

---

# STRUCTURAL INTEGRITY RESERVE STUDY

FOR

## ARDISSONE CONDOMINIUMS

4400 GULF SHORE BLVD. N.  
NAPLES, FLORIDA 34103

PREPARED FOR:

ARDISSONE CONDOMINIUM ASSOCIATION, INC.  
4400 GULF SHORE BLVD. N.  
NAPLES, FLORIDA 34103

PREPARED BY: CARTER A. NELSON, R.S., E.I.T.



5001 N NEBRASKA AVE.  
SUITE A  
TAMPA, FLORIDA 33603

NOVEMBER 2024



---

## TABLE OF CONTENTS

---

<b>I. STRUCTURAL INTEGRITY RESERVE STUDY DETERMINATION</b> .....	<b>1</b>
A. Methodology and Assumptions.....	<b>1</b>
B. Summary of Replacement Reserve Needs .....	<b>3</b>
1. Technical Definitions .....	<b>3</b>
C. Executive Summary .....	<b>5</b>
D. Replacement Reserve Requirements .....	<b>7</b>
<b>II. RESERVE CASH FLOW ANALYSIS</b> .....	<b>8</b>
A. Introduction .....	<b>8</b>
1. Formula .....	<b>9</b>
2. Definitions.....	<b>9</b>
<b>DISCLOSURES</b> .....	<b>11</b>
<b>BIOGRAPHY</b> .....	<b>12</b>
<b>LIMITATION OF RESPONSIBILITY</b> .....	<b>13</b>
<b>GLOSSARY OF TERMS</b> .....	<b>15</b>
<b>BIBLIOGRAPHY</b> .....	<b>16</b>
<b>PHOTOGRAPHS</b> .....	<b>17</b>

---

## I. STRUCTURAL INTEGRITY RESERVE STUDY DETERMINATION

### A. METHODOLOGY AND ASSUMPTIONS

A Structural Integrity Reserve Study (SIRS) is a report giving an estimate of the amount of money that must be put aside to replace or restore structural elements of the building(s) that will require replacement before the community's use expires. Per the Florida Statute Title XXXIII, Chapter 553, Section 899 and in conformance with the scope of work specified in SB 4-D & SB 154 – Building Safety, Dated May 26, 2022, and all other executed amendments to SB 4-D & SB 154, revisions Dated May 04, 2023, and, signed by the governor on June 09, 2023, passed by the state as per the date of this report, this includes the following components: Roof, load bearing walls and other primary structural members, fireproofing & fire safety, common area plumbing, common area electrical systems, exterior painting & waterproofing, and windows/exterior doors if the Association is responsible, as well as any other items that have deferred maintenance expense or replacement cost that exceeds \$10,000 and the failure to replace or maintain such time negatively affects the previously listed components.

The commonly accepted guidelines, as established by the previously mentioned governing statutes, the Community Associations Institute, and our engineering judgment and experience have been used as a basis for the reserve schedule in this report. The schedule, when implemented in conjunction with a well-planned preventive maintenance program, will provide adequate funds for the replacement of the community's SIRS elements as they reach the end of their useful lives or are experiencing deferred maintenance. In order to ensure that this schedule remains current, a reassessment of the existing condition and replacement costs for each item is necessary at regular intervals as recommended within the report. Updating the schedule, reduction of the useful lives, and inflation of the replacement costs may be executed with the benefit of re-inspection. The schedule must also be adjusted as common elements are added or modified.

It is important to note that a reserve item is a SIRS component that will require repair or replacement on a recurring basis using a similar cost item. If an upgrade is necessitated due to a cost change or other extraordinary reason, the cost over and above the replacement cost is considered to be a capital improvement rather than a capital replacement. Capital improvements should not be funded from the reserves. After it has been upgraded, the item

will then become part of the reserve schedule.

Method of Accounting

The Method used in the Structural Integrity Reserve Study is the “Cash Flow” Method and the funding plan utilized is the Baseline Funding. The goal of this funding method is to keep the reserve cash balance above zero. This means that while each individual component may not be fully funded, the reserve balance does not drop below zero during the projected period.

Level of Service

The SIRS inventory was established based on information provided by the association’s representative, field measurements, and/or drawing take-offs.

## B. SUMMARY OF REPLACEMENT RESERVE NEEDS

### 1. TECHNICAL DEFINITIONS

This page is a summary of each of the different categories within the detailed schedule. It shows the total dollar amounts for each category and is based on the full funding of each item.

The Following are descriptions of the different variables, which are shown on the reserve schedule in the order in which they appear.

#### Description

This column on the schedule lists all of the components for which we recommend that reserves be accumulated. The basis for the selection of these items includes:

- Review of the governing documents regarding the common and limited common elements.
- Review of all available maintenance contracts.
- The type of component and its anticipated full useful life and condition.
- A review of applicable statutes dealing with reserve requirements.

#### Quantity

The quantities that are used as a basis for this report are calculated from field measurements and drawings that have been supplied to Ray Engineering, Inc. Ray Engineering, Inc. has not made extensive as-built measurements, and the quantities used are based primarily on the reference materials provided.

#### Unit Cost

The construction and replacement costs used in this report are based primarily on the various publications written by the R.S. Means Company and the construction-related experience of Ray Engineering. The publications are listed in the Bibliography.

### Reserve Requirements Present Dollars

This is calculated by multiplying the “quantity” by the “unit costs”.

### Existing Reserve Fund

This is an allocation of the total existing reserve funds to the individual line items using a weighing factor which is based on the total “reserve requirement present dollars”, the “estimated remaining life”, and other factors. An existing balance was submitted to Ray Engineering, Inc. This balance was used in developing our SIRS.

### Estimated Useful Life

The useful life values that are part of this report come from a variety of sources, some of which are listed in the Bibliography. In order to ensure that all items attain their anticipated useful lives, it is imperative that a well-planned maintenance schedule be adhered to. If an existing item is replaced with an upgraded product, the estimated remaining life has been listed for the new product.

### Estimated Remaining Life

The estimated remaining life is based on both the age of the component and the results of the field inspections conducted in July 2024.

### Annual Reserve Funding

The reserve requirement present value was converted to the future value for the time in which each replacement will occur. A 3.0% compounded inflation rate has been assumed. The future value was then converted to an annual reserve fund value. The arithmetic calculations and formulas are indicated later in this report.

## C. EXECUTIVE SUMMARY

Ardissonne is a condominium complex located off Gulf Shore Blvd. N. in Naples, Florida, constructed between 1984-1992. The complex consists of 6 separate, four-story condominium buildings, totaling 33 units, located off the mainland supported by pile foundations, with 8” post-tension slabs supported by reinforced beams and columns, with a wood-framed roof structure. The roof is clad with concrete tiles, a flat MBM roof section, with runoff controlled by gutters and downspouts. The exteriors are clad with stucco, and each unit has a rear balcony. It is our understanding that the Association is not responsible for the windows of the units.

At the time of inspection, we did not observe any significant structural concerns at any of the six buildings. It is important to note, in regard to the SIRS components, that these major repairs were performed recently or are planned in the near future:

- Roof replacements of all six buildings in 2023-2024
- Full exterior restoration of all six buildings in 2024
- Major piling foundation repairs in 2022
- Seawall restoration with a projected value of \$750,000 in 2030

This SIRS is prepared for the fiscal year starting January 1, 2025. It is our recommendation that the annual contribution be set to \$202,000 through the remainder of the reserve, which is equivalent to an average contribution of \$6,121 per year, per residential unit. For a review of the funding requirements for the next 30 years, please refer to the “Cost and Funding Recap” included as a part of this report.

D. REPLACEMENT RESERVE REQUIREMENTS

**SCHEDULE I**

Exterior/Interior Building

**SCHEDULE II**

Electrical /Plumbing/Fire Safety

**YEAR-BY-YEAR FUNDING RECAP - ALL ITEMS**

**COST AND FUNDING RECAP**

**ITEMIZED PROJECT COSTS BY YEAR**





PROJECT NAME ARDISSONE CONDOS  
INFLATION RATE 3.00%  
YIELD ON RESERVE FUNDS 0.35%  
BEGINNING YEAR OF FUNDING 2025  
PLANNING HORIZON 30 YRS

PRINTED ON: 12/5/2024 11:23

RESERVE EXPENDITURES

COMPONENT DESCRIPTION	UNITS	QUANTITY	UNIT COST	TOTAL COST	ESTIMATED SERVICE LIFE	ESTIMATED REMAINING LIFE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
<b>INTERIOR BUILDING MAINTENANCE ITEMS</b>																						
1 BUILDINGS - SCHEDULED BUDGET MEMBERSHIP - REPAIR	S.F.	8400	\$20	\$168,000.00	20	8																
2 BUILDINGS - SCHEDULED BUDGET MEMBERSHIP - REPLACE	S.F.	14469	\$27	\$390,663.00	30	30																
3 BUILDINGS - SCHEDULED BUDGET MEMBERSHIP - REPLACE	S.F.	14469	\$27	\$390,663.00	30	30																
4 BUILDINGS - SCHEDULED BUDGET MEMBERSHIP - REPLACE	S.F.	14469	\$27	\$390,663.00	30	30																
5 BUILDINGS - EXTERIORS - REPAIR PAINT	S.F.	26700	\$183	\$4,886,100.00	10	10																
6 BUILDINGS - EXTERIORS - REPAIR PAINT	S.F.	26700	\$183	\$4,886,100.00	10	10																
7 EXTERIOR DOORS - REPLACE	EA.	39	\$1,500	\$57,900.00	25	15																
8 SEA WALL - RESTORATION	ALLOW.	1	\$750,000	\$750,000.00	50	5						\$869,456										
9																						
10																						
11																						
12																						
13																						
14																						
15																						
16																						
17																						
18																						
19																						
20																						
21																						
22																						
23																						
24																						
25																						
26																						
27																						
28																						
29																						
30																						
31																						
32																						
33																						
34																						
35																						
36																						
37																						
38																						
39																						
40																						
<b>TOTAL INTERIOR BUILDING MAINTENANCE ITEMS</b>												\$869,456					\$1,061,277					\$212,663

RESERVE EXPENDITURES

COMPONENT DESCRIPTION	UNITS	QUANTITY	UNIT COST	TOTAL COST	ESTIMATED SERVICE LIFE	ESTIMATED REMAINING LIFE	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	30 YR TOTAL	
<b>INTERIOR BUILDING MAINTENANCE ITEMS</b>																						
1 BUILDINGS EXTERIORS MEMBRANE DAMAGED - REPLACE	S.F.	8400	\$20	\$168,000.00	20	8															\$168,000	
2 BUILDINGS EXTERIORS ROOFING DAMAGED - REPLACE	S.F.	14469	\$27	\$390,663.00	30	30																\$390,663
3 BUILDINGS EXTERIORS TILE - REPLACE	S.F.	14469	\$27	\$390,663.00	30	30																\$390,663
4 BUILDINGS EXTERIORS TILE - REPLACE	S.F.	14469	\$27	\$390,663.00	30	30																\$390,663
5 BUILDINGS EXTERIORS REPAIR PAINT	S.F.	26700	\$1.83	\$48,861.00	10	10				\$713,130												\$713,130
6 BUILDINGS EXTERIORS REPAIR PAINT	S.F.	26700	\$1.83	\$48,861.00	10	10				\$713,130												\$713,130
7 EXTERIOR DOORS - REPLACE	EA.	39	\$1,500	\$58,500.00	25	15																\$58,500
8 SEA WALL - RESTORATION	ALLOW.	1	\$750,000	\$750,000.00	50	5																\$750,000
9																						
10																						
11																						
12																						
13																						
14																						
15																						
16																						
17																						
18																						
19																						
20																						
21																						
22																						
23																						
24																						
25																						
26																						
27																						
28																						
29																						
30																						
31																						
32																						
33																						
34																						
35																						
36																						
37																						
38																						
39																						
40																						
<b>TOTAL INTERIOR BUILDING MAINTENANCE ITEMS</b>							50	50	50	50	\$1,450,299	50										\$5,771,073

RESERVE EXPENDITURES

COMPONENT DESCRIPTION INVENTORY	UNITS	QUANTITY	UNIT COST	TOTAL COST	ESTIMATED SERVICE LIFE	ESTIMATED REMAINING LIFE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
<b>ELECTRICAL/MECHANICAL/PLUMBING ITEMS</b>																						
1 ELECTRICAL PANELBOARDS AND SWITCHES - REPLACE	EA	48	\$1,000	\$48,000.00	30	20																
2 ELECTRICAL PANELBOARDS AND SWITCHES - REPLACE	EA	48	\$4,000	\$192,000.00	30	20																
3 BUILDING LIFE SAFETY EQUIPMENT - REPLACE	SF	81,600	\$1	\$81,600.00	25	19												\$110,739				
4 BUILDING LIFE SAFETY EQUIPMENT - REPLACE	SF	81,600	\$1	\$81,600.00	25	20																
5 FIRE PUMP 75HP - REPLACE	ALLOW.	1	\$110,000	\$110,000.00	30	4	\$123,806															
6 FIRE CONTROL SYSTEM - REPLACE	EA	6	\$12,000	\$72,000.00	25	19																
7																						
8																						
9																						
10																						
11																						
12																						
13																						
14																						
15																						
16																						
17																						
18																						
19																						
20																						
21																						
22																						
23																						
24																						
25																						
26																						
27																						
28																						
29																						
30																						
31																						
32																						
33																						
34																						
35																						
36																						
37																						
38																						
39																						
40																						
<b>TOTAL ELECTRICAL/MECHANICAL/PLUMBING ITEMS</b>									\$0	\$0	\$123,806	\$869,456	\$0	\$0	\$0	\$48,635	\$116,039	\$110,739	\$0	\$0	\$0	\$12,663
<b>TOTAL</b>									\$0	\$0	\$123,806	\$869,456	\$0	\$0	\$48,635	\$116,039	\$110,739	\$110,739	\$0	\$0	\$0	\$12,663

RESERVE EXPENDITURES

COMPONENT DESCRIPTION	INVENTORY	UNITS	QUANTITY	UNIT COST	TOTAL COST	ESTIMATED SERVICE LIFE	ESTIMATED REMAINING LIFE	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	30 YR TOTAL			
1	ELECTRICAL MECHANICAL PLUMBING ITEMS	EA	1	\$14,000.00	\$14,000.00	30	20																\$26,080		
2	ELECTRICAL PANELBOARDS AND SWITCHES - REPLACE	EA	48	\$1,000	\$48,000	30	20																	\$26,080	
3	ELECTRICAL PANELBOARDS AND SWITCHES - REPLACE	EA	48	\$4,069	\$195,252	30	20																	\$143,086	
4	BUILDING LIFE SAFETY EQUIPMENT - REPLACE	S.F.	81,600	\$1	\$81,600.00	25	20				\$143,086													\$143,086	
5	FIRE PUMP - REPLACE	ALLOW.	1	\$110,000	\$110,000.00	30	4																	\$125,806	
6	FIRE CONTROL SYSTEM - REPLACE	EA	6	\$12,000	\$72,000.00	25	19																	\$96,702	
7																									
8																									
9																									
10																									
11																									
12																									
13																									
14																									
15																									
16																									
17																									
18																									
19																									
20																									
21																									
22																									
23																									
24																									
25																									
26																									
27																									
28																									
29																									
30																									
31																									
32																									
33																									
34																									
35																									
36																									
37																									
38																									
39																									
40																									
<b>TOTAL ELECTRICAL/MECHANICAL/PLUMBING ITEMS</b>								\$0	\$0	\$0	\$143,086	\$407,459	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$881,851		
<b>TOTAL</b>								\$0	\$0	\$0	\$143,086	\$1,837,758	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,659,924

FY	DESCRIPTION	First Replacement			Second Replacement			Third Replacement			Fourth Replacement			Fifth Replacement		
		Yr Replaced	Adjusted Cost if Inflation is 3.00%	Annual Funding Thru Yr Replaced	Yr Replaced	Adjusted Cost if Inflation is 3.00%	Annual Funding Thru Yr Replaced	Yr Replaced	Adjusted Cost if Inflation is 3.00%	Annual Funding Thru Yr Replaced	Yr Replaced	Adjusted Cost if Inflation is 3.00%	Annual Funding Thru Yr Replaced	Yr Replaced	Adjusted Cost if Inflation is 3.00%	Annual Funding Thru Yr Replaced
1	BUILDINGS 1-3 MODIFIED BITUMEN MEMBRANE (MBM) - REPLACE	2033	\$212,817	\$25646	2053	\$384,372	\$19219	2073		2093		2113				
2	BUILDINGS 4-6 MODIFIED BITUMEN MEMBRANE (MBM) - REPLACE	2033	\$212,817	\$25646	2053	\$384,372	\$19219	2073		2093		2113				
3	BUILDINGS 1-3 STEEL TILE - REPLACE	2055			2085			2115		2145		2175				
4	BUILDINGS 4-6 STEEL TILE - REPLACE	2055			2085			2115		2145		2175				
5	BUILDINGS 1-3 EXTERIORS - REPAIR/PAINT	2035	\$532,138	\$48376	2045	\$715,150	\$71515	2055		2065		2075				
6	BUILDINGS 4-6 EXTERIORS - REPAIR/PAINT	2035	\$532,138	\$48376	2045	\$715,150	\$71515	2055		2065		2075				
7	EXTERIOR DOORS - REPLACE	2040	\$212,663	\$13291	2065			2090		2115		2140				
8	SEA WALL - RESTORATION	2030	\$869,456	\$144909	2080			2130		2180		2230				
9		2025	0		2025	0		2025	0	2025	0	2025	0			
10		2025	0		2025	0		2025	0	2025	0	2025	0			
11		2025	0		2025	0		2025	0	2025	0	2025	0			
12		2025	0		2025	0		2025	0	2025	0	2025	0			
13		2025	0		2025	0		2025	0	2025	0	2025	0			
14		2025	0		2025	0		2025	0	2025	0	2025	0			
15		2025	0		2025	0		2025	0	2025	0	2025	0			
16		2025	0		2025	0		2025	0	2025	0	2025	0			
17		2025	0		2025	0		2025	0	2025	0	2025	0			
18		2025	0		2025	0		2025	0	2025	0	2025	0			
19		2025	0		2025	0		2025	0	2025	0	2025	0			
20		2025	0		2025	0		2025	0	2025	0	2025	0			
21		2025	0		2025	0		2025	0	2025	0	2025	0			
22		2025	0		2025	0		2025	0	2025	0	2025	0			
23		2025	0		2025	0		2025	0	2025	0	2025	0			
24		2025	0		2025	0		2025	0	2025	0	2025	0			
25		2025	0		2025	0		2025	0	2025	0	2025	0			
26		2025	0		2025	0		2025	0	2025	0	2025	0			
27		2025	0		2025	0		2025	0	2025	0	2025	0			
28		2025	0		2025	0		2025	0	2025	0	2025	0			
29		2025	0		2025	0		2025	0	2025	0	2025	0			
30		2025	0		2025	0		2025	0	2025	0	2025	0			
31		2025	0		2025	0		2025	0	2025	0	2025	0			
32		2025	0		2025	0		2025	0	2025	0	2025	0			
33		2025	0		2025	0		2025	0	2025	0	2025	0			
34		2025	0		2025	0		2025	0	2025	0	2025	0			
35		2025	0		2025	0		2025	0	2025	0	2025	0			
36		2025	0		2025	0		2025	0	2025	0	2025	0			
37		2025	0		2025	0		2025	0	2025	0	2025	0			
38		2025	0		2025	0		2025	0	2025	0	2025	0			
39		2025	0		2025	0		2025	0	2025	0	2025	0			
40		2025	0		2025	0		2025	0	2025	0	2025	0			

	FULLY FUNDED BALANCE				First Replacement				Second Replacement				Third Replacement				Fourth Replacement				Fifth Replacement				
	ELECTRICAL/MECHANICAL/PLUMBING MAINTENANCE ITEMS DESCRIPTION SCHEDULE II				Yr Replaced	Adjusted Cost if Inflation is 3.00%	Annual Funding Thru Yr Replaced	Yr Replaced	Adjusted Cost if Inflation is 3.00%	Annual Funding Thru Yr Replaced	Yr Replaced	Adjusted Cost if Inflation is 3.00%	Annual Funding Thru Yr Replaced	Yr Replaced	Adjusted Cost if Inflation is 3.00%	Annual Funding Thru Yr Replaced	Yr Replaced	Adjusted Cost if Inflation is 3.00%	Annual Funding Thru Yr Replaced	Yr Replaced	Adjusted Cost if Inflation is 3.00%	Annual Funding Thru Yr Replaced	Yr Replaced	Adjusted Cost if Inflation is 3.00%	Annual Funding Thru Yr Replaced
1	ELECTRICAL PANELBOARDS AND SWITCHES - REPLACE				2045	\$260,080	\$12385	2075	0		2105	0		2135	0		2165	0		2195	0		2225	0	
2	DOMESTIC PUMPS/LINES/CONTROLLER - REPLACE				2036	\$110,739	\$9228	2061	0		2086	0		2111	0		2136	0		2161	0		2186	0	
3	BUILDING 1-3 LIFE SAFETY EQUIPMENT - REPLACE				2044	\$143,086	\$7154	2069	0		2094	0		2119	0		2144	0		2169	0		2194	0	
4	BUILDING 4-6 LIFE SAFETY EQUIPMENT - REPLACE				2045	\$147,379	\$7018	2070	0		2095	0		2120	0		2145	0		2170	0		2195	0	
5	FIRE PUMP, 75Hp - REPLACE				2029	\$123,806	\$24761	2069	0		2109	0		2149	0		2189	0		2229	0		2269	0	
6	FIRE CONTROL SYSTEM - REPLACE				2035	\$96,762	\$8797	2060	0		2085	0		2110	0		2135	0		2160	0		2185	0	
7					2025	0		2025	0		2025	0		2025	0		2025	0		2025	0		2025	0	
8					2025	0		2025	0		2025	0		2025	0		2025	0		2025	0		2025	0	
9					2025	0		2025	0		2025	0		2025	0		2025	0		2025	0		2025	0	
10					2025	0		2025	0		2025	0		2025	0		2025	0		2025	0		2025	0	
11					2025	0		2025	0		2025	0		2025	0		2025	0		2025	0		2025	0	
12					2025	0		2025	0		2025	0		2025	0		2025	0		2025	0		2025	0	
13					2025	0		2025	0		2025	0		2025	0		2025	0		2025	0		2025	0	
14					2025	0		2025	0		2025	0		2025	0		2025	0		2025	0		2025	0	
15					2025	0		2025	0		2025	0		2025	0		2025	0		2025	0		2025	0	
16					2025	0		2025	0		2025	0		2025	0		2025	0		2025	0		2025	0	
17					2025	0		2025	0		2025	0		2025	0		2025	0		2025	0		2025	0	
18					2025	0		2025	0		2025	0		2025	0		2025	0		2025	0		2025	0	
19					2025	0		2025	0		2025	0		2025	0		2025	0		2025	0		2025	0	
20					2025	0		2025	0		2025	0		2025	0		2025	0		2025	0		2025	0	
21					2025	0		2025	0		2025	0		2025	0		2025	0		2025	0		2025	0	
22					2025	0		2025	0		2025	0		2025	0		2025	0		2025	0		2025	0	
23					2025	0		2025	0		2025	0		2025	0		2025	0		2025	0		2025	0	
24					2025	0		2025	0		2025	0		2025	0		2025	0		2025	0		2025	0	
25					2025	0		2025	0		2025	0		2025	0		2025	0		2025	0		2025	0	
26					2025	0		2025	0		2025	0		2025	0		2025	0		2025	0		2025	0	
27					2025	0		2025	0		2025	0		2025	0		2025	0		2025	0		2025	0	
28					2025	0		2025	0		2025	0		2025	0		2025	0		2025	0		2025	0	
29					2025	0		2025	0		2025	0		2025	0		2025	0		2025	0		2025	0	
30					2025	0		2025	0		2025	0		2025	0		2025	0		2025	0		2025	0	
31					2025	0		2025	0		2025	0		2025	0		2025	0		2025	0		2025	0	
32					2025	0		2025	0		2025	0		2025	0		2025	0		2025	0		2025	0	
33					2025	0		2025	0		2025	0		2025	0		2025	0		2025	0		2025	0	
34					2025	0		2025	0		2025	0		2025	0		2025	0		2025	0		2025	0	
35					2025	0		2025	0		2025	0		2025	0		2025	0		2025	0		2025	0	
36					2025	0		2025	0		2025	0		2025	0		2025	0		2025	0		2025	0	
37					2025	0		2025	0		2025	0		2025	0		2025	0		2025	0		2025	0	
38					2025	0		2025	0		2025	0		2025	0		2025	0		2025	0		2025	0	
39					2025	0		2025	0		2025	0		2025	0		2025	0		2025	0		2025	0	
40					2025	0		2025	0		2025	0		2025	0		2025	0		2025	0		2025	0	

**ARDESONE CONDOS  
COST AND FUNDING RECAP  
EXISTING FUNDING**

2025 1 2026 2 2027 3 2028 4 2029 5 2030 6 2031 7 2032 8 2033 9 2034 10 2035 11 2036 12 2037 13 2038 14 2039 15

Beginning Reserve Fund Balance	\$568,589	\$773,286	\$978,700	\$1,184,832	\$1,391,686	\$1,475,458	\$813,873	\$1,019,429	\$1,225,704	\$1,007,066	\$1,213,298	\$259,213	\$352,088	\$556,027	\$760,680
Recommended Annual Funding	\$202,000	\$202,000	\$202,000	\$202,000	\$202,000	\$202,000	\$202,000	\$202,000	\$202,000	\$202,000	\$202,000	\$202,000	\$202,000	\$202,000	\$202,000
Annual Interest	\$2,697	\$3,414	\$4,132	\$4,854	\$5,578	\$5,871	\$3,556	\$4,275	\$4,997	\$4,232	\$4,954	\$1,614	\$1,939	\$2,653	\$3,369
Capital Expenditures	\$0	\$0	\$0	\$0	\$123,806	\$869,456	\$0	\$0	\$425,635	\$0	\$1,161,039	\$110,739	\$0	\$0	\$0
Ending Reserve Balance	\$773,286	\$978,700	\$1,184,832	\$1,391,686	\$1,475,458	\$813,873	\$1,019,429	\$1,225,704	\$1,007,066	\$1,213,298	\$259,213	\$352,088	\$556,027	\$760,680	\$966,050

Inflation Rate: 3.00%  
Interest Rate: 0.35%

TOTAL UNITS: 33

ANNUAL CONTRIBUTION PER UNIT	\$6,121	\$6,121	\$6,121	\$6,121	\$6,121	\$6,121	\$6,121	\$6,121	\$6,121	\$6,121	\$6,121	\$6,121	\$6,121	\$6,121	\$6,121
MONTHLY CONTRIBUTION PER UNIT	\$510.10	\$510.10	\$510.10	\$510.10	\$510.10	\$510.10	\$510.10	\$510.10	\$510.10	\$510.10	\$510.10	\$510.10	\$510.10	\$510.10	\$510.10



**ARDESONE CONDOS  
COST AND FUNDING RECAP  
EXISTING FUNDING**

	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

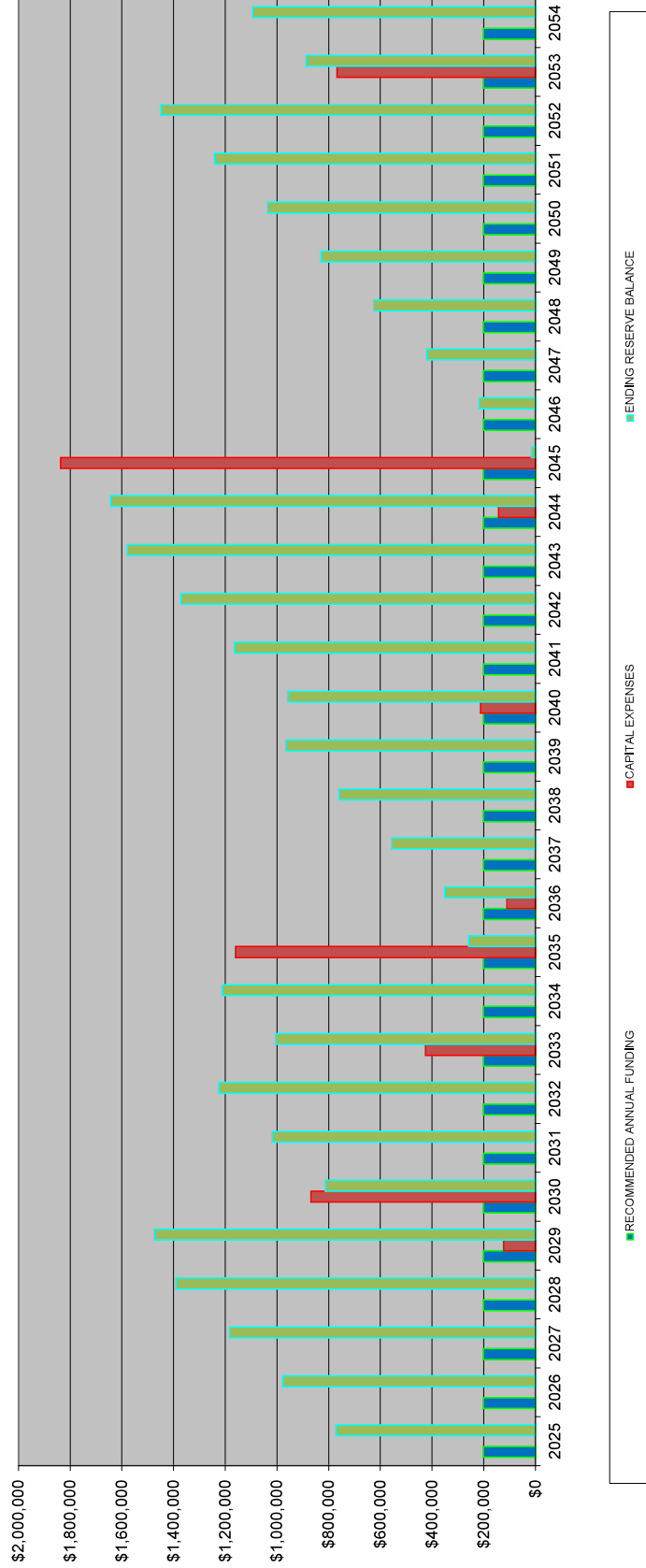
Beginning Reserve Fund Balance	\$966,050	\$959,475	\$1,165,541	\$1,372,327	\$1,579,837	\$1,644,988	\$15,694	\$218,456	\$421,928	\$626,111	\$831,010	\$1,036,625	\$1,242,960	\$1,450,018	\$889,056
Recommended Annual Funding	\$202,000	\$202,000	\$202,000	\$202,000	\$202,000	\$202,000	\$202,000	\$202,000	\$202,000	\$202,000	\$202,000	\$202,000	\$202,000	\$202,000	\$202,000
Annual Interest	\$4,088	\$4,065	\$4,786	\$5,510	\$6,236	\$6,464	\$762	\$1,472	\$2,184	\$2,898	\$3,616	\$4,335	\$5,057	\$5,782	\$3,819
Capital Expenditures	\$212,663	\$0	\$0	\$0	\$143,086	\$1,837,758	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$768,744	\$0
Ending Reserve Balance	\$959,475	\$1,165,541	\$1,372,327	\$1,579,837	\$1,644,988	\$15,694	\$218,456	\$421,928	\$626,111	\$831,010	\$1,036,625	\$1,242,960	\$1,450,018	\$889,056	\$1,094,875

Inflation Rate: 3.00%  
Interest Rate: 0.35%

TOTAL UNITS: 33

ANNUAL CONTRIBUTION PER UNIT	\$6,121	\$6,121	\$6,121	\$6,121	\$6,121	\$6,121	\$6,121	\$6,121	\$6,121	\$6,121	\$6,121	\$6,121	\$6,121	\$6,121	\$6,121
MONTHLY CONTRIBUTION PER UNIT	\$510.10	\$510.10	\$510.10	\$510.10	\$510.10	\$510.10	\$510.10	\$510.10	\$510.10	\$510.10	\$510.10	\$510.10	\$510.10	\$510.10	\$510.10

**PROJECTED CASH FLOW - RECOMMENDED FUNDING**



**ARDISSONE CONDOS****ITEMIZED PROJECTED COST BY YEAR**

(Excluding Capital Improvements)

FIRE PUMP, 75Hp - REPLACE	\$123,806
<b>Total 2029 Expenditures</b>	<b>\$123,806</b>
SEA WALL - RESTORATION	\$869,456
<b>Total 2030 Expenditures</b>	<b>\$869,456</b>
BUILDINGS 1-3 MODIFIED BITUMEN MEMBRANE (MBM) - REPLACE	\$212,817
BUILDINGS 4-6 MODIFIED BITUMEN MEMBRANE (MBM) - REPLACE	\$212,817
<b>Total 2033 Expenditures</b>	<b>\$425,635</b>
BUILDINGS 1-3 EXTERIORS - REPAIR/PAINT	\$532,138
BUILDINGS 4-6 EXTERIORS - REPAIR/PAINT	\$532,138
FIRE CONTROL SYSTEM - REPLACE	\$96,762
<b>Total 2035 Expenditures</b>	<b>\$1,161,039</b>
DOMESTIC PUMPS/LINES/CONTROLLER - REPLACE	\$110,739
<b>Total 2036 Expenditures</b>	<b>\$110,739</b>
EXTEIROR DOORS - REPLACE	\$212,663
<b>Total 2040 Expenditures</b>	<b>\$212,663</b>
BUILDING 1-3 LIFE SAFETY EQUIPMENT - REPLACE	\$143,086
<b>Total 2044 Expenditures</b>	<b>\$143,086</b>
BUILDINGS 1-3 EXTERIORS - REPAIR/PAINT	\$715,150
BUILDINGS 4-6 EXTERIORS - REPAIR/PAINT	\$715,150
ELECTRICAL PANELBOARDS AND SWITCHCES - REPLACE	\$260,080
BUILDING 4-6 LIFE SAFETY EQUIPMENT - REPLACE	\$147,379
<b>Total 2045 Expenditures</b>	<b>\$1,837,758</b>
BUILDINGS 1-3 MODIFIED BITUMEN MEMBRANE (MBM) - REPLACE	\$384,372
BUILDINGS 4-6 MODIFIED BITUMEN MEMBRANE (MBM) - REPLACE	\$384,372
<b>Total 2053 Expenditures</b>	<b>\$768,744</b>
<b>Total Expenditures</b>	<b>\$5,652,924</b>

## II. RESERVE CASH FLOW ANALYSIS

### A. INTRODUCTION

The enclosed chart and graph contain a 30-year cash flow projection of the reserve requirements for the Association. The budget should be adjusted at the end of the 30-year period to readjust for changes in the remaining life, inflation, and current costs of replacements. This cash flow analysis is based on the assumption that all of the items that make up the schedule are fully funded. By this, we mean that each item will accumulate its full replacement cost during its life span. At the end of this life, each item would be replaced, and the funding would start aging for items with a long life. For items with a short useful life, the funding for the first replacement is budgeted in addition to future replacements due to the short life span. The future replacement funding is started in the first year; however, payments are less than the first replacement due to the extended time period allowed to accumulate funds. Taking all of the components that make up the reserve schedule, using this full funding analysis, there is typically an ongoing surplus in the reserve fund. This ensures that the Association will have a surplus at the end of the 30-year period. This is called the “pooling effect” and is represented by the upper line on the cash flow chart, which is designated as the “Net Cumulative Fund”. The “Net Cumulative Fund” is calculated by taking the existing amount in the reserve fund at the time the reserve schedule is prepared, adding to it the yearly contribution, and subtracting from it the annual expenditures.

The annual reserve funding required has been calculated by estimating the remaining useful service life based on the current condition, age, and all other known factors of each item description. The present value replacement cost was estimated by either past quotations or other listed methods of estimation. The present value replacement cost was then converted to future value using a 3.0% annual compounded inflation rate. The future cost was calculated for the projected time when replacements will be required.

The future cost was then broken down into annual installments while still considering the 3.0% compounded annual inflation rate. The monthly reserve funding was calculated by a further breakdown of the annual reserve funding required.

1. Formulas

The following economic formulas were used in our calculations:

<b>DISCOUNTING FACTOR</b>	<b>FUNCTIONAL NOTATION</b>	<b>FORMULA</b>
Single Payment Compound Amount	(F/P, i %, n)	$(1+i)^n$
Uniform Series Sinking Fund	(A/F, i %, n)	$i/[(1+i)^{n-1}]$

2. Definitions

Definitions of the above-mentioned terms are as follows:

<b>TERM</b>	<b>DEFINITION</b>
Single Payment Compound Amount	Conversion of present worth to future value
Uniform Series Sinking Fund	Conversion of future value to annual value
F	Future worth of item in <i>n</i> years from present
P	Present Worth
A	Annual worth
I	Interest Rate (0.35% used)
N	# of years until each calculated replacement

The Association should update the reserve schedule a minimum of once every two years. It is especially important to update the schedule when using average contributions due to the fact that even a minor change in the estimated useful service life can have a significant impact on adequate funding.

The Association should review each of the individual line items that make up the reserve schedule to make sure that there is no overlap between what is indicated in the schedule and any other portion of the budget. For example, we may show on the reserve schedule the replacement of fencing, but at the same time, the Association may be replacing the fencing out of their operating budget. If duplication like this exists, the item should either be removed from the reserve schedule or the operation budget. It should not be funded in two different locations.

The Association should review the items on the schedule to ensure that their replacement is not covered under a maintenance contract. An example would be reserving for the replacement of mechanical equipment components while the Association has a maintenance contract for the item at the same time. The reserve schedule should be carefully reviewed to be sure that it does not fund the replacement of any portion of any item whose replacement is covered under a maintenance contract.

The Association should review the items on the schedule to be sure that they are all the Association's responsibility. As an example, if we have included site lighting on the reserve schedule, but at the same time the local municipality is responsible for the maintenance and repair of these connections, they should be removed from the schedule.

The Association should review the individual line items on the reserve schedule carefully to determine if a number of the smaller individual components can be consolidated into one line item that can be continuously funded.

For example, if there are five or six components with a total replacement cost of \$1,000 each, rather than reserving the full \$5,000 or \$6,000 for all of these items, the Association may want to consider funding all six components under one line item for a total of \$1,000. Should one of these six items have to be replaced, that line item would have to be brought current within a year or so after its expenditure. By doing this rather than

funding the full \$6,000, only a portion of the total would be funded. This would reduce the overall yearly contribution to reserves.

Depending on the size of the overall operating budget, the Association may decide that any line item of less than the given amount will be funded directly through the operating budget rather than through the reserve schedule. If this is the case, any item with the given value or less should be removed from the schedule. The schedule would then be footnoted accordingly.

## **DISCLOSURES**

Ray Engineering, Inc. does not have any other involvement with the association, which could result in actual or perceived conflicts of interest.

During our review of the property, visual review, and field measurements, as needed, of each common element were performed. No destructive testing or drawing take-offs were performed.

Material issues that, if not disclosed, would cause a distortion of the association's situation.

Information provided by the official representative of the association regarding financial, physical, quantity, or historical issues will be deemed reliable by the consultant.

The SIRS will be a reflection of information provided to the consultant and assembled for the association's use, not for the purpose of performing an audit, quality/forensic analyses, or background checks of historical records.

Ray Engineering, Inc. did not perform an audit of the current or past budgets of the association.

Information provided to Ray Engineering, Inc. by the association representative about reserve projects will be considered reliable. Any on-site inspection(s) by Ray Engineering, Inc. should not be considered a project audit or quality inspection.



## **BIOGRAPHY**

**CARTER A. NELSON, E.I.T., R.S.**

**SENIOR ENGINEER**

---

Mr. Nelson received his Bachelor of Science degree in Civil Engineering from the University of Florida in May 2017. He has multiple certifications from the International Code Council, American Concrete Institute, and GASWCC, with a background in forensic testing. He provides civil/structural as well as construction-related consulting services/administration for public works, multi-family, single-family, and commercial property projects of costs above +\$1million. Mr. Nelson specializes in the structural design/analysis, as well as restoration of wood-framed, masonry, reinforced concrete (pre-cast/cast-in-place), and CFS (cold-form-steel) multi-story existing structures and new construction. In addition to engineering experience, Mr. Nelson also performs Property Condition Assessments and Capital Reserve Analyses and is a Reserve Specialist throughout the Southeast. Currently, Mr. Nelson is pursuing his Professional Engineering license in 2024 as well as his special inspector's certification by 2027.

## LIMITATION OF RESPONSIBILITY

The report represents a statement of the physical condition of the common elements of the property based on our visual observation, professional analysis, and judgment. The report applies only to those portions of the property and/or items and equipment that were capable of being visually observed. Unless specifically stated otherwise, no intrusive testing was performed nor were any materials removed or excavations made for further inspection. Drawings and specifications were available only to the extent described in the report.

The following activities are not included in the scope and are excluded from the scope of the SIRS described in the National Reserve Study Standards:

- *Utilities* – The operating condition of any underground system or infrastructure; accessing manholes or utility pits; the SIRS does not include any infrastructure with an estimated useful life of more than 30 years unless specified otherwise in the report;
- *Structural Frame and Building Envelope* – Unless specifically defined in the proposal, entering crawl, attic, or confined space areas (however, the field observer will observe conditions to the extent easily visible from the point of access to the crawl or confined space if the access is at the exterior of the building or common space); determination of previous substructure flooding or water penetration unless easily visible or unless such information is provided;
- *Roofs* – Walking on pitched roofs or any roof areas that appear to be unsafe or roofs with no built-in access; determining roofing design criteria;
- *Plumbing* – Verifying the condition of any pipes underground, behind walls or ceilings; determining adequate pressure and flow rate, verifying pipe size, or verifying the point of discharge for underground systems;
- *HVAC* – Observation of fire connections, interiors of chimneys, flues, or boiler stacks, or tenant-owned or tenant-maintained equipment;
- *Electrical* – Removal of any electrical panels or device covers, except if removed by building staff; providing common equipment or tenant-owned equipment.
- *Vertical Transportation* – Examining of cable, shears, controllers, motors, inspection tags or entering elevator/escalator pits;
- *Life Safety/Fire Protection* – Determining NFPA hazard classifications; classifying or

- testing fire rating of assemblies;
- Preparing engineering calculations to determine any system's components or equipment's adequacy or compliance with any specific or commonly accepted design requirements or building codes; preparing designs or specifications to remedy any physical deficiencies;
  - Reporting on the presence or absence of pests or insects unless evidence of such presence is readily apparent during the field observer's walk-through survey, or such information is provided to the Consultant;
  - Entering or accessing any area of the property deemed by the engineer to pose a threat to the safety of any individual or to the integrity of the building system or material;
  - Providing an opinion on the operation of any system or component that is shut down or not properly operating;
  - Evaluating any acoustical or insulating characteristics of the property;
  - Providing an opinion on matters regarding the security and protection of its occupants or users;
  - Providing an environmental assessment or opinion of the presence of any environmental issues such as asbestos, hazardous wastes, toxic materials, radon, or the location of designated wetlands, unless specifically defined within the scope of work;
  - Any representations regarding the status of ADA Title III Compliance.

The report is not a compliance inspection or certification for past or present governmental codes or regulations of any kind. Any reference made to codes in this report is to assist in the identification of a specific problem.

## GLOSSARY OF TERMS

<u>Abbreviation</u>	<u>Definition</u>	<u>Abbreviation</u>	<u>Definition</u>
Allow.	Allowance	L.F.	Linear Foot
Avg.	Average	Lg.	Long Length
B.F.	Board Feet	L.S.	Lump Sum
Bit/Bitum.	Bituminous	Maint.	Maintenance
Bldg.	Building	Mat., Mat'l	Material
Brk.	Brick	Max	Maximum
Cal	Calculated	MBF	Thousand Board Feet
C.C.F.	Hundred Cubic Feet	M.C.F.	Thousand Cubic Feet
C.F.	Cubic Feet	Min.	Minimum
C.L.F.	Hundred Linear Feet	Misc.	Miscellaneous
Col.	Column	M.L.F.	Thousand Linear Feet
Conc.	Concrete	M.S.F.	Thousand Square Feet
Cont.	Continuous, continued	M.S.Y.	Thousand Square Yards
C.S.F.	Hundred Square Feet	NA	Not applicable/available
Cu. Ft.	Cubic Feet	No.	Number
C.Y.	Cubic Yard, 27 cubic feet	O.C.	On Center
DHW	Domestic Hot Water	P.E.	Professional Engineer
Diam.	Diameter	Ply.	Plywood
Ea.	Each	Pr.	Pair
Est.	Estimated	PVC	Polyvinyl Chloride
Ext.	Exterior	Pvmt.	Pavement
Fig.	Figure	Quan. Qty.	Quantity
Fin.	Finished	R.C.P.	Reinforced Concrete Pipe
Fixt	Fixture	Reinf.	Reinforced
Flr.	Floor	Req'd	Required
FRP	Fiberglass Reinforced Plastic	Sch., Sched.	Schedule
Ft.	Foot, Feet	S.F.	Square Foot
Galv.	Galvanized	Sq.	Square, 100 Square Feet
Ht.	Height	Std.	Standard
Htrs.	Heaters	Sys.	System
HVAC	Heating, Ventilation, A/C	S.Y.	Square Yard
HW	Hot Water	T&G	Tongue & Groove
In.	Inch	Th, Thk.	Thick
Int.	Interior	Tot.	Total
Inst.	Installation	Unfin.	Unfinished
Insul.	Insulation	V.C.T.	Vinyl Composition Tile
lb.	Pound	Vent.	Ventilator
		Yd.	Yard

## BIBLIOGRAPHY

Architectural Drawings  
by Robert M. Swedroe

Structural Drawings  
by Truglio & Smith Consulting Engineers, Inc.

Declaration of Covenants, Conditions, and Restrictions  
by N/A

Site Work Cost Data  
by R.S. Means Company, Inc. & Historical Data

Mechanical Cost Data  
by R.S. Means Company, Inc. & Historical Data

Electrical Cost Data  
by R.S. Means Company, Inc. & Historical Data

Open Shop Cost Data  
by R.S. Means Company, Inc. & Historical Data

## **PHOTOGRAPHS**

# ARDISSONE CONDOMINIUMS – SIRS

---



1. View of the subject association buildings.



2. Overview of the typical roofing system.



## ARDISSONE CONDOMINIUMS – SIRS

---



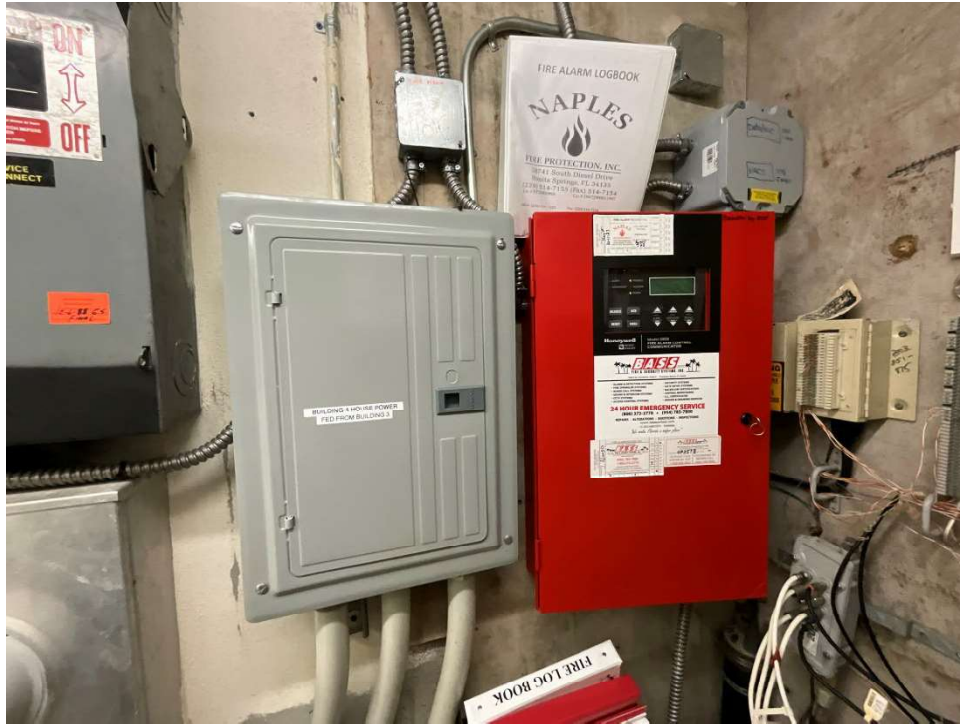
3. View of the typical rear elevation.



4. View of a typical balcony.



ARDISSONE CONDOMINIUMS – SIRS



5. View of the typical fire control system.



6. View of the typical panels and switches.