,300	57,700	59,100	60,600	62,100	63,700	65,300	66,900	68,600
Plus Estimated Interest Earned, During Year	2,394	2,949	2,782	2,642	3,260	3,555	3,023	2,043	1,500	1,474	1,093	1,012	1,690	2,411	1,766
Less Anticipated Expenditures, By Year	0	(10,651)	(123,914)	(8,273)	0	(65,819)	(141,061)	(142,294)	(69,127)	(57,878)	(131,358)	(10,080)	(7,986)	(7,367)	(240,507)
Anticipated Reserves at Year End	<u>\$226,193</u>	<u>\$268,291</u>	<u>\$198,159</u>	<u>\$244,828</u>	<u>\$301,688</u>	<u>\$294,324</u>	<u>\$212,586</u>	<u>\$130,035</u>	<u>\$121,508</u>	<u>\$125,704</u>	<u>\$57,539</u> (NOTE 5)	<u>\$112,171</u>	<u>\$171,175</u>	<u>\$233,119</u>	<u>\$62,978</u> (NOTES 4&5)

Explanatory Notes:

- 1) Year 2017 starting reserves are as of August 31, 2017; FY2017 starts January 1, 2017 and ends December 31, 2017.
- 2) The Association did not budget for reserves in 2017; 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 Years (reserve balance at critical point).

Townhome

RESERVE EXPENDITURES

Hedgerow
Homeowners Association, Inc.
Downingtown, Pennsylvania

Explanatory Notes:

- 1) 2.5% 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)																
7.140	3,400	285 Square Feet	Concrete Entrance Walks, Partial		2019	to 65	2 to 30+	10.00	2,850	34,000	25,009			2,994				3,388					3,833				
7.285	50	50 Linear Feet	Fences, Wood, Trash Corrals		2021	15 to 20	4	60.00	3,000	3,000	8,737					3,311											
7.560	3	3 Each	Light Poles and Fixtures, Hastings Court		2019	to 25	2	2,000.00	6,000	6,000	17,991			6,304													
7.561	7	7 Each	Light Poles and Fixtures, Wyndham Court		2035	to 25	18	2,000.00	14,000	14,000	21,835																
7.600	3	3 Each	Mailbox Stations		2020	to 25	3	1,800.00	5,400	5,400	16,596				5,815												
7.760	140	140 Square Feet	Retaining Walls, Timber (replace with masonry)		2021	15 to 20	4	50.00	7,000	7,000	20,388					7,727											
Anticipated Expenditures, By Year																											
											\$110,556	0	0	9,298	5,815	11,038	0	0	3,388	0	0	0	0	3,833	0	0	0

Townhome

RESERVE EXPENDITURES

Hedgerow
Homeowners Association, Inc.
Downingtown, Pennsylvania

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)															
7.140	3,400	285 Square Feet	Concrete Entrance Walks, Partial		2019	to 65	2 to 30+	10.00	2,850	34,000	25,009		4,337				4,906						5,551			
7.285	50	50 Linear Feet	Fences, Wood, Trash Corrals		2021	15 to 20	4	60.00	3,000	3,000	8,737								5,426							
7.560	3	3 Each	Light Poles and Fixtures, Hastings Court		2019	to 25	2	2,000.00	6,000	6,000	17,991												11,687			
7.561	7	7 Each	Light Poles and Fixtures, Wyndham Court		2035	to 25	18	2,000.00	14,000	14,000	21,835			21,835												
7.600	3	3 Each	Mailbox Stations		2020	to 25	3	1,800.00	5,400	5,400	16,596													10,781		
7.760	140	140 Square Feet	Retaining Walls, Timber (replace with masonry)		2021	15 to 20	4	50.00	7,000	7,000	20,388								12,661							
Anticipated Expenditures, By Year											\$110,556	0	4,337	21,835	0	0	0	4,906	0	18,087	0	0	17,238	10,781	0	0

RESERVE FUNDING PLAN

Townhome

CASH FLOW ANALYSIS

Hedgerow

Homeowners Association, Inc.

Downingtown, Pennsylvania

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)	4,370	4,422	11,014	8,533	9,727	5,882	8,166	10,578	9,711	12,343	15,107	18,004	21,037	20,351	23,613	27,015
Total Recommended Reserve Contributions (Note 2)	0	6,500	6,700	6,900	7,100	2,200	2,300	2,400	2,500	2,600	2,700	2,800	2,900	3,000	3,100	3,200
Plus Estimated Interest Earned, During Year (Note 3)	52	92	117	109	93	84	112	121	132	164	197	233	247	262	302	343
Less Anticipated Expenditures, By Year	0	0	(9,298)	(5,815)	(11,038)	0	0	(3,388)	0	0	0	0	(3,833)	0	0	0
Anticipated Reserves at Year End	<u>\$4,422</u>	<u>\$11,014</u>	<u>\$8,533</u>	<u>\$9,727</u>	<u>\$5,882</u>	<u>\$8,166</u>	<u>\$10,578</u>	<u>\$9,711</u>	<u>\$12,343</u>	<u>\$15,107</u>	<u>\$18,004</u>	<u>\$21,037</u>	<u>\$20,351</u>	<u>\$23,613</u>	<u>\$27,015</u>	<u>\$30,558</u>
					(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	30,558	34,244	33,712	15,672	19,482	23,438	27,542	26,860	31,206	17,510	21,945	26,534	13,937	7,786	12,507
Total Recommended Reserve Contributions	3,300	3,400	3,500	3,600	3,700	3,800	3,900	4,000	4,100	4,200	4,300	4,400	4,500	4,600	4,700
Plus Estimated Interest Earned, During Year	386	405	295	210	256	304	324	346	291	235	289	241	130	121	178
Less Anticipated Expenditures, By Year	0	(4,337)	(21,835)	0	0	0	(4,906)	0	(18,087)	0	0	(17,238)	(10,781)	0	0
Anticipated Reserves at Year End	<u>\$34,244</u>	<u>\$33,712</u>	<u>\$15,672</u>	<u>\$19,482</u>	<u>\$23,438</u>	<u>\$27,542</u>	<u>\$26,860</u>	<u>\$31,206</u>	<u>\$17,510</u>	<u>\$21,945</u>	<u>\$26,534</u>	<u>\$13,937</u>	<u>\$7,786</u>	<u>\$12,507</u>	<u>\$17,385</u>
													(NOTE 5)		(NOTE 4)

Explanatory Notes:

- 1) Year 2017 starting reserves are as of August 31, 2017; FY2017 starts January 1, 2017 and ends December 31, 2017.
- 2) The Association did not budget for reserves in 2017; 2018 is the first year of recommended contributions.
- 3) 1.2% is the estimated annual rate of return on invested reserves.
- 4) Accumulated year 2047 ending reserves consider the age, size, overall condition and complexity of the property.
- 5) Threshold Funding Years (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.*

Common Reserve Expenditures

Property Site Elements

Asphalt Pavement, Crack Repair and Patch

Line Item: 4.020

Quantity: Approximately 20,000 square yards at the streets and parking areas

History: Unknown; Lambeth Court was milled and overlaid in 2015. Minor repairs have been performed at the remaining streets and parking areas within the last five years.

Condition: Varying from good to poor overall

Useful Life: Three- to five-years

Priority/Criticality: Per Board discretion

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

Asphalt Pavement, Repaving

Line Items: 4.040 through 4.048

Quantity: Approximately 20,000 square yards. For prioritization purposes we have divided the streets into four phases based on condition. The chart below depicts these phases and their respective quantities:

Phase	Quantity (Square Yards)	Streets Included
Phase I	10,450	Wyndham Court, Hedgerow Court, Windmere Court, Gloucester Court, Cambridge Court, Canterbury Court, Chatham Court
Phase II	5,550	Highland Court, Brookfield Court, Suffolk Court, Somerset Court, Essex Court
Phase III	2,900	Hastings Court, Chapel Court
Phase IV	1,100	Lambeth Court

History: Unknown; Lambeth Court was repaved in 2015. Minor repairs have been performed in the last five years at the remaining streets and parking areas within the last five years.

Condition: Phase I streets are in poor overall condition, Phase II streets are in fair to poor overall condition, Phase III streets are in fair overall condition and the Phase IV street is in good overall condition. We note block cracks, settlement, pavement deterioration and alligator cracks.



Lambeth Court pavement overview



Hastings Court overview



Hastings Court cracks



Chapel Court pavement overview



Chapel Court alligator cracks and edge deterioration



Highland Court pavement overview



Highland Court alligator cracks



Brookfield Court pavement overview



Settlement and alligator cracks at manhole



Suffolk Court pavement overview



Suffolk Court alligator cracks and edge deterioration



Somerset Court pavement overview



Somerset Court alligator cracks and edge deterioration



Essex Court pavement overview



Essex Court alligator cracks and deterioration



Wyndham Court pavement overview



Wyndham Court previous patches, alligator cracks and edge deterioration



Hedgerow Court alligator cracks



Hedgerow court alligator cracks and pothole



Windmere Court alligator cracks



Gloucester court alligator cracks



Cambridge Court alligator cracks



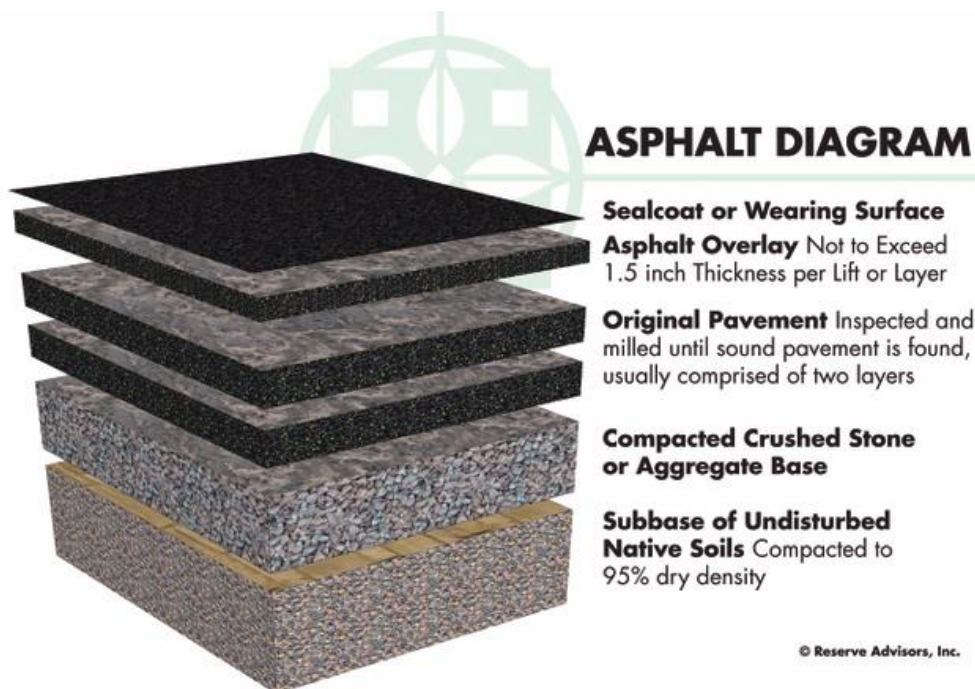
Canterbury Court alligator cracks



Chatham Court alligator cracks

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 Hedgerow:



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 of repaving followed by the milling and overlayment method of repaving at Hedgerow.

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

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

Catch Basins

Line Item: 4.100

Quantity: Nine each

History: Original

Condition: Fair overall with settlement visually apparent



Catch basin



Catch basin

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

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

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

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

Pipes, Subsurface Utilities

Line Item: 4.650

Condition: Reported satisfactory

Useful Life: Up to and likely beyond 85 years

Component Detail Notes: The Association maintains the pipes subsurface utility pipes throughout the property. The exact amounts and locations of the subsurface utility pipes were not ascertained due to the nature of the underground construction and the non-invasive nature of the inspection.

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

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We recommend the Association budget for replacement of a limited amount of subsurface utility pipes every four years beginning

by 2031. Although it is likely that the times of replacement and extent of repair costs may vary from the budgetary allowance, Hedgerow could budget sufficient reserves for these utility repairs and have the opportunity to adjust its future reserves up or down to meet any changes to these budgetary estimates. Updates of this Reserve Study would incorporate changes to budgetary costs through a continued historical analysis of the rate of deterioration and actual repairs to budget sufficient reserves.

Playground Equipment

Line Item: 4.660

History: Installed in 2012

Condition: Good overall



Playground equipment overview

Useful Life: 15- to 20-years

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

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.

Pond, Sediment Removal

Line Item: 4.730

Quantity: 2,080 square yards of water surface area

Condition: Good overall



Pond overview

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

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

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

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. For reserve budgeting purposes, we estimate the need to remove twenty-five percent (25%) of the surface area an average depth of one yard. However, the actual volume of material to remove may vary dependent upon an invasive analysis at the time of removal. A visual inspection of a body of water cannot reveal the amount of accumulated silt. This is especially true on larger bodies of water. It is therefore inaccurate to assume an entire body of water will require sediment removal. It is more cost effective to spot remove in areas of intense silt accumulation as noted through bathymetric surveys. The amount or depth of silt is determined through prodding into the silt until a relatively solid base is found or through bathymetric surveys. A bathymetric survey establishes a base of data about the depth of the body of water over many locations against which the data of future surveys is compared. These invasive procedures are beyond the scope of a Reserve Study and require multiple visits to the site. We recommend Hedgerow contract with a local engineer for periodic bathymetric surveys. Future updates of the Reserve Study can incorporate future anticipated expenditures based on the results of the bathymetric surveys.

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

Signage

Line Item: 4.810

Quantity: Two property identification signs at the west entrance to the property

History: Unknown

Condition: Fair overall with finish deterioration evident



Signage finish deterioration

Useful Life: 15- to 20-years

Component Detail Notes: The community signs contribute to the overall aesthetic appearance of the property to owners and potential buyers. Replacement of community signs is often predicated upon the desire to "update" the perceived identity of the community rather than for utilitarian concerns. Therefore, the specific time for replacement of the signs is discretionary.

Priority/Criticality: Per Board discretion

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

Tennis Court, Fence

Line Item: 4.840

Quantity: 470 linear feet

History: Unknown

Condition: Good to fair overall with rust evident



Fence overview

Useful Life: Up to 25 years

Priority/Criticality: Per Board discretion

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

Tennis and Basketball Courts, Surfaces

Line Item: 4.860

Quantity: Approximately 1,550 square yards of asphalt comprising two tennis courts and the basketball court

History: Unknown

Condition: Fair overall with cracks evident



Tennis court overview



Basketball court overview



Cracks

Useful Life: Up to 25 years

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

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

Clubhouse Elements



Clubhouse overview

Balcony and Stairs, Composite

Line Item: 5.200

Quantity: Approximately 210 square feet of composite deck boards with wood frames and 80 linear feet of vinyl railings

History: Installed approximately five years ago

Condition: Good overall



Deck and railings overview



Stairs overview

Useful Life: 20- to 25-years

Component Detail Notes: The wood components in the composite material will absorb moisture. When dispelled, black mold spots can appear that will require chemical cleaning. However, these spots will reappear resulting in the need for

cleaning every other month as needed during humid months. The Association should fund these expenses through the operating budget.

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

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

Floor Coverings, Carpet

Line Item: 5.300

Quantity: Approximately 50 square yards at the great room (Contractor measurements will vary from the actual floor area due to standard roll lengths, patterns and installation waste.)

History: Unknown

Condition: Fair overall with stains evident



Carpet stains

Useful Life: 6- to 10-years

Priority/Criticality: Per Board discretion

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

Floor Coverings, Ceramic Tile

Line Item: 5.310

Quantity: 18 square yards at the lower level hallway and rest rooms

History: Unknown

Condition: Good overall



Tile overview

Useful Life: Up to 25 years

Component Detail Notes: Replacement of tile is often based on discretionary redecorating prior to the tile reaching the end of its useful life. The Association should fund regrouting of the tiles through the operating budget if necessary

Priority/Criticality: Per Board discretion

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

Kitchen, Renovation

Line Item: 5.400

History: Unknown

Condition: Fair overall



Kitchen overview

Useful Life: Up to 25 years for renovations

Component Detail Notes: Components of the kitchen include:

- Appliances
- Laminate countertops
- Sink
- Vinyl floor covering
- Wood cabinets

Priority/Criticality: Per Board discretion

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

Rest Rooms, Fixtures

Line Item: 5.500

Quantity: Two common rest rooms located at the lower level of the clubhouse

History: Unknown

Condition: Fair overall



Rest room

Useful Life: Renovations up to every 25 years

Component Detail Notes: Components include toilets and sinks

Priority/Criticality: Per Board discretion

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

Retaining Walls, Timber

Line Item: 5.550

Quantity: Approximately 120 square feet of timber retaining walls at the stairs to the pool

History: Unknown

Condition: Fair overall with weathered wood evident

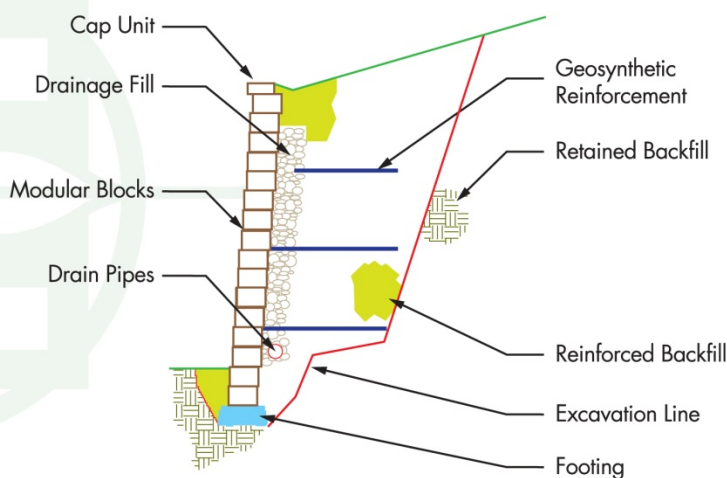


Retaining walls overview

Useful Life: 15- to 20-years

Component Detail Notes: We advise Hedgerow replace with a modular, interlocking dry-set masonry retaining wall system. The cost of dry-set masonry retaining walls is similar to the cost of timber walls. However, dry-set masonry retaining walls offer a longer useful life of up to 35 years and lower total maintenance costs. The following schematic depicts the typical components of a retaining wall system although it may not reflect the actual configuration at Hedgerow:

MASONRY RETAINING WALL 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.

Roof Assembly, Asphalt Shingles

Line Item: 5.600

Quantity: Approximately 12 *squares*¹ with approximately 90 linear feet of gutters and downspouts

History: Unknown

Condition: Fair overall condition. We note stains.



Clubhouse roof overview
Note: Stains.

Useful Life: 15- to 20-years

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

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. The estimate of cost includes replacement of the roof and gutters and downspouts.

Walls, Vinyl Siding

Line Item: 5.800

Quantity: Approximately 1,600 feet of the exterior walls

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

History: Unknown

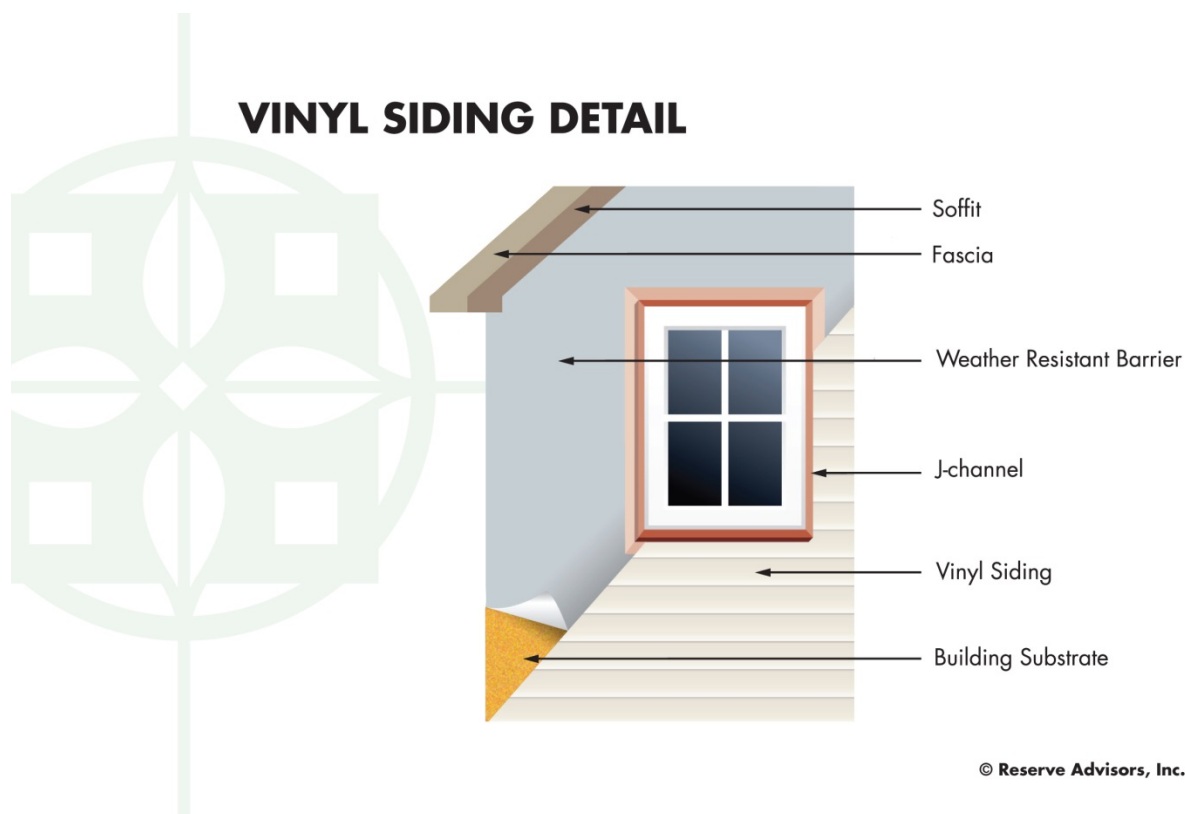
Condition: Good to fair overall



Siding overview

Useful Life: Up to 35 years

Component Detail Notes: The following diagram details the use of building wrap in a vinyl siding system:



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

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

Windows and Doors

Line Item: 5.900

Quantity: Approximately 230 square feet

History: Unknown; likely original.

Condition: Fair overall



Clubhouse windows

Useful Life: Up to 35 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.

Pool Elements



Pool area overview

Concrete Deck

Line Item: 6.200

Quantity: 4,950 square feet

History: Original; last repaired in 2014

Condition: Fair condition with significant cracks evident



Pool deck crack



Significant pool deck cracks

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

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

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

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

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

Covers, Vinyl

Line Item: 6.300

Quantity: 2,070 square feet

History: Unknown

Condition: Good to fair condition

Useful Life: Six- to eight-years

Priority/Criticality: Per Board discretion

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

Fence, Aluminum

Line Item: 6.400

Quantity: 350 linear feet

History: Installed in 2014

Condition: Good overall



Pool fence overview

Useful Life: Up to 25 years

Priority/Criticality: Not recommended to defer

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

Mechanical Equipment

Line Item: 6.600

Quantity:

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

History: Mostly replaced in the last five years

Condition: Reported satisfactory



Pool mechanical equipment

Useful Life: Up to 15 years

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

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Failure of the pool mechanical equipment as a single event is unlikely. We consider interim replacement of motors and minor repairs as normal maintenance.

Pool Finishes, Plaster and Tile

Line Items: 6.800 and 6.801

Quantity: 1,850 square feet of plaster based on the horizontal surface areas and approximately 200 linear feet of tile

History: Unknown; the Association plans to replace the plaster and tile finishes at the pool in 2018 or 2019.

Condition: We were unable to inspect the pool due to the cover.

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

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

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

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

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We recommend the Association budget for full tile replacement every other plaster replacement event. The estimate of cost for replacement of the plaster and tile finishes is based on a contractor bid cost furnished by the Board.

Structures and Deck

Line Item: 6.900

Quantity: 1,850 square feet of horizontal surface area

History: Original

Conditions: We note significant settlement at the deck and areas surrounding the pool. This is likely to increase stress at the pool structure and cause premature failure.

Useful Life: Up to 60 years

Component Detail Notes: The need to replace a pool structure depends on the condition of the concrete structure, the condition of the embedded or concealed water circulation piping, possible long term uneven settlement of the structure, and the increasing cost of repair and maintenance. Deterioration of any one of these component systems could result in complete replacement of the pool. For example, deferral of a deteriorated piping system could result in settlement and cracks in the pool structure. This mode of failure is more common as the system ages and deterioration of the piping system goes undetected. For reserve budgeting purposes, we recommend Hedgerow plan to replace the following components:

- Concrete deck
- Pool structures
- Subsurface piping

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 engage the services of an engineering firm to evaluate the pool structure based on the cracks noted at the time of inspection. The timing and cost of this project may vary.

Townhome Reserve Expenditures

Concrete Entrance Walks

Line Item: 7.140

Quantity: 3,400 square feet

Condition: Fair overall with settlement and previous repairs 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 285 square feet of concrete sidewalks, or fifty percent (50%) of the total, will require replacement during the next 30 years.

Fences, Wood, Trash Corrals

Line Item: 7.285

Quantity: Approximately 50 linear feet at the two trash corrals

History: Unknown

Condition: Fair overall condition with weathered wood evident



Useful Life: 15- to 20-years

Priority/Criticality: Per Board discretion

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

Light Poles and Fixtures

Line Items: 7.560 and 7.561

Quantity: Three at Hastings Court and seven at Wyndham Court

History: Unknown; the light poles at Wyndham Court appear to have been replaced in the last 10 years.

Condition: The light poles and fixtures at Hastings Court are in fair condition. The light poles at Wyndham Court are in good to fair condition.



Hastings Court light pole and fixture



Wyndham Court 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.

Mailbox Stations

Line Item: 7.600

Quantity: Three stations

History: Unknown

Condition: Good to fair overall



Mailbox stations

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.

Retaining Walls, Timber

Line Item: 7.760

Quantity: Approximately 140 square feet

History: Unknown

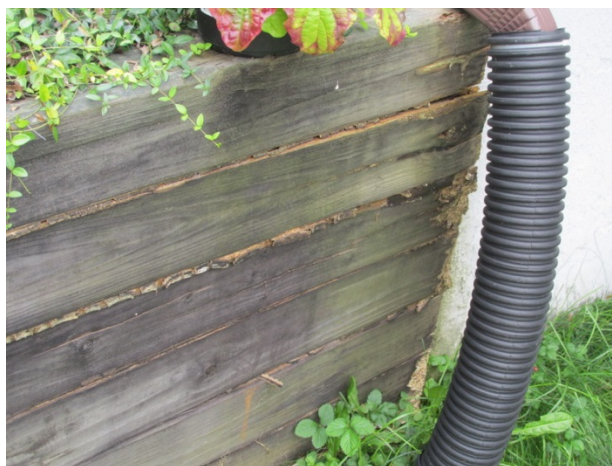
Condition: Fair overall with organic growth, wood deterioration and lean evident



Timber retaining wall



Timber retaining wall



Lean and wood deterioration

Useful Life: 15- to 20-years

Component Detail Notes: We advise Hedgerow replace with a modular, interlocking dry-set masonry retaining wall system. The cost of dry-set masonry retaining walls is similar to the cost of timber walls. However, dry-set masonry retaining walls offer a longer useful life of up to 35 years and lower total maintenance costs. The following schematic depicts the typical components of a retaining wall system although it may not reflect the actual configuration at Hedgerow:

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.

Hedgerow 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 Downingtown, Pennsylvania at an annual inflation rate. Isolated or

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 Hedgerow 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

MATTHEW D. CASEY, RS
Responsible Advisor

CURRENT CLIENT SERVICES

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

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

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

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

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

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

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

Ronald McDonald House Charities of Southern West Virginia Located on the Elk River in Charleston, West Virginia, this Ronald McDonald House was constructed in 2016 and contains 14 guest suites, an office area, a manager's apartment and common areas. The common areas include lounge areas for guests to relax, a playroom for younger guests and a dual kitchen for the guests to prepare meals.

PRIOR RELEVANT EXPERIENCE

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

EDUCATION

University of Connecticut - B.S. Civil Engineering

PROFESSIONAL AFFILIATIONS

Engineer in Training (E.I.T.) - National Council of Examiners for Engineering and Surveying
Reserve Specialist (RS) – Community Associations Institute



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 Hedgerow 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) Hedgerow 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.