# Phoenix On The Bay II Owners Association, Inc.

Orange Beach, AL • December 9, 2022







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

Phoenix On The Bay II Owners Association, Inc. Orange Beach, Alabama

Dear Board of Directors of Phoenix On The Bay II Owners Association, Inc.:

At the direction of the Board that recognizes the need for proper reserve planning, we have conducted a Reserve Study of Phoenix On The Bay II Owners Association, Inc. in Orange Beach, Alabama and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, December 9, 2022.

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

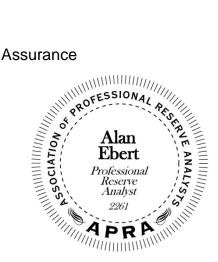
An ongoing review by the Board and an Update of this Reserve Study are necessary to ensure an equitable funding plan since a Reserve Study is a snapshot in time. We recommend the Board budget for an Update to this Reserve Study in two- to three-years. We look forward to continuing to help Phoenix On The Bay II Owners 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 January 6, 2023 by

Reserve Advisors, LLC

Visual Inspection and Report by: Taylor J. Bleistein Review by: Alan M. Ebert, RS<sup>1</sup>, PRA<sup>2</sup>, Director of Quality Assurance



<sup>&</sup>lt;sup>1</sup> 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

<sup>&</sup>lt;sup>2</sup> 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.





(800) 221-9882



Long-term thinking. Everyday commitment.



# **Table of Contents**

1.	RESERVE STUDY EXECUTIVE SUMMARY	1.1
2.	RESERVE STUDY REPORT	2.1
3.	RESERVE EXPENDITURES and FUNDING PLAN	3.1
4.	RESERVE COMPONENT DETAIL	4.1
	Exterior Building Elements	4.1
	Balconies and Breezeways, Concrete	4.1
	Balconies and Breezeways, Railings, Aluminum	4.3
	Doors, Common Area and Front Entry	4.4
	Light Fixtures	4.5
	Roofs, Built-up	4.6
	Roofs, Concrete Tiles	4.8
	Roofs, Metal	4.9
	Walls, Stucco	4.10
	Windows and Doors, Aluminum Frames	4.13
	Interior Building Elements	4.14
	Ceilings, Acoustical Tiles, Grid and Lighting	4.14
	Elevator Cab Finishes	4.14
	Exercise Equipment	4.15
	Floor Coverings, Carpet	4.16
	Floor Coverings, Tile	4.17
	Furnishings	4.18
	Mailboxes	4.19
	Paint Finishes	4.19
	Paint Finishes, Stairwells	4.20
	Rest Rooms	4.21
	Building Services Elements	4.22
	Air Handling and Condensing Units, Split Systems	4.22
	Elevators, Traction	4.23
	Generator, Emergency	4.25
	Life Safety System	4.26
	Pumps, Domestic Water	4.28
	Security System	4.29



	Property Site Elements	4.31
	Asphalt Pavement, Repaving	4.31
	Concrete Curbs and Gutters	4.33
	Irrigation System	4.34
	Lift Station, Pumps	4.34
	Lift Station, Rebuild	4.35
	Pavers, Masonry	4.36
	Perimeter Walls, Stucco	4.38
	Retaining Walls, Masonry	4.39
	Retaining Wall, Stucco	4.41
	Sport Court, Tennis, Fence	4.42
	Sport Courts, Tennis Court, Color Coat and Waterproof Coating	4.42
	Pool Elements	4.44
	Deck, Pavers (Outdoor Pool)	4.44
	Deck, Tile (Indoor Pool)	4.45
	Fence, Aluminum	4.46
	Furniture	4.46
	Light Fixtures, Bollards	4.47
	Mechanical Equipment, Dehumidification Unit	4.48
	Mechanical Equipment	4.49
	Pool Finishes, Plaster and Tile	4.50
	Garage Elements	4.52
	Concrete, Elevated Floors	4.52
	Light Fixtures	4.54
	Marina Elements	4.55
	Bulkhead, Steel and Vinyl	4.55
	Docks and Pilings, Wood and Composite	4.56
	Power Pedestals	4.57
	Reserve Study Update	4.58
5.	METHODOLOGY	5.1
6.	CREDENTIALS	6.1
7.	DEFINITIONS	7.1
8.	PROFESSIONAL SERVICE CONDITIONS	8.1



#### 1.RESERVE STUDY EXECUTIVE SUMMARY

Client: Phoenix On The Bay II Owners Association, Inc. (Phoenix On The Bay II)

Location: Orange Beach, Alabama

Reference: 170321

Property Basics: Phoenix On The Bay II Owners Association, Inc. is a midrise style development

which consists of 104 units in an eight-story building. The building was built in 2007.

Reserve Components Identified: 57 Reserve Components.

**Inspection Date:** December 9, 2022. We conducted the original inspection on March 15, 2017.

**Funding Goal:** The Funding Goal of this Reserve Study is to maintain reserves above an adequate, not excessive threshold during one or more years of significant expenditures. Our recommended Funding Plan recognizes this threshold funding year in 2047 due to replacement of windows and doors. In addition, the Reserve Funding Plan recommends 2052 year end accumulated reserves of approximately \$2,135,000. We judge this amount of accumulated reserves in 2052 necessary to fund the likely replacement of the elevators after 2052. Future replacement costs beyond the next 30 years for the replacement of the elevators are likely to more than double the current cost of replacement. These future needs, although beyond the limit of the Cash Flow Analysis of this Reserve Study, are reflected in the amount of accumulated 2052 year end reserves.

**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
- 1.3% 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:**

- \$636,526 as of September 30, 2022
- 2022 budgeted Reserve Contributions of \$126,000
- 2023 budgeted Reserve Contributions of \$130,000
- A potential deficit in reserves might occur by 2026 based upon continuation of the most recent annual reserve contribution of \$130,000 and the identified Reserve Expenditures.

**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:

- Roofs, Built-up
- Breezeways, Concrete, Repairs and Waterproof Coating Applications
- Walls, Stucco, Paint Finishes and Capital Repairs
- Concrete, Elevated Floors, Inspections and Capital Repairs
- Sport Court, Tennis, Color Coat and Waterproof Coating

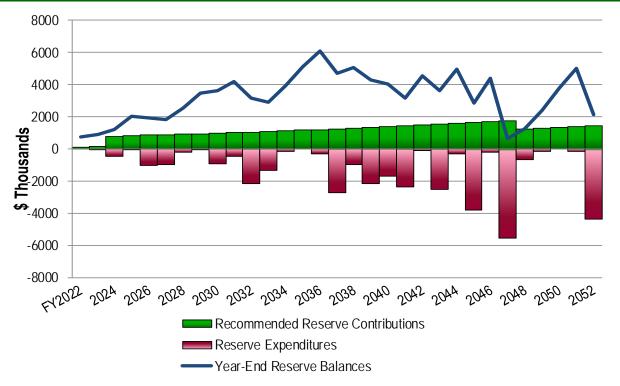


**Recommended Reserve Funding:** We recommend the following in order to achieve a stable and equitable Cash Flow Methodology Funding Plan:

- Increase to \$795,000 in 2024 due to the addition of window and door replacements to the study
- Inflationary increases from 2024 through 2047
- Decrease to \$1,240,000 by 2048 due to fully funding for replacement of windows and doors
- Inflationary increases thereafter through 2052, the limit of this study's Cash Flow Analysis
- 2024 Reserve Contribution of \$795,000 is equivalent to an average annual contribution of \$7,644.23 per unit owner.

**Phoenix On The Bay II**Recommended Reserve Funding Table and Graph

	Reserve	Reserve		Reserve	Reserve		Reserve	Reserve
Year	Contributions (\$)	Balances (\$)	Year	Contributions (\$)	Balances (\$)	Year	Contributions (\$)	Balances (\$)
2023	130,000 (Budgeted)	878,889	2033	1,083,300	2,898,400	2043	1,527,900	3,635,359
2024	795,000	1,228,586	2034	1,121,200	3,919,429	2044	1,581,400	4,982,314
2025	822,800	2,040,902	2035	1,160,400	5,138,324	2045	1,636,700	2,866,066
2026	851,600	1,903,589	2036	1,201,000	6,101,509	2046	1,694,000	4,385,413
2027	881,400	1,812,962	2037	1,243,000	4,702,205	2047	1,753,300	639,921
2028	912,200	2,538,786	2038	1,286,500	5,063,836	2048	1,240,000	1,240,683
2029	944,100	3,494,495	2039	1,331,500	4,302,876	2049	1,283,400	2,394,653
2030	977,100	3,611,918	2040	1,378,100	4,030,583	2050	1,328,300	3,762,717
2031	1,011,300	4,194,575	2041	1,426,300	3,150,382	2051	1,374,800	5,033,782
2032	1,046,700	3,137,222	2042	1,476,200	4,558,671	2052	1,422,900	2,134,990



Page 1.2 - Executive Summary



#### 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

#### Phoenix On The Bay II Owners Association, Inc.

#### **Orange Beach, Alabama**

and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, December 9, 2022. We conducted the original inspection on March 15, 2017.

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

- Identification of Property Segregates all property into several areas of responsibility for repair or replacement
- Reserve Expenditures Identifies reserve components and related quantities, useful lives, remaining useful lives and future reserve expenditures during the next 30 years
- Reserve Funding Plan Presents the recommended Reserve Contributions and year-end Reserve Balances for the next 30 years
- **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 Unit Owners 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 Unit Owners
- 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:



- Phoenix On The Bay II responsibility
- Limited useful life expectancies
- Predictable remaining useful life expectancies
- Replacement cost above a minimum threshold

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

- Bulkhead, Steel, Replacement
- Bulkhead, Vinyl, Replacement (2015)
- Electrical Systems, Common
- Fire Suppression System and Pump
- Foundations
- Fountains, Complete Replacement
- Light Poles, Concrete
- Pipes, Interior Building, Domestic Water, Sanitary Waste, Vent, Sprinkler, Common
- Parking Garage, Complete Replacement
- Pipes, Subsurface Utilities
- Pool and Spa Structures
- Structural Frames
- Trash Chute
- Valves, Large Diameter

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







Overview of flagpole



- General Maintenance to the Common Elements
- Expenditures less than \$6,000 (Excludes Outdoor Kiddie Pool Tile, and Indoor Pool and Spa Tile) (These relatively minor expenditures have a limited effect on the recommended Reserve Contributions.)
- Asphalt Pavement, Patch and Seal Coat
- Audio and Visual Equipment
- Concrete Flatwork
- Deck, Wood, Lighthouse
- Deck, Wood, Rooftop
- Defibrillators
- Electric Car Charging Station
- Flagpole
- Fountains, Plaster Finish and Mechanical Equipment
- Guard House, Interior Renovations
- Indoor Pool. Furniture
- Indoor Pool, Paint Finishes
- Irrigation System
- Landscape
- Life Safety System, Control Panel, Interim Replacement
- Light Fixtures, Interior
- Light Poles and Fixtures, Fixture Replacement
- Paint Finishes, Touch Up
- Parking Garage, Parking Blocks
- Pet Stations
- Pool Deck, Concrete, Coating Applications
- Pumps Less Than Five-HP (horsepower), Includes Fish Station Grinder Pump
- Signage, Monument, Renovation
- Site Furniture
- Tennis Court, Light Poles and Fixtures, Removal (Management informs us the Association does not plan to replace the tennis court light poles and fixtures)
- Trash Chute, Doors
- Valves, Small Diameter (we assume replacement as needed in lieu of an aggregate replacement of all the small diameter valves as a single event)
- Water Heaters, Common
- Other Repairs normally funded through the Operating Budget



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

- Dock Boxes
- Electrical Systems
- Heating, Ventilating and Air Conditioning (HVAC) Units
- Interiors
- Pipes, Interior Building, Water and Sewer
- Water Heaters

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

• Single Family Home, South End of Building (Independent Owner)



#### 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
- 2022 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
- Predicted reserves based on current funding level

#### **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**.

# Phoenix On The Bay II Owners Association, Inc. Orange Beach, Alabama

- $\frac{\text{Explanatory Notes:}}{\text{3.5\%}} \quad \text{is the estimated Inflation Rate for estimating Future Replacement Costs.}$
- 2) FY2022 is Fiscal Year beginning January 1, 2022 and ending December 31, 2022.

				Orange Beach, Alabama																						
Line	Tota	l Pei	r Phase		Estimated 1st Year o		Life Analysis. Years	Unit	Costs, \$ Per Phase	Total	Percentage of Future RUL = 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Item	Quant			Reserve Component Inventory	Event		Remaining	(2022)	(2022)	(2022)	Expenditures FY2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
				Exterior Building Elements																						
1.060	20	900	20 000 Square Fee	Balconies, Concrete, Repairs and Waterproof Coating Applications (Incl. Tile Replacement)	2030	to 25	8	23.00	687,700	687,70	0 2.5%								905,570							
1.070				Breezeways, Concrete, Repairs and Waterproof Coating Applications	2026	6 to 8	4	8.00	442,400	442,40					507,664				303,370			645,891				
				Balconies and Breezeways, Railings, Aluminum											307,004							045,091				
1.105					2047	to 40	25	73.00	516,110	516,110											648,875					
1.180		200	200 Each	Doors, Common Area	2032	to 25	10	2,300.00	460,000	460,000											040,073					
1.190		104	104 Each	Doors, Front Entry	2045	to 25	23	2,300.00	239,200	239,20		05.000														
1.260		320	320 Each	Light Fixtures (2023 is Budgeted)	2023	to 20	1	140.00	44,800	44,80		25,000				040.000										
1.300	36,		36,280 Square Fee		2027	15 to 20		19.00	689,320	689,320						818,696										100 501
1.360		40	40 Squares	Roofs, Concrete Tiles	2037	to 30	15	1,500.00	60,000	60,000																100,521
1.460		20	20 Squares	Roofs, Metal	2037	to 30	15	2,000.00	40,000	40,000																67,014
1.880				Walls, Stucco, Paint Finishes and Capital Repairs	2026	5 to 7	4	2.20	374,880	374,88					430,183							547,313				
1.980	51,	820	10,364 Square Fee	Windows and Doors, Aluminum Frames , Phased	2037	to 40	15 to 23	113.00	1,171,132	5,855,660	31.6%															1,962,055
				Interior Building Elements																						
2.060	5,	940	5,940 Square Fee	Ceilings, Acoustical Tiles, Grid and Lighting	2037	to 30	15	7.50	44,550	44,550	0.2%															74,637
2.100		3	3 Each	Elevator Cab Finishes	2024	to 20	2	16,000.00	48,000	48,000	0 0.4%		51,419													
2.160		2		Exercise Equipment, Phased, Phased	2026	5 to 15	4 to 9	37,700.00	37,700	58,50					43,262					51,381					61,025	
2.200		320	320 Square Yard	ls Floor Coverings, Carpet	2028	8 to 12	6	51.00	16,320	16,320							20,061									
2.240		960	960 Square Yar	ls Floor Coverings, Tile	2036	to 30	14	101.00	96,960	96,96	0.4%														156,949	
2.450		4	1 Allowance	Furnishings, Phased	2027	to 20	5 to 20	9,000.00	9,000	36,000	0.3%					10,689					12,695					15,078
2.700		104	<b>104</b> Each	Mailboxes	2042	to 35	20	105.00	10,920	10,92	0.1%															
2.800	16,	700	16,700 Square Fee	Paint Finishes	2027	6 to 8	5	0.90	15,030	15,03	0.3%					17,851							22,711			
2.820		2	2 Each	Paint Finishes, Stairwells (Includes Railings)	2040	15 to 20	18	11,000.00	22,000	22,00	0.1%															
2.900		6	6 Each	Rest Rooms, Renovation	2032	to 25	10	9,500.00	57,000	57,000	0.2%										80,404					
				Building Services Elements																						
3.070		8	8 Each	Air Handling and Condensing Units, Split Systems	2027	15 to 20	5	8,000.00	64,000	64,00	0.6%					76,012										
3.360		3	3 Each	Elevators, Traction, Controls and Equipment	2032	to 25	10	266,000.00	798,000	798,00	3.1%										1,125,658					
3.440		1	1 Each	Generator, Emergency, 300-kW (Includes Transfer Switch)	2037	to 30	15	82,500.00	82,500	82,50	0.4%															138,216
3.560		1	1 Allowance	Life Safety System, Control Panel and Emergency Devices	2032	to 25	10	75,500.00	75,500	75,50	0.3%										106,500					
3.700		2	2 Each	Pumps, Domestic Water, 12-HP (Incl. Controls & VFDs)	2040	to 20	18	20,000.00	40,000	40,000	0.2%															
3.820		2	1 Allowance	Security System, Phased	2029	10 to 15	7 to 14	21,500.00	21,500	43,000	0.5%							27,354							34,802	
				Property Site Elements																						
4.040	2,	700	2,700 Square Yar	s Asphalt Pavement, Mill and Overlay, Streets	2024	15 to 20	2	17.00	45,900	45,90	0.4%		49,169													
4.110	3,	000	450 Linear Feet	Concrete Curbs and Gutters, Partial	2024	to 65	2 to 30+	46.00	20,700	138,00	0.2%		22,174													
4.420		26	26 Zones	Irrigation System	2047	to 40+	25	4,390.00	114,140	114,14	0.8%															
4.540		2	2 Each	Lift Station, Pumps	2026	to 10	4	5,400.00	10,800	10,80	0.1%				12,393											
4.550		1	1 Each	Lift Station, Rebuild	2036	to 30	14	35,600.00	35,600	35,60	0.2%														57,626	
4.620	1,	440	1,440 Square Fee	Pavers, Masonry, Porte Cochere	2027	15 to 20	5	12.00	17,280	17,28	0.2%					20,523										
4.640	9,	560	9,560 Square Fee	Perimeter Walls, Stucco, Inspections and Capital Repairs	2026	6 to 8	4	1.00	9,560	9,56	0.2%				10,970							13,957				
4.745		700	700 Square Fee	Retaining Walls, Masonry (Replace with Masonry)	2042	to 35	20	30.00	21,000	21,000	0.1%															
4.755	2,	880		Retaining Walls, Stucco, Inspection, Capital Repairs and Paint Finish Applications	2026	5 to 7	4	3.00	8,640	8,64	0.2%				9,915							12,614				
4.830				ls Sport Court, Tennis, Color Coat and Waterproof Coating	2024	6 to 8	2	65.00	106,600	106,60			114,193							145,285						
4.840		600		Sport Court, Tennis, Fence	2032	to 25	10	32.50		19,50	0.1%										27,507					

#### Phoenix On The Bay II Owners Association, Inc.

				Orange Beach, Alabama																						
				Orango Bodon, Alabama	Estimated	l 1	ife Analysis		Costs, \$		Percentage															
Line Item	To Qua		r Phase uantity Units	Reserve Component Inventory	1st Year o		Years Remaining	Unit (2022)	Per Phase (2022)	Total (2022)	of Future Expenditures	16 2038	17 2039	18 2040	19 2041	20 2042	21 2043	22 2044	23 2045	24 2046	25 2047	26 2048	27 2049	28 2050	29 2051	30 2052
				Neserve Component inventory																						
				Exterior Building Elements																						
1.060	2	9,900	29,900 Square Feet	Balconies, Concrete, Repairs and Waterproof Coating Applications (Incl. Tile Replacement)	2030	to 25	8	23.00	687,700	687,700	2.5%															
1.070	5	5,300	55,300 Square Feet	Breezeways, Concrete, Repairs and Waterproof Coating Applications	2026	6 to 8	4	8.00	442,400	442,400	8.4%			821,753							1,045,500					
1.105		7,070	7,070 Linear Feet	Balconies and Breezeways, Railings, Aluminum	2047	to 40	25	73.00	516,110	516,110	3.4%										1,219,694					
1.180		200	<b>200</b> Each	Doors, Common Area	2032	to 25	10	2,300.00	460,000	460,000	1.8%															
1.190		104	<b>104</b> Each	Doors, Front Entry	2045	to 25	23	2,300.00	239,200	239,200	1.5%								527,703							
1.260		320	<b>320</b> Each	Light Fixtures (2023 is Budgeted)	2023	to 20	1	140.00	44,800	44,800	0.3%						92,263									
1.300	3	6,280	36,280 Square Feet	Roofs, Built-up	2027	15 to 20	5	19.00	689,320	689,320	6.8%										1,629,032					
1.360		40	40 Squares	Roofs, Concrete Tiles	2037	to 30	15	1,500.00	60,000	60,000	0.3%															
1.460		20	20 Squares	Roofs, Metal	2037	to 30	15	2,000.00	40,000	40,000	0.2%															
1.880	17	0,400 1	70,400 Square Feet	Walls, Stucco, Paint Finishes and Capital Repairs	2026	5 to 7	4	2.20	374,880	374,880	7.1%			696,336							885,933					
1.980	5	1,820	10,364 Square Feet	Windows and Doors, Aluminum Frames , Phased	2037	to 40	15 to 23	113.00	1,171,132	5,855,660	31.6%		2,101,802		2,251,503		2,411,866		2,583,651							
				Interior Building Elements																						
2.060		5,940	5,940 Square Feet	Ceilings, Acoustical Tiles, Grid and Lighting	2037	to 30	15	7.50	44,550	44,550	0.2%															
2.100		3	3 Each	Elevator Cab Finishes	2024	to 20	2	16,000.00	48,000	48,000	0.4%							102,313								
2.160		2	1 Allowance	Exercise Equipment, Phased, Phased	2026	5 to 15	4 to 9	37,700.00	37,700	58,500	1.2%				72,478					86,081					102,238	
2.200		320	320 Square Yard	Floor Coverings, Carpet	2028	8 to 12	6	51.00	16,320	16,320	0.2%	28,299										39,918				
2.240		960	960 Square Yard	Floor Coverings, Tile	2036	to 30	14	101.00	96,960	96,960																
2.450		4	1 Allowance	Furnishings, Phased	2027	to 20	5 to 20	9,000.00	9,000	36,000						17,908					21,269					25,261
2.700		104	<b>104</b> Each	Mailboxes	2042	to 35	20	105.00	10,920	10,920						21,728										-, -
2.800			16,700 Square Feet		2027	6 to 8	5	0.90	15,030	15,030					28,895	,,						36,763				
2.820		2	2 Each	Paint Finishes, Stairwells (Includes Railings)	2040	15 to 20		11,000.00	22,000	22,000				40,865	20,000							00,700				
2.900		6	6 Each	Rest Rooms, Renovation	2032	to 25	10	9,500.00	57,000	57,000				10,000												
2.000		Ü	• Luon	Toot Toolie, Tolloradon	2002	10 20	10	0,000.00	07,000	01,000	0.270															
				Building Services Elements																						
3.070		8	8 Each	Air Handling and Condensing Units, Split Systems	2027	15 to 20	5	8,000.00	64,000	64,000	0.6%										151,248					
3.360		3	3 Each	Elevators, Traction, Controls and Equipment	2032	to 25	10	266,000.00	798,000	798,000											101,240					
3.440		1	1 Each	Generator, Emergency, 300-kW (Includes Transfer Switch)	2037	to 30	15	82,500.00	82,500	82,500																
3.560		1	1 Allowance	Life Safety System, Control Panel and Emergency Devices	2032	to 25	10	75,500.00	75,500	75,500																
3.700		2	2 Each	Pumps, Domestic Water, 12-HP (Incl. Controls & VFDs)	2032	to 20	18	20,000.00	40,000	40,000				74,300												
3.820		2	1 Allowance	Security System, Phased	2029		7 to 14	21,500.00	21,500	43,000				74,300				45,827							58,305	
3.020		2	1 Allowance	Security System, Pridsed	2029	10 10 15	7 (0 14	21,500.00	21,500	43,000	0.5%							45,021							56,505	
				Power to O'ly Florence																						
				Property Site Elements																						
4.040				s Asphalt Pavement, Mill and Overlay, Streets		15 to 20		17.00		45,900								97,836								
4.110		3,000		Concrete Curbs and Gutters, Partial	2024		2 to 30+	46.00	20,700	138,000								44,122								
4.420		26	26 Zones	Irrigation System	2047	to 40+		4,390.00	114,140	114,140											269,741					
4.540		2	2 Each	Lift Station, Pumps	2026	to 10	4	5,400.00	10,800	10,800										24,660						
4.550		1	1 Each	Lift Station, Rebuild	2036	to 30	14	35,600.00	35,600	35,600																
4.620		1,440		Pavers, Masonry, Porte Cochere	2027	15 to 20		12.00	17,280	17,280											40,837					
4.640		9,560		Perimeter Walls, Stucco, Inspections and Capital Repairs	2026	6 to 8	4	1.00	9,560	9,560	0.2%			17,758							22,593					
4.745		700		Retaining Walls, Masonry (Replace with Masonry)	2042	to 35	20	30.00	21,000	21,000						41,786										
4.755		2,880	2,880 Square Feet	Retaining Walls, Stucco, Inspection, Capital Repairs and Paint Finish Applications	2026	5 to 7	4	3.00	8,640	8,640	0.2%			16,049							20,418					
4.830		1,640	1,640 Square Yards	Sport Court, Tennis, Color Coat and Waterproof Coating	2024	6 to 8	2	65.00	106,600	106,600	2.7%	184,843							235,172							299,204
4.840		600	600 Linear Feet	Sport Court, Tennis, Fence	2032	to 25	10	32.50	19,500	19,500	0.1%															

#### Phoenix On The Bay II Owners Association, Inc. Orange Beach, Alabama

**Explanatory Notes:** 

- 1) 3.5% is the estimated Inflation Rate for estimating Future Replacement Costs.
- 2) FY2022 is Fiscal Year beginning January 1, 2022 and ending December 31, 2022.

		Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year o Event	<u> </u>	fe Analysis ears Remaining	Unit	Costs, \$ Per Phase (2022)	Total (2022)	Percentage of Future RUL = 0 Expenditures FY2022		2 2024	3 2025	4 2026	5 2027	6 2028	7 2029	8 2030	9 2031	10 2032	11 2033	12 2034	13 2035	14 2036	15 2037
				Pool Elements																						
6.200	11,490	11,490	Square Feet	Deck, Pavers (Outdoor Pool)	2037	to 30	15	7.00	80,430	80,43	<b>0.4%</b>															134,748
6.210	2,570	2,570	Square Feet	Deck, Tile (Indoor Pool)	2032	to 25	10	25.00	64,250	64,25	<b>0.3%</b>										90,631					
6.400	1,000	1,000	Linear Feet	Fence, Aluminum	2037	to 30	15	40.00	40,000	40,00	0 0.2%															67,014
6.500	2	1	Allowance	Furniture, Phased	2028	to 12	6 to 12	20,000.00	20,000	40,00	0.5%						24,585						30,221			
6.550	80	80	Each	Light Fixtures, Bollards	2027	to 20	5	550.00	44,000	44,00	0.4%					52,258										
6.598	1	1	Allowance	Mechanical Equipment, Dehumidification Unit	2038	15 to 20	16	90,000.00	90,000	90,00	0.4%															
6.600	2	1	Allowance	Mechanical Equipment, Phased	2025	to 15	3 to 10	28,500.00	28,500	57,00	0.5%			31,598							40,202					
6.800	5,980	5,980	Square Feet	Pool Finishes, Plaster (Dolphin Pool and Lazy River)	2028	8 to 12	6	22.00	131,560	131,56	<b>2.0</b> %						161,721									
6.801	300	300	Square Feet	Pool Finishes, Plaster (Outdoor Kiddie Pool)	2028	8 to 12	6	22.00	6,600	6,60	0 0.1%						8,113									
6.802	610	610	Square Feet	Pool Finishes, Plaster (Indor Pool and Spa)	2032	8 to 12	10	22.00	13,420	13,42	<b>0.2</b> %										18,930					
6.803	250	250	Linear Feet	Pool Finishes, Tile (Dolphin Pool and Lazy River)	2038	15 to 25	16	37.00	9,250	9,25	0.0%															
6.804	60	60	Linear Feet	Pool Finishes, Tile (Outdoor Kiddie Pool)	2038	15 to 25	16	37.00	2,220	2,22	0.0%															
6.805	130	130	Linear Feet	Pool Finishes, Tile (Indor Pool and Spa)	2042	15 to 25	20	37.00	4,810	4,81	0 0.0%															
				<u>Garage Elements</u>																						
7.300	103,600	103,600	Square Feet	Concrete, Elevated Floors, Inspections and Capital Repairs	2024	5 to 10	2	2.00	207,200	207,20	0 5.3%		221,958							282,392						
7.600	151	151	Each	Light Fixtures	2034	to 15	12	400.00	60,400	60,40	0.7%												91,269			
				<u>Marina Elements</u>																						
8.100	880	880	Linear Feet	Bulkhead, Steel and Vinyl, Inspections and Capital Repairs	2033	10 to 15	11	110.00	96,800	96,80	0 1.1%											141,325				
8.395	4,800	4,800	Square Feet	Docks and Pilings, Wood and Composite, Decking and Structure Repairs	2037	to 15	15	19.00	91,200	91,20	0 0.4%															152,792
8.400	4,800	4,800	Square Feet	Docks and Pilings, Wood and Composite	2052	to 30	30	250.00	1,200,000	1,200,00	0 9.4%															
8.800	32	32	Each	Power Pedestals	2047	to 25	25	1,600.00	51,200	51,20	0.3%															
				Anticipated Expenditures, By Year (\$35,830,650 over 30 years)							0	25,000	 458,913	31,598	1,014,387	996,029	214,480	27,354	905,570	479,058	2,151,402	1,361,100	144,201	0	310,402	2,712,075

# Phoenix On The Bay II Owners Association, Inc.

				Orange Beach, Alabama																						
Line	Total	Per I	Phase		Estimated 1st Year o		ife Analysis. ears	Unit	Costs, \$ Per Phase	Total	Percentage of Future	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Item	Quantit	y Qua	ntity Units	Reserve Component Inventory	Event	Useful	Remaining	(2022)	(2022)	(2022) E	Expenditures	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052
				Pool Elements																						
6.200	11,4	90 1	<b>1,490</b> Square Fe	et Deck, Pavers (Outdoor Pool)	2037	to 30	15	7.00	80,430	80,430	0.4%															
6.210	2,5	70	<b>2,570</b> Square Fe	et Deck, Tile (Indoor Pool)	2032	to 25	10	25.00	64,250	64,250	0.3%															
6.400	1,0	00	1,000 Linear Fe	t Fence, Aluminum	2037	to 30	15	40.00	40,000	40,000	0.2%															
6.500		2	1 Allowance	Furniture, Phased	2028	to 12	6 to 12	20,000.00	20,000	40,000	0.5%			37,150						45,667						56,136
6.550		80	80 Each	Light Fixtures, Bollards	2027	to 20	5	550.00	44,000	44,000	0.4%										103,983					
6.598		1	1 Allowance	Mechanical Equipment, Dehumidification Unit	2038	15 to 20	16	90,000.00	90,000	90,000	0.4%	156,059														
6.600		2	1 Allowance	Mechanical Equipment, Phased	2025	to 15	3 to 10	28,500.00	28,500	57,000	0.5%		51,148							65,075						
6.800	5,9	80	<b>5,980</b> Square Fe	et Pool Finishes, Plaster (Dolphin Pool and Lazy River)	2028	8 to 12	6	22.00	131,560	131,560	2.0%	228,123										321,790				
6.801	3	00	300 Square Fe	et Pool Finishes, Plaster (Outdoor Kiddie Pool)	2028	8 to 12	6	22.00	6,600	6,600	0.1%	11,444										16,143				
6.802	6	10	610 Square Fe	et Pool Finishes, Plaster (Indor Pool and Spa)	2032	8 to 12	10	22.00	13,420	13,420	0.2%					26,703										37,667
6.803	2	50	250 Linear Fe	et Pool Finishes, Tile (Dolphin Pool and Lazy River)	2038	15 to 25	16	37.00	9,250	9,250	0.0%	16,039														
6.804		60	60 Linear Fe	et Pool Finishes, Tile (Outdoor Kiddie Pool)	2038	15 to 25	16	37.00	2,220	2,220	0.0%	3,849														
6.805	1	30	130 Linear Fe	et Pool Finishes, Tile (Indor Pool and Spa)	2042	15 to 25	20	37.00	4,810	4,810	0.0%					9,571										
				Garage Elements																						
7.300	103,6	00 10	3,600 Square Fe	et Concrete, Elevated Floors, Inspections and Capital Repairs	2024	5 to 10	2	2.00	207,200	207,200	5.3%	359,282							457,107							581,568
7.600	1	51	<b>151</b> Each	Light Fixtures	2034	to 15	12	400.00	60,400	60,400	0.7%												152,907			
				<u>Marina Elements</u>																						
8.100	8	80	880 Linear Fe	Bulkhead, Steel and Vinyl, Inspections and Capital Repairs	2033	10 to 15	11	110.00	96,800	96,800	1.1%											236,769				
8.395	4,8			et Docks and Pilings, Wood and Composite, Decking and Structure Repairs	2037	to 15	15	19.00	91,200	91,200	0.4%															
8.400	4,8	00	<b>4,800</b> Square Fe	et Docks and Pilings, Wood and Composite	2052	to 30	30	250.00	1,200,000	1,200,000	9.4%															3,368,152
8.800		32	32 Each	Power Pedestals	2047	to 25	25	1,600.00	51,200	51,200	0.3%										120,998					
				Anticipated Expenditures, By Year (\$35,830,650 over 30 years)								987,938	2,152,950	1,704,211	2,352,876	117,696	2,504,129	290,098	3,803,633	221,483	5,531,246	651,383	152,907	0	160,543	4,367,988

Reserve Advisors, LLC

# **RESERVE FUNDING PLAN**

CASH FLOW ANALYSIS
Phoenix On The Bay II
Owners Association, Inc.

Owners Association, Inc.		<u> </u>	Individual Re	serve Budget	s & Cash Flov	vs for the Nex	t 30 Years										
Orange Beach, Alabama		FY2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
Reserves at Beginning of Year	(Note 1)	636,526	763,284	878,889	1,228,586	2,040,902	1,903,589	1,812,962	2,538,786	3,494,495	3,611,918	4,194,575	3,137,222	2,898,400	3,919,429	5,138,324	6,101,509
<b>Total Recommended Reserve Contributions</b>	(Note 2)	126,000	130,000	795,000	822,800	851,600	881,400	912,200	944,100	977,100	1,011,300	1,046,700	1,083,300	1,121,200	1,160,400	1,201,000	1,243,000
Estimated Interest Earned, During Year	(Note 3)	758	10,605	13,610	21,114	25,474	24,002	28,104	38,963	45,893	50,415	47,349	38,978	44,030	58,495	72,587	69,771
Anticipated Expenditures, By Year		0	(25,000)	(458,913)	(31,598)	(1,014,387)	(996,029)	(214,480)	(27,354)	(905,570)	(479,058)	(2,151,402)	(1,361,100)	(144,201)	0	(310,402)	(2,712,075)
Anticipated Reserves at Year End		<u>\$763,284</u>	<u>\$878,889</u>	<u>\$1,228,586</u>	\$2,040,902	<u>\$1,903,589</u>	<u>\$1,812,962</u>	\$2,538,786	<u>\$3,494,495</u>	<u>\$3,611,918</u>	<u>\$4,194,575</u>	\$3,137,222	\$2,898,400	\$3,919,429	<u>\$5,138,324</u>	<u>\$6,101,509</u>	<u>\$4,702,205</u>
Predicted Reserves based on 2023 funding level of:	\$130,000	763,284	878,889	559,264	665,576	(215,907)	(1,090,372)										

(continued)	Individual Re	serve Budget	s & Cash Flo	ws for the Nex	kt 30 Years, C	Continued .									
	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052
Reserves at Beginning of Year	4,702,205	5,063,836	4,302,876	4,030,583	3,150,382	4,558,671	3,635,359	4,982,314	2,866,066	4,385,413	639,921	1,240,683	2,394,653	3,762,717	5,033,782
Total Recommended Reserve Contributions	1,286,500	1,331,500	1,378,100	1,426,300	1,476,200	1,527,900	1,581,400	1,636,700	1,694,000	1,753,300	1,240,000	1,283,400	1,328,300	1,374,800	1,422,900
Estimated Interest Earned, During Year	63,069	60,490	53,818	46,375	49,785	52,917	55,653	50,685	46,830	32,454	12,145	23,477	39,764	56,808	46,296
Anticipated Expenditures, By Year	(987,938)	(2,152,950)	(1,704,211)	(2,352,876)	(117,696)	(2,504,129)	(290,098)	(3,803,633)	(221,483)	(5,531,246)	(651,383)	(152,907)	0	(160,543)	(4,367,988)
Anticipated Reserves at Year End	<u>\$5,063,836</u>	\$4,302,876	\$4,030,583	\$3,150,382	<u>\$4,558,671</u>	\$3,635,359	<u>\$4,982,314</u>	\$2,866,066	<u>\$4,385,413</u>	<u>\$639,921</u>	\$1,240,683	<u>\$2,394,653</u>	\$3,762,717	\$5,033,782	<u>\$2,134,990</u>
										(NOTE 5)					(NOTE 4)

#### **Explanatory Notes:**

- 1) Year 2022 starting reserves are as of September 30, 2022; FY2022 starts January 1, 2022 and ends December 31, 2022.
- 2) Reserve Contributions for 2022 are budgeted; 2023 is budgeted; 2024 is the first year of recommended contributions.
- 3) 1.3% is the estimated annual rate of return on invested reserves; 2022 is a partial year of interest earned.
- 4) Accumulated year 2052 ending reserves consider the need to fund for replacement of the elevators shortly after 2052, and the age, size, overall condition and complexity of the property.
- 5) Threshold Funding Year (reserve balance at critical point).

Printed on 1/6/2023 Funding Plan - Section 3

# **FIVE-YEAR OUTLOOK**

#### Phoenix On The Bay II Owners Association, Inc. Orange Beach, Alabama

Line Item	Reserve Component Inventory	RUL = 0 FY2022	1 2023	2 2024	3 2025	4 2026	5 2027
	Exterior Building Elements						
1.070	Breezeways, Concrete, Repairs and Waterproof Coating Applications					507,664	
1.260	Light Fixtures (2023 is Budgeted)		25,000				
1.300	Roofs, Built-up						818,696
1.880	Walls, Stucco, Paint Finishes and Capital Repairs					430,183	
	Interior Building Elements						
2.100	Elevator Cab Finishes			51,419			
2.160	Exercise Equipment, Phased, Phased					43,262	
2.450	Furnishings, Phased						10,689
2.800	Paint Finishes						17,851
	Building Services Elements						
3.070	Air Handling and Condensing Units, Split Systems						76,012
	Property Site Elements						
4.040	Asphalt Pavement, Mill and Overlay, Streets			49,169			
4.110	Concrete Curbs and Gutters, Partial			22,174			
4.540	Lift Station, Pumps					12,393	
4.620	Pavers, Masonry, Porte Cochere						20,523
4.640	Perimeter Walls, Stucco, Inspections and Capital Repairs					10,970	
4.755	Retaining Walls, Stucco, Inspection, Capital Repairs and Paint Finish Applications					9,915	
4.830	Sport Court, Tennis, Color Coat and Waterproof Coating			114,193			
	Pool Elements						
6.550	Light Fixtures, Bollards						52,258
6.600	Mechanical Equipment, Phased				31,598		
	Garage Elements						
7.300	Concrete, Elevated Floors, Inspections and Capital Repairs			221,958			
	Anticipated Expenditures, By Year (\$35,830,650 over 30 years)	0	25,000	458,913	31,598	1,014,387	996,029

Printed on 1/6/2023 Five-Year Outlook - 1 of 1



#### **4.RESERVE COMPONENT DETAIL**

this The Reserve Component Detail of 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**



**Building elevation** 

# **Balconies and Breezeways, Concrete**

**Line Items:** 1.060

**Quantity:** Approximately 29,900 square feet at the balconies and approximately 55,300 square feet of horizontal surface area at the breezeways. The balconies and breezeways comprise reinforced concrete with a waterproof coating.

History: Replaced from 2019 through 2020.

**Condition:** The balconies are in good overall condition and the breezeways are in good to fair overall condition with isolated cracks and chipped coatings evident

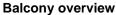




**Balcony overview** 

**Balcony overview** 







**Concrete cracks** 



**Breezeway overview** 



**Evidence of isolated chipped coatings** 

**Useful Life:** Capital repairs including a close-up visual inspection, patching of delaminated concrete, routing and filling of cracked concrete, and waterproof coating applications up to every 25 years for the balconies due to the presence of tile floor coverings and every six- to eight-years for the breezeways.



**Component Detail Notes:** A waterproof coating application minimizes storm water penetration into the concrete and therefore minimizes future concrete deterioration. Failure to maintain a waterproof coating on the balconies and breezeways will result in increased concrete repairs and replacements as the balconies and breezeways age. Capital repairs may also include replacement of the caulked joint between the balcony, breezeway, and the building, and repair or replacement of the metal railings and railing fastener attachments as needed.

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

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Our cost includes the following activities per event:

- Partial depth replacement of up to one percent (1%) of the concrete topsides, edges and undersides
- Crack repairs as necessary
- Repairs to the railings as necessary
- Replacement of perimeter sealants as needed
- Application of a waterproof coating (Urethane based elastomeric)
- Tile removal and replacement at the balconies

The Association should coordinate both balcony, breezeway, and facade capital repairs and maintenance to allow for the possible use of a single contractor and combine any applicable staging or mobilization costs. Also, coordinated repairs will reduce disruption to unit owners.

# Balconies and Breezeways, Railings, Aluminum

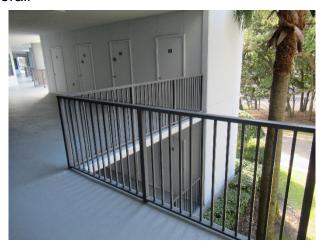
**Line Item:** 1.105

Quantity: Approximately 7,070 linear feet of aluminum railings at the balconies and

breezeways which are mechanically attached

*History:* Original

**Condition:** Good overall



Overview of railings

Page 4.3 - Reserve Component Detail



**Useful Life:** Up to 40 years (The useful life of the finish is indeterminate. Future updates of this Reserve Study will again consider the need to refinish the railings based on condition.)

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.

# **Doors, Common Area and Front Entry**

**Line Items:** 1.180 and 1.190

Quantity: 200 common area doors, and 104 front entry doors

History: Management informs us the front entry doors were replaced in 2020. The

common area doors are original

**Condition:** Good overall



Common area doors

Lobby area entrance doors

**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 and repair any damage, base corrosion or alignment issues
  - Replace deteriorated hardware and loose weather stripping
  - o Periodic touch-up paint finish applications as needed



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

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

# **Light Fixtures**

**Line Item:** 1.260

**Quantity:** Approximately 320 exterior plastic light fixtures

*History:* Original; Management informs us the Association is planning to replace the light

fixtures in 2022 and 2023

**Condition:** Good overall



**Ceiling mounted light fixture** 

Useful Life: Up to 20 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
  - o 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.



# Roofs, Built-up

**Line Item:** 1.300

**Quantity:** Approximately 36,280 square feet

*History:* Original The Association conducts inspections of the roofs annual. We concur with this preventive maintenance practice and recommend the Association continue to fund these inspections through the operating budget.

**Condition:** Good overall. Management and the Board do not report history of leaks.





**Built-up roof overview** 

**Built-up roof overview** 



**Built-up roof overview** 

Useful Life: 15- to 20-years

**Component Detail Notes:** Built-up roofing provides a durable system due to its multi-layer protection. Built-up roofs are composed of asphalt coated roofing sheets installed in layers to add strength to the roofing system. Built-up roofs are an economical option for flat and low-sloped roofs.



Contractors can install a new built-up roof in one of two ways: *tear-off* or an *overlay*. An *overlay* is the application of a new roof membrane over an existing roof. This method, although initially more economical, often covers up problems with the deck, flashing and saturated insulation. The *tear-off* method of replacement includes removal of the existing roofing, flashings and insulation, and installation of a new roofing system.

The contractor should follow the manufacturer's directions and specifications upon installation of the roof. The contractor should remove the original insulation if saturated or compacted and apply a new layer of insulation per the manufacturer's instructions. The insulation should fit loosely with gaps no greater than ¼ inch. Gaps will cause failure of the membrane later. Mechanical fastening of the insulation is the best manner of installation. The contractor applies the base sheet of roofing over the insulation board. This sheet is normally 30-pound material. The contractor should start the installation of a roof membrane from the lowest points of the roof. Mechanical fastening and embedding the base sheet in a flood coat of hot asphalt is the best manner of installation. Felt or glass fiber plies saturated with asphalt are usually used for level or low-pitch roofs because of their greater resistance to standing water. A membrane of three- or four-plies is common, the more plies used, the more durable a roof.

**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:

#### · Semi-annually:

- Note drainage issues with water ponding after 48 hours of rainfall event. Verify scuppers and drains are free of debris. Replace damaged or missing drain covers.
- Inspect perimeter flashing for loose fasteners, deflections, and sealant damage
- Verify membrane surface is free of ruptures or damage, and areas of extensive blistering or bubbling
- o Remove oil spills or contaminants from mechanical equipment
- In areas of possible foot traffic, remove any sharp debris or trash and note areas of crushed insulation
- Ensure ballast is not displaced near roofing corners, edges and near mechanical equipment
- If frequency of leaks increase or location of water infiltration is unknown, we recommend the consideration of a thermal image inspection

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

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



# **Roofs, Concrete Tiles**

**Line Item:** 1.360

**Quantity:** Approximately 40 squares<sup>1</sup>

History: Original

**Condition:** Good overall with no significant deterioration evident from our visual inspection from the ground. Management and the Board do not report a history of leaks.





Concrete tile roof

Concrete tile roofs overview

Useful Life: Up to 30 years

**Component Detail Notes:** A tile roof rarely fails at all points of application simultaneously. Rather, occurrences of roof leaks will increase as more concrete tiles crack, break and dislodge. This deterioration will result in increased maintenance costs such that replacement becomes the least costly long-term alternative as compared to ongoing repairs.

A concrete tile roof system comprises sheathing, underlayments, battens and the tiles themselves. Replacement standards should conform to the local building code and manufacturer's specifications at the time of actual replacement. The manner of construction is such that the underlayment is the primary line of defense from water infiltration. The tiles act to shade the underlayment from harmful sunlight and to protect the roof from heavy winds. Most storm water is shed from the roof tiles into the gutters or over the edge of the roof. However, this tile style is meant to allow water to pass between the tiles onto the underlayment. The underlayment thus sheds any remaining water into the gutters. In fact, horizontal driving rains will force their way up and under the tile only to be shed at some other point.

Preventative Maintenance Notes: We recommend the Association maintain a service and inspection contract with a qualified professional and record all documentation of

<sup>&</sup>lt;sup>1</sup> We quantify the roof area in squares where one square is equal to 100 square feet of surface area.



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 tiles
  - o Implement repairs as needed if issues are reoccurring
  - Ensure proper ventilation and verify vents are clear of debris and not blocked from attic insulation
  - o Trim tree branches that are near or in contact with roof
  - Periodic cleaning at areas with organic growth (We do not recommend pressure washing as it may cause further damage to tiles.)

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 20 squares<sup>2</sup>. This quantity includes the lighthouse

*History:* Original

**Condition:** Good overall with no significant deterioration evident from our visual inspection from the ground. Management and the Board do not report a history of leaks.





Metal roofs overview

**Metal roofs overview** 

<sup>&</sup>lt;sup>2</sup> We quantify the roof area in squares where one square is equal to 100 square feet of surface area.



Useful Life: Up to 30 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
  - Ensure proper ventilation and verify vents are clear of debris and not blocked from attic insulation
  - Clear valleys of debris
  - o 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.

# Walls, Stucco

**Line Item:** 1.880

Quantity: Approximately 170,400 square feet of the building exteriors. This quantity

includes the lighthouse

*History:* Applied paint finishes and repaired from 2019 through 2020.

**Condition:** Good to fair overall with isolated cracks evident.





Stucco wall finishes

Stucco wall finishes

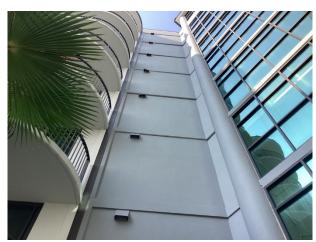




Stucco wall finishes

Stucco wall finishes





Stucco cracks

Stucco wall finishes





Stucco wall finishes

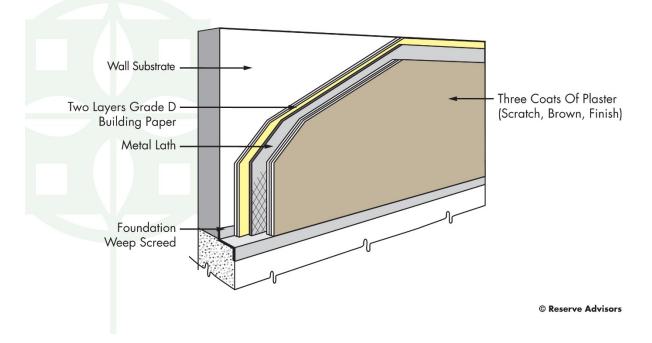
Stucco wall finishes

*Useful Life:* We recommend inspections, repairs and paint finish applications every five-to seven-years.



**Component Detail Notes:** The following graphic details the typical components of a stucco wall system on frame construction although it may not reflect the actual configuration at Phoenix On The Bay II:

# STUCCO DETAIL



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 and biological growth. Water-soluble cleaners that will not attack Portland cement are acceptable for removing stains.

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 anticipates the following in coordination with each paint finish application:

- Complete inspection of the stucco
- Crack repairs as needed (Each paint product has the limited ability to cover and seal cracks but we recommend repair of all cracks which exceed the ability of the paint product to bridge.)
- Replacement of up to one percent (1%), of the stucco walls (The exact amount of area in need of replacement will be discretionary based on the actual future conditions and the desired appearance.)
- Replacement of up to thirty-three percent (33%) of the sealants in coordination with each paint finish application.



# **Windows and Doors, Aluminum Frames**

**Line Item:** 1.980

**Quantity:** Approximately 51,820 square feet of windows and doors. This quantity includes all of the windows and doors except for the common area and front entry doors.

History: Original

Condition: Good overall



**Common windows** 

**Useful Life:** Up to 40 years

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

- Annually:
  - Inspect and repair loose weather stripping and/or lock damage
  - o Inspect for broken glass and damaged screens
  - o Record instances of water infiltration, trapped moisture or leaks
- As-needed:
  - Verify weep holes are unobstructed and not blocked with dirt or sealant, if applicable
  - Replace damaged or deteriorated sliding glass rollers, 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.



# **Interior Building Elements**

# Ceilings, Acoustical Tiles, Grid and Lighting

**Line Item:** 2.060

Quantity: Approximately 5,940 square feet the meeting room, kitchen, storage spaces,

fitness room and first, second and third floor common areas

History: Original

**Condition:** Good overall





Overview of acoustic ceiling tiles

Overview of acoustic ceiling tiles

**Useful Life:** Up to 30 years

Priority/Criticality: Per Board discretion

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

**Expenditures** table in Section 3.

#### **Elevator Cab Finishes**

**Line Item:** 2.100

**Quantity:** Three elevators; the cab finishes consist of:

Tile floor coverings

Laminate wall coverings

Eggcrate ceiling finishes

*History:* Original

Condition: Good overall





Elevator cab finishes

Useful Life: Up to 20 years

Priority/Criticality: Per Board discretion

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

**Expenditures** table in Section 3.

# **Exercise Equipment**

**Line Item:** 2.160

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

- Ellipticals (2)
- Stationary cycles (2)
- Televisions
- Treadmills (3)

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

• Weight training machines (8)

History: Varied ages.

Conditions: Good overall







Strength training exercise equipment

Cardiovascular exercise equipment

**Useful Life:** The useful life of cardiovascular equipment is up to five years. The useful life of strength training equipment is up to 15 years.

Priority/Criticality: Per Board discretion

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Our estimate of cost includes complete replacement of the cardiovascular equipment and up to thirty three percent (33%) of the strength training equipment per event

# Floor Coverings, Carpet

**Line Item:** 2.200

**Quantity:** Approximately 320 square yards at the meeting room, storage spaces and fitness room (Contractor measurements will vary from the actual floor area due to standard roll lengths, patterns and installation waste.)

History: Replaced in 2018.

Condition: Good overall







Overview of carpet floor coverings

Overview of carpet floor coverings

Useful Life: 8- to 12-years

Priority/Criticality: Per Board discretion

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

**Expenditures** table in Section 3.

# Floor Coverings, Tile

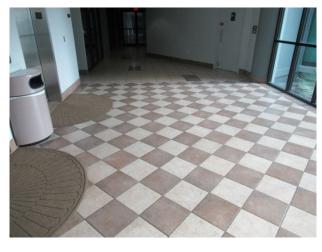
**Line Item:** 2.240

Quantity: Approximately 960 square yards at the lobby, kitchen, second and third floor

hallways and portions of the meeting room and fitness center

History: Original

Condition: Good overall



Overview of tile floor coverings



**Useful Life:** Up to 30 years although replacement of tile is often based on discretionary redecorating prior to the tile reaching the end of its useful life.

Priority/Criticality: Per Board discretion

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. The Association should fund regrouting of the tiles through the operating budget if necessary.

# **Furnishings**

**Line Item:** 2.450

**Quantity:** Furnishings and components in the clubhouse include but are not limited to the following elements:

- Chairs
- Desks
- Folding chairs
- Folding tables
- Pictures/decorations
- Tables

History: Original

Condition: Good overall





Overview of furnishings

**Overview of furnishings** 

**Useful Life:** Varies significantly up to 20 years

**Priority/Criticality:** Per Board discretion

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Due to varied uses, ages and useful lives, we



recommend the Association budget \$9,000 plus inflation for phased replacements of up to twenty-five percent (25%) of the furnishings per event.

#### **Mailboxes**

**Line Item:** 2.700

Quantity: 104 unit mailboxes

**History:** Original

**Condition:** Reported good overall



**Mailboxes** 

**Useful Life:** Up to 35 years

Priority/Criticality: Per Board discretion

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

**Expenditures** table in Section 3.

#### **Paint Finishes**

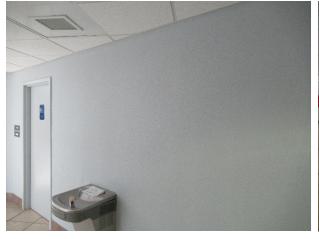
**Line Item:** 2.800

**Quantity:** Approximately 16,700 square feet on the walls and ceilings at the lobby, meeting room, kitchen, storage spaces, fitness room and first, second, and third floor common areas

*History:* Applied paint finishes in 2020.

Condition: Good overall







Overview of interior paint finishes

Overview of interior paint finishes

Useful Life: Six- to eight-years

Priority/Criticality: Per Board discretion

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

**Expenditures** table in Section 3.

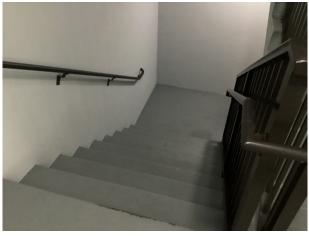
## **Paint Finishes, Stairwells**

**Line Item:** 2.820

Quantity: Two each

History: Applied paint finishes in 2020.

Conditions: Good to fair overall with scuffs evident.





Stairwell paint finishes

Stairwell paint finishes





Tread scuffs

Useful Life: 15- to 20-years

Priority/Criticality: Per Board discretion

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

**Expenditures** table in Section 3.

#### **Rest Rooms**

**Line Item:** 2.900

**Quantity:** Six common located at the first, third and basement levels. The rest room components include:

- Tile floor coverings
- Tile wall coverings
- Paint finishes on the ceilings and portions of the walls
- Light fixtures
- Plumbing fixtures

History: Original

**Condition:** Good to fair overall





Overview of restroom

Useful Life: Renovation up to every 25 years

Priority/Criticality: Per Board discretion

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

**Expenditures** table in Section 3.

# **Building Services Elements**

### Air Handling and Condensing Units, Split Systems

**Line Item:** 3.070

**Quantity:** Eight Carrier split systems

*History:* Installed from 2007 through 2019. Management informs us the Association replaced all of the large condensing units within the last three years. The lower tonnage

units are still original

**Condition:** Reported satisfactory without operational deficiencies



Split system condensing unit

Page 4.22 - Reserve Component Detail



Useful Life: 15- to 20-years

**Component Detail Notes:** A split system air conditioner consists of an outside condensing unit, an interior evaporator coil, refrigerant lines and an interior electric airhandling unit. The condensing units have cooling capacities that range from 3- to 7.5-tons. The split systems use R-410A refrigerant.

**Preventative Maintenance Notes:** We recommend the Association obtain and adhere to the manufacturer's recommended maintenance plan. 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 unit's age, operational condition, or changes in technology. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Semi-annually:
  - Lubricate motors and bearings
  - o Change or clean air filters as needed
  - Inspect condenser base and piping insulation
  - o Inspect base pan, coil, cabinet and clear obstructions as necessary
- Annually:
  - Clean coils and drain pans, clean fan assembly, check refrigerant charge, inspect fan drive system and controls
  - Inspect and clean accessible ductwork as needed
  - Clean debris from inside cabinet, inspect condenser compressor and associated tubing for damage

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

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. The condensing unit may require replacement prior to replacement of the related interior forced air unit. For purposes of this Reserve Study, we assume coordination of replacement of the interior forced air unit, evaporator coil, refrigerant lines and exterior condensing unit.

### **Elevators, Traction**

**Line Item:** 3.360

**Quantity:** Three *Otis* traction elevators

History: Original; Management informs us the Association spent \$67,000 on rust

remediation in 2022

**Condition:** Reported satisfactory and service interruptions are reportedly infrequent.





**Traction elevator controls** 

**Useful Life:** Up to 25 years however, the scarcity of parts, and the potential frequency and duration of service interruption makes controls replacement more desirable as the components age.

**Component Detail Notes:** The elevators utilize programmable logic computer controls

**Preventative Maintenance Notes:** We recommend the Association obtain and adhere to the manufacturer's recommended maintenance plan. The Association has a current preventative maintenance contract in place. 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 unit's age, operational condition, or changes in technology. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

#### Ongoing:

 Maintain a maintenance contract with a qualified professional for the elevator(s) and follow the manufacturer's specific recommended maintenance plan adhering to local, state, and/or federal inspection guidelines

#### As-needed:

- Keep an accurate log of all repairs and inspection dates
- Inspect and adjust misaligned door operators
- Clear and remove any items located in the elevator machine room(s) not associated with the elevator components (These rooms should never be used for storage)
- Inspect electrical components for signs of overheating or failure
- Inspect controls
- Lubricate the hoist cables
- Inspect hoist cables and motors for signs of wear or deterioration
- Ensure air temperature and humidity of machine/pump housing room meets the designated specified range for proper operation
- Ensure all call buttons are in working condition

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 replacement of the following traction elevator system components:

- Cab control panels
- Door operators
- Hallway panels/buttons
- Hoists and motors
- Microprocessor based controllers

### **Generator, Emergency**

**Line Item:** 3.440

Quantity: One Kohler 300-kW (kilowatt) diesel generator

*History:* Original

**Condition:** Reported satisfactory without operational deficiencies





Generator

Transfer switch

**Useful Life:** Up to 30 years

**Preventative Maintenance Notes:** We recommend the Association obtain and adhere to the manufacturer's recommended maintenance plan. The Association conducts weekly load tests. We also recommend the Association maintain a maintenance contract with a qualified professional. As a reference, the Association may consult the following document: NFPA 110, Standard for Emergency and Standby Power Systems. The required preventative maintenance may vary in frequency and scope based on the unit's age, operational condition, or changes in technology. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- · Weekly:
  - Check fuel and oil levels
  - Inspect cooling and exhaust systems



- Check battery, electrical components and transfer switches
- Run generator without load and look for unusual conditions such as leaks
- Monthly:
  - Exercise generator under load test for minimum of 30 minutes
  - o Check oil levels before running and after 10 minutes of run time
- Annually:
  - Complete full inspection and necessary repairs
  - Change fuel and air filters
  - o Change oil and replace oil filter
  - Change spark plugs
  - Flush cooling system

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

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Our estimate of cost includes replacement of the transfer switch. We recognize that the transfer switch may require replacement prior to the replacement of the generator. For purposes of this Reserve Study, we assume coordination of replacement with the generator.

### Life Safety System

**Line Item:** 3.560

**Quantity:** The life safety system at Phoenix On The Bay II includes the following components:

- Audio/visual fixtures
- Simplex control panel
- Detectors
- Exit light fixtures
- Pull stations
- Voice communication system at the stairwells
- Wiring

**History:** Original

**Conditions:** Reported satisfactory without operational deficiencies.







**Emergency devices** 

**Emergency devices** 



**Control panel** 

**Useful Life:** Up to 25 years for the devices and up to 15 years for the control panel

**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 display panel read 'System is Normal' at the time of our inspection. 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. We recommend the Association budget for interim replacements of the control panel through the operating budget

### **Pumps, Domestic Water**

**Line Item:** 3.700

**Quantity:** Two each

History: Installed in 2020.

**Condition:** Reported satisfactory without operational deficiencies.



**Domestic water pumps** 

**Useful Life:** Up to 20 years

**Component Detail Notes:** Major pumps included in this Reserve Study are those with a motor drive of at least five-HP. The Association should replace or repair all pumps with motor drives less than five-HP as needed and fund this ongoing maintenance activity through the operating budget. The Association may choose to rebuild pumps prior to complete replacement. However, this activity becomes less desirable as pumps age due to the scarcity of parts. We regard interim replacements of motors and component parts as normal maintenance and base our estimates on complete replacements. An exact replacement time for each individual pump is difficult, if not impossible, to estimate.



**Preventative Maintenance Notes:** We recommend the Association obtain and adhere to the manufacturer's recommended maintenance plan. 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 unit's age, operational condition, or changes in technology. Valuable motor information to note in a preventative maintenance plan or schedule includes age of unit and last time of repair, horsepower and rpm (revolutions per minute), bearing type and conditions surrounding motor/pump. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Weekly:
  - Check/adjust controls
  - Check/adjust pressure levels
  - Check for leaks
  - Conduct churn tests
- Quarterly:
  - Inspect/clean motors
  - Inspect mountings and connections for proper alignment, torque and condition
  - Inspect/replace pump packing as needed, consider replacement with mechanical seals
  - Check for appropriate oil levels
- Semi-annually:
  - Lubricate pumps, motors and motor bearings
- Annually:
  - Inspect belts for wear and/or replace belts
  - Clean filters if present
  - Assess proper internal component performance and replace damaged or malfunction components as necessary, and tighten fittings
  - Access temperature and vibration performance of motors in accordance with the intended design

**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 costs include an allowance for replacement of the variable frequency drives (VFD) and controls.

# **Security System**

**Line Item:** 3.820

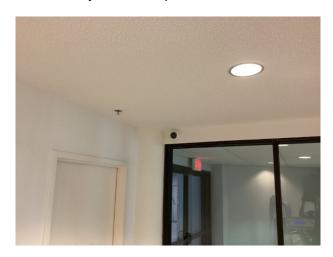
**Quantity:** Phoenix On The Bay II utilizes the following security system components:

- Cameras (36)
- Multiplexer (1)
- Recorder (1)



*History:* Upgraded from 2021 through 2022.

**Condition:** Reported satisfactory without operational deficiencies



Security system camera

Useful Life: 10- to 15-years

**Preventative Maintenance Notes:** We recommend the Association obtain and adhere to the manufacturer's recommended maintenance plan. The required preventative maintenance may vary in frequency and scope based on the unit's age, operational condition, or changes in technology. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

#### Monthly:

- Check cameras for proper focus, fields of view are unobstructed and camera and lenses are clean and dust-free
- Check recording equipment for proper operation
- Verify monitors are free from distortion with correct brightness and contrast

#### Annually:

- Check exposed wiring and cables for wear, proper connections and signal transmission
- Check power connections, and if applicable, functionality of battery power supply systems

Priority/Criticality: Per Board discretion

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Our cost is based on information provided by the Association. The Association should anticipate replacement of up to fifty percent (50%) of the security system components per event.



# **Property Site Elements**

## **Asphalt Pavement, Repaving**

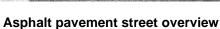
**Line Item:** 4.040

Quantity: Approximately 2,700 square yards at the streets

*History:* Original

**Condition:** Good to fair overall with isolated cracks and settlement evident. We note centerline deterioration at the pavement due to the drainage system.

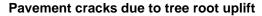






Asphalt pavement street overview







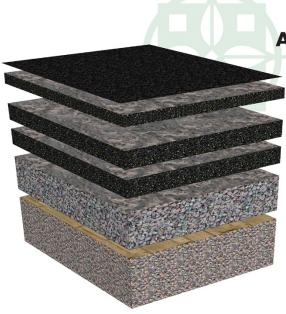
**Pavement settlement** 

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 Phoenix On The Bay



ASPHALT DIAGRAM

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

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

Compacted Crushed Stone or Aggregate Base

**Subbase of Undisturbed Native Soils** Compacted to 95% dry density

© Reserve Advisors

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

**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. Our cost for milling and overlayment includes area patching of up to ten percent (10%).

#### **Concrete Curbs and Gutters**

**Line Item:** 4.110

**Quantity:** Approximately 3,000 linear feet

**Condition:** Good to fair overall with isolated cracks evident.





Concrete curb and gutter

**Concrete cracks** 

**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:
  - o Inspect and repair major cracks, spalls and trip hazards
  - o 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 900 linear feet of curbs and gutters, or thirty percent (30%) of the total, will require replacement during the next 30 years.



## **Irrigation System**

**Line Item:** 4.420

**Quantity:** Approximately 26 zones

History: Original

Condition: Satisfactory operational condition and Management and the Board do not

report any deficiencies

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

Phoenix On The Bay II 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.

# Lift Station, Pumps

**Line Item:** 4.540

**Quantity:** Two each

*History:* Original; Management informs us the Association replaced the electrical panel and waste grinder within the last four years. We are also informed the Association added a diffuser in 2021



**Condition:** Reported satisfactory without operational deficiencies





Lift station pump

Lift station

Useful Life: Up to 10 years

**Preventative Maintenance Notes:** We recommend the Association obtain and adhere to the manufacturer's recommended maintenance plan. The required preventative maintenance may vary in frequency and scope based on the unit's age, 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 repair bearings, lubricant and shaft seals, and grease motor bearings as needed
  - Test and adjust pump if excessive vibration is evident. Inspect impeller for wear, corrosion or damage.
  - Check amperage draw on motors for functionality
  - Check all float switches for functionality

**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.

### Lift Station, Rebuild

**Line Item:** 4.550

Quantity: One each

History: Original

**Condition:** Reported satisfactory without operational deficiencies



Useful Life: Up to 30 years

**Preventative Maintenance Notes:** We recommend the Association obtain and adhere to the manufacturer's recommended maintenance plan. The required preventative maintenance may vary in frequency and scope based on the unit's age, operational condition, or changes in technology. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Semi-annually:
  - o Inspect lifting chain/cable and guide rails
  - o Inspect check valves for wear and damage
  - o Check all controls and electrical components
  - o Clean and remove grease and other debris as needed

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

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Rebuilding of the station includes replacement of pumps, motors, guide rails and electrical components including controls. The Association should fund interim repairs and replacements through the operating budget.

### Pavers, Masonry

**Line Item:** 4.620

Quantity: Approximately 1,440 square feet at the entrance to the property

*History:* Original; Management informs us the Association conducted partial resetting in

2020

Condition: Good to fair overall







Masonry pavers overview







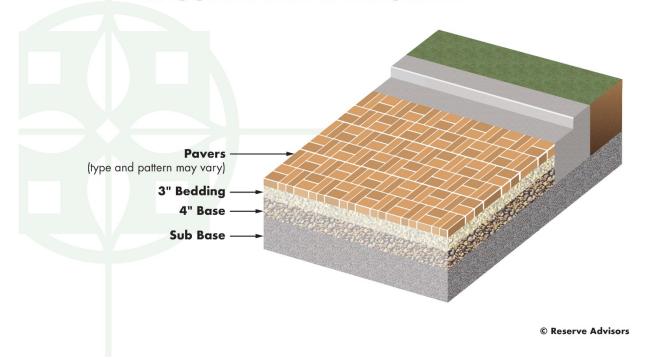
Masonry pavers overview

**Paver cracks** 

Useful Life: 15- to 20-years

**Component Detail Notes:** The following diagram depicts the typical components of a masonry paver system although it may not reflect the actual configuration at Phoenix On The Bay II:

## **MASONRY PAVER DIAGRAM**



Page 4.37 - Reserve Component Detail



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

- Annually:
  - Inspect and repair settlement, trip hazards and paver spalls at heavy traffic areas
  - o Re-set and/or reseal damaged pavers as necessary
  - o Periodically clean and remove overgrown vegetation as needed

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

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We suggest the Association conduct interim resetting and replacement of minor areas of pavers as normal maintenance, funded from the operating budget.

#### Perimeter Walls, Stucco

**Line Item:** 4.640

Quantity: Approximately 9,560 square feet of surface area

*History:* Inspected and repaired from 2019 through 2020.

**Condition:** The walls are in good to fair condition overall and paint finish is in good to fair condition overall with isolated cracks evident.







Stucco perimeter wall overview







Wall stucco cracks

Wall stucco cracks

**Useful Life:** Indefinitely long with periodic finish applications and proper maintenance every six- to eight-years

**Component Detail Notes:** Stucco is Portland cement plaster that is applied directly to a solid base such as masonry or concrete. Periodic paint finish applications and repairs to stucco help prevent water infiltration and spalling from weather exposure, maintain a good appearance and maximize the useful life of the system.

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

- As-needed:
  - Inspect for significant stucco damage, cracks and paint finish deterioration. If these conditions exist, perform near term repairs and remediation, utilizing reserve funds if project scope warrants.
  - Ensure irrigation heads are directed away from the walls
  - Pressure clean as necessary at areas of finish stains and organic growth

**Priority/Criticality:** Not recommended to defer

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Our estimate of cost includes stucco paint finish applications and stucco replacement of up to five percent (5%) per event

# **Retaining Walls, Masonry**

**Line Item:** 4.745

**Quantity:** Approximately 700 square feet

**History:** Original



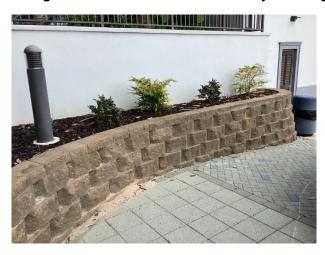
**Condition:** Good overall





Masonry retaining wall

Masonry retaining walls overview



Masonry retaining walls overview

Useful Life: Up to 35 years

**Component Detail Notes:** Properly constructed interlocking masonry retaining walls utilize geosynthetic reinforcement and a drainage system to stabilize the wall and prevent the buildup of hydrostatic pressure behind the wall. Water stains may indicate inadequate drainage or blocked drainage from behind the walls

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

- Annually:
  - Inspect and repair leaning sections or damaged areas
  - Water stains which may indicate possible blocked drainage should be investigated further
  - Inspect and repair erosion at the wall base and backside

**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.

### **Retaining Wall, Stucco**

**Line Item:** 4.755

**Quantity:** Approximately 2,880 square feet

*History:* Inspected and repaired from 2019 through 2020.

Condition: Good overall



Concrete retaining walls overview

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

**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 for the application of stucco paint finishes an allowance for an inspection and crack repairs of up to ten percent (10%). Updates of this Reserve Study will continue to monitor the rate of deterioration and incorporate any available inspection reports.



# **Sport Court, Tennis, Fence**

**Line Item:** 4.840

**Quantity:** Approximately 600 linear feet

History: Original

**Condition:** Good to fair overall with rust evident.





**Chain link fence** 

Fence post rust

Useful Life: Up to 25 years

Priority/Criticality: Per Board discretion

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

**Expenditures** table in Section 3.

## **Sport Courts, Tennis Court, Color Coat and Waterproof Coating**

**Line Item:** 4.830

Quantity: Approximately 1,640 square feet comprising one Tennis court

History: Original

**Condition:** Fair overall with isolated color coat fade, chipped waterproof coatings and

cracks





Color coat fade



**Tennis court overview** 



Surface cracks



**Chipped waterproof coatings** 



**Surface cracks** 

Useful Life: Six- to eight-years



**Component Detail Notes:** Prior to the application of the color coat, the Association should require the contractor to rout and fill all cracks with hot emulsion. This deters water infiltration and further deterioration of the asphalt playing surface.

Priority/Criticality: Not recommended to defer

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

**Expenditures** table in Section 3.

### **Pool Elements**

## **Deck, Pavers (Outdoor Pool)**

**Line Item:** 6.200

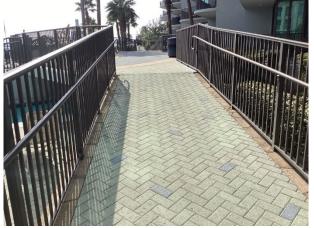
Quantity: Approximately 11,490 square feet

History: Original

**Condition:** Good overall



Paver pool deck overview



Paver pool deck overview



Paver pool deck overview



Paver pool deck overview



Useful Life: Up to 30 years

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

- Annually:
  - Inspect and repair settlement, trip hazards and significant paver spall
  - Reset and/or reseal damaged pavers as necessary
  - o Periodically clean and remove overgrown vegetation as needed

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

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We recommend the Association fund interim inspections, partial replacements and repairs through the operating budget.

#### Deck, Tile (Indoor Pool)

**Line Item:** 6.210

Quantity: Approximately 2,570 square feet. This quantity includes the wall tile around

the pool deck

History: Original

**Condition:** Good overall





Overview of indoor pool deck tile

Overview of indoor pool deck tile

**Useful Life:** Up to 25 years

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

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



### Fence, Aluminum

**Line Item:** 6.400

**Quantity:** Approximately 1,000 linear feet

History: Original

Condition: Good overall



**Aluminum pool fence** 

Useful Life: Up to 30 years

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

Annually:

Inspect and repair loose fasteners or sections, and damage

 Repair leaning sections and clear vegetation from fence areas which could cause damage

Priority/Criticality: Not recommended to defer

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

#### **Furniture**

**Line Item:** 6.500

**Quantity:** The pool furniture includes the following:

Chairs

Lounges

Tables



• Ladders and life safety equipment

History: Replaced in 2016.

**Condition:** Good overall



**Pool furniture** 

**Useful Life:** Up to 12 years

Priority/Criticality: Per Board discretion

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We recommend interim re-strapping, refinishing, cushion replacements, reupholstering and other repairs to the furniture as normal maintenance to maximize its useful life.

## **Light Fixtures, Bollards**

**Line Item:** 6.550

Quantity: 80 bollard light fixtures

*History:* Original

**Condition:** Good overall

Useful Life: Up to 20 years

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

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

**Expenditures** table in Section 3.



### **Mechanical Equipment, Dehumidification Unit**

**Line Item:** 6.598

**Quantity:** One dehumidification unit at the indoor pool facility

History: Replaced in 2018

**Condition:** Reported satisfactory



Pool dehumidification unit

Useful Life: 15- to 20-years

**Preventative Maintenance Notes:** We recommend the Association obtain and adhere to the manufacturer's recommended maintenance plan. 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 unit's age, operational condition, or changes in technology. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Quarterly:
  - o Inspect belts for alignment, tension and condition
  - o Clean/replace filter and screen cleaning as needed
  - o Inspect/clean coils, blowers and motors
  - Check refrigerant pressure and oil levels
  - Clean drainage and inspect drain pans
  - Check/adjust controls
- Semi-annually:
  - Lubricate motor bearings
- Annually:
  - Replace belts

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.

### **Mechanical Equipment**

**Line Item:** 6.600

**Quantity:** The mechanical equipment includes the following:

Automatic chlorinators and controls

• Interconnected pipe, fittings and valves

Pumps, filters, and heaters

History: Varied ages.

**Condition:** Reported satisfactory without operational deficiencies







**Pool filters** 



Pool mechanical equipment



Pool mechanical equipment for fountains





Lazy river pump

Useful Life: Up to 15 years

**Preventative Maintenance Notes:** We recommend the Association maintain a maintenance contract with a qualified professional and follow the manufacturer's specific recommended maintenance and local, state and/or federal inspection guidelines.

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

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

### Pool Finishes, Plaster and Tile

*Line Items:* 6.800 through 6.805

**Quantity:** The pool and tile quantities are as follows:

- Approximately 5,980 square feet of plaster finishes and approximately 250 linear feet of tile at the dolphin pool and lazy river
- Approximately 300 square feet of plaster finishes and approximately 60 linear feet of tile at the dolphin pool and lazy river
- Approximately 610 square feet of plaster finishes and approximately 130 linear feet of tile at the dolphin pool and lazy river

#### History:

- Plaster finish: The Association replaced the plaster finishes at the dolphin pool, lazy river and outdoor kiddie pool in 2018 and at the indoor pool and spa in 2020
- Tile: The Association replaced the pool tile at the dolphin pool, lazy river and outdoor kiddie pool in 2018 and at the indoor pool and spa in 2020



Condition: Good



Pool plaster overview









Dolphin pool plaster overview



Overview of indoor pool



Overview of indoor spa

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



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

- Semi-annually:
  - Inspect and patch areas of significant plaster delamination, coping damage and structure cracks
  - Inspect main drain connection and anti-entrapment covers, pressure test circulation piping and valves
  - o Test handrails and safety features for proper operation

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

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We recommend the Association budget for full tile replacement every other plaster replacement event. Removal and replacement of the finish provides the opportunity to inspect the pool structures and to allow for partial repairs of the underlying concrete surfaces as needed. To maintain the integrity of the pool structures, we recommend the Association budget for the following:

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

# **Garage Elements**

### **Concrete, Elevated Floors**

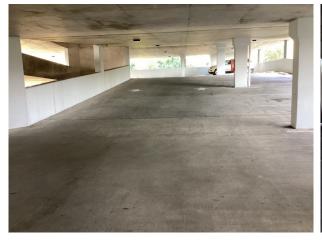
**Line Item:** 7.300

Quantity: Approximately 103,600 square feet of elevated cast in place concrete floor

structures

**Condition:** Good to fair overall with isolated cracks and exposed reinforcing steel evident. The elevated structural concrete does not utilize a protective traffic coating







Elevated garage floor overview

Elevated garage floor overview





**Concrete cracks** 

Concrete cracks at ceiling



**Exposed reinforcement** 

Useful Life: Repairs to the various concrete surfaces every 5- to 10-years



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

- Semi-annually:
  - Clean floors and remove vehicular oil stains
- Annually:
  - Inspect for large cracks, concrete spalls and vehicular damage at walls and columns
  - Verify drains are working properly and check for areas of extensive water ponding
  - Check for any signs of exposed rebar

**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:

- Complete inspection of the garage concrete
- Partial depth concrete replacement of a limited amount of the surface area of the concrete floors
- Partial depth concrete replacement of a limited amount of the surface area of the elevated structural concrete ceilings
- Remediation of structural concrete columns and beams as needed
- Crack repairs on all surfaces as needed

# **Light Fixtures**

**Line Item:** 7.600

**Quantity:** Approximately 151 light fixtures with LED lamps

History: Replaced in 2019.

**Condition:** Reported satisfactory



**Garage light fixture** 



Useful Life: Up to 15 years

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

• As-needed:

Inspect and replace/repair broken or dislodged fixtures

Replace burned out bulbs

Priority/Criticality: Per Board discretion

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

## **Marina Elements**

# **Bulkhead, Steel and Vinyl**

**Line Item:** 8.100

**Quantity:** Approximately 880 linear feet. This quantity comprises 245 linear feet of steel bulkheads and 635 linear feet of vinyl bulkheads.

History: Inspected and repaired in 2018.

Conditions: Good overall



Steel bulkhead

**Useful Life:** Inspections and capital repairs every 10- to 15-years

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

Expenditure Detail Notes: Expenditure timing and costs are depicted in the Reserve Expenditures table in Section 3. Our cost is based on information provided by the



Association and includes allowances for a complete inspection and partial replacement of up to twenty percent (20%) of the bulkheads.

# **Docks and Pilings, Wood and Composite**

*Line Items:* 8.395 and 8.400

**Quantity:** Approximately 4,800 square feet of wood and composite docks

*History:* Both the harbor dock and the dock located at the south end of the property were

replaced in 2022 as a result of storm damage.

**Condition:** Good overall





Harbor deck boards



Harbor docks



Overview of wood pilings

**Harbor docks** 







Dock with composite decking

Dock with composite decking

**Useful Life:** Up to 30 years for complete replacement and up to 15 years for interim replacement of the decking and structure repairs

**Component Detail Notes:** The sit atop wood pilings. The height of the docks are manually adjustable at the piles to accommodate changes in water levels. Phoenix On The Bay II should fund this activity through the operating budget when necessary. Phoenix On The Bay II should also anticipate replacement of the utility lines for the docks at the time of replacement.

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

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Our cost is based on information provided by the Association. Our cost for repairs includes allowances for complete replacement of the decking and partial replacement of up to ten percent (10%) of the structure and pilings. Our estimate of cost includes an allowance for removal and disposal of the existing docks, and installation of new docks and utility lines. Phoenix On The Bay II should fund interim replacements of utilities prior to replacement of the docks and annual repairs to displaced pilings through the operating budget.

### **Power Pedestals**

*Line Item:* 8.800

Quantity: 32 each

History: Replaced in 2022.

**Condition:** Reported satisfactory





Power pedestals

**Useful Life:** Up to 25 years

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

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Our cost is based on information provided by the Association.

# **Reserve Study Update**

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

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

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



## 5.METHODOLOGY

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

Phoenix On The Bay II 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 annual 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 Unit Owners pay their "fair share" of the weathering and aging of the commonly owned property each year. Level reserve assessments preserve the property and enhance the resale value of the homes.

This Reserve Study is in compliance with and exceeds the National standards<sup>1</sup> 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
- Local<sup>2</sup> 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 Orange Beach, Alabama at an annual inflation rate<sup>3</sup>. Isolated or regional markets

<sup>&</sup>lt;sup>1</sup> Identified in the APRA "Standards - Terms and Definitions" and the CAI "Terms and Definitions".

<sup>&</sup>lt;sup>2</sup> See Credentials for additional information on our use of published sources of cost data.

<sup>&</sup>lt;sup>3</sup> Derived from Marshall & Swift, historical costs and the Bureau of Labor Statistics.



- of greater construction (development) activity may experience slightly greater rates of inflation for both construction materials and labor.
- The past and current maintenance practices of Phoenix On The Bay II 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.



# TAYLOR J. BLEISTEIN Responsible Advisor

### **CURRENT CLIENT SERVICES**

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



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

- Bayway Isles Point Brittany Four Condominium Corporation A 19 story coastal high-rise located in St. Petersburg, Florida. This 178 unit condominium was constructed in 1970 and consists of traction controlled elevators, domestic water and fire pumps, concrete aggregate panels and retaining brackets, and gemstone water proof coatings on the concrete breezeways
- **Lido Surf and Sand Owners' Association** This costal midrise built in 1976 is located in Sarasota, Florida and contains three eight story buildings containing 108 units which are connected by an outdoor atrium which contains plaza decks and tile floor coverings. The condominium also maintains three hydraulic elevators, a generator, domestic water and fire pumps, and a fire suppression system, as well as a pool and a 2 story garage which utilizes a traffic coating
- Orange Acres Ranch Homeowners Association Located in Lake Wales, Florida; this 114 unit cooperative was built in 1985 and converted to a co-operative in 2007. The co-operative maintains a domestic water treatment system which includes water softeners, hydroneumatic storage tanks, valves, and well pumps. The co-operative also maintains a wastewater treatment plant with drainage fields, as well as a clubhouse and pool area.
- **Village at Deaton Creek Homeowners Association** Located in Hoschton, Georgia. This homeowners association is comprised of 1,144 single family homes built from 2006 to 2015. The Association maintains asphalt street systems, an indoor and outdoor pool, with a dehumidification system, seven tennis courts, eight pickleball courts and vehicular and pedestrian bridges. The Association also maintains a 2 story clubhouse which includes elevators, a commercial sized gymnasium, a kitchen and 2<sup>nd</sup> story terrace.
- **Golf Lakes Residents' Association** Located in Bradenton, Florida; this 780 unit co-operative built in 1965 maintains the asphalt pavement street systems, a three hole golf course, subsurface utility pipes, and a pedestrian bridge. The co-operative also maintains a fitness center, pool area, and a clubhouse that contains a commercial grade kitchen and kitchen equipment
- **Bridgewater Owners Association** This homeowners Association is located in Ridgeland, Mississippi and consists of 281 single family homes, which were constructed in seven phases from 1995 to 2006. The Association maintains the asphalt pavement streets, ponds, pond spillways, seawalls, subsurface utility pipes, and a clubhouse and pool area

### PRIOR RELEVANT EXPERIENCE

Before joining *Reserve Advisors*, Mr. Bleistein successfully completed the bachelors program in Mechanical Engineering from Hanover College

### **EDUCATION**

Hanover College - B.S. Mechanical Engineering



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

### **CURRENT CLIENT SERVICES**

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

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



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

### 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:

<u>Association of Construction Inspectors</u>, (ACI) the largest professional organization for those involved in construction inspection and construction project management. ACI is also the leading association providing standards, guidelines, regulations, education, training, and professional recognition in a field that has quickly become important procedure for both residential and commercial construction, found on the web at www.iami.org.

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.

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

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

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

Reserve Advisors' 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 Phoenix On The Bay II 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) Phoenix On The Bay II 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 property.

Our inspection and analysis of the subject property is limited to visual observations, is noninvasive and is not meant to nor does it include investigation into statutory, regulatory or code compliance. RA inspects sloped roofs from the ground and inspects flat roofs where safe access (stairs or ladder permanently attached to the structure) is available. The report is based upon a "snapshot in time" at the moment of inspection. RA may note visible physical defects in 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, and/or occupancy.

RA is not responsible for conditions that have changed between the time of inspection and the issuance of the Report. RA does not investigate, nor assume any responsibility for any existence or impact of any hazardous materials, such as asbestos, urea-formaldehyde foam insulation, other chemicals, toxic wastes, environmental mold or other potentially hazardous materials or structural defects that are latent or hidden defects which may or may not be present on or within the property. RA does not make any soil analysis or geological study as part of its services, nor does RA investigate 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 quarantee of remaining useful lives of any property element.

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

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. 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 completes the services in accordance with the Proposal. The Report represents a valid opinion of RA's findings and recommendations and is deemed complete. RA 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.

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

Use of Our Report and Your Name - Use of 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. 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 - The retainer payment is due upon authorization and prior to inspection. The balance is due net 30 days from the report shipment date. Any balance remaining 30 days after delivery of the Report shall accrue an interest charge of 1.5% per month. 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.