

FULL RESERVE STUDY

Hayden Falls Condominium Association #1



Dublin, Ohio
March 21, 2017



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Long-term thinking. Everyday commitment.

Hayden Falls Condominium Association #1
Dublin, Ohio

Dear Board of Directors of Hayden Falls Condominium Association #1:

At the direction of the Board that recognizes the need for proper reserve planning, we have conducted a *Full Reserve Study* of Hayden Falls Condominium Association #1 in Dublin, Ohio and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, March 21, 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 Hayden Falls Condominium Association #1 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 June 8, 2017 by

Reserve Advisors, Inc.

Visual Inspection and Report by: Sarah Girls, RS
Review by: Alan M. Ebert, PRA¹, RS², Director of Quality Assurance



¹PRA (Professional Reserve Analyst) is the professional designation of the Association of Professional Reserve Analysts. Learn more about APRA at <http://www.apra-usa.com>.

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



Long-term thinking. Everyday commitment.

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1. RESERVE STUDY EXECUTIVE SUMMARY

Client: Hayden Falls Condominium Association #1 (Hayden Falls)

Location: Dublin, Ohio

Reference: 161640

Property Basics: Hayden Falls Condominium Association #1 is a townhome style development of 96 units in 35 buildings. The Board informs us that 30 buildings were built beginning in 1986 and concluding by 1993, three buildings were built in 2003 and two buildings were built in 2005.

Reserve Components Identified: 22 Reserve Components.

Inspection Date: March 21, 2017.

Funding Goal: The Funding Goal of this Reserve Study is to maintain reserves above an adequate, not excessive threshold during one or more years of significant expenditures. Our recommended Funding Plan recognizes these threshold funding years in 2027 and 2046 due to replacement of the asphalt shingle roofs.

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
- 1.4% future Inflation Rate for estimating Future Replacement Costs

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

Cash Status of Reserve Fund:

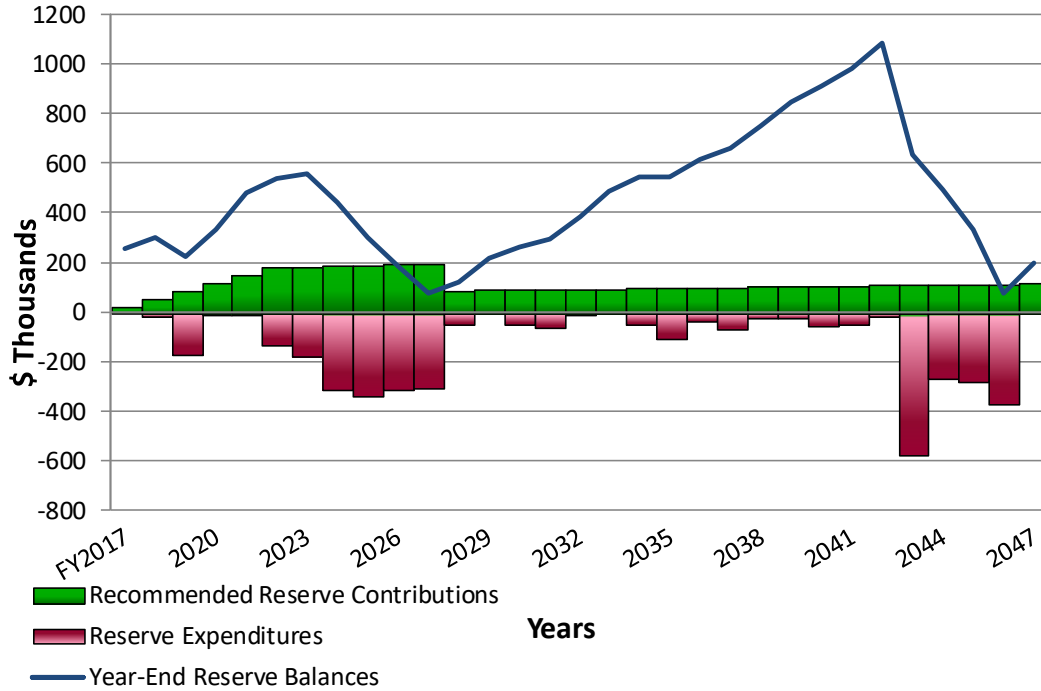
- \$230,107 as of December 31, 2016
- 2017 budgeted Reserve Contributions of \$22,850
- A potential deficit in reserves might occur by 2023 based upon continuation of the most recent annual reserve contribution of \$22,850 and the identified Reserve Expenditures.

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

- Phased increases of approximately \$32,000 from 2018 through 2022
- Inflationary increases from 2023 through 2027
- Decrease to \$90,300 by 2028 due to fully funding for replacement of asphalt shingle roofs
- Inflationary increases through 2047, the limit of this study's Cash Flow Analysis
- Initial adjustment in Reserve Contributions of \$32,050 represents an average monthly increase of \$27.82 per homeowner and about a fourteen percent (13.9%) adjustment in the 2017 total Operating Budget of \$230,439.

Hayden Falls Recommended Reserve Funding Table and Graph

Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)
2018	54,900	298,612	2028	90,300	119,643	2038	103,800	750,798
2019	86,900	220,291	2029	91,600	213,228	2039	105,300	844,260
2020	118,900	332,583	2030	92,900	258,345	2040	106,800	907,842
2021	150,900	478,137	2031	94,200	294,516	2041	108,300	978,572
2022	182,900	538,183	2032	95,500	385,200	2042	109,800	1,087,315
2023	185,500	557,180	2033	96,800	487,203	2043	111,300	635,339
2024	188,100	440,325	2034	98,200	542,169	2044	112,900	491,928
2025	190,700	300,049	2035	99,600	545,483	2045	114,500	330,596
2026	193,400	182,227	2036	101,000	616,296	2046	116,100	77,691
2027	196,100	73,611	2037	102,400	659,643	2047	117,700	197,029



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

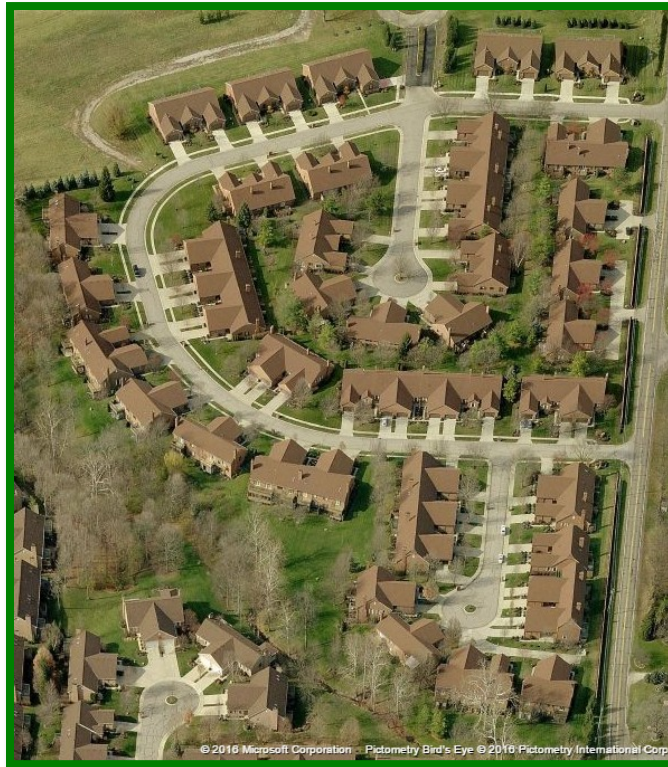
**Hayden Falls Condominium Association #1
Dublin, Ohio**

and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, March 21, 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 Others

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

- Hayden Falls responsibility
- Limited useful life expectancies
- Predictable remaining useful life expectancies
- Replacement cost above a minimum threshold

Long-Lived Property Elements may not have predictable Remaining Useful Lives or their replacement may occur beyond the 30-year scope of the study. The operating budget should fund infrequent repairs. Funding untimely or unexpected replacements from reserves will necessitate increases to Reserve Contributions. Periodic updates of this Reserve Study will help determine the merits of adjusting the Reserve Funding Plan. We identify the following Long-Lived Property Elements as excluded from reserve funding at this time.

- Electrical Systems, Common
- Foundations
- Pipes, Subsurface Utilities
- Structural Frames

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

- General Maintenance to the Common Elements
- Expenditures less than \$5,000 (These relatively minor expenditures have a limited effect on the recommended Reserve Contributions.)
- Irrigation System, Controllers
- Landscape
- Paint Finishes, Touch Up
- Sump Pumps
- Walls, Paint Finishes and Partial Replacements
- 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:

- Balconies and Decks
- Electrical Systems (Including Circuit Protection Panels)
- Fences, Privacy
- Garage Doors
- Heating, Ventilating and Air Conditioning (HVAC) Units
- Interiors
- Patios
- Pipes (Within Units)
- Windows and Doors

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

- Asphalt Pavement, Streets (Municipality)
- Catch Basins, Streets (Municipality)

3. RESERVE EXPENDITURES and FUNDING PLAN

The tables following this introduction present:

Reserve Expenditures

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

Reserve Funding Plan

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

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

RESERVE EXPENDITURES

Hayden Falls Condominium
Association #1
Dublin, Ohio

Explanatory Notes:

- 1) 1.4% is the estimated future Inflation Rate for estimating Future Replacement Costs.
- 2) FY2017 is Fiscal Year beginning January 1, 2017 and ending December 31, 2017.

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years		Costs, \$				RUL = 0 FY2017	1 2018	2 2019	3 2020	4 2021	5 2022	6 2023	7 2024	8 2025	9 2026	10 2027	11 2028	12 2029	13 2030	14 2031	15 2032	
						Useful	Remaining	Unit (2017)	Per Phase (2017)	Total (2017)	30-Year Total (Inflated)																	
Exterior Building Elements																												
1.101	74	37	Each	Chimneys, Masonry (2018 and 2019 is Budgeted)	2018	15 to 20	1 to 2	425.00	15,725	31,450	73,858		15,450	16,000														
1.240	10,650	2,663	Linear Feet	Gutters and Downspouts, Aluminum, Phased	2024	15 to 20	7 to 10	9.00	23,963	95,850	248,391							26,412	26,782	27,156	27,537							
1.241	1,070	1,070	Linear Feet	Gutters and Downspouts, Aluminim, 2003-2005 Buildings	2021	15 to 20	4	9.00	9,630	9,630	23,625				10,181													
1.260	96	96	Each	Light Fixtures, Front	2032	to 25	15	75.00	7,200	7,200	8,870																8,870	
1.261	114	114	Each	Light Fixtures, Garage	2019	to 25	2	100.00	11,400	11,400	27,636		11,721															
1.262	96	96	Each	Light Fixtures, Rear	2019	to 25	2	65.00	6,240	6,240	15,128		6,416															
1.280	2,200	550	Squares	Roofs, Asphalt Shingles, Phased	2024	15 to 20	7 to 10	285.00	156,750	627,000	1,624,837							172,772	175,191	177,643	180,130							
1.281	310	310	Squares	Roofs, Asphalt Shingles, 2003-2005 Buildings	2023	15 to 20	6	285.00	88,350	88,350	222,858							96,036										
1.560	126	126	Pairs	Shutters, Vinyl	2022	to 20	5	75.00	9,450	9,450	23,508					10,130												
1.820	175,050	87,525	Square Feet	Walls, Masonry, Inspections and Repairs, Partial (Incl. Mailboxes)	2019	10 to 15	2 to 30+	0.80	70,020	140,040	342,898		71,994									80,464						
Property Site Elements																												
4.110	5,000	200	Linear Feet	Concrete Curbs and Gutters, Partial	2019	to 65	2 to 30+	32.50	6,500	162,500	39,759		6,683					7,265								7,897		
4.120	78,900	2,365	Square Feet	Concrete Driveways, Partial	2019	to 65	2 to 30+	13.00	30,745	1,025,700	384,126		31,612			32,958		34,362			35,825					37,351		
4.140	22,900	915	Square Feet	Concrete Sidewalks, Partial	2019	to 65	2 to 30+	9.00	8,235	206,100	102,888		8,467		8,828		9,204			9,596						10,004		
4.170	96	10	Each	Concrete Stoops, Partial	2019	to 65	2 to 30+	500.00	5,000	48,000	30,583		5,141					5,588								6,074		
4.220	550	550	Linear Feet	Fence, Chain Link	2041	to 25	24	14.00	7,700	7,700	10,750																	
4.285	1,030	1,030	Linear Feet	Fences, Composite	2030	20 to 25	13	41.00	42,230	42,230	50,596															50,596		
4.420	4	1	Allowance	Irrigation System, Partial	2026	to 40	9	28,500.00	28,500	114,000	112,068										32,299							
4.500	1	1	Allowance	Landscape, Partial Replacements, Phased	2022	N/A	5 to 9	77,000.00	77,000	77,000	385,000						77,000	77,000	77,000	77,000	77,000							
4.560	5	5	Each	Light Poles and Fixtures	2020	to 25	3	1,900.00	9,500	9,500	23,926				9,905													
4.600	96	96	Each	Mailboxes	2027	to 25	10	60.00	5,760	5,760	6,619														6,619			
4.650	1	1	Allowance	Pipes, Subsurface Utilities	2019	to 85+	2	10,000.00	10,000	10,000	48,971		10,282									11,492						
4.760	900	900	Square Feet	Retaining Walls, Timber (Replace with Masonry)	2024	15 to 20	7	35.00	31,500	31,500	34,720							34,720										
Anticipated Expenditures, By Year										\$3,841,615	0	15,450	168,316	9,905	10,181	128,916	173,036	310,904	335,392	314,098	306,242	45,421	0	50,596	61,326	8,870		

RESERVE EXPENDITURES

Hayden Falls Condominium Association #1 Dublin, Ohio

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)																	
Exterior Building Elements																												
1.101	74	37	Each	Chimneys, Masonry (2018 and 2019 is Budgeted)	2018	15 to 20	1 to 2	425.00	15,725	31,450	73,858						21,057	21,351										
1.240	10,650	2,663	Linear Feet	Gutters and Downspouts, Aluminum, Phased	2024	15 to 20	7 to 10	9.00	23,963	95,850	248,391											34,397	34,878	35,367	35,862			
1.241	1,070	1,070	Linear Feet	Gutters and Downspouts, Aluminum, 2003-2005 Buildings	2021	15 to 20	4	9.00	9,630	9,630	23,625							13,444										
1.260	96	96	Each	Light Fixtures, Front	2032	to 25	15	75.00	7,200	7,200	8,870																	
1.261	114	114	Each	Light Fixtures, Garage	2019	to 25	2	100.00	11,400	11,400	27,636									15,915								
1.262	96	96	Each	Light Fixtures, Rear	2019	to 25	2	65.00	6,240	6,240	15,128								8,712									
1.280	2,200	550	Squares	Roofs, Asphalt Shingles, Phased	2024	15 to 20	7 to 10	285.00	156,750	627,000	1,624,837											225,006	228,156	231,350	234,589			
1.281	310	310	Squares	Roofs, Asphalt Shingles, 2003-2005 Buildings	2023	15 to 20	6	285.00	88,350	88,350	222,858												126,822					
1.560	126	126	Pairs	Shutters, Vinyl	2022	to 20	5	75.00	9,450	9,450	23,508									13,378								
1.820	175,050	87,525	Square Feet	Walls, Masonry, Inspections and Repairs, Partial (Incl. Mailboxes)	2019	10 to 15	2 to 30+	0.80	70,020	140,040	342,898			89,930									100,510					
Property Site Elements																												
4.110	5,000	200	Linear Feet	Concrete Curbs and Gutters, Partial	2019	to 65	2 to 30+	32.50	6,500	162,500	39,759					8,584							9,330					
4.120	78,900	2,365	Square Feet	Concrete Driveways, Partial	2019	to 65	2 to 30+	13.00	30,745	1,025,700	384,126		38,942			40,601			42,330			44,133				46,012		
4.140	22,900	915	Square Feet	Concrete Sidewalks, Partial	2019	to 65	2 to 30+	9.00	8,235	206,100	102,888		10,431			10,875			11,338			11,821				12,324		
4.170	96	10	Each	Concrete Stoops, Partial	2019	to 65	2 to 30+	500.00	5,000	48,000	30,583					6,603						7,177						
4.220	550	550	Linear Feet	Fence, Chain Link	2041	to 25	24	14.00	7,700	7,700	10,750									10,750								
4.285	1,030	1,030	Linear Feet	Fences, Composite	2030	20 to 25	13	41.00	42,230	42,230	50,596																	
4.420	4	1	Allowance	Irrigation System, Partial	2026	to 40	9	28,500.00	28,500	114,000	112,068					37,116										42,653		
4.500	1	1	Allowance	Landscape, Partial Replacements, Phased	2022	N/A	5 to 9	77,000.00	77,000	77,000	385,000																	
4.560	5	5	Each	Light Poles and Fixtures	2020	to 25	3	1,900.00	9,500	9,500	23,926														14,021			
4.600	96	96	Each	Mailboxes	2027	to 25	10	60.00	5,760	5,760	6,619																	
4.650	1	1	Allowance	Pipes, Subsurface Utilities	2019	to 85+	2	10,000.00	10,000	10,000	48,971				12,843								14,354					
4.760	900	900	Square Feet	Retaining Walls, Timber (Replace with Masonry)	2024	15 to 20	7	35.00	31,500	31,500	34,720																	
Anticipated Expenditures, By Year										\$3,841,615	0	49,373	102,773	37,116	66,663	21,057	21,351	53,668	48,821	13,378	573,550	263,034	280,738	371,440	0			

RESERVE FUNDING PLAN

CASH FLOW ANALYSIS Hayden Falls Condominium Association #1

Individual Reserve Budgets & Cash Flows for the Next 30 Years

Dublin, Ohio	FY2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Reserves at Beginning of Year (Note 1)	230,107	255,855	298,612	220,291	332,583	478,137	538,183	557,180	440,325	300,049	182,227	73,611	119,643	213,228	258,345	294,516
Total Recommended Reserve Contributions (Note 2)	22,850	54,900	86,900	118,900	150,900	182,900	185,500	188,100	190,700	193,400	196,100	90,300	91,600	92,900	94,200	95,500
Plus Estimated Interest Earned, During Year (Note 3)	2,898	3,307	3,095	3,297	4,835	6,062	6,533	5,949	4,416	2,876	1,526	1,153	1,985	2,813	3,297	4,054
Less Anticipated Expenditures, By Year	0	(15,450)	(168,316)	(9,905)	(10,181)	(128,916)	(173,036)	(310,904)	(335,392)	(314,098)	(306,242)	(45,421)	0	(50,596)	(61,326)	(8,870)
Anticipated Reserves at Year End	<u>\$255,855</u>	<u>\$298,612</u>	<u>\$220,291</u>	<u>\$332,583</u>	<u>\$478,137</u>	<u>\$538,183</u>	<u>\$557,180</u>	<u>\$440,325</u>	<u>\$300,049</u>	<u>\$182,227</u>	<u>\$73,611</u>	<u>\$119,643</u>	<u>\$213,228</u>	<u>\$258,345</u>	<u>\$294,516</u>	<u>\$385,200</u>
Predicted Reserves based on 2017 funding level of: \$22,850	255,855	266,370	123,228	137,729	152,127	47,250	(103,270)	(394,292)			(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	385,200	487,203	542,169	545,483	616,296	659,643	750,798	844,260	907,842	978,572	1,087,315	635,339	491,928	330,596	77,691
Total Recommended Reserve Contributions	96,800	98,200	99,600	101,000	102,400	103,800	105,300	106,800	108,300	109,800	111,300	112,900	114,500	116,100	117,700
Plus Estimated Interest Earned, During Year	5,203	6,139	6,487	6,929	7,610	8,412	9,513	10,450	11,251	12,321	10,274	6,723	4,906	2,435	1,638
Less Anticipated Expenditures, By Year	0	(49,373)	(102,773)	(37,116)	(66,663)	(21,057)	(21,351)	(53,668)	(48,821)	(13,378)	(573,550)	(263,034)	(280,738)	(371,440)	0
Anticipated Reserves at Year End	<u>\$487,203</u>	<u>\$542,169</u>	<u>\$545,483</u>	<u>\$616,296</u>	<u>\$659,643</u>	<u>\$750,798</u>	<u>\$844,260</u>	<u>\$907,842</u>	<u>\$978,572</u>	<u>\$1,087,315</u>	<u>\$635,339</u>	<u>\$491,928</u>	<u>\$330,596</u>	<u>\$77,691</u>	<u>\$197,029</u>
														(NOTE 5)	(NOTE 4)

Explanatory Notes:

- 1) Year 2017 starting reserves are as of December 31, 2016; FY2017 starts January 1, 2017 and ends December 31, 2017.
- 2) Reserve Contributions for 2017 are budgeted; 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.*

Exterior Building Elements



Front elevation



Side elevation



Rear elevation

Chimneys, Masonry

Line Item: 1.101

Quantity: 74 masonry and concrete chimneys

History: Original

Condition: Fair overall based on our visual inspection from the ground



Masonry chimney



Masonry chimney

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. The estimate of cost is based on historical costs provided by the Board.

Gutters and Downspouts, Aluminum

Line Items: 1.240 and 1.241

Quantity: Approximately 10,650 linear feet of aluminum small and large capacity gutters and downspouts at the original buildings and 1,070 linear feet of aluminum gutters and downspouts at the five buildings built between 2003 and 2005.

History: The gutters and downspouts are original, however the Board informs us the Association has replaced sections of gutters and downspouts throughout the community since construction.

Condition: Good to fair overall



Gutter and downspout configuration

Useful Life: 15- to 20-years

Component Detail Notes: Downspouts that discharge directly onto roofs cause premature deterioration of the roofs due to the high concentration of storm water. We recommend either routing these downspouts directly to the ground, connecting the downspouts to the gutters of the lower roof or distributing the storm water discharge over a large area.

The useful life of gutters and downspouts coincides with that of the asphalt shingle roofs. This will result in the most economical unit price and minimize the possibility of damage to other roof components as compared to separate replacements.

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

Expenditure Detail Notes: We include gutter and downspout replacement with the respective roof replacement projects. Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3.

Light Fixtures

Line Items: 1.260, 1.261 and 1.262

Quantity: Approximately 96 exterior wall mounted metal light fixtures with incandescent bulbs accent the front entrances, 114 exterior wall mounted light fixtures are located at the garages and 96 exterior wall mounted light fixtures are location at the rear entries.

History: The front entrance light fixtures were recently replaced and the garage and rear entry light fixtures are original.

Condition: Good to fair overall condition



Front entrance light fixture



Garage light fixture

Useful Life: Up to 25 years

Priority/Criticality: Per Board discretion

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

Roofs, Asphalt Shingles

Line Items: 1.280 and 1.281

Quantity: 2,200 squares¹ at the originally constructed buildings and 310 squares at the buildings built from 2003 through 2005.

History: The roofs at the buildings built between 2003 and 2005 are original. The roofs at the originally constructed building were replaced approximately 10- to 12- years ago.

Condition: Good to fair overall condition. We note areas of loose, missing and curling shingles

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



Shingle lift at 2003-2005 Buildings



Shingle lift at 2003-2005 Buildings



Asphalt shingle roof



Discoloration at asphalt shingle roof



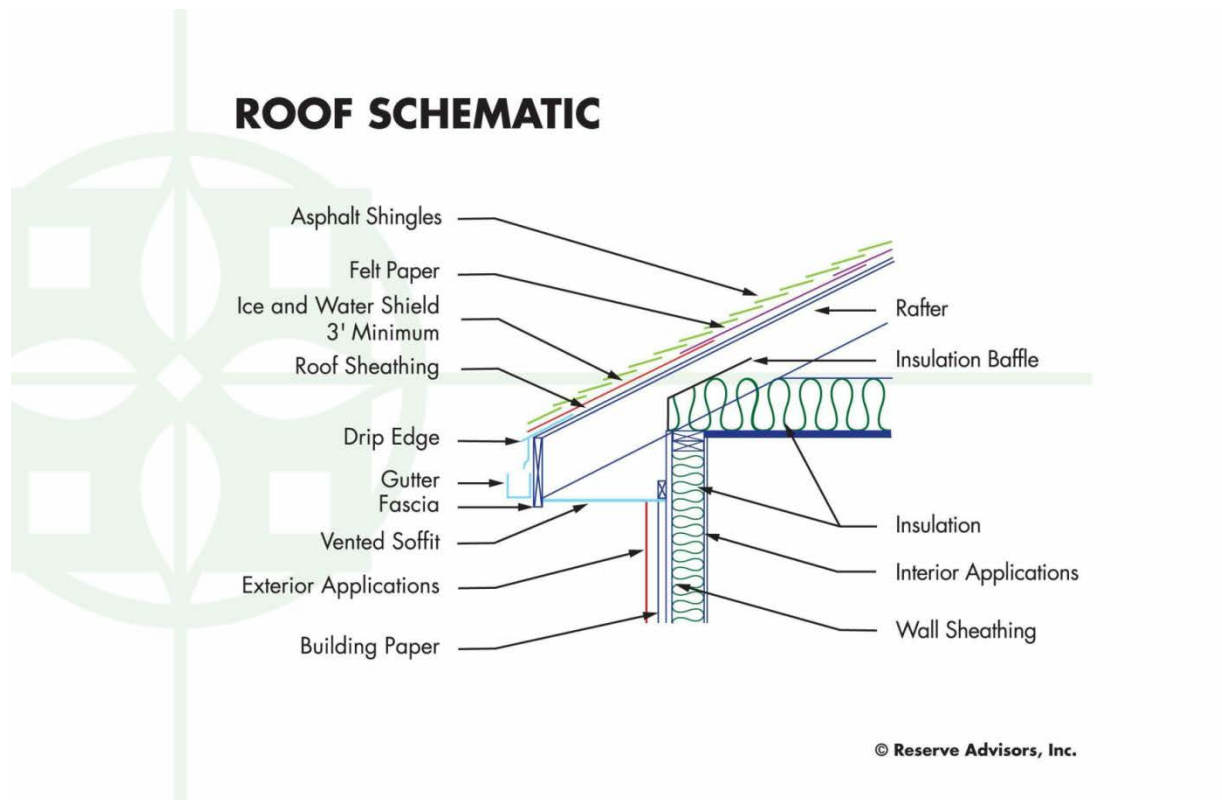
Asphalt shingle roof

Useful Life: 15- to 20-years

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

- Three tab shingles
- Boston style ridge caps
- Soffit, square box hood and ridge vents
- Metal drip edge
- Open valleys with metal w flashing

The following cross-sectional schematic illustrates an asphalt shingle roof system:



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

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

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

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We base our cost on replacement with standard laminate Class A 240-260-pounds per square shingles.

Shutters, Vinyl

Line Item: 1.560

Quantity: Approximately 126 pairs of decorative vinyl shutters

History: Original

Condition: Good to fair overall



Shutters

Useful Life: Up 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.

Walls, Masonry

Line Item: 1.820

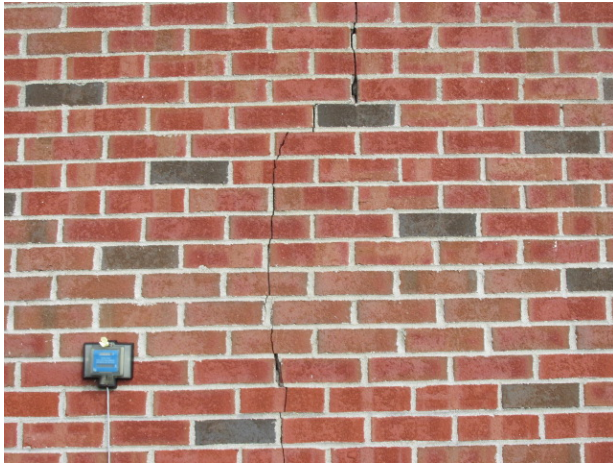
Quantity: Approximately 175,050 square feet of the exterior walls, including the mailbox stations and entrance monuments.

History: Original. The Board informs us that the Association conducts annual repairs to the masonry at the building exteriors. However, we note multiple areas of large

cracks in need of repair and recommend the Association fund future repairs to the masonry through Reserves.

Condition: Good to fair overall with the following evident:

- Minimal previous repairs evident
- Efflorescence is not visible
- Lintel paint finish in good condition
- Masonry exhibits cracks
- No spalled masonry is evident
- Mortar deterioration is evident



Large masonry crack at Unit 5715



Crack at masonry



Crack at masonry



Step crack at masonry

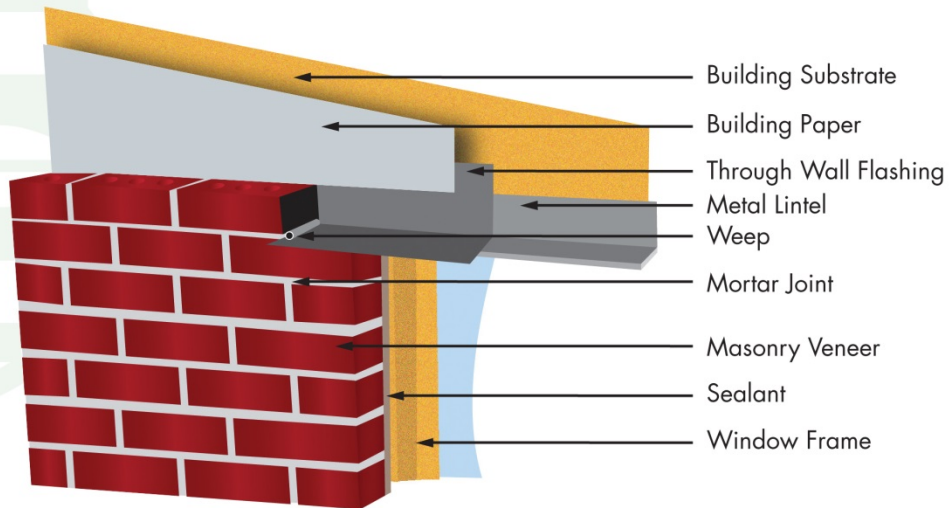


Crack at masonry above garage

Useful Life: We advise a complete inspection of the masonry and related masonry repairs every 10- to 15-years to forestall deterioration.

Component Detail Notes: We recommend an inspection, repair and replacement of the steel lintels. Lintels are structural supports or beams above windows and doors. Fatigued lintels also allow the direct penetration of storm water into the wall assembly. These inspections should locate areas of rust on the lintels and cracks or other structural damage to the walls around lintels. The contractor should remove any areas of rust, prime and paint these lintels. Paint protects and maximizes the remaining useful life of the lintels and therefore the exterior wall systems. Structural damage can eventually lead to costly replacements of lintels and surrounding wall systems. The following diagram details a metal lintel and weep system:

MASONRY WALL, METAL LINTEL AND WEEP SYSTEM 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. Our cost includes the following activities:

- Complete inspection of the masonry
- Repointing of up to two percent (2%) of the masonry
- Replacement of a limited amount of the masonry
- Paint applications to the metal lintels (approximately 4,540 linear feet)
- Replacement of up to twenty-five percent (25%) of the sealants at the window and door perimeters

Property Site Elements

Concrete Curbs and Gutters

Line Item: 4.110

Quantity: 5,000 linear feet

Condition: Good to fair overall with crack and deterioration evident



Cracks and deterioration at curb and gutter



Cracks and deterioration at curb and gutter



Cracks and deterioration at curb and gutter

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

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We estimate that up to 1,000 linear feet of curbs and gutters, or twenty percent (20%) of the total, will require replacement during the next 30 years.

Concrete Driveways

Line Item: 4.120

Quantity: 78,900 square feet

Condition: Fair to poor overall condition. We note areas of large cracks and deterioration.



Crack at driveway



Cracks and deterioration at driveway



Cracks and deterioration at driveway

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 23,650 square feet of concrete driveways, or thirty percent (30%) of the total, will require replacement during the next 30 years.

Concrete Sidewalks

Line Item: 4.140

Quantity: 22,900 square feet

Condition: Good to fair overall with cracks and deterioration evident



Cracks at sidewalk



Concrete sidewalk



Cracks at deterioration at concrete sidewalk

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

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We estimate that up to 9,150 square feet of concrete sidewalks, or forty percent (40%) of the total, will require replacement during the next 30 years.

Concrete Stoops

Line Item: 4.170

Quantity: 96 stoops

Condition: Good to fair overall with isolated crack evident



Concrete stoop



Crack at concrete stoop

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 recommend the Association plan for replacement of up to 50 stoops, or approximately fifty-two percent (52.1%) of the total, during the next 30 years.

Fence, Chain Link

Line Item: 4.220

Quantity: 550 linear feet

History: The chain link fence is located at the west perimeter and was installed in 2016.

Condition: Good overall with no visible deterioration evident



Chain link fence

Useful Life: Up to 25 years

Priority/Criticality: Per Board discretion

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

Fences, Composite

Line Item: 4.285

Quantity: 1,030 linear feet

History: The composite fences are located at the north perimeter of the community and were installed in 2008.

Condition: Good overall condition



Composite fence

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.

Irrigation System

Line Item: 4.420

History: The Board informs us that the Association installed the irrigation system over a series of years during construction.

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

Useful Life: Up to 40 years

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

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

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

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

Expenditure Detail Notes: We recommend the Association consider replacement of up to twenty-five percent (25%) of the irrigation system by 2026 and every 10 years thereafter. Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3.

Landscape

Line Item: 4.500

Component Detail Notes: The Association contains a large quantity of trees, shrubbery and other landscape elements. Replacement of these elements is an ongoing need. Many associations budget for these replacements as normal maintenance. Other associations fund ongoing replacements from reserves. Large

amounts of landscape may need replacement due to disease, drought or other forces of nature. If the cost of removal and replacement is substantial, funding from reserves is logical. The Association may also desire to periodically update the appearance of the community through major improvements to the landscape.

Useful Life: At the request of the Board, we include a landscape allowance of \$77,000 beginning by 2022 and concluding by 2026.

Priority/Criticality: Per Board discretion

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

Light Poles and Fixtures

Line Item: 4.560

Quantity: Five each

History: Original

Condition: Good to fair overall



Light pole and fixture

Useful Life: 25 years

Priority/Criticality: Per Board discretion

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

Mailboxes

Line Item: 4.600

Quantity: 96 Mailboxes

History: Original

Condition: Fair to poor



Mailboxes

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.

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. Although it is likely that the times of replacement and extent of repair costs may vary from the budgetary allowance, Hayden Falls 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.

Retaining Walls, Timber

Line Item: 4.760

Quantity: 900 square feet

History: Original

Condition: Fair overall with wood deterioration evident



Wood deterioration



Timber retaining wall



Timber retaining wall

Useful Life: 15- to 20-years

Component Detail Notes: We advise Hayden Falls 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.

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.

Hayden Falls 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 Dublin, Ohio at an annual inflation rate. Isolated or regional markets of greater

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.

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

- The past and current maintenance practices of Hayden Falls 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. 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 Hayden Falls 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) Hayden Falls 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.

7. PROFESSIONAL SERVICE CONDITIONS

Our Services - Reserve Advisors, Inc. will perform its services as an independent contractor in accordance with our professional practice standards. Our compensation is not contingent upon our conclusions.

Our inspection and analysis of the subject property is limited to visual observations and is noninvasive. We will inspect sloped roofs from the ground. We will inspect 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 our observation. Conditions can change between the time of inspection and the issuance of the report. Reserve Advisors does not investigate, nor assume any responsibility for any existence or impact of any hazardous materials, structural, latent or hidden defects which may or may not be present on or within the property. Our opinions of estimated costs and remaining useful lives are not a guarantee of the actual costs of replacement, a warranty of the common elements or other property elements, or a guarantee of remaining useful lives.

We assume, without independent verification, the accuracy of all data provided to us. You agree to indemnify and hold us 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 as 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 controlling person of Reserve Advisors, Inc., including any director, officer, employee, affiliate, or agent. Liability of Reserve Advisors, Inc. 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 - Reserve Advisors, Inc. will complete the services in accordance with the Proposal. The Report represents a valid opinion of our findings and recommendations and is deemed complete. However, we will consider any additional information made available to us in the interest of promptly issuing a Revised Report if changes are requested within six months of receiving the Report. We retain the right to withhold a Revised Report if payment for services is not rendered in a timely manner. All files, work papers or documents developed by us during the course of the engagement remains our property.

Your Obligations - You agree to provide us access to the subject property during our on-site visual inspection and tour. You will provide to us to the best of your ability and if reasonably available, historical and budgetary information, the governing documents, and other information that we request and deem necessary to complete our Study. You agree to pay our actual attorneys' fees and any other costs incurred in the event we have to initiate litigation to collect on any unpaid balance for our services.

Use of Our Report and Your Name - Use of this Report is limited to only the purpose stated herein. Any use or reliance for any other purpose, by you or third parties, is invalid. Our Reserve Study Report in whole or part is not and cannot be used as a design specification, design engineering services or an appraisal. You may show our report in its entirety to those third parties who need to review the information contained herein. The Client and other third parties viewing this report should not reference our name or our report, in whole or in part, in any document prepared and/or distributed to third parties without our written consent. ***This report contains intellectual property developed by Reserve Advisors, Inc. specific to this engagement and***



cannot be reproduced or distributed to those who conduct reserve studies without the written consent of Reserve Advisors, Inc.

We reserve the right to include our client's name in our client lists, but we will maintain the confidentiality of all conversations, documents provided to us, and the contents of our reports, subject to legal or administrative process or proceedings. These conditions can only be modified by written documents executed by both parties.

Payment Terms, Due Dates and Interest Charges - The retainer payment is due upon authorization and prior to shipment of the report. The final payment of the fee is due immediately upon receipt of the Report. Subsequent changes to the report can be made for up to six months from the initial report date. Any outstanding balance after 30 days of the invoice date is subject to an interest charge of 1.5% per month. Any litigation necessary to collect an unpaid balance shall be venued in Milwaukee County Circuit Court in the State of Wisconsin.

CONDITIONS OF OUR SERVICE ASSUMPTIONS

To the best of our knowledge, all data set forth in this report are true and accurate. Although gathered from reliable sources, we make no guarantee nor assume liability for the accuracy of any data, opinions, or estimates identified as furnished by others that we used in formulating this analysis.

We did not make any soil analysis or geological study with this report; nor were any water, oil, gas, coal, or other subsurface mineral and use rights or conditions investigated.

Substances such as asbestos, urea-formaldehyde foam insulation, other chemicals, toxic wastes, environmental mold or other potentially hazardous materials could, if present, adversely affect the validity of this study. Unless otherwise stated in this report, the existence of hazardous substance, that may or may not be present on or in the property, was not considered. Our opinions are predicated on the assumption that there are no hazardous materials on or in the property. We assume no responsibility for any such conditions. We are not qualified to detect such substances, quantify the impact, or develop the remedial cost.

We have made a visual inspection of the property and noted visible physical defects, if any, in our report. Our inspection and analysis was made by employees generally familiar with real estate and building construction; however, we did not do any invasive testing. Accordingly, we do not opine on, nor are we responsible for, the structural integrity of the property including its conformity to specific governmental code requirements, such as fire, building and safety, earthquake, and occupancy, or any physical defects that were not readily apparent during the inspection.

Our opinions of the remaining useful lives of the property elements do not represent a guarantee or warranty of performance of the products, materials and workmanship.

8. 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



SARAH M. GIRLS, E.I.T., RS
Responsible Advisor

CURRENT CLIENT SERVICES

Sarah M. Girls, a Civil Engineer, is an Advisor for Reserve Advisors. Ms. Girls is responsible for the inspection and analysis of the condition of clients' properties, and recommending engineering solutions to prolong the lives of the components. She also forecasts capital expenditures for the repair and/or replacement of the property components and prepares technical reports on assignments. She is responsible for conducting Life Cycle Cost Analysis and Capital Replacement Forecast services on townhomes, homeowners associations, planned unit developments and recreational associations.

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

Brightwater Homeowner Association Located in Missouri City, Texas, this lively planned unit development consists of 795 single family homes surrounding a picturesque lake. The Association contains a clubhouse equipped with indoor entertainment amenities. In addition to the clubhouse the development also features an outdoor pool and tennis courts for recreational activities.

Lismore Village Homeowners' Association Located in Greer, South Carolina, this quaint community comprises 76 townhomes. The buildings feature brick masonry, vinyl siding and asphalt shingle roofs. The development contains asphalt pavement, a gazebo, perimeter fences and concrete flatwork.

Pecan Park Garden Estate Condominium This attractive gated community in Austin, Texas consists of 146 units with a relaxing pool. Located throughout the property are perimeter walls, private drives and an irrigation system.

The Villages of Berry Creek Situated in Georgetown, Texas, this inviting community is comprised of 241 homes. Homeowners can enjoy two pools, a large deck and a playground that provide enough recreational space for entertaining. The development also includes perimeter fences and detention ponds.

Maple Leaf 20 Condominium Association A townhome style condominium development of 160 units in 20 buildings located in Greenfield, Wisconsin. These buildings were constructed in the mid 2000's and comprise asphalt shingle roofs, vinyl siding and masonry walls. The development contains asphalt pavement, wood fences and concrete flatwork.

Emerald Pointe Condominium Association This quaint community is located in Raleigh, North Carolina and consists of 51 townhomes in 14 buildings. The Association maintains asphalt shingle roofs, wood siding and decks, concrete flatwork and retaining walls.

PRIOR RELEVANT EXPERIENCE

Before joining Reserve Advisors, Ms. Girls attended Valparaiso University in Valparaiso, Indiana where she attained her Bachelor of Science degree in Civil Engineering. During her time at Valparaiso University, Ms. Girls lead her senior design group to develop a bypass around the City of Delphi, Indiana. This project also included the design of a bridge and mechanically stabilized earth walls. Ms. Girls also worked for Hagerman Inc. as an intern project engineer. She was responsible for overseeing and inspecting the construction of Valparaiso University's new Welcome Center.

EDUCATION

Valparaiso University –B.S. Civil Engineering

PROFESSIONAL AFFILIATIONS

Engineer In Training (E.I.T.) Registration

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.