

Champions Way Homeowners Association, Inc.

August 9, 2023 • South Bend, IN

RESERVE STUDY



Champions Way Homeowners Association, Inc.
South Bend, Indiana

Dear Board of Directors of Champions Way Homeowners Association, Inc.:

At the direction of the Board that recognizes the need for proper reserve planning, we have conducted a *Reserve Study* of Champions Way Homeowners Association, Inc. in South Bend, Indiana and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, August 9, 2023.

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

An ongoing review by the Board and an Update of this Reserve Study are necessary to ensure an equitable funding plan since a Reserve Study is a snapshot in time. We recommend the Board budget for an Update to this Reserve Study in two- to three-years. We look forward to continuing to help Champions Way 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 August 30, 2023 by

Reserve Advisors, LLC

Visual Inspection and Report by: Justin B. Klein, RS¹
Review by: Andrew K. McGowan, RS, Regional Engineering Manager
Alan M. Ebert, RS, PRA², 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
Exterior Building Elements.....	4.1
Gutters, Downspouts and Scuppers, Aluminum	4.2
Life Safety System.....	4.3
Light Fixtures	4.4
Parapet Walls	4.5
Roofs, Asphalt Shingles	4.9
Roofs, Metal	4.12
Sealants, Windows, Doors, Dissimilar Materials, and Control Joints.....	4.14
Walls, Masonry	4.16
Walls, Siding and Trim, Paint Finishes	4.21
Property Site Elements	4.23
Asphalt Pavement, Repaving	4.23
Catch Basins	4.25
Concrete Sidewalks.....	4.26
Concrete Stairs.....	4.28
Irrigation System.....	4.29
Mailbox Stations	4.31
Railings, Aluminum.....	4.31
Reserve Study Update.....	4.33
5. METHODOLOGY	5.1
6. CREDENTIALS	6.1
7. DEFINITIONS	7.1
8. PROFESSIONAL SERVICE CONDITIONS	8.1



1. RESERVE STUDY EXECUTIVE SUMMARY

Client: Champions Way Homeowners Association, Inc. (Champions Way)

Location: South Bend, Indiana

Reference: 182212

Property Basics: Champions Way Homeowners Association, Inc. is a townhome style development which consists of 62 units in nine buildings. The community was built from 2010 to 2015.

Reserve Components Identified: 19 Reserve Components.

Inspection Date: August 9, 2023. We conducted the original inspection on April 28, 2020.

Funding Goal: The Funding Goal of this Reserve Study is to maintain reserves above an adequate, not excessive threshold during one or more years of significant expenditures. Our recommended Funding Plan recognizes this threshold funding year in 2053 due to the subsequent replacement of the asphalt shingle roofs and gutters and downspouts.

Methodology: 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
- 2.0% anticipated annual rate of return on invested reserves
- 3.5% 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.

Unaudited Cash Status of Reserve Fund:

- \$397,510 as of June 30, 2023
- 2023 budgeted Reserve Contributions of \$69,440

Project Prioritization: We note anticipated Reserve Expenditures for the next 30 years in the **Reserve Expenditures** tables and include a **Five-Year Outlook** table following the **Reserve Funding Plan** in Section 3. We recommend the Association prioritize the following projects in the next five years based on the conditions identified:

- Paint finish applications at the fiber cement siding at the parapet walls
- Continued replacement/installation of the sealants at windows, doors, dissimilar materials and control joints
- Inspections and repairs at the masonry wing walls
- Paint finish applications at the composite siding and trim
- Partial replacement of the concrete sidewalks.

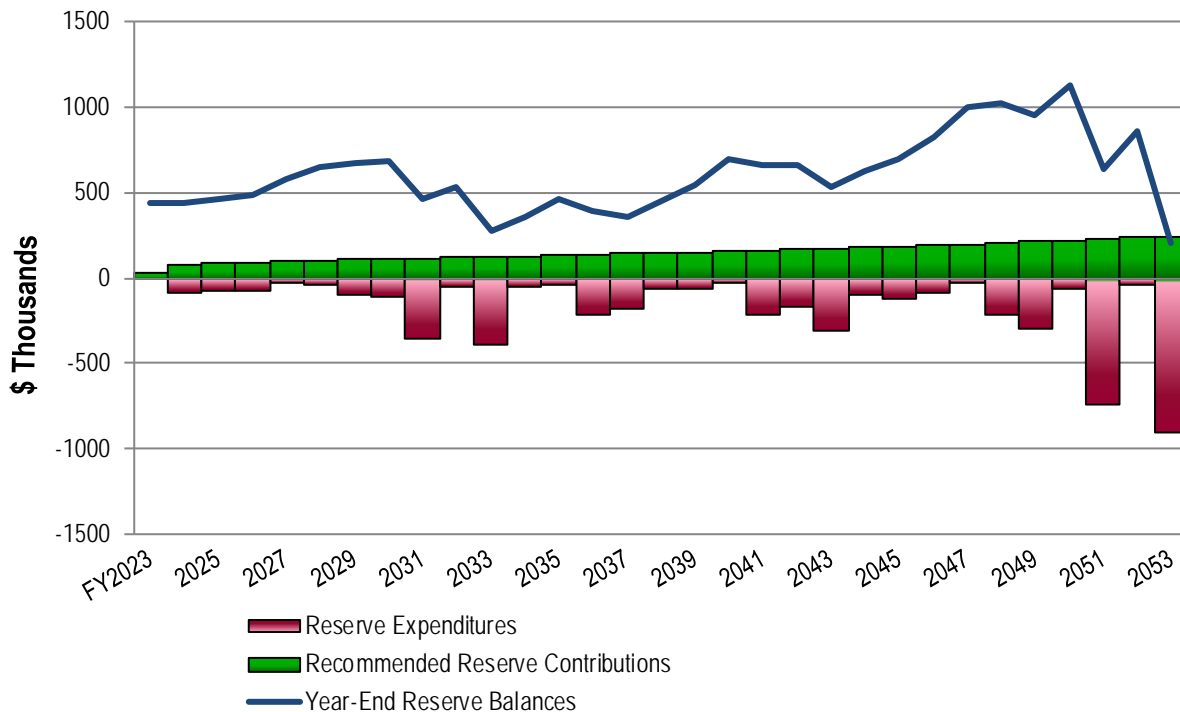


Recommended Reserve Funding: We recommend the following in order to achieve a stable and equitable Cash Flow Methodology Funding Plan:

- Phased increases of \$7,600 from 2024 through 2027
- Inflationary increases thereafter through 2053, the limit of this study's Cash Flow Analysis
- Initial adjustment in Reserve Contributions of \$7,560 represents an average quarterly increase of \$30.48 per homeowner and about a five percent (4.5%) adjustment in the 2023 total Operating Budget of \$166,160.
- Our revised findings reflect both external market and internal property changes. The result is an overall increase in the recommended Reserve Funding Plan since our last Reserve Study on April 28, 2020. The overall increase relates primarily to increased expected inflation rate and increased expected replacement cost of the asphalt shingle roofs.

Champions Way
Recommended Reserve Funding Table and Graph

Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)
2024	77,000	434,785	2034	126,900	358,256	2044	179,200	624,233
2025	84,600	456,381	2035	131,300	460,178	2045	185,500	696,053
2026	92,200	487,410	2036	135,900	387,271	2046	192,000	817,450
2027	99,800	574,000	2037	140,700	358,262	2047	198,700	1,002,219
2028	103,300	648,194	2038	145,600	446,837	2048	205,700	1,016,219
2029	106,900	671,975	2039	150,700	547,277	2049	212,900	952,887
2030	110,600	682,017	2040	156,000	690,420	2050	220,400	1,131,128
2031	114,500	456,005	2041	161,500	653,942	2051	228,100	641,110
2032	118,500	531,406	2042	167,200	661,965	2052	236,100	854,069
2033	122,600	276,613	2043	173,100	535,712	2053	244,400	203,930





2. RESERVE STUDY REPORT

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

Champions Way Homeowners Association, Inc.

South Bend, Indiana

and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, August 9, 2023. We conducted the original inspection on April 28, 2020.

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

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

IDENTIFICATION OF PROPERTY



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

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

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

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

- Champions Way responsibility
- Limited useful life expectancies
- Predictable remaining useful life expectancies
- Replacement cost above a minimum threshold



Long-Lived Property Elements – These 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 the 30-year Reserve Expenditures at this time:

- Electrical Systems, Common
- Foundations
- Pipes, Fire Suppression
- Pipes, Subsurface Utilities
- Structural Frames
- Walls, Siding and Trim, Composite, Full Replacement

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

- General Maintenance to the Common Elements
- Expenditures less than \$3,000 (These relatively minor expenditures have a limited effect on the recommended Reserve Contributions.)
- Address Plaques
- Asphalt Pavement, Crack Repairs, Patch, and Seal Coat
- Buried Downspouts, Maintenance
- Fire Suppression Rooms, Control Panels, Interim Replacements
- Fire Suppression Rooms, Doors, Metal (We assume replacement as needed in lieu of an aggregate replacement of all fire suppression room doors as a single event.)
- Fire Suppression Rooms, Unit Heaters
- Fire Suppression Rooms, Valves, Small Diameter (We assume replacement as needed in lieu of an aggregate replacement of all small diameter valves as a single event.)
- Irrigation System, Controls and Maintenance
- Landscape
- Paint Finishes, Touch Up
- Other Repairs normally funded through the Operating Budget



Rusted sprinkler valves



Unit heater

Homeowners' Responsibility - Items 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 (Including Juliet railings) (The Association conducts paint finish application of the balcony soffit and fascia trim.)

We note systematic soffit deflection and isolated stains. These conditions are likely caused by water accumulation which may lead to premature deterioration of the frame and the need for replacement if not properly maintained. We recommend Unit Owners conduct periodic inspections and remediation to ensure water drains properly through the soffit. We estimate costs of full balcony soffit replacement and necessary frame repairs at approximately \$1,300 per balcony. However, the exact cost may vary based on the exact scope of frame deterioration and coordination of repairs.



Soffit displacement at the unit owned balcony



Juliet balcony

- Electrical Systems (Including Circuit Protection Panels)

- Garage Aprons and Heating, Ventilating and Air Conditioning (HVAC) Pads
- Garage Doors
- HVAC Units
- Interiors
- Pipes (Within Units)
- Roofs, Decking and Trusses
- Windows and Doors

Others' Responsibility - Items designated as the responsibility of others to repair or replace. Property Maintained by the Master Association relates to:

- Pond Area (Including benches, bridges, and surrounding sidewalks)
- Sidewalks, Along Streets
- Street Lights
- Street Systems



Pond area overview

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
- 2023 local cost of replacement
 - Per unit
 - Per phase
 - Replacement of total quantity
- Percentage of future expenditures anticipated during the next 30 years
- Schedule of estimated future costs for each reserve component including inflation

Reserve Funding Plan

- Reserves at the beginning of each year
- Total recommended reserve contributions
- Estimated interest earned from invested reserves
- Anticipated expenditures by year
- Anticipated reserves at year end

Five-Year Outlook

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

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

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

RESERVE EXPENDITURES

**Champions Way
Homeowners Association, Inc.
South Bend, Indiana**

Explanatory Notes:

- 1) **3.5%** is the estimated Inflation Rate for estimating Future Replacement Costs.
- 2) FY2023 is Fiscal Year beginning January 1, 2023 and ending December 31, 2023.

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis		Costs, \$			Percentage of Future Expenditures	RUL = 0 FY2023	1 2024	2 2025	3 2026	4 2027	5 2028	6 2029	7 2030	8 2031	9 2032	10 2033	11 2034	12 2035	13 2036	14 2037	15 2038
						Useful Years	Remaining	Unit (2023)	Per Phase (2023)	Total (2023)																	
Exterior Building Elements																											
1.240	3,400	3,400	Linear Feet	Gutters, Downspouts and Scuppers, Aluminum, Buildings 1-5 (Includes Heat Tracers)	2031	15 to 20	8	19.50	66,300	66,300	5.0%									87,304							
1.241	3,700	3,700	Linear Feet	Gutters, Downspouts and Scuppers, Aluminum, Buildings 6-9 (Includes Heat Tracers)	2033	15 to 20	10	19.50	72,150	72,150	5.8%										101,775						
1.255	2	1	Allowance	Life Safety System, Control Panels and Emergency Devices, Phased	2036	to 25	13 to 14	24,500.00	24,500	49,000	1.5%														38,317	39,658	
1.260	257	257	Each	Light Fixtures	2028	to 25	5	135.00	34,695	34,695	2.7%						41,207										
1.272	62	21	Units	Parapet Walls, Siding, Fiber Cement, Paint Finishes and Repairs, Phased	2024	to 10	1 to 3	1,200.00	24,804	74,400	6.7%	25,672	26,571	27,501								36,213	37,481	38,792			
1.280	305	305	Squares	Roofs, Asphalt Shingles, Buildings 1-5	2031	15 to 20	8	520.00	158,600	158,600	12.0%							208,846									
1.281	320	320	Squares	Roofs, Asphalt Shingles, Buildings 6-9	2033	15 to 20	10	520.00	166,400	166,400	13.4%											234,724					
1.460	175	88	Each	Roofs, Metal, Phased	2041	to 35	18 to 20	1,300.00	113,750	227,500	8.4%																
1.540	21,200	2,332	Linear Feet	Sealants, Windows, Doors, Dissimilar Materials and Control Joints, Phased (Excludes Parapets and Wing Walls)	2024	to 20	1 to 30+	6.00	13,992	127,200	6.6%	14,482	14,989	15,513					18,425	19,070	19,737					23,441	
1.819	53	3	Each	Walls, Masonry, Wing Walls, Inspections and Repairs, Partial	2024	to 3	1 to 30+	7,800.00	20,670	413,400	6.8%	21,393		23,719				26,298			29,157			32,327			
1.820	98,000	49,000	Square Feet	Walls, Masonry, Remaining, Inspections and Repairs, Phased (Excludes Parapets)	2030	8 to 12	7 to 13	0.90	44,100	88,200	6.0%								56,108					68,970			
1.830	62	21	Units	Walls, Siding and Trim, Composite, Paint Finishes, Phased	2024	4 to 6	1 to 3	1,200.00	24,804	74,400	12.0%	25,672	26,571	27,501					31,558	32,662	33,805			38,792	40,150	41,555	
Property Site Elements																											
4.045	1,950	1,950	Square Yards	Asphalt Pavement, Total Replacement	2029	15 to 20	6	35.00	68,250	68,250	4.8%								83,897								
4.100	10	10	Each	Catch Basins, Inspections and Capital Repairs	2029	15 to 20	6	1,000.00	10,000	10,000	0.7%								12,293								
4.140	3,250	230	Square Feet	Concrete Sidewalks, Partial	2025	to 65	2 to 30+	15.00	3,450	48,750	0.6%		3,696						4,543						5,585		
4.160	61	6	Each	Concrete Stairs, Partial	2037	to 65	14 to 30+	2,400.00	14,400	146,400	1.7%														23,309		
4.420	32	16	Zones	Irrigation System, Phased	2051	to 40+	28 to 30	2,200.00	35,200	70,400	3.7%																
4.600	5	5	Each	Mailbox Stations	2034	to 25	11	2,100.00	10,500	10,500	0.3%											15,330					
4.731	650	650	Linear Feet	Railings, Aluminum, Stairs	2037	to 25	14	65.00	42,250	42,250	1.3%															68,390	
Anticipated Expenditures, By Year (\$5,218,200 over 30 years)												0	87,219	71,827	70,515	23,719	41,207	96,190	113,964	351,780	52,875	385,393	51,543	37,481	217,198	177,092	64,996

RESERVE EXPENDITURES

**Champions Way
Homeowners Association, Inc.
South Bend, Indiana**

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis		Costs, \$			Percentage of Future Expenditures	16 2039	17 2040	18 2041	19 2042	20 2043	21 2044	22 2045	23 2046	24 2047	25 2048	26 2049	27 2050	28 2051	29 2052	30 2053		
						Useful	Remaining	Unit (2023)	Per Phase (2023)	Total (2023)																		
Exterior Building Elements																												
1.240	3,400	3,400	Linear Feet	Gutters, Downspouts and Scuppers, Aluminum, Buildings 1-5 (Includes Heat Tracers)	2031	15 to 20	8	19.50	66,300	66,300	5.0%															173,717		
1.241	3,700	3,700	Linear Feet	Gutters, Downspouts and Scuppers, Aluminum, Buildings 6-9 (Includes Heat Tracers)	2033	15 to 20	10	19.50	72,150	72,150	5.8%																202,510	
1.255	2	1	Allowance	Life Safety System, Control Panels and Emergency Devices, Phased	2036	to 25	13 to 14	24,500.00	24,500	49,000	1.5%																	
1.260	257	257	Each	Light Fixtures	2028	to 25	5	135.00	34,695	34,695	2.7%																97,382	
1.272	62	21	Units	Parapet Walls, Siding, Fiber Cement, Paint Finishes and Repairs, Phased	2024	to 10	1 to 3	1,200.00	24,804	74,400	6.7%						51,082	52,870	54,720									
1.280	305	305	Squares	Roofs, Asphalt Shingles, Buildings 1-5	2031	15 to 20	8	520.00	158,600	158,600	12.0%																415,559	
1.281	320	320	Squares	Roofs, Asphalt Shingles, Buildings 6-9	2033	15 to 20	10	520.00	166,400	166,400	13.4%																	467,050
1.460	175	88	Each	Roofs, Metal, Phased	2041	to 35	18 to 20	1,300.00	113,750	227,500	8.4%			211,289		226,338												
1.540	21,200	2,332	Linear Feet	Sealants, Windows, Doors, Dissimilar Materials and Control Joints, Phased (Excludes Parapets and Wing Walls)	2024	to 20	1 to 30+	6.00	13,992	127,200	6.6%	24,262	25,111				29,824	30,868	31,948						37,945	39,273		
1.819	53	3	Each	Walls, Masonry, Wing Walls, Inspections and Repairs, Partial	2024	to 3	1 to 30+	7,800.00	20,670	413,400	6.8%	35,841			39,738		44,058		48,848					54,159				
1.820	98,000	49,000	Square Feet	Walls, Masonry, Remaining, Inspections and Repairs, Phased (Excludes Parapets)	2030	8 to 12	7 to 13	0.90	44,100	88,200	6.0%				84,782				104,219									
1.830	62	21	Units	Walls, Siding and Trim, Composite, Paint Finishes, Phased	2024	4 to 6	1 to 3	1,200.00	24,804	74,400	12.0%				47,686	49,355	51,082		58,618	60,670	62,793							
Property Site Elements																												
4.045	1,950	1,950	Square Yards	Asphalt Pavement, Total Replacement	2029	15 to 20	6	35.00	68,250	68,250	4.8%																166,937	
4.100	10	10	Each	Catch Basins, Inspections and Capital Repairs	2029	15 to 20	6	1,000.00	10,000	10,000	0.7%																24,460	
4.140	3,250	230	Square Feet	Concrete Sidewalks, Partial	2025	to 65	2 to 30+	15.00	3,450	48,750	0.6%					6,865											8,439	
4.160	61	6	Each	Concrete Stairs, Partial	2037	to 65	14 to 30+	2,400.00	14,400	146,400	1.7%					28,653											35,222	
4.420	32	16	Zones	Irrigation System, Phased	2051	to 40+	28 to 30	2,200.00	35,200	70,400	3.7%														92,230	98,799		
4.600	5	5	Each	Mailbox Stations	2034	to 25	11	2,100.00	10,500	10,500	0.3%																	
4.731	650	650	Linear Feet	Railings, Aluminum, Stairs	2037	to 25	14	65.00	42,250	42,250	1.3%																	
Anticipated Expenditures, By Year (\$5,218,200 over 30 years)												60,103	25,111	211,289	172,206	311,211	102,164	126,752	85,588	31,948	211,685	295,728	62,793	735,665	37,945	905,014		

RESERVE FUNDING PLAN

CASH FLOW ANALYSIS

Champions Way
Homeowners Association, Inc.

South Bend, Indiana

Individual Reserve Budgets & Cash Flows for the Next 30 Years

		FY2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
Reserves at Beginning of Year	(Note 1)	397,510	436,379	434,785	456,381	487,410	574,000	648,194	671,975	682,017	456,005	531,406	276,613	358,256	460,178	387,271	358,262
Total Recommended Reserve Contributions	(Note 2)	34,720	77,000	84,600	92,200	99,800	103,300	106,900	110,600	114,500	118,500	122,600	126,900	131,300	135,900	140,700	145,600
Estimated Interest Earned, During Year	(Note 3)	4,149	8,625	8,823	9,344	10,509	12,101	13,071	13,406	11,268	9,776	8,000	6,286	8,103	8,391	7,382	7,971
Anticipated Expenditures, By Year		0	(87,219)	(71,827)	(70,515)	(23,719)	(41,207)	(96,190)	(113,964)	(351,780)	(52,875)	(385,393)	(51,543)	(37,481)	(217,198)	(177,092)	(64,996)
Anticipated Reserves at Year End		<u>\$436,379</u>	<u>\$434,785</u>	<u>\$456,381</u>	<u>\$487,410</u>	<u>\$574,000</u>	<u>\$648,194</u>	<u>\$671,975</u>	<u>\$682,017</u>	<u>\$456,005</u>	<u>\$531,406</u>	<u>\$276,613</u>	<u>\$358,256</u>	<u>\$460,178</u>	<u>\$387,271</u>	<u>\$358,262</u>	<u>\$446,837</u>

(continued)

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

		2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053
Reserves at Beginning of Year		446,837	547,277	690,420	653,942	661,965	535,712	624,233	696,053	817,450	1,002,219	1,016,219	952,887	1,131,128	641,110	854,069
Total Recommended Reserve Contributions		150,700	156,000	161,500	167,200	173,100	179,200	185,500	192,000	198,700	205,700	212,900	220,400	228,100	236,100	244,400
Estimated Interest Earned, During Year		9,843	12,254	13,311	13,029	11,858	11,485	13,072	14,985	18,017	19,985	19,496	20,634	17,547	14,804	10,475
Anticipated Expenditures, By Year		(60,103)	(25,111)	(211,289)	(172,206)	(311,211)	(102,164)	(126,752)	(85,588)	(31,948)	(211,685)	(295,728)	(62,793)	(735,665)	(37,945)	(905,014)
Anticipated Reserves at Year End		<u>\$547,277</u>	<u>\$690,420</u>	<u>\$653,942</u>	<u>\$661,965</u>	<u>\$535,712</u>	<u>\$624,233</u>	<u>\$696,053</u>	<u>\$817,450</u>	<u>\$1,002,219</u>	<u>\$1,016,219</u>	<u>\$952,887</u>	<u>\$1,131,128</u>	<u>\$641,110</u>	<u>\$854,069</u>	<u>\$203,930</u>

(NOTES 4&5)

Explanatory Notes:

- 1) Year 2023 starting reserves are as of June 30, 2023; FY2023 starts January 1, 2023 and ends December 31, 2023.
- 2) Reserve Contributions for 2023 are the remaining budgeted 2 quarters; 2024 is the first year of recommended contributions.
- 3) 2.0% is the estimated annual rate of return on invested reserves; 2023 is a partial year of interest earned.
- 4) Accumulated year 2053 ending reserves consider the age, size, overall condition and complexity of the property.
- 5) Threshold Funding Year (reserve balance at critical point).

RESERVE EXPENDITURES

**Champions Way
Homeowners Association, Inc.**
South Bend, Indiana

Line Item	Reserve Component Inventory	RUL = 0 FY2023	1 2024	2 2025	3 2026	4 2027	5 2028
<u>Exterior Building Elements</u>							
1.260	Light Fixtures						41,207
1.272	Parapet Walls, Siding, Fiber Cement, Paint Finishes and Repairs, Phased		25,672	26,571	27,501		
1.540	Sealants, Windows, Doors, Dissimilar Materials and Control Joints, Phased (Excludes Parapets and Wing Walls)		14,482	14,989	15,513		
1.819	Walls, Masonry, Wing Walls, Inspections and Repairs, Partial		21,393			23,719	
1.830	Walls, Siding and Trim, Composite, Paint Finishes, Phased		25,672	26,571	27,501		
<u>Property Site Elements</u>							
4.140	Concrete Sidewalks, Partial			3,696			
Anticipated Expenditures, By Year (\$5,218,200 over 30 years)		0	87,219	71,827	70,515	23,719	41,207

4. RESERVE COMPONENT DETAIL

The Reserve Component Detail of this *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 overview



Rear elevation overview



Side elevation overview

Gutters, Downspouts and Scuppers, Aluminum

Line Items: 1.240 and 1.241

Quantity: Approximately 3,400 linear feet of aluminum six-inch seamless gutters and three-inch by four-inch downspouts at Buildings 1 through 5. In addition, Champions Way maintains approximately 3,700 linear feet of gutters and downspouts at Buildings 6 through 9. This quantity includes heat tracers.

History: The gutters and downspouts at Buildings 1 through 5 are original to 2011 and the gutters and downspouts at Buildings 6-9 are original to 2013.

Condition: Good to fair overall with isolated fastener rust and dented sections evident.



Aluminum gutter and downspout with damaged gutter



Building 1 gutter and downspouts overview

Useful Life: 15- to 20-years

Component Detail Notes: The size of the gutter is determined by the roof's watershed area, a roof pitch factor and the rainfall intensity number of the Association's region. We recommend sloping gutters 1/16 inch per linear foot and providing fasteners a maximum of every three feet.

Downspouts can drain 100 square feet of roof area per one square inch of downspout cross sectional area. We recommend the use of downspout extensions and splash blocks at the downspout discharge to direct storm water away from the foundations. The useful life of gutters and downspouts coincides with that of the sloped roofs. Coordinated replacement will result in the most economical unit price and minimize the possibility of damage to other roof components as compared to separate replacements.

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Semi-annually:
 - Clean out debris and leaves that collect in the gutters

- Repair and refasten any loose gutter fasteners
- Repair and seal any leaking seams or end caps
- Verify downspouts discharge away from foundations

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 replacement of the heat tracers.

Life Safety System

Line Item: 1.255

Quantity: The life safety systems at Champions Way include the following components:

- Audio/visual fixtures
- *Simplex* control panels
- Piping, common (Long-lived with an anticipated useful life of up to 65 years and beyond)
- Wiring

History: Original with isolated audio/visual fixture replacements

Conditions: Reported satisfactory without operational deficiencies.



Control panel



Audio/visual fixture

Useful Life: Up to 25 years for the devices and the control panels with interim replacements funded through the operating budget.

Preventative Maintenance Notes: We recommend the Association obtain and adhere to the manufacturer's recommended maintenance plan. In accordance with *NFPA 72* (National Fire Alarm and Signaling Code) we also recommend the Association maintain a maintenance contract with a qualified professional. The required preventative maintenance may vary in frequency and scope based on the age of the components,

operational condition, or changes in technology. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Semi-annually:
 - Inspect and test all components and devices, including, but not limited to, control panels, annunciators, detectors, audio/visual fixtures, signal transmitters and magnetic door holders
 - Test backup batteries
- As-needed:
 - Ensure clear line of access to components such as pull stations
 - Ensure detectors are properly positioned and clean of debris

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. Changes in technology or building codes may make a replacement desirable prior to the end of the functional life. Our estimate of future cost considers only that amount necessary to duplicate the same functionality. Local codes or ordinances at the actual time of replacement may require a betterment as compared to the existing system. A betterment could result in a higher, but at this time unknown, cost of replacement.

Light Fixtures

Line Item: 1.260

Quantity: Approximately 257 exterior metal light fixtures accent the balconies, garages and front entries

History: Original; Management notes the fixtures have begun to lose their finish and are considering replacing the light fixtures in the near term.

Condition: Fair overall with finish deterioration and mis-matched fixtures evident. We note replaced fixtures.



Wall mounted light fixtures at garages



Replaced light fixtures



Mismatched finishes



Wall mounted light fixtures at front entryway

Useful Life: Up to 25 years

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- As-needed:
 - Replace burned out bulbs at common fixtures as needed
 - Inspect and repair broken or dislodged fixtures
 - Ensure a waterproof seal between the fixture and building exists

Priority/Criticality: Per Board discretion

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

Parapet Walls

Line Item: 1.272

Quantity: The parapet walls are comprised of the following approximately quantities of materials:

- 13,200 square feet of fiber cement siding
- 4,000 linear feet of aluminum coping and capstones
- 2,000 square feet of masonry
- Limited quantity of sealants.

History: In 2019, the Association contracted *KIL Architecture* to perform an invasive analysis at the parapet walls to identify the source of reported leaks. In 2022 and 2023, the Association conducted reflashing at the majority of the parapet walls at the roof tops. The project included reframing of up to fifty percent (50%) of the walls, adding flashing at the base of the walls, and replacing the end unit wall caps with metal coping rather than stone. Siding was replaced and finished as needed. At the time of the inspection,

Management informs us approximately ninety percent (90%) of the parapet wall project was complete. We note that the remaining expenditures related to this project will be paid for through the remaining balance of the special assessment. Management anticipates that there will be no reserve funds needed to fund the rest of the project. Upon completion of the parapet wall coping, flashing, and water remediation project, the Association plans to perform paint finish applications at the entirety of the walls.

Condition: Upon completion of the renovation, we assume satisfactory condition. The paint finishes are in fair overall condition.



Parapet walls overview



Parapet walls overview with minor finish deterioration



Parapet wall finish deterioration



Parapet wall finish deterioration



Parapet wall finish deterioration



Missing siding at parapet wall – Note: ongoing repairs, we assume installation of siding in near term



Missing siding at parapet wall – Note: ongoing repairs, we assume installation of siding in near term



Aluminum wall cap missing – Note: ongoing repairs, we assume installation of cap in near term

Useful Life: With the benefit of periodic maintenance, applications of this type of material can have a useful life of up to 45 years. This useful life is based on a high grade pre-finish applied in the factory. This useful life is also dependent upon paint applications and partial replacements up to every 10 years.

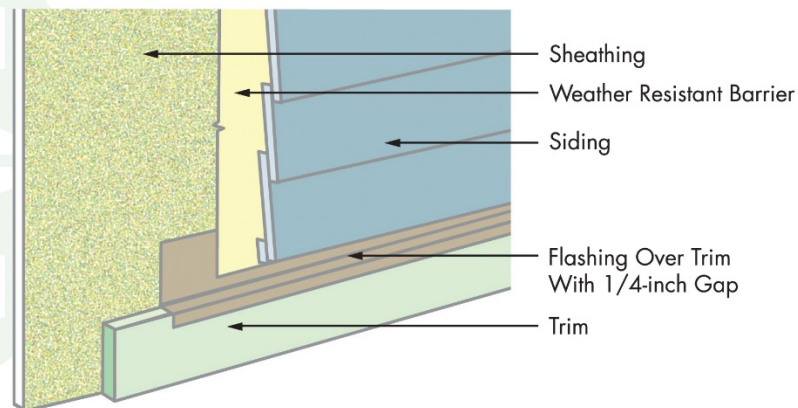
Component Detail Notes: Fiber cement siding is made from a combination of cement, sand and cellulose fiber. Manufacturing of the siding utilizes a steam curing process to increase strength and dimensional stability. The siding is also manufactured in layers forming a sheet of desired thickness. A wood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

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

- Resistant to insects, birds and fire

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

FIBER CEMENT SIDING DETAIL



© Reserve Advisors

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
 - Inspect and repair damage, loose boards and finish stains
 - Periodic pressure cleaning at areas with organic growth
 - Touch-up paint finish applications as needed and sealing of butt joints and field cut end joints

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 anticipate the following during each paint application cycle:

- Paint finish application
- Replacement of 400 square feet, or up to two percent (2%), of the siding and trim (The exact amount of material in need of replacement will depend on the actual future conditions and desired appearance. We

recommend replacement wherever cracks, delamination and deterioration impair the ability of the material to prevent water infiltration.)

- Minor repairs of the coping and masonry.

Roofs, Asphalt Shingles

Line Items: 1.280 and 1.281

Quantity: Approximately 305 squares¹ of asphalt shingle roofs at Buildings 1 through 5 and approximately 320 squares at Buildings 6 through 9.

History: The asphalt shingle roofs at Buildings 1 through 5 are original to 2011 and the asphalt shingle roofs at Buildings 6-9 are original to 2013. Management reports isolated repairs due to storm related shingle loss and at rotted parapet walls. These repairs were funded through the operating budget.

Condition: Good to fair overall with staining, minor shingle lift, and isolated sheathing deflection. Management reports a limited history of leaks at the parapet walls. Following the recent remediation of the parapet walls, Management does not report leaks.



Asphalt shingle roof overview of Building 5



Asphalt shingle roof staining



Asphalt shingle roof staining



Asphalt shingle roof staining

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



Minor shingle lift



Sheathing deflection

Useful Life: 15- to 20-years

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

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

Insulation and ventilation are two major components of a sloped roof system. Together, proper insulation and ventilation help to control attic moisture and maintain an energy efficient building. Both insulation and ventilation prevent moisture buildup which can cause wood rot, mold and mildew growth, warp sheathing, deteriorate shingles, and eventually damage building interiors. Sufficient insulation helps to minimize the quantity of moisture that enters the attic spaces and adequate ventilation helps to remove any moisture that enters the attic spaces. These two roof system components also help to reduce the amount of energy that is required to heat and cool a building. Proper attic insulation minimizes heat gain and heat loss between the residential living spaces and attic spaces. This reduces energy consumption year-round. Proper attic ventilation removes excessive heat from attic spaces that can radiate into residential living spaces and cause air conditioners to work harder. Properly installed attic insulation and ventilation work together to maximize the useful life of sloped roof systems.

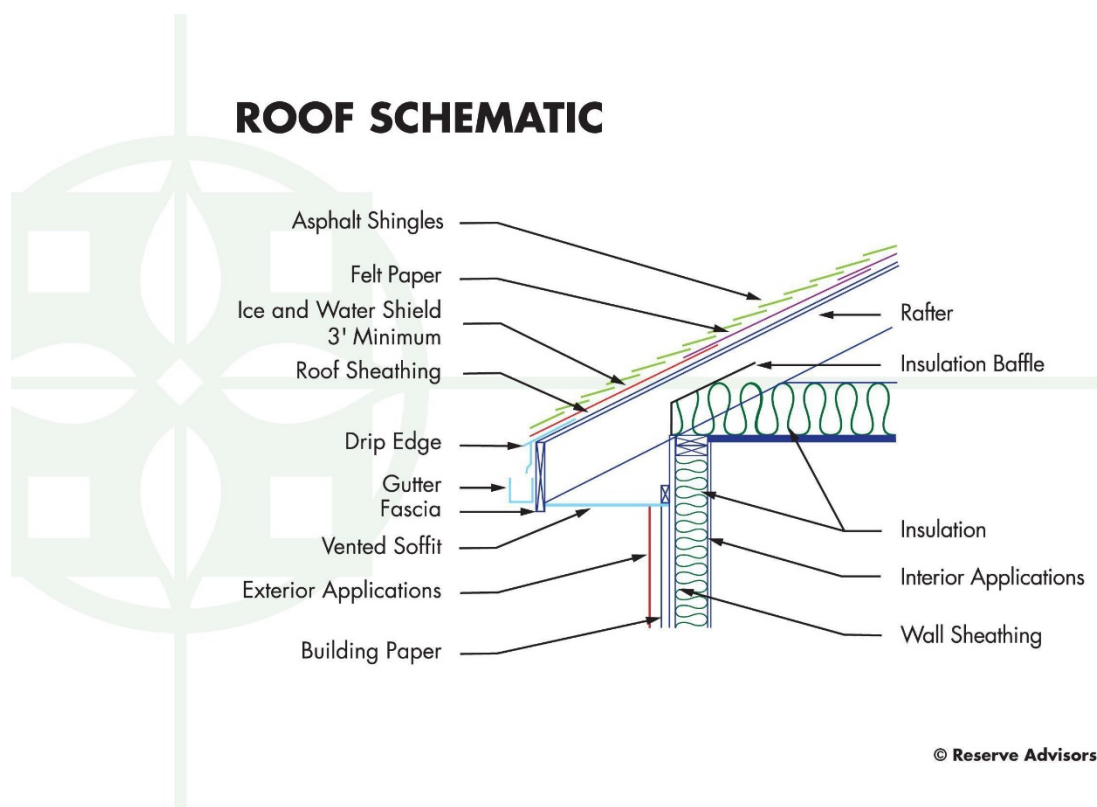
The vents should be clear of debris and not blocked from above by attic insulation. If the soffit vents are blocked from above, installation of polystyrene vent spaces or baffles between the roof joists at these locations can ensure proper ventilation.

Certain characteristics of condition govern the times of replacement. Replacement of an asphalt shingle roof becomes necessary when there are multiple or recurring leaks and when the shingles begin to cup, curl and lift. These conditions are indications that the asphalt shingle roof is near the end of its useful life. Even if the shingles are largely watertight, the infiltration of water in one area can lead to permanent damage to the underlying roof sheathing. This type of deterioration requires replacement of saturated

sections of sheathing and greatly increases the cost of roof replacement. Roof leaks may occur from interrelated roof system components, i.e., flashings. Therefore, the warranty period, if any, on the asphalt shingles, may exceed the useful life of the roof system.

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

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



Contractors use one of two methods for replacement of sloped roofs, either an overlayment or a tear-off. Overlayment is the application of new shingles over an existing roof. However, there are many disadvantages to overlayment including hidden defects

of the underlying roof system, absorption of more heat resulting in accelerated deterioration of the new and old shingles, and an uneven visual appearance. Therefore, we recommend only the tear-off method of replacement. The tear-off method of replacement includes removal of the existing shingles, flashings if required and underlayments.

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

Preventative Maintenance Notes: We recommend the Association maintain a service and inspection contract with a qualified professional and record all documentation of repairs conducted. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
 - Record any areas of water infiltration, flashing deterioration, damage or loose shingles
 - Implement repairs as needed if issues are reoccurring
 - Trim tree branches that are near or in contact with roof
- As-needed:
 - Ensure proper ventilation and verify vents are clear of debris and not blocked from attic insulation

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

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

Roofs, Metal

Line Item: 1.460

Quantity: Approximately 175 metal roofs. The quantity includes approximately 500 linear feet of metal trim caps.

History: Original.

Condition: Good overall with isolated finish deterioration. Management does not report a history of leaks.



Metal roofs overview



Metal roof with minor finish deterioration



Metal roof overview

Useful Life: Up to 35 years

Preventative Maintenance Notes: We recommend the Association maintain a service and inspection contract with a qualified professional and record all documentation of repairs conducted. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
 - Record any areas of water infiltration, flashing deterioration, damage or loose fasteners
 - Implement repairs as needed if issues are reoccurring
 - Clear valleys of debris
 - Periodic cleaning at areas with organic growth

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.

Sealants, Windows, Doors, Dissimilar Materials, and Control Joints

Line Item: 1.540

Quantity: Approximately 21,200 linear feet of exterior sealants or *caulk*² at the windows, doors, dissimilar materials and control joints³. The quantity excludes sealants at the parapet walls and wing walls.

History: In 2017 and 2018, the Association conducted partial sealant replacement at the windows and doors. In the last few years the Association addressed sealants as needed, working front to back to identify areas of concern. Management notes recent minor sealant applications have been funded through the operating budget.

Condition: Fair overall with cohesive failure, adhesion failure, brittle sealants, sealant cracks and missing sealant evident. We note a lack of sealant along the fiber cement-composite joint at the front bays. We recommend the Association seal these areas to prevent water infiltration.



Lacking sealant at Unit 45



Cohesive failure above garage



Sealant cracks



Adhesion failure at Unit 43

² The terms sealant and caulk are used interchangeably throughout this text and throughout the industry.

³ A control joint is a formed or sawed groove in a wall system that allows for thermal expansion and contraction of the building materials without damage.



Brittle sealants and cohesive failure at Unit 72



Cohesive failure at Unit 85



Sealant failure at window at Unit 72



Brittle sealants

Useful Life: Up to 20 years

Component Detail Notes: The rate of deterioration of the sealants is not uniform due to the different exposures to sunlight and weather. The Association should anticipate gradual dispersed deterioration as the sealants age.

Correct preparation of the joint surfaces before re-application of a sealant is important to ensure proper adhesion. The surfaces must be removed of all contaminants, including the previous sealant material, paint, rust and other corrosion, water, grease, etc. The surfaces should also be dry and free from dust and grit, which can be removed using dry compressed air or brushes. The Association should ensure the manufacturer's instructions are followed in determining if the substrate is compatible with the sealant and that the chemical cleaners and solvents used to prepare the surfaces are also compatible with the sealant.

Several types of caulk are available with significantly different weathering and elongation properties. We recommend a silicone-based or polyurethane-based caulk. The major advantage of polyurethane-based caulks is their ability to bond to most construction surfaces without special preparation, such as primer application, as is required for

alternate materials like silicone caulk. With proper surface preparation, i.e., removing surface contaminants, silicone-based caulks perform better than most other caulk materials. The weathering and elongation properties of silicone-based caulk give it a much longer useful life than other caulk materials.

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 is based, in part, on information provided by the Association. We recommend Champions Way replace up to eleven percent (11.1%) or 2,355 linear feet of joint sealant in conjunction with paint finish applications.

Walls, Masonry

Line Items: 1.819 and 1.820

Quantity: Champions Way maintains the following approximate quantities of masonry:

- 53 wing walls comprising 4,200 square feet of exposed masonry and 890 linear feet of capstones
- 98,000 square feet of masonry at the remaining exterior building surfaces. This quantity excludes the parapet walls.

History: The Association conducted repairs including brick replacement, sealer application, and capstone resetting of the wing walls in 2017 and 2018. In recent years, the Association repointed and repaired multiple wing walls at Building 1.

Condition: The wing walls are in fair condition with the following evident:

- Opportunity for water accumulation between the concrete stairs and wing walls. We recommend the Association apply sealant along these joints to prevent water infiltrations. The Association should ensure dry conditions at the time of application.
- Undersized capstones which exacerbate deterioration and efflorescence. We recommend the Association conduct replacement of the capstone with larger capstones with underside grooves to deter water accumulation.
- Masonry exhibits systemic cracks
- Masonry exhibits systemic spalls and scaling
- Isolated mortar deterioration is evident

The remaining masonry is in good to fair overall condition with the following evident:

- Minimal previous repairs evident
- Efflorescence is visible (Efflorescence is not a safety concern. However, it can be an indication of water infiltration, masonry saturation, improper drainage behind the façade or another underlying issue.)
- Lintels exhibit rust

- Masonry exhibits cracks
- Masonry exhibits isolated spalls
- Mortar loss is evident
- Weeps and flashing at lintels are visible



Previous repairs



Efflorescence at Unit 55



Rust jacking



Efflorescence and sill cracks at Unit 92



Efflorescence and masonry cracks at Building 2



Lintel rust and cast stone crack



Mortar loss



Lintel rust



Wing wall overview



Efflorescence at wing wall



Masonry cracks and missing sealant at wing wall
– Note: opportunity for water accumulation
between stairs and wing wall masonry



Wing wall efflorescence at Unit 71



Cracks and scaling masonry at Unit 71



Wing wall efflorescence at Building 2



Efflorescence and masonry cracks at Unit 24



Spalled masonry at 1246 Duey Street

Useful Life:

- We recommend the Association conduct repairs of the wing walls as described below every three years
- We recommend the Association anticipate the need to conduct inspections and repairs of the remaining masonry every 8- to 12-years

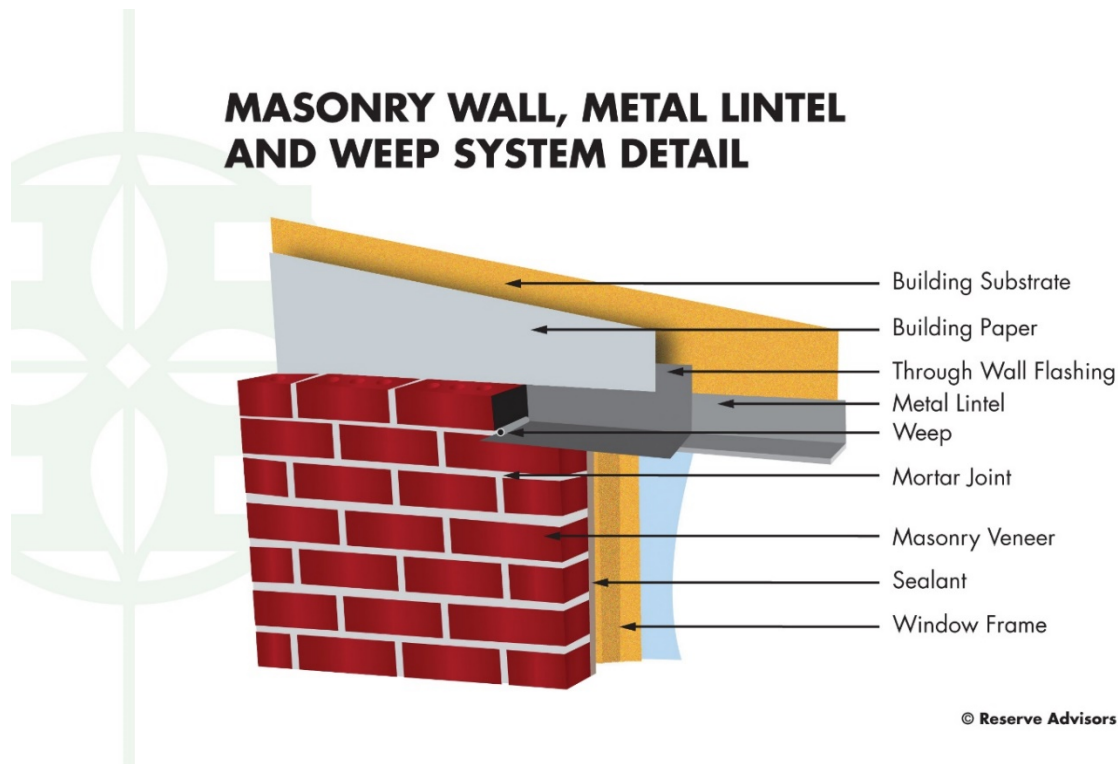
Component Detail Notes: Common types of masonry deterioration include efflorescence, spalling, joint deterioration and cracking. The primary cause of efflorescence, cracks and face spall is water infiltration; therefore, prevention of water infiltration is the principal concern for the maintenance of masonry applications.

Repointing is a process of raking and cutting out defective mortar to a depth of not less than $\frac{1}{2}$ inch nor more than $\frac{3}{4}$ inch and replacing it with new mortar. Face grouting is the process of placing mortar over top of the existing mortar. We advise against face grouting because the existing, often deteriorated mortar does not provide a solid base for the new mortar. New mortar spalls at face grouted areas will likely occur. One purpose of a mortar joint is to protect the masonry by relieving stresses within the wall caused by expansion, contraction, moisture migration and settlement. Repointed mortar joints are more

effective if the mortar is softer and more permeable than the masonry units, and no harder or less permeable than the existing mortar. The masonry contractor should address these issues within the proposed scope of work.

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. We include costs of paint finish applications of the steel lintels in Line Item, "**Walls, Siding and Trim, Composite**". Structural damage can eventually lead to costly replacements of lintels and surrounding wall systems.

The following diagram details a typical metal lintel and weep system and may not reflect the actual configuration at the Association:



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 estimate that up to 27 of the wing walls, or approximately fifty-three percent (52.9%) of the total, will require replacement during the next 30 years.

Our cost for wing wall repairs is based on information provided by the Association and includes:

- Sealer application of the entirety of the brick masonry
- Replacement of the capstones with oversized capstones with underside grooves and flashing
- Shoring of the overhead roof structures
- Repointing of up to fifty percent (50%) of the masonry at each wall
- Replacement of up to ten percent (10%) of the masonry at each wall
- Installation/replacement of sealants along the stairs and under the capstones

Our cost for repairs of the remaining masonry 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

Walls, Siding and Trim, Paint Finishes

Line Item: 1.830

Quantity: Approximately 19,600 square feet of composite trim and fiber cement siding. This quantity excludes the fiber cement siding at the parapet walls. In addition, the Association conducts paint finish applications of approximately 3,100 linear feet of steel lintels.

History: Painted from 2017 to 2019.

Condition: Fair overall with missing soffit, loose trim, damage, rot and deterioration evident.



Siding overview



Loose trim



Finish rot and deterioration



Loose trim boards



Finish deterioration



Missing soffit at Unit 98

Useful Life: We recommend the Association anticipate a useful life of paint finish applications every four- to six-years

Component Detail Notes: Correct and complete preparation of the surface before application of the paint finish maximizes the useful life of the paint finish and surface. The contractor should remove all loose, peeled or blistered paint before application of the new paint finish. The contractor should then power wash the surface to remove all dirt or chalking of the prior paint finish.

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 estimate of cost is based, in part, on information provided by the Association. We assume the following activities per event:

- Paint finish applications
- Replacement of up to three percent (3%), of the siding and trim (The exact amount of material in need of replacement will depend on the actual future conditions and desired appearance. We recommend replacement

wherever holes, cracks and deterioration impair the ability of the material to prevent water infiltration.)

- Replacement of sealants as needed

Property Site Elements

Asphalt Pavement, Repaving

Line Item: 4.045

Quantity: Approximately 1,950 square yards

History: Original; We note the Association performed seal coat applications and repairs in 2017 and 2020. Management informs us the Association intends to perform repairs and seal coat applications in 2023 funded through the operating budget.

Condition: Fair overall with periodic cracks, standing water, alligator cracks, longitudinal cracks and previous repairs evident. We note centerline deterioration at the pavement due to the drainage system.



Asphalt pavement alley overview



Asphalt pavement alley overview



Asphalt pavement street overview with cracks and repairs



Asphalt pavement alley overview



Standing water and cracks

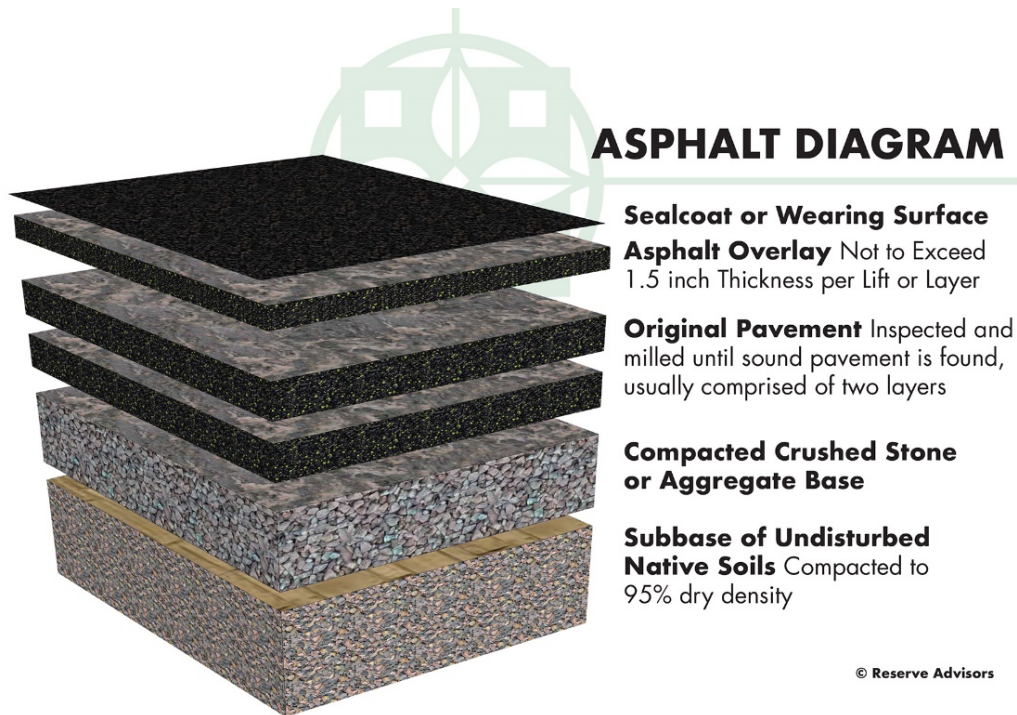


Pavement longitudinal cracks and alligator cracks

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

Component Detail Notes: The initial installation of asphalt uses at least two lifts, or two separate applications of asphalt, over the base course. The first lift is the binder course. The second lift is the wearing course. The wearing course comprises a finer aggregate for a smoother more watertight finish.

The following diagram depicts the typical components although it may not reflect the actual configuration at Champions Way:



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 at Champions Way.

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
 - Inspect for settlement, large cracks and trip hazards, and ensure proper drainage
 - Repair areas which could cause vehicular damage such as potholes
- As needed:
 - Perform crack repairs and patching

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. Due to the limited quantity of asphalt pavement, we recommend the Association conduct complete replacement of the pavement in lieu of phased replacements to result in the lowest economical unit cost. Our cost includes replacement of up to fifteen percent (15%) of the concrete curbs.

Catch Basins

Line Item: 4.100

Quantity: 10 catch basins⁴; This quantity excludes the drain in the concrete apron along the street

History: Original

Condition: Good overall

⁴ We utilize the terminology catch basin to refer to all storm water collection structures including curb inlets.



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.

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
 - Inspect and repair any settlement and collar cracks
 - Ensure proper drainage and inlets are free of debris
 - If property drainage is not adequate in heavy rainfall events, typically bi-annual cleaning of the catch basins is recommended

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.

Concrete Sidewalks

Line Item: 4.140

Quantity: Approximately 3,250 square feet of concrete sidewalks, mailbox pads, and aprons at the streets. Unit Owners maintain the garage aprons and HVAC pads

Condition: Good to fair overall with isolated cracks, settlement and previous repairs evident.



Sidewalk cracks



Sidewalk cracks



Spall at concrete apron



Replaced section



Cracks and spalls at concrete apron



Sidewalk edge cracks likely due to settlement

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

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
 - Inspect and repair major cracks, spalls and trip hazards
 - Mark with orange safety paint prior to replacement or repair
 - Repair or perform concrete leveling in areas in immediate need of repair or possible safety hazard

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 1,150 square feet of concrete sidewalks, or approximately thirty-five percent (35.4%) of the total, will require replacement during the next 30 years.

Concrete Stairs

Line Item: 4.160

Quantity: 61 each with aluminum railings.

History and Condition: Good to fair overall with periodic cracks, spalled concrete, spalled concrete at railing attachment and railing rust evident. The Association performed isolated settlement remediation at Unit 46 recently funded through the operating budget. The rate of deterioration may be affected by the frequency of repairs of the wing walls as noted in Line Item, “**Walls, Masonry**”.



Concrete stairs with spall and removed railing



Concrete stairs with staining



Stair cracks at Unit 87

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

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
 - Inspect and repair major cracks, spalls and trip hazards
 - Mark with orange safety paint prior to replacement or repair
 - Repair or perform concrete leveling in areas in immediate need of repair or possible safety hazard

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 18 stairs, or approximately thirty percent (29.5%) of the total, will require replacement during the next 30 years.

Irrigation System

Line Item: 4.420

Quantity: 32 zones with approximately 12 to 14 heads each and three controllers. Nine of these zones utilize a drip irrigation system

History: Original; The Association has replaced isolated sprinkler heads as needed.

Condition: Satisfactory operational condition and Management does not report any deficiencies



Irrigation system controller

Useful Life: Up to and sometimes beyond 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

Champions Way 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.

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Semi-annually:
 - Conduct seasonal repairs which includes valve repairs, controller repairs, partial head replacements and pipe repairs
 - Blow out irrigation water lines and drain building exterior faucets each fall if applicable

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

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

Mailbox Stations

Line Item: 4.600

Quantity: Five stations

History: Original

Condition: Good to fair overall with isolated finish deterioration evident.



Mailbox stations



Mailbox station minor finish deterioration

Useful Life: Up to 25 years

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- As-needed:
 - Inspect and repair damage, vandalism, and finish deterioration
 - Verify posts are anchored properly

Priority/Criticality: Per Board discretion

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

Railings, Aluminum

Line Item: 4.731

Quantity: Approximately 650 linear feet at the front entry stairs

History: Original; Management informs us of the Association's desire to perform refinishing of the railings. Based on conversations with Management we recommend the Association phase the refinishing over multiple years and fund the project through the operating budget.

Condition: Good to fair overall with leaning railings, rusted fasteners and finish deterioration evident



Leaning railing at Unit 67



Rusted fasteners at Unit 45



Railing with rusted fasteners

Useful Life: Up to 25 years

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
 - Inspect for damage, and excessive finish deterioration or corrosion
 - Test security of railings and inspect connection fasteners

Priority/Criticality: Per Board discretion

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-to three-years. Budgeting for an Update demonstrates the Board's objective to continue fulfilling its fiduciary responsibility to maintain the commonly owned property and to fund reserves appropriately.

5.METHODOLOGY

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

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

- The Cash Flow Method to compute, project and illustrate the 30-year Reserve Funding Plan
- Local² costs of material, equipment and labor
- Current and future costs of replacement for the Reserve Components
- Costs of demolition as part of the cost of replacement
- Local economic conditions and a historical perspective to arrive at our estimate of long-term future inflation for construction costs in South Bend, Indiana at an annual inflation rate³. 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 additional information on our use of published sources of cost data.

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

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

- The past and current maintenance practices of Champions Way 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 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 founders are also founders of Community Associations Institute's (CAI) Reserve Committee that developed national standards for reserve study providers. One of our founders 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 a 2,600,000-square foot 98-story highrise. 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.

JUSTIN B. KLEIN, RS
Responsible Advisor

CURRENT CLIENT SERVICES

Justin B. Klein, a Senior Engineer, is an Advisor for Reserve Advisors, LLC. Mr. Klein 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 and Transition Study Reports for apartments, high rises, condominiums, townhomes, and homeowners associations.



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

Springfield Golf and Country Club – This private club, established in 1960, is located in Springfield, Virginia. Home to an 18-hole golf course, multiple practice putting greens, a driving range, outdoor pool facility, a fitness center and studio, a golf simulator, four indoor tennis courts, and six outdoor tennis courts including two clay courts, members of this Club can enjoy an extensive array of amenities.

Glenmore Community Association – Located in Keswick, Virginia, this master community association features 980 single family homes and counting. The community maintains a private equestrian center located on a 61-acre parcel of land. The equestrian center is equipped with two outdoor riding rings and 13 fenced paddocks in addition to the 27 stalls at the Main Barn. The Association also maintains over 10 miles of roads, three earthen dams, eight ponds, a dog park, and playground.

California House – Built in 1900 and converted to condominiums in 1978, this six story building is located in the historic Kalorama neighborhood in Washington D.C. Sharing its footprint with a sister building, the Association's 27 residents can enjoy the decorative cornice, ornate marble tiled lobby and welcoming courtyard.

Villages of Five Points – Conveniently nestled east of Route 1 in Lewes, Delaware, this master association of over 580 units comprising condos, townhouses and single-family homes is a short drive to the shores of the Atlantic Ocean. The Association maintains a clubhouse, two pool houses and pools, eight tennis courts and over 1.5 miles of pavement walking paths.

Windsor Park Residences – Located within the Windsor Club in Vero Beach, Florida, this condominium Association features 12 residences within five connected three-story buildings with a private reflecting pool centerpiece at the courtyard. Owners can take advantage of direct access elevators and garages for their vehicles and golf carts.

PRIOR RELEVANT EXPERIENCE

Before joining Reserve Advisors, LLC, Mr. Klein attended Rose-Hulman Institute of Technology in Terre Haute, Indiana where he attained his Bachelor of Science degree in Mechanical Engineering. His rigorous coursework focused on using problem solving to understand mechanical systems and principles. During his undergraduate education, Mr. Klein worked to develop a debris displacement apparatus to be mounted inside a D-155 bulldozer for Komatsu America Corporation.

EDUCATION

Rose-Hulman Institute of Technology - B.S. Mechanical Engineering

PROFESSIONAL AFFILIATIONS

Reserve Specialist (RS) – Community Association Institute
Engineer in Training (E.I.T) – State of Virginia



ANDREW K. MCGOWAN, RS
Great Lakes Regional Engineering Manager

CURRENT CLIENT SERVICES

Andrew K. McGowan is a Mechanical Engineer and Advisor for **Reserve Advisors, LLC**. Mr. McGowan is responsible for the inspection and analysis of the condition of clients' property, recommending engineering solutions to prolong the lives of the components, forecasting capital expenditures for the repair and/or replacement of the property components, and preparation of 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 various buildings and communities.



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

Lake Summerset Association, Inc. is an expansive lake getaway of 2,219 units surrounding Lake Summerset in Davis, Illinois. The community is constantly evolving and includes a campground, maintenance compound, dam, docks and various outdoor activity centers.

Nichols Tower is a 14-story historic commercial office building converted from the *Sears Roebuck and Co.* Merchandise Building in Chicago, Illinois. The tower stands as a beacon in the community maintained by *The Foundation for Homan Square*. The building combines historic elements such as decorative masonry and terrazzo floors with new renovations to appeal to tenants.

Park Millennium Condominium Association is a 54-story high-rise condominium building in downtown Chicago consisting of 480 residential and three commercial units. The Association faces various maintenance needs to their plaza deck, indoor pool, waterproof membranes, expansion joints and shared Pedway. Residents may enjoy amenities such as the business center, fitness center and club rooms.

Shoreline Towers Condominium Association stands 25-stories adjacent to Lake Michigan. The building automation system optimizes energy efficiency for high efficiency boilers and various other systems. Automatic doors meeting ADA accessibility requirements ensure everyone has access to the hospitality room, laundry room and sun deck.

Vista Homes Building Corporation is a cooperative of 120 units in a 17-story building overlooking the Museum of Science and Industry in Chicago, Illinois. Originally built in 1925, the building has an extensive history. Upgraded electrical and piping systems help ensure the building is positioned to stand for many more years to come.

PRIOR RELEVANT EXPERIENCE

Before joining Reserve Advisors, Mr. McGowan attended The Ohio State University where he attained his Bachelor of Science degree in Mechanical Engineering. After graduation, he worked for one of the top cabinet manufacturers where he performed field visits with home construction contractors, such as *NVR, Inc.*, to determine reliable solutions to common quality issues.

EDUCATION

Ohio State University – B.S. Mechanical Engineering

PROFESSIONAL AFFILIATIONS

Professional Engineer (P.E.) - Illinois

Reserve Specialist (RS) - Community Associations Institute

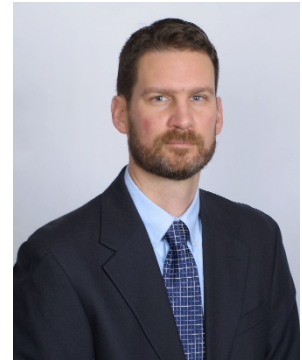
Homeowner Leader Education Committee Member - Community Associations Institute

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, Illinois, Colorado

Reserve Specialist (RS) - Community Associations Institute

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



RESOURCES

Reserve Advisors 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.

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 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' 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 Champions Way 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) Champions Way 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, LLC ("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 subject property. The purpose of our energy benchmarking services is to track, collect and summarize the subject property's energy consumption over time for your use in comparison with other buildings of similar size and establishing a performance baseline for your planning of long-term energy efficiency goals.

Our inspection and analysis of the subject property is limited to visual observations, is noninvasive and is not meant to nor does it include investigation into statutory, regulatory or code compliance. RA inspects sloped roofs from the ground and inspects flat roofs where safe access (stairs or ladder permanently attached to the structure) is available. Our energy benchmarking services with respect to the subject property is limited to collecting energy and utility data and summarizing such data in the form of an Energy Star Portfolio Manager Report or any other similar report, and hereby expressly excludes any recommendations with respect to the results of such energy benchmarking services or the accuracy of the energy information obtained from utility companies and other third-party sources with respect to the subject property. The reserve report and any energy benchmarking report (i.e., any Energy Star Portfolio Manager Report) (including any subsequent revisions thereto pursuant to the terms hereof, collectively, the "Report") are based upon a "snapshot in time" at the moment of inspection. RA may note visible physical defects in the Report. The inspection is made by employees generally familiar with real estate and building construction. Except to the extent readily apparent to RA, RA cannot and shall not opine on the structural integrity of or other physical defects in the property under any circumstances. Without limitation to the foregoing, RA cannot and shall not opine on, nor is RA responsible for, the property's conformity to specific governmental code requirements for fire, building, earthquake, occupancy or otherwise.

RA is not responsible for conditions that have changed between the time of inspection and the issuance of the Report. RA does not provide invasive testing on any mechanical systems that provide energy to the property, nor can RA opine on any system components that are not easily accessible during the inspection. 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 vapor, water, oil, gas, coal, or other subsurface mineral and use rights or such hidden conditions, and RA assumes no responsibility for any such conditions. The Report contains opinions of estimated replacement costs or deferred maintenance expenses and remaining useful lives, which are neither a guarantee of the actual costs or expenses of replacement or deferred maintenance nor a guarantee of remaining useful lives of any property element.

RA assumes, without independent verification, the accuracy of all data provided to it. Except to the extent resulting from RA's willful misconduct in connection with the performance of its obligations under this agreement, you agree to indemnify, defend, and hold RA and its affiliates, officers, managers, employees, agents, successors and assigns (each, an "RA Party") harmless from and against (and promptly reimburse each RA Party for) any and all losses, claims, actions, demands, judgments, orders, damages, expenses or liabilities, including, without limitation, reasonable attorneys' fees, asserted against or to which any RA Party may become subject in connection with this engagement, including, without limitation, as a result of any false, misleading or incomplete information which RA relied upon that was 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 or to whom you provided the Report. NOTWITHSTANDING ANY OTHER PROVISION HEREIN TO THE CONTRARY, THE AGGREGATE LIABILITY (IF ANY) OF RA WITH RESPECT TO THIS AGREEMENT AND RA'S OBLIGATIONS HEREUNDER IS LIMITED TO THE AMOUNT OF THE FEES ACTUALLY RECEIVED BY RA FROM YOU FOR THE SERVICES AND REPORT PERFORMED BY RA UNDER THIS AGREEMENT, WHETHER ARISING IN CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY OR OTHERWISE. YOUR REMEDIES SET FORTH HEREIN ARE EXCLUSIVE AND ARE YOUR SOLE REMEDIES FOR ANY FAILURE OF RA TO COMPLY WITH ITS OBLIGATIONS HEREUNDER OR OTHERWISE. RA SHALL NOT BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR EXEMPLARY DAMAGES OF ANY KIND, INCLUDING, BUT NOT LIMITED TO, ANY LOST PROFITS AND LOST SAVINGS, LOSS OF USE OR INTERRUPTION OF BUSINESS, HOWEVER CAUSED, WHETHER ARISING IN CONTRACT, TORT (INCLUDING NEGLIGENCE), BREACH OF WARRANTY, STRICT LIABILITY OR OTHERWISE, EVEN IF RA HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO EVENT WILL RA BE LIABLE FOR THE COST OF PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES. RA DISCLAIMS ALL REPRESENTATIONS AND WARRANTIES WHATSOEVER, EXPRESS OR IMPLIED OR OF ANY NATURE, WITH REGARD TO THE SERVICES AND THE REPORT, INCLUDING, WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Report - RA will complete the services in accordance with the Proposal. The Report represents a valid opinion of RA's findings and recommendations with respect to the reserve study and is deemed complete. RA will consider any additional information made available to RA within 6 months of issuing the Report and issue a revised Report based on such additional information if a timely request for a revised Report is made by you. 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. RA reserves the right to, and you acknowledge and agree that RA may, use any data provided by you in connection with the services, or gathered as a result of providing such services, including in connection with creating and issuing any Report, in a de-identified and aggregated form for RA's business purposes.

Your Obligations - You agree to provide us access to the subject property for an 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. Additionally, you agree to provide historical replacement schedules, utility bills and historical energy usage files that RA requests and deems necessary to complete the energy benchmarking services, and you agree to provide any utility release(s) reasonably requested by RA permitting RA to obtain any such data and/or information from any utility representative or other third party. 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 the Report is limited to only the purpose stated herein. You acknowledge that RA is the exclusive owner of all intellectual property rights in and relating to the Report. You hereby acknowledge that any use or reliance by you on the Report for any unauthorized purpose is at your own risk and that you will be liable for the consequences of any unauthorized use or distribution of the Report. Use or possession of the Report by any unauthorized third party is prohibited. 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 the Report in its entirety to the following third parties: members of your organization (including your directors, officers, tenants and prospective purchasers), your accountants, attorneys, financial institutions and property managers who need to review the information contained herein, and any other third party who has a right to inspect the Report under applicable law including, but not limited to, any government entity or agency, or any utility companies. Without the written consent of RA, you shall not disclose the Report to any other third party. By engaging our services, you agree that the Report contains intellectual property developed (and owned solely) by RA and agree that you will not reproduce or distribute the Report **to any party that conducts reserve studies without the written consent of RA**.

RA will include (and you hereby agree that RA may include) your name in our client lists. RA reserves the right to use (and you hereby agree that RA may 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 - If reserve study and energy benchmarking services are performed by RA, then the retainer payment is due upon execution of this agreement and prior to the inspection by RA, and any balance is due net 30 days from the Report shipment date. If only energy benchmarking services are performed by RA, then the retainer payment is due upon execution of this agreement and any balance is due net 30 days from the Report shipment date. In any case, any balance remaining 30 days after delivery of the Report shall accrue an interest charge of 1.5% per month. Unless this agreement is earlier terminated by RA in the event you breach or otherwise fail to comply with your obligations under this agreement, RA's obligations under this agreement shall commence on the date you execute and deliver this agreement and terminate on the date that is 6 months from the date of delivery of the Report by RA. Notwithstanding anything herein to the contrary, each provision that by its context and nature should survive the expiration or early termination of this agreement shall so survive, including, without limitation, any provisions with respect to payment, intellectual property rights, limitations of liability and governing law.

Miscellaneous – Neither party shall be liable for any failures or delays in performance due to fire, flood, strike or other labor difficulty, act of God, act of any governmental authority, riot, embargo, fuel or energy shortage, pandemic, wrecks or delays in transportation, or due to any other cause beyond such party's reasonable control; provided, however, that you shall not be relieved from your obligations to make any payment(s) to RA as and when due hereunder. In the event of a delay in performance due to any such cause, the time for completion or date of delivery will be extended by a period of time reasonably necessary to overcome the effect of such delay. You may not assign or otherwise transfer this agreement, in whole or in part, without the prior written consent of RA. RA may freely assign or otherwise transfer this agreement, in whole or in part, without your prior consent. This agreement shall be governed by the laws of the State of Wisconsin without regard to any principles of conflicts of law that would apply the laws of another jurisdiction. Any dispute with respect to this agreement shall be exclusively venued in Milwaukee County Circuit Court or in the United States District Court for the Eastern District of Wisconsin. Each party hereto agrees and hereby waives the right to a trial by jury in any action, proceeding or claim brought by or on behalf of the parties hereto with respect to any matter related to this agreement.