

STRUCTURAL INTEGRITY RESERVE STUDY AND BUILDING IMPROVEMENTS RESERVE STUDY (FISCAL YEAR: 2025)

WINSTON TOWERS 100
SUNNY ISLES BEACH, FL



Prepared for:

Winston Towers 100 Association, Inc.

Prepared by:



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August 1, 2024

This item has been digitally signed and sealed by Casey Cromer, P.E. on the date listed above.

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INTRODUCTION

Criterion-Cromer Engineers (Criterion) has conducted a Structural Integrity Reserve Study and a Building Improvements Reserve Study of the Winston Towers 100 Association, Inc. (the "Association") community located at 250 174th Street, Sunny Isles Beach, FL 33160. The services performed are consistent with our proposal dated November 9, 2023.

Criterion-Cromer Engineers presents this confidential report for the Association's review and use. This report and all Appendices must be reviewed in its entirety to understand our findings and their limitations.

We have conducted our study in general accordance with the Florida Statutes, where applicable, as well as following the methodologies included within the National Reserve Study Standards published by the Community Association Institute (CAI). Our analysis has been conducted by licensed Professional Engineers and other qualified staff working with the advisement of a Reserve Specialist. Casey Cromer, P.E. performed a visual site inspection on March 12, 2024. Excerpts of relevant referenced standards are available in Appendix B. Qualifications of the project team leaders can be found in Appendix C.

In reviewing the engineering assumptions, cost estimates, and projected reserve balance values herein, please understand that their accuracy diminishes greatly beyond Year 5. Long-term projections are intended only to indicate the likely pattern of reserve expenditures and to guide financial planning. Criterion agrees with CAI's recommendation that reserve studies should be updated regularly to allow periodic adjustment of funding plans and strategies.

This report contains two levels of analysis: A Structural Integrity Reserve Study and a Full Reserve Study.

- Analysis related to the Structural Integrity Reserve Study is presented in Section 3.0.
- Analysis related to the Building Improvements Reserve Study is presented in Section 4.0.
- The combination of the Structural Integrity Reserve Study and Building Improvements Reserve Study is effectively consistent with a Full Reserve Study.
- Additional information related to scope and basis for these analyses is presented in Section 6.0.

EXECUTIVE SUMMARY

COMMUNITY INFORMATION

Community Name:	Winston Towers 100 Association, Inc.
Jurisdiction:	Sunny Isles Beach, FL
Next Fiscal Year Begins:	January 1, 2025 (Fiscal Year: 2025)
Starting Reserve Balance (Projected):	\$0
Current Annual Contribution:	\$0
Projected Annual Return on Investment:	0.0%
Projected Rate of Annual Inflation:	3.0%
Engineer in Responsible Charge:	Casey Cromer, P.E.
Date on Site:	March 12, 2024

FUNDING STATUS AND FUNDING PLANS

Structural Integrity Reserve Study (see Section 3.0 for complete data)

Component Method (Straight Line Funding)

Fully Funded Balance:	\$2,039,227
Current Percent Funded:	0%
Year 1 Contribution:	\$461,226

Cash Flow Method (Pooled Funding), Year 1 Contribution:

Threshold Funding Plan (Recommended):	\$278,650
Baseline Funding Plan:	\$241,350

Building Improvements Reserve Study (see Section 4.0 for complete data)

Component Method (Straight Line Funding)

Fully Funded Balance:	\$1,490,504
Current Percent Funded:	0%
Year 1 Contribution:	\$399,413

Cash Flow Method (Pooled Funding), Year 1 Contribution:

Threshold Funding Plan (Recommended):	\$295,250
Baseline Funding Plan:	\$256,200

COMPONENT LIST

ALL COMPONENTS (PAGE 1 OF 3)

#	Component Description	Estimated Quantity	Current Cost		UL	RUL
			Unit	Total		
Building Structure and Envelope (SIRS)						
101	Roofing: main roof and appurtenances	298 SQ	\$ 3,500	\$ 1,043,000	25	24
102	Waterproofing: unit balconies	44,450 SF	\$ 18.00	\$ 800,100	20	6
103	Waterproofing: plaza deck	48,000 SF	\$ 14.00	\$ 672,000	30	30
104	Waterproofing: parking deck	23,000 SF	\$ 7.50	\$ 172,500	10	8
105	Waterproofing: painting façade	1 Allow	\$ 235,000	\$ 235,000	8	7
106	Railings: balconies, replacement	8,000 LF	\$ 240	\$ 1,920,000	50	36
107	Exterior doors: storefront doors	1 Allow	\$ 19,500	\$ 19,500	25	13
108	Exterior doors: metal doors allowance	1 Allow	\$ 18,000	\$ 18,000	10	10
109	Exterior windows: storefront	1 Lot	\$ 57,500	\$ 57,500	40	20
110	Exterior windows: corridors	1 Lot	\$ 82,500	\$ 82,500	40	20
111	Exterior windows: office	1 Lot	\$ 15,500	\$ 15,500	40	20
112	Structure: structural recertification repairs, minor	1 Allow	\$ 100,000	\$ 100,000	20	5
113	Structure: structural recertification repairs, major	1 Allow	\$ 520,000	\$ 520,000	20	15
Electrical Systems (SIRS)						
201	Switchboards and transformers	1 Lot	\$ 50,450	\$ 50,450	50	5
202	Electrical subpanels, original	1 Lot	\$ 19,500	\$ 19,500	50	5
203	Electrical subpanels, newer	1 Lot	\$ 16,250	\$ 16,250	50	35
204	Electrical safety switches, original	1 Lot	\$ 4,500	\$ 4,500	50	5
205	Electrical safety switches, newer	1 Lot	\$ 14,250	\$ 14,250	50	35
206	Unit distribution equipment	1 Lot	\$ 385,000	\$ 385,000	60	15
207	Generator: 200 kW, with transfer switches	1 EA	\$ 150,000	\$ 150,000	30	28
Plumbing (SIRS)						
301	Domestic water: booster pump system	1 EA	\$ 31,000	\$ 31,000	25	13
302	Hot water, boiler, 400 MBU/hr	1 EA	\$ 12,000	\$ 12,000	25	16
303	Hot water, boiler, 400 MBU/hr	1 EA	\$ 12,000	\$ 12,000	25	19
304	Hot water, boiler, 400 MBU/hr	2 EA	\$ 12,000	\$ 24,000	25	22
305	Hot water, storage tank, 200 gal	3 EA	\$ 9,650	\$ 28,950	25	16
Fire Protection Systems (SIRS)						
401	Fire suppression: pump and controller	1 EA	\$ 53,200	\$ 53,200	30	17
402	Fire suppression: jockey pump and controller	1 EA	\$ 6,300	\$ 6,300	30	22
403	Fire suppression: transfer switch	1 EA	\$ 10,150	\$ 10,150	30	22
404	Fire suppression: standpipe repair allowance	1 Allow	\$ 40,000	\$ 40,000	10	5
405	Fire alarm: panel, boosters, and accessories	1 Allow	\$ 19,200	\$ 19,200	12	7
406	Fire alarm: system components	1 Allow	\$ 375,000	\$ 375,000	24	19

COMPONENT LIST

ALL COMPONENTS (PAGE 2 OF 3)

#	Component Description	Estimated Quantity	Current Cost		UL	RUL
			Unit	Total		

Mechanical Systems

501	Elevators: traction, modernization	5 EA	\$ 320,000	\$ 1,600,000	28	25
502	Elevators: renovate cabs	5 EA	\$ 15,000	\$ 75,000	25	22
503	Cooling tower: 562 tons	2 EA	\$ 148,300	\$ 296,600	25	12
504	Cooling tower: mobilization for replacement	1 EA	\$ 100,000	\$ 100,000	25	12
505	Cooling tower: rooftop piping	1 Allow	\$ 130,000	\$ 130,000	25	12
506	Cooling tower: water treatment skid system	1 EA	\$ 30,000	\$ 30,000	25	18
507	Cooling tower: 50 hp pumps	2 EA	\$ 22,000	\$ 44,000	25	13
508	Cooling tower: variable frequency drives	2 EA	\$ 14,500	\$ 29,000	25	13
509	Cooling tower: boiler, 1900 MBU/hr	1 EA	\$ 38,000	\$ 38,000	25	3
510	Cooling tower: boiler pumps	1 Lot	\$ 6,000	\$ 6,000	25	3
511	HVAC: packaged unit, 45 tons	3 EA	\$ 51,500	\$ 154,500	22	9
512	HVAC, heat pump, auditorium, 10 tons	1 EA	\$ 12,150	\$ 12,150	20	18
513	HVAC, heat pump, billiard room, 2.5 tons	1 EA	\$ 4,400	\$ 4,400	20	1
514	HVAC, heat pump, lobby, 5 tons	2 EA	\$ 6,600	\$ 13,200	20	14
515	HVAC, heat pump, lobby, 3.5 tons	1 EA	\$ 4,850	\$ 4,850	20	18
516	HVAC, split system, gym, 2 tons	1 EA	\$ 3,800	\$ 3,800	20	17
517	HVAC: split system, elevator machine room, 2 tons	2 EA	\$ 3,800	\$ 7,600	20	16
518	HVAC: split system, elevator machine room, 4 tons	1 EA	\$ 6,000	\$ 6,000	20	16
519	HVAC: exhaust ventilators, rooftop	48 EA	\$ 1,800	\$ 86,400	30	25

Amenities

601	Plaza deck: pool, refinish	1 Lot	\$ 40,000	\$ 40,000	12	12
602	Plaza deck: pool equipment, repair allowance	1 Allow	\$ 28,000	\$ 28,000	12	12
603	Plaza deck: amenities and beautification	1 Allow	\$ 275,000	\$ 275,000	30	30
604	Restrooms, saunas and restrooms	1 Allow	\$ 54,500	\$ 54,500	30	5
605	Restrooms, level 2 corridor	1 Allow	\$ 17,500	\$ 17,500	30	5
606	Restrooms, gym	1 Allow	\$ 21,500	\$ 21,500	30	5
607	Restrooms, pool deck	1 Allow	\$ 44,500	\$ 44,500	30	22
608	Finishes: corridors, flooring, tile	16,300 SF	\$ 25.00	\$ 407,500	30	22
609	Finishes: corridors, flooring, carpet	32,350 SF	\$ 9.50	\$ 307,325	15	7
610	Finishes: lobby	1 Allow	\$ 410,000	\$ 410,000	30	28
611	Finishes: corridors and lobby, interior painting	1 Lot	\$ 120,000	\$ 120,000	10	7
612	Finishes: game room	1 Allow	\$ 24,000	\$ 24,000	30	15
613	Finishes: billiard room	1 Allow	\$ 19,000	\$ 19,000	30	15

COMPONENT LIST

ALL COMPONENTS (PAGE 3 OF 3)

#	Component Description	Estimated Quantity	Current Cost		UL	RUL
			Unit	Total		
614	Finishes: auditorium	1 Allow	\$ 94,500	\$ 94,500	30	28
615	Finishes: auditorium kitchen	1 Allow	\$ 17,500	\$ 17,500	30	10
616	Finishes: office	1 Allow	\$ 26,500	\$ 26,500	30	15
617	Finishes: gym, rubber flooring	2,400 SF	\$ 9.50	\$ 22,800	15	10
618	Finishes: gym, ceiling and lighting	1 Allow	\$ 24,000	\$ 24,000	30	25
619	FF&E: gym, weight equipment	1 Lot	\$ 23,000	\$ 23,000	18	9
620	FF&E: gym, cardio equipment	1 Lot	\$ 24,500	\$ 24,500	12	6
621	FF&E: general furniture allowance	1 Allow	\$ 50,000	\$ 50,000	15	13
622	Systems: security camera system	1 Allow	\$ 65,600	\$ 65,600	12	10
623	Systems: access control system	1 Allow	\$ 25,000	\$ 25,000	12	10

Site and Building Improvements

701	Building systems: mailbox kiosk	1 Lot	\$ 85,000	\$ 85,000	30	22
702	Building systems: trash chute	1 Lot	\$ 132,000	\$ 132,000	40	38
703	Building systems: trash chute doors	1 Lot	\$ 18,000	\$ 18,000	25	23
704	Building systems: stair landing windows	1 Lot	\$ 132,000	\$ 132,000	40	26
705	Building systems: parking gates	1 Lot	\$ 61,500	\$ 61,500	35	18
706	Building systems: parking gate operators	4 EA	\$ 2,000	\$ 8,000	15	9
707	Site: parking lot, asphalt sealcoat and striping	12,000 SY	\$ 2.50	\$ 30,000	5	1
708	Site: parking lot, asphalt repair and resurface	12,000 SY	\$ 28.00	\$ 336,000	25	16
709	Site: parking, wheel stops	540 EA	\$ 70.00	\$ 37,800	30	17
710	Site: parking lot, light poles	1 Lot	\$ 26,500	\$ 26,500	30	25
711	Lighting: parking garage	1 Lot	\$ 90,000	\$ 90,000	30	22

1.0 Study Information

1.1 Property Description

The community consists of a 23-story residential building, with 407 residential units and various amenities. The community was originally completed in approximately 1970 and is located within Sunny Isles Beach, Florida. We understand that the Association is generally responsible for the infrastructure, building exteriors, roofing, exterior waterproofing, walkways, railings, common area stairs, lobbies, common corridors, elevators, parking areas, interior amenities, amenity deck with pool and sports court, site improvements, and common mechanical, electrical, plumbing, and fire protection systems.

We visited the property on March 12, 2024. During our site visit, we observed the common areas of the property including the rooftops, corridors, electrical rooms, mechanical rooms, interior common rooms, parking garage, and other common components. During our visit, significant construction/restoration activities were underway at the parking garage, pool, and plaza deck. The common components of the property were found to be in generally good condition and appropriately maintained.

1.2 Sources of Information

The following people provided information which may have been utilized in our study:

- Lev Solodovnik (Association, management/consultant)
- Angelina Saar (Association, management)
- Slava Butler (Association)

The following documents were provided to us and reviewed:

- Reserve Study Questionnaire, completed by Lev Solodovnik
- Partial historical construction drawings and documents (reviewed on-site)
- Partial historical construction drawings (received from the City of Sunny Isles Beach)

1.3 Component Notes

General notes, comments, assumptions, and recommendations are listed below. If there are any questions or if any of our assumptions are not accurate, please advise us so we can make appropriate changes.

- Miami-Dade County requires a recertification/milestone inspection to be performed periodically. The first inspection is typically required to be performed prior to the completion of the building's 30th year. This process involves a thorough structural evaluation and often results in some form of required structural repairs. Although future structural repairs are not predictable, we have included a reasonable allowance for structural repairs associated with the future building inspections.

- There are components which are excluded from this analysis as their remaining useful life is estimated to be longer than the study period and/or their useful life cannot be reasonably anticipated. Once these components remaining useful life is less than the study period, or their need for repair becomes evident, they should be added to the funding plan calculations. These components include:
 - Work related to underground/site drainage systems
 - The replacement of plumbing supply and waste piping
 - The replacement of fire suppression systems
- Interior renovations and updates to the lobby, common rooms, furniture, etc. are typically performed for aesthetic purposes and the timing of such work is highly subjective. We have included anticipated dates for such work, as appropriate.
- Our quantity estimations have been performed with the assistance of historical building drawings which may or may not be accurate. While we make every effort to be as accurate as possible, our cost and quantity estimates are to be considered preliminary and by no means a guarantee. We do not recommend using our estimates for future contractor bidding purposes.
- As utilized within this report, the “Year” nomenclature is defined as follows:
 - 2024 | Year 0 = fiscal year from January 1, 2024 through December 31, 2024
 - 2025 | Year 1 = fiscal year from January 1, 2025 through December 31, 2025
 - 2026 | Year 2 = fiscal year from January 1, 2026 through December 31, 2026, etc.

Sample component photos are included in Appendix A – Component Photographs.

1.4 Key Terms

Estimated Quantity: The estimated total quantity for a component, typically designated with one of the following units of measurement:

Allowance = a lump sum cost utilized when future expenditures are difficult to predict

Lot = a lump sum cost utilized for or group of items or related work package

EA = each LF = linear foot SF = square foot SQ = roofing square (100 square feet)

Current Cost: The estimated cost to perform the work, on a unit and/or total basis.

Useful Life (UL): The estimated time, in years, that a newly constructed/installed component can be expected to serve its intended function presuming proper construction, and proactive, planned, preventive maintenance.

Remaining Useful Life (RUL): The estimated time, in years, that an existing component can be expected to service its intended function, presuming timely preventive maintenance. Projects expected to occur in the initial year have a remaining useful life of 0.

2.0 Funding Methodologies

Component Method (Straight Line Funding)

The Component Method is a reserve funding method which is based on the sum of funding for each individual component. This method utilized the fully funded balance as well as the annual contribution rate required to maintain the fully funded balance. The fully funded balance for each component is the direct proportion of the fraction of life “used up”. This value is calculated for each component, and then totaled to determine the fully funded balance for the reserve account. The Component Method is based on the current cost and condition of each component and therefore does not consider inflation, returns on investments, or the available excess cash flow that the reserve account may have at any given point.

Cash Flow Method (Pooled Funding)

The Cash Flow Method is a reserve funding method which is based on the expected balance of the reserve account over time. This method considers the projected inflation rate as well as future returns on investments. The Cash Flow Method can consider various funding goals including baseline funding, threshold funding, and full funding. Cash Flow Method funding plans are typically created based on the following funding goals, as defined by the National Reserve Study Standards (listed by most aggressive to most conservative):

Baseline Funding

Establishing a reserve funding goal of allowing the reserve cash balance to approach but never fall below zero during the cash flow projection. This is the funding goal with the greatest risk of being prepared to fund future repair and replacement of major components, and it is not recommended as a long-term solution/plan. Baseline funding may lead to project delays, the need for a special assessment, and/or a line of credit for the community to fund needed repairs and replacement of major components.

Threshold Funding

Establishing a reserve funding goal of keeping the reserve balance above a specified dollar or percent funded amount. Depending on the threshold selected, this funding goal may be weaker or stronger than “fully funded” with respective higher risk or less risk of cash problems. In determining the threshold, many variables should be considered, including things such as investment risk tolerance, community age, building type, components that are not readily inspected, and components with a remaining useful life of more than 30 years.

Full Funding

Setting a reserve funding goal to attain and maintain reserves at or near 100 percent funded. Fully funded is when the actual or projected reserve balance is equal to the fully funded balance.

3.0 Structural Integrity Reserve Study – Funding Plans

A Structural Integrity Reserve Study only covers a portion of the Association components. Therefore, if one of Structural Integrity Reserve Study funding plans is followed, it will only be predictive if the future expenditures are limited to those presented in the component list for the Structural Integrity Reserve Study. See Section 5.0 for additional commentary and see Section 6.2.1 for the scope of a Structural Integrity Reserve Study. For this Association the following funding methods/plans have been calculated, as summarized below:

Component Method (Straight Line Funding)

The Component Method has been calculated for the items included within the scope of a Structural Integrity Reserve Study. In Year 1, annual reserve contributions are \$461,226. The complete analysis can be found on Page 11.

Cash Flow Method – Option 1

Threshold Funding Plan (Recommended)

- In Year 1, annual reserve contributions are \$278,650.
- In Years 2+, reserve contributions are increased annually at the project rate of inflation (3.0%)
- The complete funding plan details can be found on Page 12.

In this plan, the reserve balance is maintained above the suggested minimum threshold starting in Year 3. The suggested minimum threshold is two times the average annual expenditure over the course of the study period. This threshold value is then annually escalated at the projected rate of inflation. This funding plan is relatively conservative and results in a low chance of unplanned special assessments in the future.

Cash Flow Method – Option 2

Baseline Funding Plan

- In Year 1, annual reserve contributions are \$241,350.
- In Years 2+, reserve contributions are increased annually at the project rate of inflation (3.0%).
- The complete funding plan details can be found on Page 13.

In this plan, the reserve balance remains positive (above zero) throughout the study period. This is the most aggressive funding plan and leaves no margin for changes in costs, inflation, condition, future discrepancies, etc., and results in a likely chance of unplanned special assessments in the future.

COMPONENT METHOD

STRUCTURAL INTEGRITY RESERVE STUDY

#	Component Description	Current Cost	UL	RUL	Fully Funded Balance	Starting Balance	Remaining Balance	Year 1 Contribution
Building Structure and Envelope (SIRS)								
101	Roofing: main roof and appurtenances	\$ 1,043,000	25	24	\$ 41,720	\$ -	\$ 1,043,000	\$ 43,458
102	Waterproofing: unit balconies	\$ 800,100	20	6	\$ 560,070	\$ -	\$ 800,100	\$ 133,350
103	Waterproofing: plaza deck	\$ 672,000	30	30	\$ -	\$ -	\$ 672,000	\$ 22,400
104	Waterproofing: parking deck	\$ 172,500	10	8	\$ 34,500	\$ -	\$ 172,500	\$ 21,563
105	Waterproofing: painting façade	\$ 235,000	8	7	\$ 29,375	\$ -	\$ 235,000	\$ 33,571
106	Railings: balconies, replacement	\$ 1,920,000	50	36	\$ 537,600	\$ -	\$ 1,920,000	\$ 53,333
107	Exterior doors: storefront doors	\$ 19,500	25	13	\$ 9,360	\$ -	\$ 19,500	\$ 1,500
108	Exterior doors: metal doors allowance	\$ 18,000	10	10	\$ -	\$ -	\$ 18,000	\$ 1,800
109	Exterior windows: storefront	\$ 57,500	40	20	\$ 28,750	\$ -	\$ 57,500	\$ 2,875
110	Exterior windows: corridors	\$ 82,500	40	20	\$ 41,250	\$ -	\$ 82,500	\$ 4,125
111	Exterior windows: office	\$ 15,500	40	20	\$ 7,750	\$ -	\$ 15,500	\$ 775
112	Structure: structural recertification repairs, minor	\$ 100,000	20	5	\$ 75,000	\$ -	\$ 100,000	\$ 20,000
113	Structure: structural recertification repairs, major	\$ 520,000	20	15	\$ 130,000	\$ -	\$ 520,000	\$ 34,667
Building Structure and Envelope (SIRS) Subtotal (13 Line Items)					\$ 1,495,375	\$ -	\$ 5,655,600	\$ 373,417
Electrical Systems (SIRS)								
201	Switchboards and transformers	\$ 50,450	50	5	\$ 45,405	\$ -	\$ 50,450	\$ 10,090
202	Electrical subpanels, original	\$ 19,500	50	5	\$ 17,550	\$ -	\$ 19,500	\$ 3,900
203	Electrical subpanels, newer	\$ 16,250	50	35	\$ 4,875	\$ -	\$ 16,250	\$ 464
204	Electrical safety switches, original	\$ 4,500	50	5	\$ 4,050	\$ -	\$ 4,500	\$ 900
205	Electrical safety switches, newer	\$ 14,250	50	35	\$ 4,275	\$ -	\$ 14,250	\$ 407
206	Unit distribution equipment	\$ 385,000	60	15	\$ 288,750	\$ -	\$ 385,000	\$ 25,667
207	Generator: 200 kW, with transfer switches	\$ 150,000	30	28	\$ 10,000	\$ -	\$ 150,000	\$ 5,357
Electrical Systems (SIRS) Subtotal (7 Line Items)					\$ 374,905	\$ -	\$ 639,950	\$ 46,785
Plumbing (SIRS)								
301	Domestic water: booster pump system	\$ 31,000	25	13	\$ 14,880	\$ -	\$ 31,000	\$ 2,385
302	Hot water, boiler, 400 MBU/hr	\$ 12,000	25	16	\$ 4,320	\$ -	\$ 12,000	\$ 750
303	Hot water, boiler, 400 MBU/hr	\$ 12,000	25	19	\$ 2,880	\$ -	\$ 12,000	\$ 632
304	Hot water, boiler, 400 MBU/hr	\$ 24,000	25	22	\$ 2,880	\$ -	\$ 24,000	\$ 1,091
305	Hot water, storage tank, 200 gal	\$ 28,950	25	16	\$ 10,422	\$ -	\$ 28,950	\$ 1,809
Plumbing (SIRS) Subtotal (5 Line Items)					\$ 35,382	\$ -	\$ 107,950	\$ 6,666
Fire Protection Systems (SIRS)								
401	Fire suppression: pump and controller	\$ 53,200	30	17	\$ 23,053	\$ -	\$ 53,200	\$ 3,129
402	Fire suppression: jockey pump and controller	\$ 6,300	30	22	\$ 1,680	\$ -	\$ 6,300	\$ 286
403	Fire suppression: transfer switch	\$ 10,150	30	22	\$ 2,707	\$ -	\$ 10,150	\$ 461
404	Fire suppression: standpipe repair allowance	\$ 40,000	10	5	\$ 20,000	\$ -	\$ 40,000	\$ 8,000
405	Fire alarm: panel, boosters, and accessories	\$ 19,200	12	7	\$ 8,000	\$ -	\$ 19,200	\$ 2,743
406	Fire alarm: system components	\$ 375,000	24	19	\$ 78,125	\$ -	\$ 375,000	\$ 19,737
Fire Protection Systems (SIRS) Subtotal (6 Line Items)					\$ 133,565	\$ -	\$ 503,850	\$ 34,357
Total					\$ 2,039,227	\$ -	\$ 6,907,350	\$ 461,226

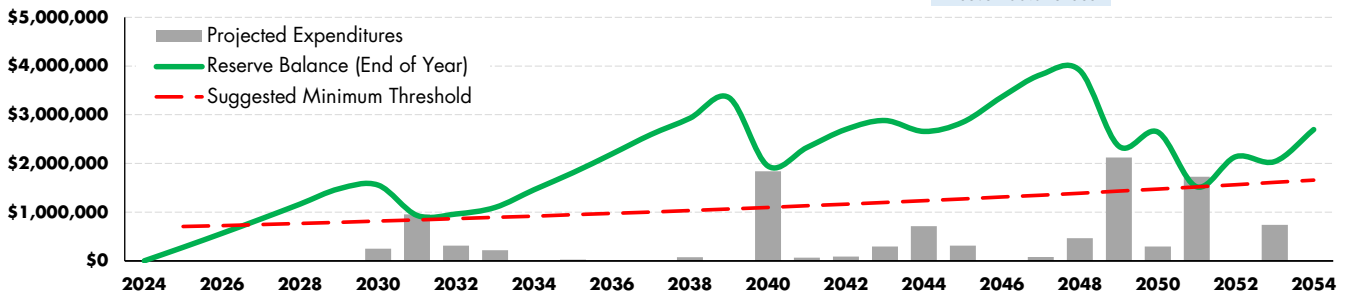
THRESHOLD FUNDING PLAN (RECOMMENDED)

STRUCTURAL INTEGRITY RESERVE STUDY

Year	Reserve Balance (Start of Year)	Projected Expenditures	Reserve Contributions			Reserve Balance (End of Year)	Suggested Minimum Threshold	Projected Percent Funded
			Association Annual Total	Average Unit Monthly Total	Change from Prior Year			
2024	Year 0		\$ -	\$ -		\$ -		0%
2025	Year 1	\$ -	\$ 278,650	\$ 57	N/A	\$ 278,650	\$ 704,187	12%
2026	Year 2	\$ 278,650	\$ 287,010	\$ 59	3.0%	\$ 565,660	\$ 725,312	22%
2027	Year 3	\$ 565,660	\$ 295,620	\$ 61	3.0%	\$ 861,279	\$ 747,072	30%
2028	Year 4	\$ 861,279	\$ 304,488	\$ 62	3.0%	\$ 1,165,768	\$ 769,484	37%
2029	Year 5	\$ 1,165,768	\$ 313,623	\$ 64	3.0%	\$ 1,479,391	\$ 792,568	43%
2030	Year 6	\$ 1,479,391	\$ 248,606	\$ 66	3.0%	\$ 1,553,816	\$ 816,345	44%
2031	Year 7	\$ 1,553,816	\$ 955,361	\$ 68	3.0%	\$ 931,178	\$ 840,836	30%
2032	Year 8	\$ 931,178	\$ 312,634	\$ 70	3.0%	\$ 961,248	\$ 866,061	31%
2033	Year 9	\$ 961,248	\$ 218,518	\$ 72	3.0%	\$ 1,095,716	\$ 892,042	34%
2034	Year 10	\$ 1,095,716	\$ -	\$ 74	3.0%	\$ 1,459,291	\$ 918,804	40%
2035	Year 11	\$ 1,459,291	\$ 24,190	\$ 77	3.0%	\$ 1,809,582	\$ 946,368	46%
2036	Year 12	\$ 1,809,582	\$ -	\$ 79	3.0%	\$ 2,195,299	\$ 974,759	51%
2037	Year 13	\$ 2,195,299	\$ -	\$ 81	3.0%	\$ 2,592,587	\$ 1,004,002	55%
2038	Year 14	\$ 2,592,587	\$ 74,161	\$ 84	3.0%	\$ 2,927,633	\$ 1,034,122	58%
2039	Year 15	\$ 2,927,633	\$ -	\$ 86	3.0%	\$ 3,349,117	\$ 1,065,145	61%
2040	Year 16	\$ 3,349,117	\$ 1,838,402	\$ 89	3.0%	\$ 1,944,843	\$ 1,097,100	44%
2041	Year 17	\$ 1,944,843	\$ 65,713	\$ 92	3.0%	\$ 2,326,281	\$ 1,130,013	48%
2042	Year 18	\$ 2,326,281	\$ 87,931	\$ 94	3.0%	\$ 2,698,916	\$ 1,163,913	52%
2043	Year 19	\$ 2,698,916	\$ 293,670	\$ 97	3.0%	\$ 2,879,629	\$ 1,198,830	53%
2044	Year 20	\$ 2,879,629	\$ 712,274	\$ 100	3.0%	\$ 2,655,969	\$ 1,234,795	49%
2045	Year 21	\$ 2,655,969	\$ 313,360	\$ 103	3.0%	\$ 2,845,882	\$ 1,271,839	50%
2046	Year 22	\$ 2,845,882	\$ -	\$ 106	3.0%	\$ 3,364,253	\$ 1,309,994	55%
2047	Year 23	\$ 3,364,253	\$ 77,506	\$ 109	3.0%	\$ 3,820,669	\$ 1,349,294	58%
2048	Year 24	\$ 3,820,669	\$ 463,793	\$ 113	3.0%	\$ 3,906,816	\$ 1,389,773	58%
2049	Year 25	\$ 3,906,816	\$ 2,120,204	\$ 116	3.0%	\$ 2,353,050	\$ 1,431,466	40%
2050	Year 26	\$ 2,353,050	\$ 293,129	\$ 119	3.0%	\$ 2,643,352	\$ 1,474,410	43%
2051	Year 27	\$ 2,643,352	\$ 1,725,489	\$ 123	3.0%	\$ 1,518,798	\$ 1,518,643	28%
2052	Year 28	\$ 1,518,798	\$ -	\$ 127	3.0%	\$ 2,137,760	\$ 1,564,202	35%
2053	Year 29	\$ 2,137,760	\$ 737,857	\$ 131	3.0%	\$ 2,037,434	\$ 1,611,128	33%
2054	Year 30	\$ 2,037,434	\$ -	\$ 134	3.0%	\$ 2,694,091	\$ 1,659,462	40%

*Suggested Minimum Threshold = 2 * Average Annual Expenditure (Future Costs)

Below Threshold
Above Threshold
Above 100% Funded



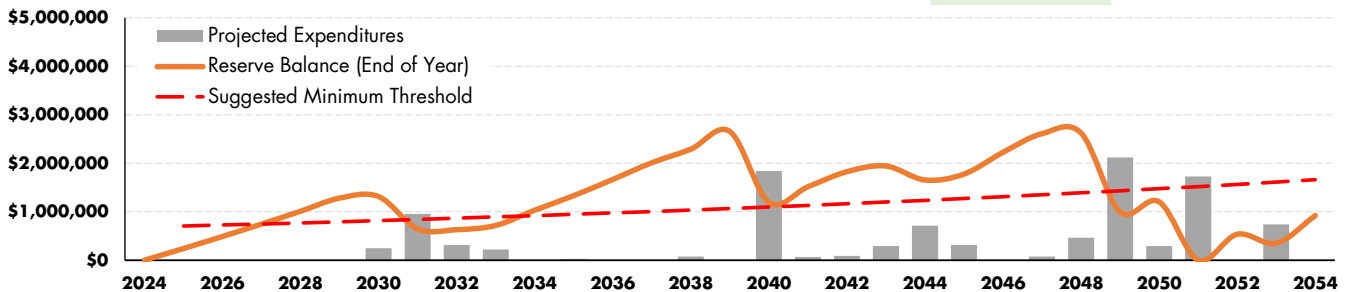
BASELINE FUNDING PLAN

STRUCTURAL INTEGRITY RESERVE STUDY

Year	Reserve Balance (Start of Year)	Projected Expenditures	Reserve Contributions			Reserve Balance (End of Year)	Suggested Minimum Threshold	Projected Percent Funded	
			Association Annual Total	Average Unit Monthly Total	Change from Prior Year				
2024	Year 0		\$ -	\$ -		\$ -		0%	
2025	Year 1	\$ -	\$ -	\$ 241,350	\$ 49	N/A	\$ 241,350	\$ 704,187	10%
2026	Year 2	\$ 241,350	\$ -	\$ 248,591	\$ 51	3.0%	\$ 489,941	\$ 725,312	19%
2027	Year 3	\$ 489,941	\$ -	\$ 256,048	\$ 52	3.0%	\$ 745,989	\$ 747,072	26%
2028	Year 4	\$ 745,989	\$ -	\$ 263,730	\$ 54	3.0%	\$ 1,009,718	\$ 769,484	32%
2029	Year 5	\$ 1,009,718	\$ -	\$ 271,642	\$ 56	3.0%	\$ 1,281,360	\$ 792,568	37%
2030	Year 6	\$ 1,281,360	\$ 248,606	\$ 279,791	\$ 57	3.0%	\$ 1,312,544	\$ 816,345	37%
2031	Year 7	\$ 1,312,544	\$ 955,361	\$ 288,185	\$ 59	3.0%	\$ 645,368	\$ 840,836	21%
2032	Year 8	\$ 645,368	\$ 312,634	\$ 296,830	\$ 61	3.0%	\$ 629,564	\$ 866,061	20%
2033	Year 9	\$ 629,564	\$ 218,518	\$ 305,735	\$ 63	3.0%	\$ 716,781	\$ 892,042	22%
2034	Year 10	\$ 716,781	\$ -	\$ 314,907	\$ 64	3.0%	\$ 1,031,688	\$ 918,804	29%
2035	Year 11	\$ 1,031,688	\$ 24,190	\$ 324,354	\$ 66	3.0%	\$ 1,331,852	\$ 946,368	34%
2036	Year 12	\$ 1,331,852	\$ -	\$ 334,085	\$ 68	3.0%	\$ 1,665,936	\$ 974,759	39%
2037	Year 13	\$ 1,665,936	\$ -	\$ 344,107	\$ 70	3.0%	\$ 2,010,044	\$ 1,004,002	43%
2038	Year 14	\$ 2,010,044	\$ 74,161	\$ 354,431	\$ 73	3.0%	\$ 2,290,314	\$ 1,034,122	45%
2039	Year 15	\$ 2,290,314	\$ -	\$ 365,064	\$ 75	3.0%	\$ 2,655,377	\$ 1,065,145	49%
2040	Year 16	\$ 2,655,377	\$ 1,838,402	\$ 376,015	\$ 77	3.0%	\$ 1,192,991	\$ 1,097,100	27%
2041	Year 17	\$ 1,192,991	\$ 65,713	\$ 387,296	\$ 79	3.0%	\$ 1,514,574	\$ 1,130,013	31%
2042	Year 18	\$ 1,514,574	\$ 87,931	\$ 398,915	\$ 82	3.0%	\$ 1,825,557	\$ 1,163,913	35%
2043	Year 19	\$ 1,825,557	\$ 293,670	\$ 410,882	\$ 84	3.0%	\$ 1,942,770	\$ 1,198,830	36%
2044	Year 20	\$ 1,942,770	\$ 712,274	\$ 423,209	\$ 87	3.0%	\$ 1,653,704	\$ 1,234,795	31%
2045	Year 21	\$ 1,653,704	\$ 313,360	\$ 435,905	\$ 89	3.0%	\$ 1,776,249	\$ 1,271,839	31%
2046	Year 22	\$ 1,776,249	\$ -	\$ 448,982	\$ 92	3.0%	\$ 2,225,231	\$ 1,309,994	36%
2047	Year 23	\$ 2,225,231	\$ 77,506	\$ 462,452	\$ 95	3.0%	\$ 2,610,176	\$ 1,349,294	39%
2048	Year 24	\$ 2,610,176	\$ 463,793	\$ 476,325	\$ 98	3.0%	\$ 2,622,709	\$ 1,389,773	39%
2049	Year 25	\$ 2,622,709	\$ 2,120,204	\$ 490,615	\$ 100	3.0%	\$ 993,119	\$ 1,431,466	17%
2050	Year 26	\$ 993,119	\$ 293,129	\$ 505,333	\$ 103	3.0%	\$ 1,205,324	\$ 1,474,410	20%
2051	Year 27	\$ 1,205,324	\$ 1,725,489	\$ 520,493	\$ 107	3.0%	\$ 328	\$ 1,518,643	0%
2052	Year 28	\$ 328	\$ -	\$ 536,108	\$ 110	3.0%	\$ 536,436	\$ 1,564,202	9%
2053	Year 29	\$ 536,436	\$ 737,857	\$ 552,191	\$ 113	3.0%	\$ 350,771	\$ 1,611,128	6%
2054	Year 30	\$ 350,771	\$ -	\$ 568,757	\$ 116	3.0%	\$ 919,528	\$ 1,659,462	14%

*Suggested Minimum Threshold = 2 * Average Annual Expenditure (Future Costs)

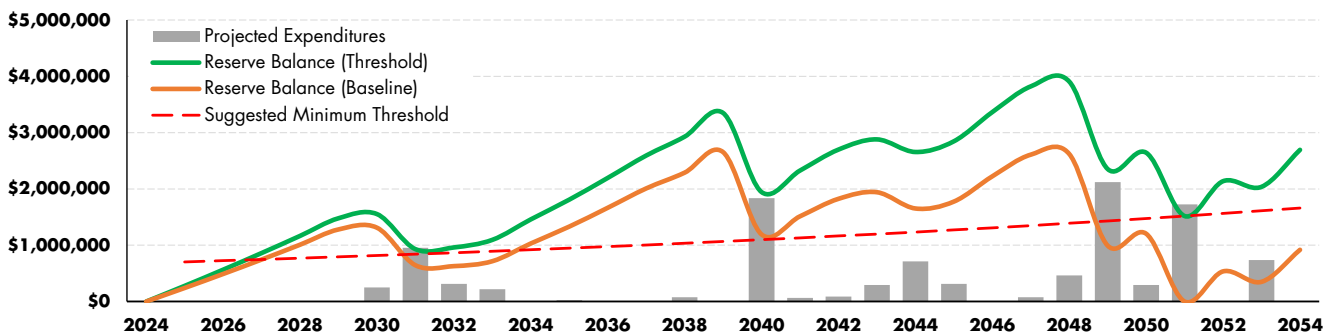
Below 10% Funded
Below Threshold
Above Threshold



COMPARISON OF CASH FLOW METHOD PLANS

STRUCTURAL INTEGRITY RESERVE STUDY

Year		Projected Expenditures	Threshold Funding Plan (Recommended)			Baseline Funding Plan		
			Annual Contribution	Reserve Balance (End of Year)	Percent Funded	Annual Contribution	Reserve Balance (End of Year)	Percent Funded
2024	Year 0		\$ -	\$ -	0%	\$ -	\$ -	0%
2025	Year 1	\$ -	\$ 278,650	\$ 278,650	12%	\$ 241,350	\$ 241,350	10%
2026	Year 2	\$ -	\$ 287,010	\$ 565,660	22%	\$ 248,591	\$ 489,941	19%
2027	Year 3	\$ -	\$ 295,620	\$ 861,279	30%	\$ 256,048	\$ 745,989	26%
2028	Year 4	\$ -	\$ 304,488	\$ 1,165,768	37%	\$ 263,730	\$ 1,009,718	32%
2029	Year 5	\$ -	\$ 313,623	\$ 1,479,391	43%	\$ 271,642	\$ 1,281,360	37%
2030	Year 6	\$ 248,606	\$ 323,032	\$ 1,553,816	44%	\$ 279,791	\$ 1,312,544	37%
2031	Year 7	\$ 955,361	\$ 332,723	\$ 931,178	30%	\$ 288,185	\$ 645,368	21%
2032	Year 8	\$ 312,634	\$ 342,704	\$ 961,248	31%	\$ 296,830	\$ 629,564	20%
2033	Year 9	\$ 218,518	\$ 352,985	\$ 1,095,716	34%	\$ 305,735	\$ 716,781	22%
2034	Year 10	\$ -	\$ 363,575	\$ 1,459,291	40%	\$ 314,907	\$ 1,031,688	29%
2035	Year 11	\$ 24,190	\$ 374,482	\$ 1,809,582	46%	\$ 324,354	\$ 1,331,852	34%
2036	Year 12	\$ -	\$ 385,717	\$ 2,195,299	51%	\$ 334,085	\$ 1,665,936	39%
2037	Year 13	\$ -	\$ 397,288	\$ 2,592,587	55%	\$ 344,107	\$ 2,010,044	43%
2038	Year 14	\$ 74,161	\$ 409,207	\$ 2,927,633	58%	\$ 354,431	\$ 2,290,314	45%
2039	Year 15	\$ -	\$ 421,483	\$ 3,349,117	61%	\$ 365,064	\$ 2,655,377	49%
2040	Year 16	\$ 1,838,402	\$ 434,128	\$ 1,944,843	44%	\$ 376,015	\$ 1,192,991	27%
2041	Year 17	\$ 65,713	\$ 447,151	\$ 2,326,281	48%	\$ 387,296	\$ 1,514,574	31%
2042	Year 18	\$ 87,931	\$ 460,566	\$ 2,698,916	52%	\$ 398,915	\$ 1,825,557	35%
2043	Year 19	\$ 293,670	\$ 474,383	\$ 2,879,629	53%	\$ 410,882	\$ 1,942,770	36%
2044	Year 20	\$ 712,274	\$ 488,614	\$ 2,655,969	49%	\$ 423,209	\$ 1,653,704	31%
2045	Year 21	\$ 313,360	\$ 503,273	\$ 2,845,882	50%	\$ 435,905	\$ 1,776,249	31%
2046	Year 22	\$ -	\$ 518,371	\$ 3,364,253	55%	\$ 448,982	\$ 2,225,231	36%
2047	Year 23	\$ 77,506	\$ 533,922	\$ 3,820,669	58%	\$ 462,452	\$ 2,610,176	39%
2048	Year 24	\$ 463,793	\$ 549,940	\$ 3,906,816	58%	\$ 476,325	\$ 2,622,709	39%
2049	Year 25	\$ 2,120,204	\$ 566,438	\$ 2,353,050	40%	\$ 490,615	\$ 993,119	17%
2050	Year 26	\$ 293,129	\$ 583,431	\$ 2,643,352	43%	\$ 505,333	\$ 1,205,324	20%
2051	Year 27	\$ 1,725,489	\$ 600,934	\$ 1,518,798	28%	\$ 520,493	\$ 328	0%
2052	Year 28	\$ -	\$ 618,962	\$ 2,137,760	35%	\$ 536,108	\$ 536,436	9%
2053	Year 29	\$ 737,857	\$ 637,531	\$ 2,037,434	33%	\$ 552,191	\$ 350,771	6%
2054	Year 30	\$ -	\$ 656,657	\$ 2,694,091	40%	\$ 568,757	\$ 919,528	14%



4.0 Building Improvements Reserve Study – Funding Plans

Additional analysis has been performed for components not considered in the Structural Integrity Reserve Study (SIRS) analysis. The SIRS and Building Improvements Reserve Study collectively cover all Association components that meet the criteria (see Section 6.1).

For the purposes of this analysis, Building Improvements refers to all Association components which are not considered components of a SIRS. For this Association, the following funding methods/plans have been calculated, as summarized below:

The funding plans presented are created based upon the following assumptions:

- A separate account will be maintained for Building Improvements reserves.
- The starting balance for the Building Improvements reserves is \$0.

Component Method (Straight Line Funding)

The Component Method has been calculated for the Building Improvements Reserve Study. In Year 1, annual reserve contributions are \$399,413. The complete analysis can be found on Page 16.

Cash Flow Method – Option 1

Threshold Funding Plan (Recommended)

- In Year 1, annual reserve contributions are \$295,250.
- In Years 2+, reserve contributions are increased annually at the project rate of inflation (3.0%)
- The complete funding plan details can be found on Page 18.

In this plan, the reserve balance is maintained above the suggested minimum threshold starting in Year 4. The suggested minimum threshold is two times the average annual expenditure over the course of the study period. This threshold value is then annually escalated at the projected rate of inflation. This funding plan is relatively conservative and results in a low chance of unplanned special assessments in the future.

Cash Flow Method – Option 2

Baseline Funding Plan

- In Year 1, annual reserve contributions are \$256,200.
- In Years 2+, reserve contributions are increased annually at the project rate of inflation (3.0%)
- The complete funding plan details can be found on Page 19.

In this plan, the reserve balance remains positive (above zero) throughout the study period. This is the most aggressive funding plan and leaves no margin for changes in costs, inflation, condition, future discrepancies, etc., and results in a likely chance of unplanned special assessments in the future.

COMPONENT METHOD

BUILDING IMPROVEMENTS RESERVE STUDY (PAGE 1 OF 2)

#	Component Description	Current Cost	UL	RUL	Fully Funded Balance	Starting Balance	Remaining Balance	Year 1 Contribution
Mechanical Systems								
501	Elevators: traction, modernization	\$ 1,600,000	28	25	\$ 171,429	\$ -	\$ 1,600,000	\$ 64,000
502	Elevators: renovate cabs	\$ 75,000	25	22	\$ 9,000	\$ -	\$ 75,000	\$ 3,409
503	Cooling tower: 562 tons	\$ 296,600	25	12	\$ 154,232	\$ -	\$ 296,600	\$ 24,717
504	Cooling tower: mobilization for replacement	\$ 100,000	25	12	\$ 52,000	\$ -	\$ 100,000	\$ 8,333
505	Cooling tower: rooftop piping	\$ 130,000	25	12	\$ 67,600	\$ -	\$ 130,000	\$ 10,833
506	Cooling tower: water treatment skid system	\$ 30,000	25	18	\$ 8,400	\$ -	\$ 30,000	\$ 1,667
507	Cooling tower: 50 hp pumps	\$ 44,000	25	13	\$ 21,120	\$ -	\$ 44,000	\$ 3,385
508	Cooling tower: variable frequency drives	\$ 29,000	25	13	\$ 13,920	\$ -	\$ 29,000	\$ 2,231
509	Cooling tower: boiler, 1900 MBU/hr	\$ 38,000	25	3	\$ 33,440	\$ -	\$ 38,000	\$ 12,667
510	Cooling tower: boiler pumps	\$ 6,000	25	3	\$ 5,280	\$ -	\$ 6,000	\$ 2,000
511	HVAC: packaged unit, 45 tons	\$ 154,500	22	9	\$ 91,295	\$ -	\$ 154,500	\$ 17,167
512	HVAC, heat pump, auditorium, 10 tons	\$ 12,150	20	18	\$ 1,215	\$ -	\$ 12,150	\$ 675
513	HVAC, heat pump, billiard room, 2.5 tons	\$ 4,400	20	1	\$ 4,180	\$ -	\$ 4,400	\$ 4,400
514	HVAC, heat pump, lobby, 5 tons	\$ 13,200	20	14	\$ 3,960	\$ -	\$ 13,200	\$ 943
515	HVAC, heat pump, lobby, 3.5 tons	\$ 4,850	20	18	\$ 485	\$ -	\$ 4,850	\$ 269
516	HVAC, split system, gym, 2 tons	\$ 3,800	20	17	\$ 570	\$ -	\$ 3,800	\$ 224
517	HVAC: split system, elevator machine room, 2 tons	\$ 7,600	20	16	\$ 1,520	\$ -	\$ 7,600	\$ 475
518	HVAC: split system, elevator machine room, 4 tons	\$ 6,000	20	16	\$ 1,200	\$ -	\$ 6,000	\$ 375
519	HVAC: exhaust ventilators, rooftop	\$ 86,400	30	25	\$ 14,400	\$ -	\$ 86,400	\$ 3,456
Mechanical Systems Subtotal (19 Line Items)					\$ 655,246	\$ -	\$ 2,641,500	\$ 161,225

Amenities

601	Plaza deck: pool, refinish	\$ 40,000	12	12	\$ -	\$ -	\$ 40,000	\$ 3,333
602	Plaza deck: pool equipment, repair allowance	\$ 28,000	12	12	\$ -	\$ -	\$ 28,000	\$ 2,333
603	Plaza deck: amenities and beautification	\$ 275,000	30	30	\$ -	\$ -	\$ 275,000	\$ 9,167
604	Restrooms, saunas and restrooms	\$ 54,500	30	5	\$ 45,417	\$ -	\$ 54,500	\$ 10,900
605	Restrooms, level 2 corridor	\$ 17,500	30	5	\$ 14,583	\$ -	\$ 17,500	\$ 3,500
606	Restrooms, gym	\$ 21,500	30	5	\$ 17,917	\$ -	\$ 21,500	\$ 4,300
607	Restrooms, pool deck	\$ 44,500	30	22	\$ 11,867	\$ -	\$ 44,500	\$ 2,023
608	Finishes: corridors, flooring, tile	\$ 407,500	30	22	\$ 108,667	\$ -	\$ 407,500	\$ 18,523
609	Finishes: corridors, flooring, carpet	\$ 307,325	15	7	\$ 163,907	\$ -	\$ 307,325	\$ 43,904
610	Finishes: lobby	\$ 410,000	30	28	\$ 27,333	\$ -	\$ 410,000	\$ 14,643
611	Finishes: corridors and lobby, interior painting	\$ 120,000	10	7	\$ 36,000	\$ -	\$ 120,000	\$ 17,143
612	Finishes: game room	\$ 24,000	30	15	\$ 12,000	\$ -	\$ 24,000	\$ 1,600
613	Finishes: billiard room	\$ 19,000	30	15	\$ 9,500	\$ -	\$ 19,000	\$ 1,267
614	Finishes: auditorium	\$ 94,500	30	28	\$ 6,300	\$ -	\$ 94,500	\$ 3,375
615	Finishes: auditorium kitchen	\$ 17,500	30	10	\$ 11,667	\$ -	\$ 17,500	\$ 1,750
616	Finishes: office	\$ 26,500	30	15	\$ 13,250	\$ -	\$ 26,500	\$ 1,767

COMPONENT METHOD

BUILDING IMPROVEMENTS RESERVE STUDY (PAGE 2 OF 2)

#	Component Description	Current Cost	UL	RUL	Fully Funded Balance	Year End Balance	Year End Shortfall	Year 1 Contribution
617	Finishes: gym, rubber flooring	\$ 22,800	15	10	\$ 7,600	\$ -	\$ 22,800	\$ 2,280
618	Finishes: gym, ceiling and lighting	\$ 24,000	30	25	\$ 4,000	\$ -	\$ 24,000	\$ 960
619	FF&E: gym, weight equipment	\$ 23,000	18	9	\$ 11,500	\$ -	\$ 23,000	\$ 2,556
620	FF&E: gym, cardio equipment	\$ 24,500	12	6	\$ 12,250	\$ -	\$ 24,500	\$ 4,083
621	FF&E: general furniture allowance	\$ 50,000	15	13	\$ 6,667	\$ -	\$ 50,000	\$ 3,846
622	Systems: security camera system	\$ 65,600	12	10	\$ 10,933	\$ -	\$ 65,600	\$ 6,560
623	Systems: access control system	\$ 25,000	12	10	\$ 4,167	\$ -	\$ 25,000	\$ 2,500
Amenities Subtotal (23 Line Items)					\$ 535,523	\$ -	\$ 2,142,225	\$ 162,311
Site and Building Improvements								
701	Building systems: mailbox kiosk	\$ 85,000	30	22	\$ 22,667	\$ -	\$ 85,000	\$ 3,864
702	Building systems: trash chute	\$ 132,000	40	38	\$ 6,600	\$ -	\$ 132,000	\$ 3,474
703	Building systems: trash chute doors	\$ 18,000	25	23	\$ 1,440	\$ -	\$ 18,000	\$ 783
704	Building systems: stair landing windows	\$ 132,000	40	26	\$ 46,200	\$ -	\$ 132,000	\$ 5,077
705	Building systems: parking gates	\$ 61,500	35	18	\$ 29,871	\$ -	\$ 61,500	\$ 3,417
706	Building systems: parking gate operators	\$ 8,000	15	9	\$ 3,200	\$ -	\$ 8,000	\$ 889
707	Site: parking lot, asphalt sealcoat and striping	\$ 30,000	5	1	\$ 24,000	\$ -	\$ 30,000	\$ 30,000
708	Site: parking lot, asphalt repair and resurface	\$ 336,000	25	16	\$ 120,960	\$ -	\$ 336,000	\$ 21,000
709	Site: parking, wheel stops	\$ 37,800	30	17	\$ 16,380	\$ -	\$ 37,800	\$ 2,224
710	Site: parking lot, light poles	\$ 26,500	30	25	\$ 4,417	\$ -	\$ 26,500	\$ 1,060
711	Lighting: parking garage	\$ 90,000	30	22	\$ 24,000	\$ -	\$ 90,000	\$ 4,091
Site and Building Improvements Subtotal (11 Line Items)					\$ 299,735	\$ -	\$ 956,800	\$ 75,877
Total					\$1,490,504	\$ -	\$5,740,525	\$ 399,413

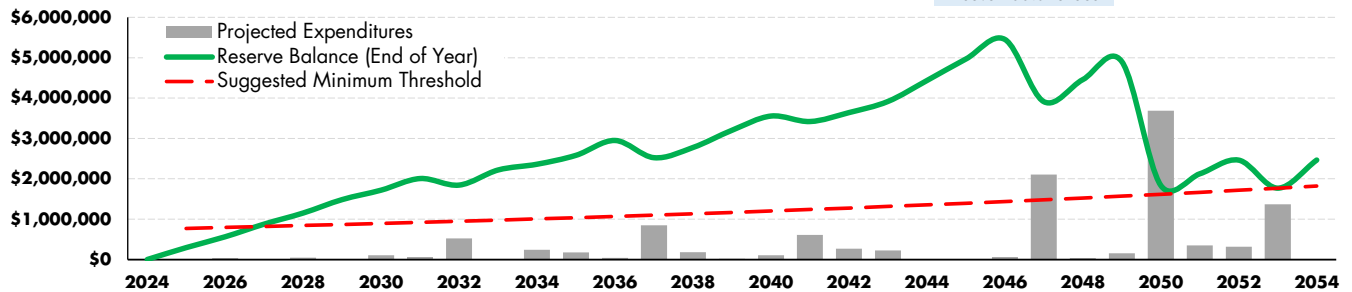
THRESHOLD FUNDING PLAN (RECOMMENDED)

BUILDING IMPROVEMENTS RESERVE STUDY

Year	Reserve Balance (Start of Year)	Projected Expenditures	Reserve Contributions			Reserve Balance (End of Year)	Suggested Minimum Threshold	Projected Percent Funded	
			Association Annual Total	Average Unit Monthly Total	Change from Prior Year				
2024	Year 0					\$ -		0%	
2025	Year 1	\$ -	\$ -	\$ 295,250	\$ 60	N/A	\$ 295,250	\$ 772,244	17%
2026	Year 2	\$ 295,250	\$ 35,432	\$ 304,108	\$ 62	3.0%	\$ 563,926	\$ 795,411	29%
2027	Year 3	\$ 563,926	\$ -	\$ 313,231	\$ 64	3.0%	\$ 877,156	\$ 819,274	40%
2028	Year 4	\$ 877,156	\$ 48,080	\$ 322,628	\$ 66	3.0%	\$ 1,151,704	\$ 843,852	48%
2029	Year 5	\$ 1,151,704	\$ -	\$ 332,306	\$ 68	3.0%	\$ 1,484,010	\$ 869,167	55%
2030	Year 6	\$ 1,484,010	\$ 108,392	\$ 342,276	\$ 70	3.0%	\$ 1,717,894	\$ 895,242	60%
2031	Year 7	\$ 1,717,894	\$ 65,076	\$ 352,544	\$ 72	3.0%	\$ 2,005,362	\$ 922,100	65%
2032	Year 8	\$ 2,005,362	\$ 525,556	\$ 363,120	\$ 74	3.0%	\$ 1,842,926	\$ 949,763	63%
2033	Year 9	\$ 1,842,926	\$ -	\$ 374,014	\$ 77	3.0%	\$ 2,216,940	\$ 978,255	69%
2034	Year 10	\$ 2,216,940	\$ 242,035	\$ 385,234	\$ 79	3.0%	\$ 2,360,139	\$ 1,007,603	71%
2035	Year 11	\$ 2,360,139	\$ 175,919	\$ 396,791	\$ 81	3.0%	\$ 2,581,012	\$ 1,037,831	73%
2036	Year 12	\$ 2,581,012	\$ 41,527	\$ 408,695	\$ 84	3.0%	\$ 2,948,180	\$ 1,068,966	77%
2037	Year 13	\$ 2,948,180	\$ 847,757	\$ 420,956	\$ 86	3.0%	\$ 2,521,378	\$ 1,101,035	72%
2038	Year 14	\$ 2,521,378	\$ 180,630	\$ 433,585	\$ 89	3.0%	\$ 2,774,333	\$ 1,134,066	75%
2039	Year 15	\$ 2,774,333	\$ 19,966	\$ 446,592	\$ 91	3.0%	\$ 3,200,959	\$ 1,168,088	79%
2040	Year 16	\$ 3,200,959	\$ 108,279	\$ 459,990	\$ 94	3.0%	\$ 3,552,670	\$ 1,203,131	82%
2041	Year 17	\$ 3,552,670	\$ 609,147	\$ 473,790	\$ 97	3.0%	\$ 3,417,313	\$ 1,239,225	80%
2042	Year 18	\$ 3,417,313	\$ 267,100	\$ 488,003	\$ 100	3.0%	\$ 3,638,216	\$ 1,276,401	82%
2043	Year 19	\$ 3,638,216	\$ 226,424	\$ 502,643	\$ 103	3.0%	\$ 3,914,436	\$ 1,314,694	83%
2044	Year 20	\$ 3,914,436	\$ -	\$ 517,723	\$ 106	3.0%	\$ 4,432,159	\$ 1,354,134	87%
2045	Year 21	\$ 4,432,159	\$ -	\$ 533,254	\$ 109	3.0%	\$ 4,965,413	\$ 1,394,758	90%
2046	Year 22	\$ 4,965,413	\$ 63,994	\$ 549,252	\$ 112	3.0%	\$ 5,450,671	\$ 1,436,601	92%
2047	Year 23	\$ 5,450,671	\$ 2,107,570	\$ 565,730	\$ 116	3.0%	\$ 3,908,831	\$ 1,479,699	80%
2048	Year 24	\$ 3,908,831	\$ 35,525	\$ 582,701	\$ 119	3.0%	\$ 4,456,007	\$ 1,524,090	84%
2049	Year 25	\$ 4,456,007	\$ 154,492	\$ 600,182	\$ 123	3.0%	\$ 4,901,697	\$ 1,569,813	86%
2050	Year 26	\$ 4,901,697	\$ 3,684,421	\$ 618,188	\$ 127	3.0%	\$ 1,835,464	\$ 1,616,907	50%
2051	Year 27	\$ 1,835,464	\$ 349,368	\$ 636,734	\$ 130	3.0%	\$ 2,122,830	\$ 1,665,414	53%
2052	Year 28	\$ 2,122,830	\$ 317,644	\$ 655,836	\$ 134	3.0%	\$ 2,461,021	\$ 1,715,377	58%
2053	Year 29	\$ 2,461,021	\$ 1,369,325	\$ 675,511	\$ 138	3.0%	\$ 1,767,207	\$ 1,766,838	46%
2054	Year 30	\$ 1,767,207	\$ -	\$ 695,776	\$ 142	3.0%	\$ 2,462,983	\$ 1,819,843	56%

*Suggested Minimum Threshold = 2 * Average Annual Expenditure (Future Costs)

Below Threshold
Above Threshold
Above 100% Funded



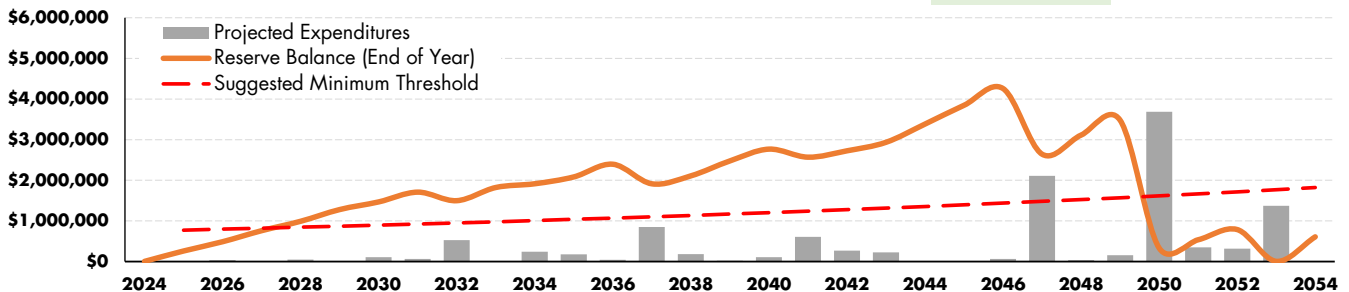
BASELINE FUNDING PLAN

BUILDING IMPROVEMENTS RESERVE STUDY

Year	Reserve Balance (Start of Year)	Projected Expenditures	Reserve Contributions			Reserve Balance (End of Year)	Suggested Minimum Threshold	Projected Percent Funded	
			Association Annual Total	Average Unit Monthly Total	Change from Prior Year				
2024	Year 0					\$ -		0%	
2025	Year 1	\$ -	\$ -	\$ 256,200	\$ 52	N/A	\$ 256,200	\$ 772,244	15%
2026	Year 2	\$ 256,200	\$ 35,432	\$ 263,886	\$ 54	3.0%	\$ 484,654	\$ 795,411	25%
2027	Year 3	\$ 484,654	\$ -	\$ 271,803	\$ 56	3.0%	\$ 756,457	\$ 819,274	34%
2028	Year 4	\$ 756,457	\$ 48,080	\$ 279,957	\$ 57	3.0%	\$ 988,333	\$ 843,852	41%
2029	Year 5	\$ 988,333	\$ -	\$ 288,355	\$ 59	3.0%	\$ 1,276,689	\$ 869,167	48%
2030	Year 6	\$ 1,276,689	\$ 108,392	\$ 297,006	\$ 61	3.0%	\$ 1,465,302	\$ 895,242	51%
2031	Year 7	\$ 1,465,302	\$ 65,076	\$ 305,916	\$ 63	3.0%	\$ 1,706,143	\$ 922,100	55%
2032	Year 8	\$ 1,706,143	\$ 525,556	\$ 315,094	\$ 65	3.0%	\$ 1,495,681	\$ 949,763	51%
2033	Year 9	\$ 1,495,681	\$ -	\$ 324,546	\$ 66	3.0%	\$ 1,820,227	\$ 978,255	56%
2034	Year 10	\$ 1,820,227	\$ 242,035	\$ 334,283	\$ 68	3.0%	\$ 1,912,475	\$ 1,007,603	57%
2035	Year 11	\$ 1,912,475	\$ 175,919	\$ 344,311	\$ 70	3.0%	\$ 2,080,867	\$ 1,037,831	59%
2036	Year 12	\$ 2,080,867	\$ 41,527	\$ 354,641	\$ 73	3.0%	\$ 2,393,981	\$ 1,068,966	63%
2037	Year 13	\$ 2,393,981	\$ 847,757	\$ 365,280	\$ 75	3.0%	\$ 1,911,504	\$ 1,101,035	55%
2038	Year 14	\$ 1,911,504	\$ 180,630	\$ 376,238	\$ 77	3.0%	\$ 2,107,112	\$ 1,134,066	57%
2039	Year 15	\$ 2,107,112	\$ 19,966	\$ 387,525	\$ 79	3.0%	\$ 2,474,672	\$ 1,168,088	61%
2040	Year 16	\$ 2,474,672	\$ 108,279	\$ 399,151	\$ 82	3.0%	\$ 2,765,544	\$ 1,203,131	64%
2041	Year 17	\$ 2,765,544	\$ 609,147	\$ 411,126	\$ 84	3.0%	\$ 2,567,523	\$ 1,239,225	60%
2042	Year 18	\$ 2,567,523	\$ 267,100	\$ 423,460	\$ 87	3.0%	\$ 2,723,883	\$ 1,276,401	61%
2043	Year 19	\$ 2,723,883	\$ 226,424	\$ 436,163	\$ 89	3.0%	\$ 2,933,622	\$ 1,314,694	62%
2044	Year 20	\$ 2,933,622	\$ -	\$ 449,248	\$ 92	3.0%	\$ 3,382,871	\$ 1,354,134	66%
2045	Year 21	\$ 3,382,871	\$ -	\$ 462,726	\$ 95	3.0%	\$ 3,845,596	\$ 1,394,758	69%
2046	Year 22	\$ 3,845,596	\$ 63,994	\$ 476,607	\$ 98	3.0%	\$ 4,258,210	\$ 1,436,601	72%
2047	Year 23	\$ 4,258,210	\$ 2,107,570	\$ 490,906	\$ 101	3.0%	\$ 2,641,545	\$ 1,479,699	54%
2048	Year 24	\$ 2,641,545	\$ 35,525	\$ 505,633	\$ 104	3.0%	\$ 3,111,654	\$ 1,524,090	59%
2049	Year 25	\$ 3,111,654	\$ 154,492	\$ 520,802	\$ 107	3.0%	\$ 3,477,963	\$ 1,569,813	61%
2050	Year 26	\$ 3,477,963	\$ 3,684,421	\$ 536,426	\$ 110	3.0%	\$ 329,968	\$ 1,616,907	9%
2051	Year 27	\$ 329,968	\$ 349,368	\$ 552,519	\$ 113	3.0%	\$ 533,119	\$ 1,665,414	13%
2052	Year 28	\$ 533,119	\$ 317,644	\$ 569,094	\$ 117	3.0%	\$ 784,569	\$ 1,715,377	19%
2053	Year 29	\$ 784,569	\$ 1,369,325	\$ 586,167	\$ 120	3.0%	\$ 1,411	\$ 1,766,838	0%
2054	Year 30	\$ 1,411	\$ -	\$ 603,752	\$ 124	3.0%	\$ 605,163	\$ 1,819,843	14%

*Suggested Minimum Threshold = 2 * Average Annual Expenditure (Future Costs)

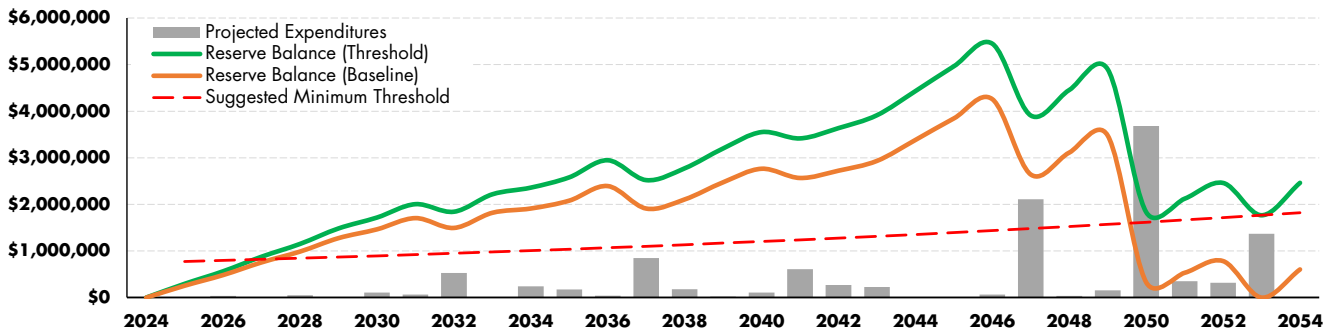
Below 10% Funded
Below Threshold
Above Threshold



COMPARISON OF CASH FLOW METHOD PLANS

BUILDING IMPROVEMENTS RESERVE STUDY

Year		Projected Expenditures	Threshold Funding Plan (Recommended)			Baseline Funding Plan		
			Annual Contribution	Reserve Balance (End of Year)	Percent Funded	Annual Contribution	Reserve Balance (End of Year)	Percent Funded
2024	Year 0		\$ -	\$ -	N/A	\$ -	\$ -	N/A
2025	Year 1	\$ -	\$ 295,250	\$ 295,250	17%	\$ 256,200	\$ 256,200	15%
2026	Year 2	\$ 35,432	\$ 304,108	\$ 563,926	29%	\$ 263,886	\$ 484,654	25%
2027	Year 3	\$ -	\$ 313,231	\$ 877,156	40%	\$ 271,803	\$ 756,457	34%
2028	Year 4	\$ 48,080	\$ 322,628	\$ 1,151,704	48%	\$ 279,957	\$ 988,333	41%
2029	Year 5	\$ -	\$ 332,306	\$ 1,484,010	55%	\$ 288,355	\$ 1,276,689	48%
2030	Year 6	\$ 108,392	\$ 342,276	\$ 1,717,894	60%	\$ 297,006	\$ 1,465,302	51%
2031	Year 7	\$ 65,076	\$ 352,544	\$ 2,005,362	65%	\$ 305,916	\$ 1,706,143	55%
2032	Year 8	\$ 525,556	\$ 363,120	\$ 1,842,926	63%	\$ 315,094	\$ 1,495,681	51%
2033	Year 9	\$ -	\$ 374,014	\$ 2,216,940	69%	\$ 324,546	\$ 1,820,227	56%
2034	Year 10	\$ 242,035	\$ 385,234	\$ 2,360,139	71%	\$ 334,283	\$ 1,912,475	57%
2035	Year 11	\$ 175,919	\$ 396,791	\$ 2,581,012	73%	\$ 344,311	\$ 2,080,867	59%
2036	Year 12	\$ 41,527	\$ 408,695	\$ 2,948,180	77%	\$ 354,641	\$ 2,393,981	63%
2037	Year 13	\$ 847,757	\$ 420,956	\$ 2,521,378	72%	\$ 365,280	\$ 1,911,504	55%
2038	Year 14	\$ 180,630	\$ 433,585	\$ 2,774,333	75%	\$ 376,238	\$ 2,107,112	57%
2039	Year 15	\$ 19,966	\$ 446,592	\$ 3,200,959	79%	\$ 387,525	\$ 2,474,672	61%
2040	Year 16	\$ 108,279	\$ 459,990	\$ 3,552,670	82%	\$ 399,151	\$ 2,765,544	64%
2041	Year 17	\$ 609,147	\$ 473,790	\$ 3,417,313	80%	\$ 411,126	\$ 2,567,523	60%
2042	Year 18	\$ 267,100	\$ 488,003	\$ 3,638,216	82%	\$ 423,460	\$ 2,723,883	61%
2043	Year 19	\$ 226,424	\$ 502,643	\$ 3,914,436	83%	\$ 436,163	\$ 2,933,622	62%
2044	Year 20	\$ -	\$ 517,723	\$ 4,432,159	87%	\$ 449,248	\$ 3,382,871	66%
2045	Year 21	\$ -	\$ 533,254	\$ 4,965,413	90%	\$ 462,726	\$ 3,845,596	69%
2046	Year 22	\$ 63,994	\$ 549,252	\$ 5,450,671	92%	\$ 476,607	\$ 4,258,210	72%
2047	Year 23	\$ 2,107,570	\$ 565,730	\$ 3,908,831	80%	\$ 490,906	\$ 2,641,545	54%
2048	Year 24	\$ 35,525	\$ 582,701	\$ 4,456,007	84%	\$ 505,633	\$ 3,111,654	59%
2049	Year 25	\$ 154,492	\$ 600,182	\$ 4,901,697	86%	\$ 520,802	\$ 3,477,963	61%
2050	Year 26	\$ 3,684,421	\$ 618,188	\$ 1,835,464	50%	\$ 536,426	\$ 329,968	9%
2051	Year 27	\$ 349,368	\$ 636,734	\$ 2,122,830	53%	\$ 552,519	\$ 533,119	13%
2052	Year 28	\$ 317,644	\$ 655,836	\$ 2,461,021	58%	\$ 569,094	\$ 784,569	19%
2053	Year 29	\$ 1,369,325	\$ 675,511	\$ 1,767,207	46%	\$ 586,167	\$ 1,411	0%
2054	Year 30	\$ -	\$ 695,776	\$ 2,462,983	56%	\$ 603,752	\$ 605,163	14%



5.0 Discussion of Funding Plans

5.1 Funding Recommendations

The decision on how an association chooses to fund its reserves is entirely up to the association and typically determined by an elected Board of Directors. In determining how to proceed, an association should consider many factors.

One important factor is the association's willingness to accept future special assessments. If an association's top priority is to avoid special assessments, then they should consider a conservative plan that is regularly updated, such as a Full Funding Plan with annual updates. In this scenario, it is nearly a guarantee that no special assessments will be required. Alternatively, if an association is agreeable to special assessments, they could consider a Baseline Funding Plan with updates only every ten years. We do not recommend this approach.

Another important element of reserve funding is maintaining an up-to-date reserve study. A detailed reserve study can often be updated for multiple years. A reserve study update is a simpler process than starting a full reserve study from scratch and can often be performed without the need for site visits and at a significantly lower cost.

We typically recommend that a moderate approach be considered for an association's reserve funding. A Threshold Funding Plan maintains an acceptable reserve balance throughout the study period without unnecessarily high reserve contribution rates. If updated at least every three years, a Threshold Funding Plan should be adequate to avoid special assessments in the future.

5.2 Limitations of a Structural Integrity Reserve Study

As described in the Florida Statutes, a Structural Integrity Reserve Study (SIRS) is intended to provide an analysis of reserve funding for components related to the structural integrity and safety of buildings three stories and higher. Fundamentally, a SIRS only covers a portion of total association components. However, association components which are not related to the structural integrity and safety of the building can be numerous and costly to maintain, repair, and replace.

Association components outside of the scope of a SIRS can include:

- Site improvements such as roadways, sidewalks, asphalt, fencing, irrigation systems, etc.
- Components not part of a building, such as pools, amenity decks, etc.
- Structures less than three stories in height
- Elevator machinery and cabs
- Interiors amenities such as gyms, lobby finishes, corridor finishes, etc.
- Electronic amenities such as security systems, access control systems, etc.
- Mechanical systems such as HVAC components, cooling towers, vehicle gates, etc.

Therefore, if the Association chooses to follow one of the SIRS funding plans for its reserve contributions, we recommend that expenditures from that reserve account be limited to those included in the SIRS component list and for other components which are directly related to the structural integrity and safety of the building. In this scenario, a separate reserve account could be maintained and utilized for other association expenditures not related to the structural integrity and safety of the building.

It is also important to note that a SIRS is not intended to be a thorough structural evaluation or assessment but rather a useful tool to assist an association in its financial planning. The need for future structural repairs is not typically predictable and therefore such repairs may not meet the requirements to be considered reserve components. The need for structural repairs should be evaluated, at a minimum, during county-required building recertification process (if applicable) or state-required Milestone Inspection process. A SIRS is not the equivalent of a building recertification or other Milestone Inspection and will not meet the need of a building recertification and/or Milestone Inspection that may be required in the future.

6.0 Scope And Basis

6.1 Objectives

The purpose of a reserve study is to conduct a reserve analysis for the Association which includes an evaluation of the current rate of contribution to the reserves, and, if necessary, suggestions to alternative funding strategies. This report is intended to be used as a tool by the Association for considering and managing its future financial obligations, determining appropriate reserve fund allocations, and informing the individual owners of the Association's required reserve expenditures and the resulting financial plan.

For purposes of financial planning, Association expenses are typically divided into two categories:

- Annual Operations: Related to commonly held elements of real property and other assets. These expenses typically include annual operating expenditures, taxes, insurance, property management costs, and other service fees.
- Reserve Expenditures: Related to major periodic repairs and/or replacement of commonly held elements which meet the following criteria:
 - The Association has the obligation to maintain or replace the existing element.
 - The need and schedule for this project can be reasonably anticipated.
 - The total cost for the project is material to the Association, can be reasonably estimated, and includes all direct and related costs.

The focuses of our reserve analysis are long-term reserve expenditures, the funding plan, and ensuring adequate reserve balances. History demonstrates that, as time progresses, property conditions and management strategies will change. As a result, planned scopes of work may be altered or deferred, actual cost in the marketplace will vary from estimates, and actual rates of inflation and returns on investment will vary from projections. For these reasons, we concur with the CAI's guidelines and recommend that this reserve study be updated at least every three years.

The reserve expenditures included within the Structural Integrity Reserve Study differ from traditional reserve expenses and are described in the Florida Statutes. Please reference Section 6.2.1 of this report.

6.2 Level of Service

This report contains two levels of analysis:

6.2.1 Structural Integrity Reserve Study

This analysis is consistent with the Florida Statutes section 718.112(2)(g)1, related to a Structural Integrity Reserve Study, which describes a reserve study encompassing “each building on the condominium property that is three stories or higher in height”, which will include the components within the SIRS Study Area and SIRS Item List “as related to the structural integrity and safety of the building”. Excerpts from the Florida Statutes are provided in Appendix B.

SIRS Study Area

The SIRS Study Area is limited to buildings three stories or higher and therefore excludes many common components which are not directly within (or affecting) buildings.

SIRS Item List

The SIRS Item List is consistent with the Florida Statutes section 718.112(2)(g)1 (a. through h.) which includes: the roof, structure, fireproofing and fire protection systems, plumbing, electrical systems, waterproofing and exterior painting, windows and exterior doors, and any other item that has a deferred maintenance expense or replacement cost that exceeds \$10,000 and the failure to replace or maintain such item negatively affects the items listed above. The SIRS Item List is not inclusive of all Association items within the building and excludes Association items such as interior finishes, interior amenities, HVAC systems, elevators, and other similar items not related to the structural integrity and safety of the building.

It is important to note that a Structural Integrity Reserve Study is not the equivalent of a building recertification or other Milestone Inspection and will not meet the need of a building recertification and/or Milestone Inspection that may be required in the future.

6.2.2 Full Reserve Study

The National Reserve Study Standards (NRSS) identifies four levels of service for Reserve Studies:

- I. Full
- II. Update, With Site Visit/On-Site Review
- III. Update, No Site Visit/Off-Site Review
- IV. Preliminary, Community Not Yet Constructed

All may be appropriate for a community, depending on the condition of the community and the phase of the planning cycle. The combination of the SIRS and Building Improvements Reserve Study is generally consistent with the NRSS Level I, Full Reserve Study.

6.3 Opinions of Useful Life

For components which require periodic reserve expenditures for their repairs or replacement, the frequency of work equals the typical, industry accepted expected useful life (UL) for the type of feature. Theoretically, the remaining useful life (RUL) of a component, prior to the next reserve expenditure for its repair or replacement, is equal to the difference between its UL and its age: $RUL = UL - Age$.

In our experience, the effective age and actual RUL of an installed item can vary greatly from its actual age and calculated RUL. These variances depend on the quality of its original materials and workmanship, level of service, climatic exposure, and ongoing maintenance. As part of our analysis, we have determined our opinion of the UL and RUL of each common component based on our evaluation of its history and its existing condition.

In summary, we have based our opinion of the useful life, remaining useful life, and expected frequency and schedule of repair for each common component on some or all of the following:

- Actual or assumed age.
- Observed existing condition.
- Association's maintenance history and plan.
- Fannie Mae – Estimated Useful Life Tables
- Marshall & Swift Valuation Service Expected Life Expectancies
- Our experience with actual performance of such components under similar service and exposure.

6.4 Estimating

In developing our estimate of reserve expenditures for most common components, we have estimated quantities of each item as well as unit costs for its repair or replacement. In some cases, it is more appropriate to estimate a lump sum cost for a required work package or 'lot'. In other cases, particularly when future expenditures are difficult to predict, it is more appropriate to allocate an allowance.

Unless directed to take a different approach, we assume that contract labor will perform the work and apply appropriate installer's mark-ups on supplied material and equipment. When required, our estimated costs consider demolition and disposal of existing materials as well as protection of other portions of the property. When appropriate for large reserve projects, we will also consider soft costs for design and project management, as well as typical general contractor's cost for general conditions, supervision, overhead and profit.

We have based our opinion of unit, lump sum, and allowance costs on some or all of the following:

- Records of previous expenses.
- Previously solicited Vendor quotations or Contractor proposals.
- Provided reserve budgets developed by others.
- Our project files on repairs and replacements at other properties.
- RSMMeans Construction Cost Data.
- Marshall & Swift Valuation Service – Facility Cost Index.

The primary purpose of this reserve study is to aid in overall budget planning. While we make every effort to be accurate, our cost and quantity estimates are to be considered preliminary and by no means a guarantee. Annual reserve expenditure budgets have been calculated for all years during the study period by inflating the annual tallies of current dollar cost at a rate of inflation selected by the Association.

6.5 Information Provided

Our initial financial analysis was based on the current funding rate and future plans of the Association. We were provided with initial information on the reserves and its funding plan.

- Reserve Balance Provided: \$0
- As of: May 24, 2024
- Current Monthly Reserve Contribution: \$0
- Fiscal Year Starting Date: January 1, 2025
- For Designated Year: 2025
- Projected Reserve Balance on Starting Date: \$0
- Planned Increases: N/A
- Planned Special Assessments: N/A
- Projected Annual Return on Investment: 0.0%
- Projected Rate of Annual Inflation: 3.0%

Financial data, records of past expenses, and cost estimates provided by others have been taken in good faith and at face value. No audit or other verification has been performed.

7.0 Projected Expenditures Schedule

See the following pages.

PROJECTED EXPENDITURE SCHEDULE

ALL COMPONENTS (PAGE 1 OF 6)

Projected Expenditures in 2026 (Year 2)

#	Component Category	Component Description	Estimated Cost
513	Mechanical Systems	HVAC, heat pump, billiard room, 2.5 tons	\$ 4,532
707	Site and Building Improvements	Site: parking lot, asphalt sealcoat and striping	\$ 30,900
			\$ 35,432

Projected Expenditures in 2028 (Year 4)

#	Component Category	Component Description	Estimated Cost
509	Mechanical Systems	Cooling tower: boiler, 1900 MBU/hr	\$ 41,524
510	Mechanical Systems	Cooling tower: boiler pumps	\$ 6,556
			\$ 48,080

Projected Expenditures in 2030 (Year 6)

#	Component Category	Component Description	Estimated Cost
112	Building Structure and Envelope (SIRS)	Structure: structural recertification repairs, minor	\$ 115,927
201	Electrical Systems (SIRS)	Switchboards and transformers	\$ 58,485
202	Electrical Systems (SIRS)	Electrical subpanels, original	\$ 22,606
204	Electrical Systems (SIRS)	Electrical safety switches, original	\$ 5,217
404	Fire Protection Systems (SIRS)	Fire suppression: standpipe repair allowance	\$ 46,371
604	Amenities	Restrooms, saunas and restrooms	\$ 63,180
605	Amenities	Restrooms, level 2 corridor	\$ 20,287
606	Amenities	Restrooms, gym	\$ 24,924
			\$ 356,998

Projected Expenditures in 2031 (Year 7)

#	Component Category	Component Description	Estimated Cost
102	Building Structure and Envelope (SIRS)	Waterproofing: unit balconies	\$ 955,361
620	Amenities	FF&E: gym, cardio equipment	\$ 29,254
707	Site and Building Improvements	Site: parking lot, asphalt sealcoat and striping	\$ 35,822
			\$ 1,020,437

Projected Expenditures in 2032 (Year 8)

#	Component Category	Component Description	Estimated Cost
105	Building Structure and Envelope (SIRS)	Waterproofing: painting façade	\$ 289,020
405	Fire Protection Systems (SIRS)	Fire alarm: panel, boosters, and accessories	\$ 23,614
609	Amenities	Finishes: corridors, flooring, carpet	\$ 377,971
611	Amenities	Finishes: corridors and lobby, interior painting	\$ 147,585
			\$ 838,190

PROJECTED EXPENDITURE SCHEDULE

ALL COMPONENTS (PAGE 2 OF 6)

Projected Expenditures in 2033 (Year 9)

#	Component Category	Component Description	Estimated Cost
104	Building Structure and Envelope (SIRS)	Waterproofing: parking deck	\$ 218,518
			\$ 218,518

Projected Expenditures in 2034 (Year 10)

#	Component Category	Component Description	Estimated Cost
511	Mechanical Systems	HVAC: packaged unit, 45 tons	\$ 201,587
619	Amenities	FF&E: gym, weight equipment	\$ 30,010
706	Site and Building Improvements	Building systems: parking gate operators	\$ 10,438
			\$ 242,035

Projected Expenditures in 2035 (Year 11)

#	Component Category	Component Description	Estimated Cost
108	Building Structure and Envelope (SIRS)	Exterior doors: metal doors allowance	\$ 24,190
615	Amenities	Finishes: auditorium kitchen	\$ 23,519
617	Amenities	Finishes: gym, rubber flooring	\$ 30,641
622	Amenities	Systems: security camera system	\$ 88,161
623	Amenities	Systems: access control system	\$ 33,598
			\$ 200,109

Projected Expenditures in 2036 (Year 12)

#	Component Category	Component Description	Estimated Cost
707	Site and Building Improvements	Site: parking lot, asphalt sealcoat and striping	\$ 41,527
			\$ 41,527

Projected Expenditures in 2037 (Year 13)

#	Component Category	Component Description	Estimated Cost
503	Mechanical Systems	Cooling tower: 562 tons	\$ 422,881
504	Mechanical Systems	Cooling tower: mobilization for replacement	\$ 142,576
505	Mechanical Systems	Cooling tower: rooftop piping	\$ 185,349
601	Amenities	Plaza deck: pool, refinish	\$ 57,030
602	Amenities	Plaza deck: pool equipment, repair allowance	\$ 39,921
			\$ 847,757

PROJECTED EXPENDITURE SCHEDULE

ALL COMPONENTS (PAGE 3 OF 6)

Projected Expenditures in 2038 (Year 14)

#	Component Category	Component Description	Estimated Cost
107	Building Structure and Envelope (SIRS)	Exterior doors: storefront doors	\$ 28,636
301	Plumbing (SIRS)	Domestic water: booster pump system	\$ 45,525
507	Mechanical Systems	Cooling tower: 50 hp pumps	\$ 64,615
508	Mechanical Systems	Cooling tower: variable frequency drives	\$ 42,587
621	Amenities	FF&E: general furniture allowance	\$ 73,427
			\$ 254,791

Projected Expenditures in 2039 (Year 15)

#	Component Category	Component Description	Estimated Cost
514	Mechanical Systems	HVAC, heat pump, lobby, 5 tons	\$ 19,966
			\$ 19,966

Projected Expenditures in 2040 (Year 16)

#	Component Category	Component Description	Estimated Cost
105	Building Structure and Envelope (SIRS)	Waterproofing: painting façade	\$ 366,122
113	Building Structure and Envelope (SIRS)	Structure: structural recertification repairs, major	\$ 810,143
206	Electrical Systems (SIRS)	Unit distribution equipment	\$ 599,817
404	Fire Protection Systems (SIRS)	Fire suppression: standpipe repair allowance	\$ 62,319
612	Amenities	Finishes: game room	\$ 37,391
613	Amenities	Finishes: billiard room	\$ 29,601
616	Amenities	Finishes: office	\$ 41,286
			\$ 1,946,680

Projected Expenditures in 2041 (Year 17)

#	Component Category	Component Description	Estimated Cost
302	Plumbing (SIRS)	Hot water, boiler, 400 MBU/hr	\$ 19,256
305	Plumbing (SIRS)	Hot water, storage tank, 200 gal	\$ 46,456
517	Mechanical Systems	HVAC: split system, elevator machine room, 2 tons	\$ 12,196
518	Mechanical Systems	HVAC: split system, elevator machine room, 4 tons	\$ 9,628
707	Site and Building Improvements	Site: parking lot, asphalt sealcoat and striping	\$ 48,141
708	Site and Building Improvements	Site: parking lot, asphalt repair and resurface	\$ 539,181
			\$ 674,859

PROJECTED EXPENDITURE SCHEDULE

ALL COMPONENTS (PAGE 4 OF 6)

Projected Expenditures in 2042 (Year 18)

#	Component Category	Component Description	Estimated Cost
401	Fire Protection Systems (SIRS)	Fire suppression: pump and controller	\$ 87,931
516	Mechanical Systems	HVAC, split system, gym, 2 tons	\$ 6,281
611	Amenities	Finishes: corridors and lobby, interior painting	\$ 198,342
709	Site and Building Improvements	Site: parking, wheel stops	\$ 62,478
			\$ 355,032

Projected Expenditures in 2043 (Year 19)

#	Component Category	Component Description	Estimated Cost
104	Building Structure and Envelope (SIRS)	Waterproofing: parking deck	\$ 293,670
506	Mechanical Systems	Cooling tower: water treatment skid system	\$ 51,073
512	Mechanical Systems	HVAC, heat pump, auditorium, 10 tons	\$ 20,685
515	Mechanical Systems	HVAC, heat pump, lobby, 3.5 tons	\$ 8,257
620	Amenities	FF&E: gym, cardio equipment	\$ 41,710
705	Site and Building Improvements	Building systems: parking gates	\$ 104,700
			\$ 520,093

Projected Expenditures in 2044 (Year 20)

#	Component Category	Component Description	Estimated Cost
303	Plumbing (SIRS)	Hot water, boiler, 400 MBU/hr	\$ 21,042
405	Fire Protection Systems (SIRS)	Fire alarm: panel, boosters, and accessories	\$ 33,667
406	Fire Protection Systems (SIRS)	Fire alarm: system components	\$ 657,565
			\$ 712,274

Projected Expenditures in 2045 (Year 21)

#	Component Category	Component Description	Estimated Cost
108	Building Structure and Envelope (SIRS)	Exterior doors: metal doors allowance	\$ 32,510
109	Building Structure and Envelope (SIRS)	Exterior windows: storefront	\$ 103,851
110	Building Structure and Envelope (SIRS)	Exterior windows: corridors	\$ 149,004
111	Building Structure and Envelope (SIRS)	Exterior windows: office	\$ 27,995
			\$ 313,360

Projected Expenditures in 2046 (Year 22)

#	Component Category	Component Description	Estimated Cost
513	Mechanical Systems	HVAC, heat pump, billiard room, 2.5 tons	\$ 8,185
707	Site and Building Improvements	Site: parking lot, asphalt sealcoat and striping	\$ 55,809
			\$ 63,994

PROJECTED EXPENDITURE SCHEDULE

ALL COMPONENTS (PAGE 5 OF 6)

Projected Expenditures in 2047 (Year 23)

#	Component Category	Component Description	Estimated Cost
304	Plumbing (SIRS)	Hot water, boiler, 400 MBU/hr	\$ 45,986
402	Fire Protection Systems (SIRS)	Fire suppression: jockey pump and controller	\$ 12,071
403	Fire Protection Systems (SIRS)	Fire suppression: transfer switch	\$ 19,448
502	Mechanical Systems	Elevators: renovate cabs	\$ 143,708
607	Amenities	Restrooms, pool deck	\$ 85,267
608	Amenities	Finishes: corridors, flooring, tile	\$ 780,812
609	Amenities	Finishes: corridors, flooring, carpet	\$ 588,866
622	Amenities	Systems: security camera system	\$ 125,696
623	Amenities	Systems: access control system	\$ 47,903
701	Site and Building Improvements	Building systems: mailbox kiosk	\$ 162,869
711	Site and Building Improvements	Lighting: parking garage	\$ 172,449
			\$ 2,185,076

Projected Expenditures in 2048 (Year 24)

#	Component Category	Component Description	Estimated Cost
105	Building Structure and Envelope (SIRS)	Waterproofing: painting façade	\$ 463,793
703	Site and Building Improvements	Building systems: trash chute doors	\$ 35,525
			\$ 499,317

Projected Expenditures in 2049 (Year 25)

#	Component Category	Component Description	Estimated Cost
101	Building Structure and Envelope (SIRS)	Roofing: main roof and appurtenances	\$ 2,120,204
601	Amenities	Plaza deck: pool, refinish	\$ 81,312
602	Amenities	Plaza deck: pool equipment, repair allowance	\$ 56,918
706	Site and Building Improvements	Building systems: parking gate operators	\$ 16,262
			\$ 2,274,697

PROJECTED EXPENDITURE SCHEDULE

ALL COMPONENTS (PAGE 6 OF 6)

Projected Expenditures in 2050 (Year 26)

#	Component Category	Component Description	Estimated Cost
112	Building Structure and Envelope (SIRS)	Structure: structural recertification repairs, minor	\$ 209,378
404	Fire Protection Systems (SIRS)	Fire suppression: standpipe repair allowance	\$ 83,751
501	Mechanical Systems	Elevators: traction, modernization	\$ 3,350,045
519	Mechanical Systems	HVAC: exhaust ventilators, rooftop	\$ 180,902
617	Amenities	Finishes: gym, rubber flooring	\$ 47,738
618	Amenities	Finishes: gym, ceiling and lighting	\$ 50,251
710	Site and Building Improvements	Site: parking lot, light poles	\$ 55,485
			\$ 3,977,550

Projected Expenditures in 2051 (Year 27)

#	Component Category	Component Description	Estimated Cost
102	Building Structure and Envelope (SIRS)	Waterproofing: unit balconies	\$ 1,725,489
704	Site and Building Improvements	Building systems: stair landing windows	\$ 284,670
707	Site and Building Improvements	Site: parking lot, asphalt sealcoat and striping	\$ 64,698
			\$ 2,074,856

Projected Expenditures in 2052 (Year 28)

#	Component Category	Component Description	Estimated Cost
611	Amenities	Finishes: corridors and lobby, interior painting	\$ 266,555
619	Amenities	FF&E: gym, weight equipment	\$ 51,090
			\$ 317,644

Projected Expenditures in 2053 (Year 29)

#	Component Category	Component Description	Estimated Cost
104	Building Structure and Envelope (SIRS)	Waterproofing: parking deck	\$ 394,668
207	Electrical Systems (SIRS)	Generator: 200 kW, with transfer switches	\$ 343,189
509	Mechanical Systems	Cooling tower: boiler, 1900 MBU/hr	\$ 86,941
510	Mechanical Systems	Cooling tower: boiler pumps	\$ 13,728
610	Amenities	Finishes: lobby	\$ 938,050
614	Amenities	Finishes: auditorium	\$ 216,209
621	Amenities	FF&E: general furniture allowance	\$ 114,396
			\$ 2,107,181

8.0 Standards and Limitations

Criterion-Cromer Engineers shall perform duties to at least the professional standards consistent with a licensed, Professional Engineer, but does not guarantee or warrant that all adverse conditions concerning the property can be or will be discovered and included in the report. The photographs are an integral part of this report and must be included in any review.

This study is limited to the visual observations made during our inspection. We did not undertake any excavation, conduct any destructive or invasive testing, remove surface materials or finishes, or displace furnishings or equipment. The observations described in this study are valid on the dates of the investigation. Accordingly, we cannot comment on the condition of systems that we could not see, such as buried structures and utilities, nor are we responsible for conditions that could not be seen or were not within the scope of our services at the time of inspection. We did not perform any computations or other engineering analysis as part of this study, nor did we conduct a comprehensive code compliance investigation.

This information in this study is not to be considered a warranty of condition, quality, compliance or cost. No warranty is implied. Financial data, records of past expenses, and cost estimates provided by others have been taken in good faith and at face value. No audit or other verification has been performed.

Reserve budgets are opinions of likely expense based on reasonable cost estimates. We have not obtained competitive quotations or estimates from contractors. Actual costs can vary significantly, based on the specific scope of work developed, availability of materials and qualified contractors, and many other variables. We cannot be responsible for variances.

Criterion-Cromer Engineers does not offer financial counseling services. Although reasonable rates of inflation and return on investment must be assumed to calculate projected balances, no one can accurately predict actual economic performance. Although reserve fund management and investment may be discussed during the course of the study, we do not purport to hold any special qualifications in this area. We recommend that the Association also seek other professional guidance before finalizing their current reserve fund planning activity. Depending on issues which may arise, an appropriate team of consultants to aid decision-making might include their property manager, accountant, financial counselor, and attorney.

Criterion-Cromer Engineers prepared this confidential report for the review and use of the Association. We do not intend any other individual or party to rely upon this study without our express written consent. If another individual or party relies on this study, they shall indemnify, defend and hold Criterion-Cromer Engineers, its subsidiaries, affiliates, officers, directors, members, shareholders, partners, agents, employees and such other parties in interest specified by Criterion-Cromer Engineers harmless for any damages, losses, or expenses they may incur as a result of its use. Any use or reliance of the report by an individual or party other than shall constitute acceptance of these terms and conditions.

9.0 Conclusion

To the best of our ability, we have attempted to work in the best interest of the Association and to aid the Board toward fulfillment of their fiduciary responsibilities and obligations to the individual Unit Owners who comprise the association's membership. In our professional opinion, and within the limitations disclosed elsewhere herein, all information contained herein is reliable and appropriate to guide the Board's deliberations and decision-making. We consider our report confidential and will not share its content with anyone but the Board without its knowledge and release.

We are unaware of any other involvement or business relationship between Criterium-Cromer Engineers and the Developer, individual Unit Owners, members of the Board, or any other entities which constitutes any conflict of interest.

Criterium Engineers appreciates this opportunity to assist you in support of the financial planning for your community. We are pleased to present this report for the Board's consideration and use. Thank you.

Respectfully submitted,



Casey Cromer, P.E.
President
Criterium-Cromer Engineers

APPENDIX A

COMPONENT PHOTOGRAPHS

Component Photographs



Photo 01
Building Structure and Envelope



Photo 02
Building Structure and Envelope



Photo 03
Building Structure and Envelope



Photo 04
Building Structure and Envelope



Photo 05
Building Structure and Envelope



Photo 06
Building Structure and Envelope

Component Photographs



Photo 07
Building Structure and Envelope



Photo 08
Building Structure and Envelope



Photo 09
Building Structure and Envelope



Photo 10
Building Structure and Envelope



Photo 11
Building Structure and Envelope



Photo 12
Building Structure and Envelope

Component Photographs



Photo 13
Building Structure and Envelope



Photo 14
Building Structure and Envelope



Photo 15
Building Structure and Envelope



Photo 16
Building Structure and Envelope



Photo 17
Building Structure and Envelope



Photo 18
Building Structure and Envelope

Component Photographs



Photo 19
Building Structure and Envelope



Photo 20
Building Structure and Envelope



Photo 21
Building Structure and Envelope



Photo 22
Building Structure and Envelope



Photo 23
Building Structure and Envelope

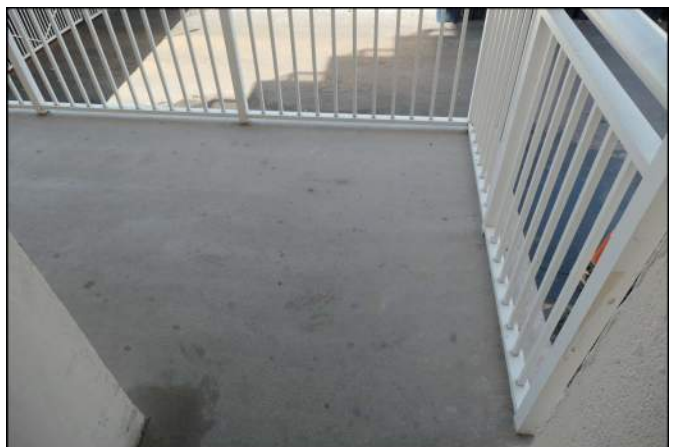


Photo 24
Building Structure and Envelope

Component Photographs



Photo 25
Building Structure and Envelope



Photo 26
Building Structure and Envelope



Photo 27
Building Structure and Envelope



Photo 28
Building Structure and Envelope



Photo 29
Building Structure and Envelope



Photo 30
Building Structure and Envelope

Component Photographs



Photo 31
Building Structure and Envelope



Photo 32
Building Structure and Envelope



Photo 33
Building Structure and Envelope



Photo 34
Building Structure and Envelope



Photo 35
Building Structure and Envelope

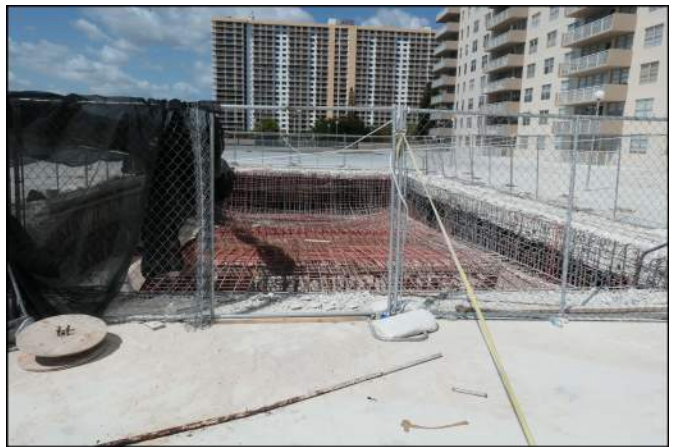


Photo 36
Building Structure and Envelope

Component Photographs



Photo 37
Building Structure and Envelope



Photo 38
Building Structure and Envelope



Photo 39
Building Structure and Envelope



Photo 40
Building Structure and Envelope



Photo 41
Building Structure and Envelope



Photo 42
Building Structure and Envelope

Component Photographs



Photo 43
Building Structure and Envelope



Photo 44
Building Structure and Envelope



Photo 45
Building Structure and Envelope



Photo 46
Building Structure and Envelope



Photo 47
Building Structure and Envelope



Photo 48
Building Structure and Envelope

Component Photographs



Photo 49
Electrical Systems



Photo 50
Electrical Systems



Photo 51
Electrical Systems



Photo 52
Electrical Systems



Photo 53
Electrical Systems



Photo 54
Electrical Systems

Component Photographs



Photo 55
Electrical Systems



Photo 56
Electrical Systems



Photo 57
Electrical Systems



Photo 58
Electrical Systems



Photo 59
Electrical Systems



Photo 60
Electrical Systems

Component Photographs



Photo 61
Electrical Systems



Photo 62
Electrical Systems



Photo 63
Electrical Systems



Photo 64
Electrical Systems



Photo 65
Electrical Systems



Photo 66
Electrical Systems

Component Photographs



Photo 67
Electrical Systems



Photo 68
Electrical Systems



Photo 69
Electrical Systems



Photo 70
Electrical Systems



Photo 71
Electrical Systems



Photo 72
Electrical Systems

Component Photographs



Photo 73
Electrical Systems



Photo 74
Electrical Systems



Photo 75
Electrical Systems



Photo 76
Electrical Systems



Photo 77
Electrical Systems



Photo 78
Electrical Systems

Component Photographs



Photo 79
Electrical Systems



Photo 80
Electrical Systems



Photo 81
Electrical Systems



Photo 82
Electrical Systems



Photo 83
Electrical Systems



Photo 84
Electrical Systems

Component Photographs



Photo 85
Plumbing



Photo 86
Plumbing



Photo 87
Plumbing



Photo 88
Plumbing



Photo 89
Plumbing



Photo 90
Plumbing

Component Photographs



Photo 91
Plumbing



Photo 92
Plumbing



Photo 93
Plumbing



Photo 94
Plumbing



Photo 95
Plumbing



Photo 96
Plumbing

Component Photographs



Photo 97
Fire Protection Systems



Photo 98
Fire Protection Systems



Photo 99
Fire Protection Systems



Photo 100
Fire Protection Systems



Photo 101
Fire Protection Systems



Photo 102
Fire Protection Systems

Component Photographs



Photo 103
Fire Protection Systems



Photo 104
Fire Protection Systems



Photo 105
Fire Protection Systems



Photo 106
Fire Protection Systems



Photo 107
Fire Protection Systems



Photo 108
Fire Protection Systems

Component Photographs



Photo 109
Fire Protection Systems



Photo 110
Fire Protection Systems



Photo 111
Fire Protection Systems



Photo 112
Fire Protection Systems



Photo 113
Fire Protection Systems



Photo 114
Fire Protection Systems

Component Photographs



Photo 115
Mechanical Systems



Photo 116
Mechanical Systems



Photo 117
Mechanical Systems



Photo 118
Mechanical Systems



Photo 119
Mechanical Systems



Photo 120
Mechanical Systems

Component Photographs



Photo 121
Mechanical Systems



Photo 122
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Photo 123
Mechanical Systems



Photo 124
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Photo 125
Mechanical Systems



Photo 126
Mechanical Systems

Component Photographs



Photo 127
Mechanical Systems



Photo 128
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Photo 129
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Photo 130
Mechanical Systems



Photo 131
Mechanical Systems



Photo 132
Mechanical Systems

Component Photographs



Photo 133
Mechanical Systems



Photo 134
Mechanical Systems



Photo 135
Mechanical Systems



Photo 136
Mechanical Systems



Photo 137
Mechanical Systems



Photo 138
Mechanical Systems

Component Photographs



Photo 139
Mechanical Systems



Photo 140
Mechanical Systems



Photo 141
Mechanical Systems



Photo 142
Mechanical Systems



Photo 143
Mechanical Systems



Photo 144
Mechanical Systems

Component Photographs



Photo 145
Mechanical Systems



Photo 146
Mechanical Systems

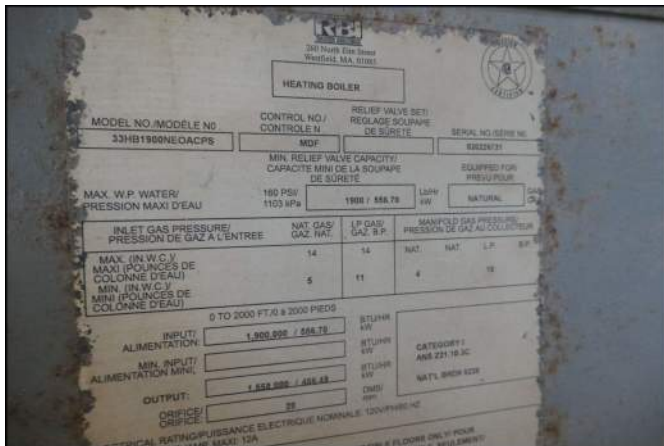


Photo 147
Mechanical Systems



Photo 148
Mechanical Systems



Photo 149
Mechanical Systems



Photo 150
Mechanical Systems

Component Photographs



Photo 151
Mechanical Systems



Photo 152
Mechanical Systems



Photo 153
Mechanical Systems



Photo 154
Mechanical Systems



Photo 155
Mechanical Systems



Photo 156
Mechanical Systems

Component Photographs



Photo 157
Mechanical Systems



Photo 158
Mechanical Systems



Photo 159
Mechanical Systems



Photo 160
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Photo 161
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Photo 162
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Component Photographs



Photo 163
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Photo 164
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Photo 165
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Photo 166
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Photo 167
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Photo 168
Mechanical Systems

Component Photographs



Photo 169
Mechanical Systems



Photo 170
Mechanical Systems



Photo 171
Mechanical Systems



Photo 172
Mechanical Systems



Photo 173
Mechanical Systems



Photo 174
Mechanical Systems

Component Photographs



Photo 175
Amenities



Photo 176
Amenities



Photo 177
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Photo 178
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Photo 179
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Photo 180
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Component Photographs



Photo 181
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Photo 182
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Photo 183
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Photo 184
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Photo 185
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Photo 186
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Component Photographs



Photo 187
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Photo 188
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Photo 189
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Photo 190
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Photo 191
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Photo 192
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Component Photographs



Photo 193
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Photo 194
Amenities

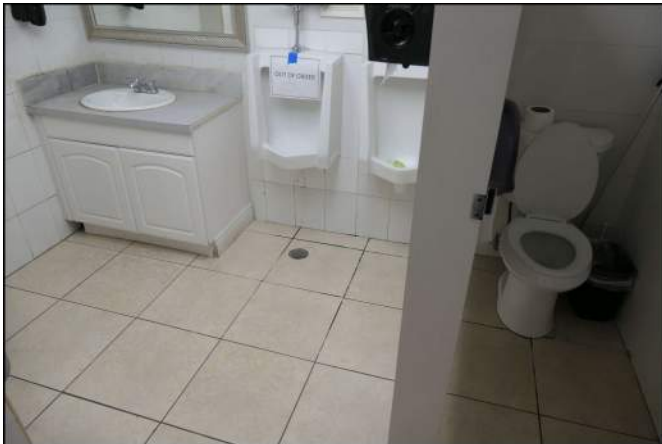


Photo 195
Amenities



Photo 196
Amenities



Photo 197
Amenities

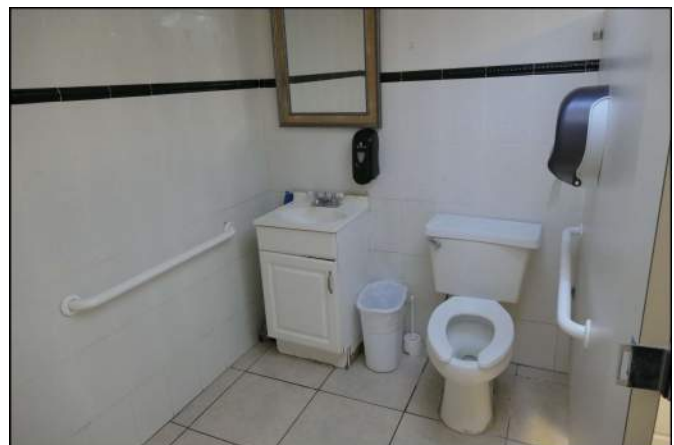


Photo 198
Amenities

Component Photographs



Photo 199
Amenities



Photo 200
Amenities



Photo 201
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Photo 202
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Photo 203
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Photo 204
Amenities

Component Photographs



Photo 205
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Photo 206
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Photo 207
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Photo 208
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Photo 209
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Photo 210
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Component Photographs



Photo 211
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Photo 212
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Photo 214
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Photo 215
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Photo 216
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Component Photographs



Photo 217
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Photo 219
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Photo 220
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Photo 221
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Photo 222
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Component Photographs



Photo 223
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Photo 224
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Photo 225
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Photo 226
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Photo 227
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Photo 228
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Component Photographs



Photo 229
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Photo 230
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Photo 231
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Photo 232
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Photo 233
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Photo 234
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Component Photographs



Photo 235
Amenities

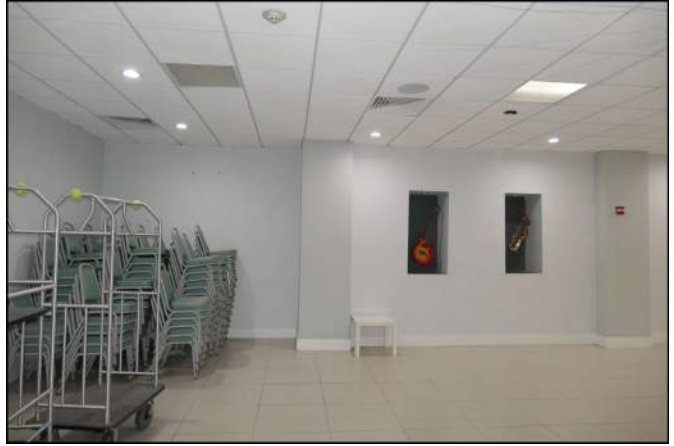


Photo 236
Amenities



Photo 237
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Photo 238
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Photo 239
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Photo 240
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Component Photographs



Photo 241
Amenities



Photo 242
Amenities



Photo 243
Amenities



Photo 244
Amenities

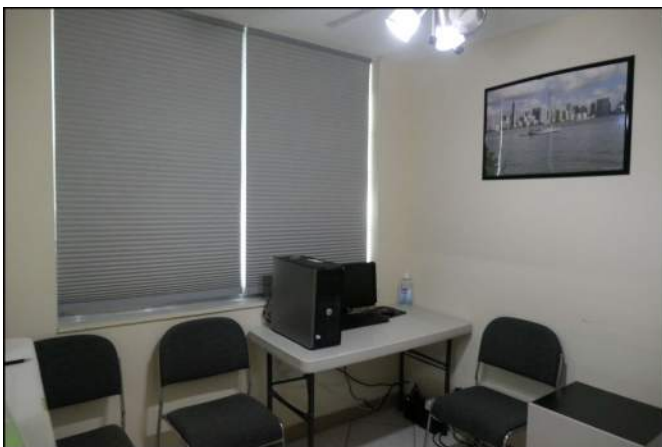


Photo 245
Amenities



Photo 246
Amenities

Component Photographs



Photo 247
Amenities



Photo 248
Amenities



Photo 249
Amenities



Photo 250
Amenities



Photo 251
Amenities



Photo 252
Amenities

Component Photographs



Photo 253
Amenities



Photo 254
Amenities

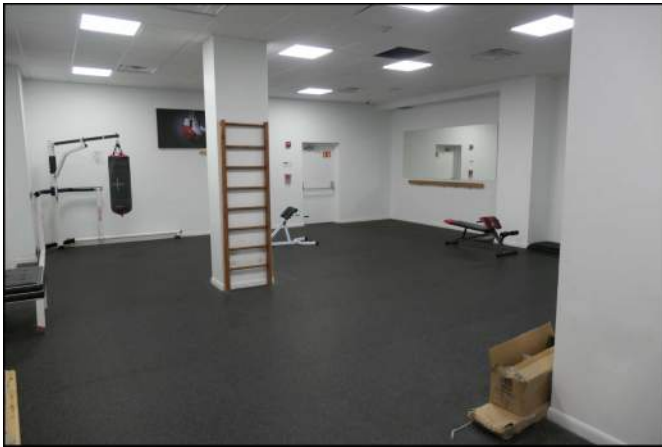


Photo 255
Amenities



Photo 256
Amenities



Photo 257
Amenities

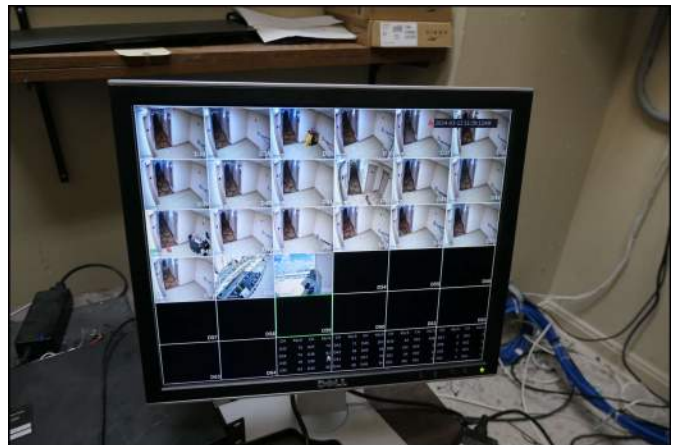


Photo 258
Amenities

Component Photographs



Photo 259
Site and Building Improvements



Photo 260
Site and Building Improvements



Photo 261
Site and Building Improvements



Photo 262
Site and Building Improvements



Photo 263
Site and Building Improvements



Photo 264
Site and Building Improvements

Component Photographs



Photo 265
Site and Building Improvements



Photo 266
Site and Building Improvements



Photo 267
Site and Building Improvements

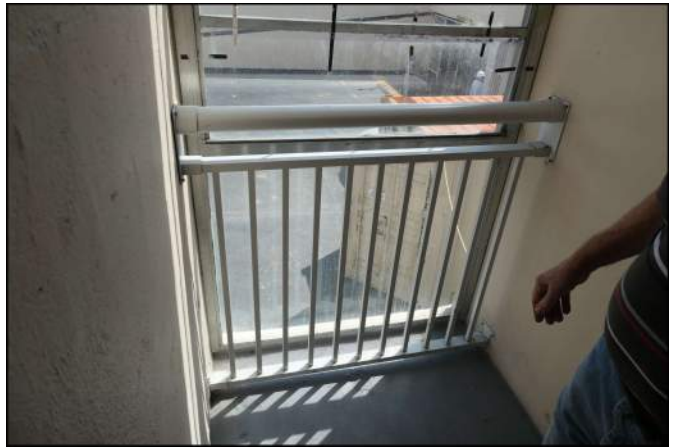


Photo 268
Site and Building Improvements

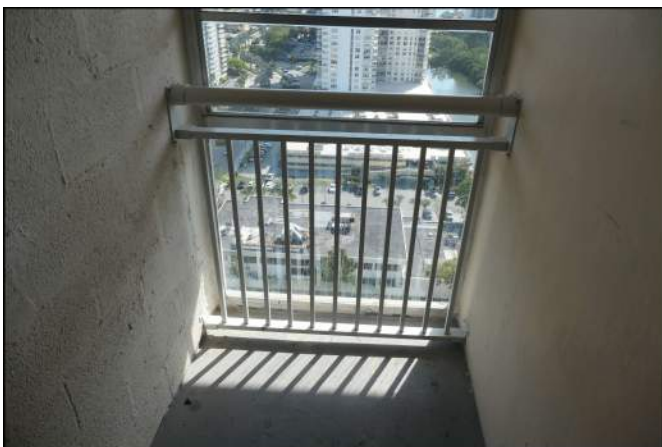


Photo 269
Site and Building Improvements

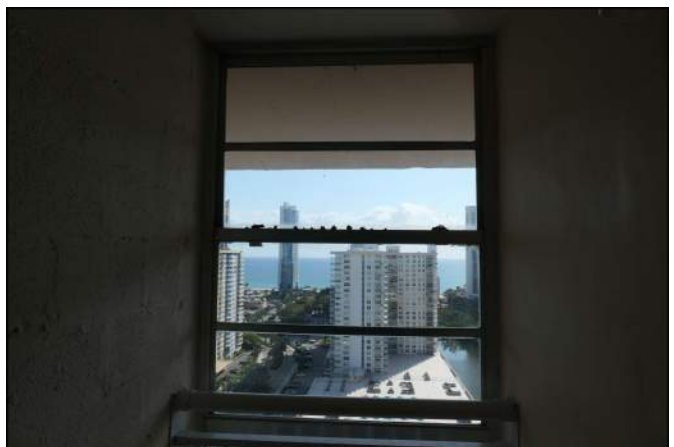


Photo 270
Site and Building Improvements

Component Photographs



Photo 271
Site and Building Improvements



Photo 272
Site and Building Improvements



Photo 273
Site and Building Improvements



Photo 274
Site and Building Improvements



Photo 275
Site and Building Improvements



Photo 276
Site and Building Improvements

Component Photographs



Photo 277
Site and Building Improvements



Photo 278
Site and Building Improvements



Photo 279
Site and Building Improvements



Photo 280
Site and Building Improvements



Photo 281
Site and Building Improvements



Photo 282
Site and Building Improvements

Component Photographs



Photo 283
Site and Building Improvements



Photo 284
Site and Building Improvements



Photo 285
Site and Building Improvements



Photo 286
Site and Building Improvements



Photo 287
Site and Building Improvements

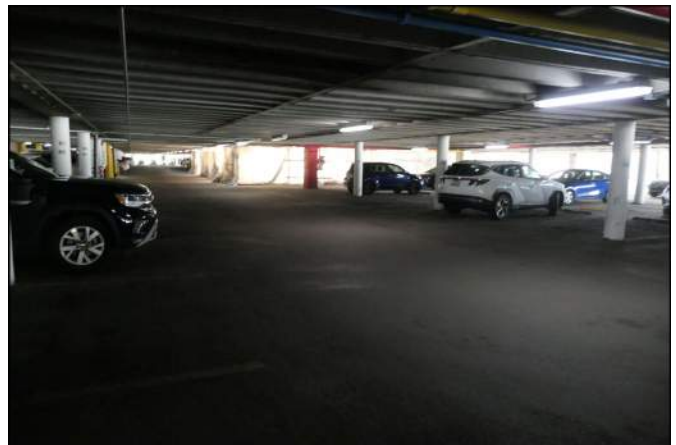


Photo 288
Site and Building Improvements

APPENDIX B

REFERENCE DOCUMENTS

EXCERPTS FROM THE FLORIDA STATUTES

Section 718.112(2)(f): Annual Budget.-

1. The proposed annual budget of estimated revenues and expenses must be detailed and must show the amounts budgeted by accounts and expense classifications, including, at a minimum, any applicable expenses listed in s. 718.504(21). The board shall adopt the annual budget at least 14 days before the start of the association's fiscal year. In the event that the board fails to timely adopt the annual budget a second time, it is deemed a minor violation and the prior year's budget shall continue in effect until a new budget is adopted. A multicondominium association must adopt a separate budget of common expenses for each condominium the association operates and must adopt a separate budget of common expenses for the association. In addition, if the association maintains limited common elements with the cost to be shared only by those entitled to use the limited common elements as provided for in s. 718.113(1), the budget or a schedule attached to it must show the amount budgeted for this maintenance. If, after turnover of control of the association to the unit owners, any of the expenses listed in s. 718.504(21) are not applicable, they do not need to be listed.

- 2a. In addition to annual operating expenses, the budget must include reserve accounts for capital expenditures and deferred maintenance. These accounts must include, but are not limited to, roof replacement, building painting, and pavement resurfacing, regardless of the amount of deferred maintenance expense or replacement cost, and any other item that has a deferred maintenance expense or replacement cost that exceeds \$10,000. The amount to be reserved must be computed using a formula based upon estimated remaining useful life and estimated replacement cost or deferred maintenance expense of the reserve item. In a budget adopted by an association that is required to obtain a structural integrity reserve study, reserves must be maintained for the items identified in paragraph (g) for which the association is responsible pursuant to the declaration of condominium, and the reserve amount for such items must be based on the findings and recommendations of the association's most recent structural integrity reserve study. With respect to items for which an estimate of useful life is not readily ascertainable or with an estimated remaining useful life of greater than 25 years, an association is not required to reserve replacement costs for such items, but an association must reserve the amount of deferred maintenance expense, if any, which is recommended by the structural integrity reserve study for such items. The association may adjust replacement reserve assessments annually to take into account an inflation adjustment and any changes in estimates or extension of the useful life of a reserve item caused by deferred maintenance. The members of a unit-owner-controlled association may determine, by a majority vote of the total voting interests of the association, to provide no reserves or less reserves than required by this subsection. For a budget adopted on or after December 31, 2024, the members of a unit-owner-controlled association that must obtain a structural integrity reserve study may not determine to provide no reserves or less reserves than required by this subsection for items listed in paragraph (g), except that members of an association operating a multicondominium may determine to provide no reserves or less reserves than required by this subsection if an alternative funding method has been approved by the division.

- 2b. Before turnover of control of an association by a developer to unit owners other than a developer under s. 718.301, the developer-controlled association may not vote to waive the reserves or reduce funding of the reserves. If a meeting of the unit owners has been called to determine whether to waive or reduce the funding of reserves and no such result is achieved or a quorum is not attained, the reserves included in the budget shall go into effect. After the turnover, the developer may vote its voting interest to waive or reduce the funding of reserves.
3. Reserve funds and any interest accruing thereon shall remain in the reserve account or accounts, and may be used only for authorized reserve expenditures unless their use for other purposes is approved in advance by a majority vote of all the total voting interests of the association. Before turnover of control of an association by a developer to unit owners other than the developer pursuant to s. 718.301, the developer-controlled association may not vote to use reserves for purposes other than those for which they were intended. For a budget adopted on or after December 31, 2024, members of a unit-owner-controlled association that must obtain a structural integrity reserve study may not vote to use reserve funds, or any interest accruing thereon, for any other purpose other than the replacement or deferred maintenance costs of the components listed in paragraph (g).
4. The only voting interests that are eligible to vote on questions that involve waiving or reducing the funding of reserves, or using existing reserve funds for purposes other than purposes for which the reserves were intended, are the voting interests of the units subject to assessment to fund the reserves in question. Proxy questions relating to waiving or reducing the funding of reserves or using existing reserve funds for purposes other than purposes for which the reserves were intended must contain the following statement in capitalized, bold letters in a font size larger than any other used on the face of the proxy ballot: **WAIVING OF RESERVES, IN WHOLE OR IN PART, OR ALLOWING ALTERNATIVE USES OF EXISTING RESERVES MAY RESULT IN UNIT OWNER LIABILITY FOR PAYMENT OF UNANTICIPATED SPECIAL ASSESSMENTS REGARDING THOSE ITEMS.**

Section 718.112(2)(g): Structural Integrity Reserve Study–

1. A residential condominium association must have a structural integrity reserve study completed at least every 10 years after the condominium's creation for each building on the condominium property that is three stories or higher in height, as determined by the Florida Building Code, which includes, at a minimum, a study of the following items as related to the structural integrity and safety of the building:
 - a. Roof.
 - b. Structure, including load-bearing walls and other primary structural members and primary structural systems as those terms are defined in s. 627.706.
 - c. Fireproofing and fire protection systems.
 - d. Plumbing.
 - e. Electrical systems.
 - f. Waterproofing and exterior painting.
 - g. Windows and exterior doors.
 - h. Any other item that has a deferred maintenance expense or replacement cost that exceeds \$10,000 and the failure to replace or maintain such item negatively affects the items listed in sub-subparagraphs a.-g., as determined by the visual inspection portion of the structural integrity reserve study.
2. A structural integrity reserve study is based on a visual inspection of the condominium property. A structural integrity reserve study may be performed by any person qualified to perform such study. However, the visual inspection portion of the structural integrity reserve study must be performed or verified by an engineer licensed under chapter 471, an architect licensed under chapter 481, or a person certified as a reserve specialist or professional reserve analyst by the Community Associations Institute or the Association of Professional Reserve Analysts.
3. At a minimum, a structural integrity reserve study must identify each item of the condominium property being visually inspected, state the estimated remaining useful life and the estimated replacement cost or deferred maintenance expense of each item of the condominium property being visually inspected, and provide a reserve funding schedule with a recommended annual reserve amount that achieves the estimated replacement cost or deferred maintenance expense of each item of condominium property being visually inspected by the end of the estimated remaining useful life of the item. The structural integrity reserve study may recommend that reserves do not need to be maintained for any item for which an estimate of useful life and an estimate of replacement cost cannot be determined, or the study may recommend a deferred maintenance expense amount for such item. The structural integrity reserve study may recommend that reserves for replacement costs do not need to be maintained for any item with an estimated remaining useful life of greater than 25 years, but the study may recommend a deferred maintenance expense amount for such item.
4. This paragraph does not apply to buildings less than three stories in height; single-family, two-family, or three-family dwellings with three or fewer habitable stories above ground; any portion or component of a building that has not been submitted to the condominium form of ownership; or any portion or component of a building that is maintained by a party other than the association.

Reserve Study Standards[®]™

RSS - RS052023

Terms and Definitions

Adequate Reserves: A replacement reserve fund and stable and equitable multiyear [funding plan](#) that together provide for the reliable and timely execution of the association's major repair and replacement projects as defined herein without reliance on additional supplemental funding.

Capital Improvements: Additions to the association's common area that previously did not exist. While these components should be added to the reserve study for future replacement, the cost of construction or installation cannot be taken from the reserve fund.

Cash Flow Method (also known as pooling): A method of developing a reserve funding plan where funding of reserves is designed to offset the annual expenditures from the reserve fund.

To determine the selected funding plan, different reserve funding plans are tested against the anticipated schedule of reserve expenses until the desired funding goal is achieved.

Common Area: The areas identified in the community association's master deed or declarations of covenant easements and restrictions that the association is obligated to maintain and replace or based on a well-established association precedent.

Community Association: A nonprofit entity that exists to preserve the nature of the community and protect the value of the property owned by members. Membership in the community association is mandatory and automatic for all owners. All owners pay mandatory lien-based assessments that fund the operation of the association and maintain the common area or elements, as defined in the governing documents. The community association is served and lead by an elected board of trustees or directors.

Components: The individually listed projects within the physical analysis which are determined for inclusion using the process described within the component inventory. These components form the building blocks for the reserve study. **Components are selected to be included in the reserve study based on the following three-part test:**

1. The association has the obligation to maintain or replace the existing element.
2. The need and schedule for this project can be reasonably anticipated.
3. The total cost for the project is material to the association, can be reasonably estimated, and includes all direct and related costs.

Component Inventory: The task of selecting and quantifying reserve components. This task can be accomplished through on-site visual observations, review of association design and organizational documents, review of association precedents, and discussion with appropriate representative(s) of the association.

The Reserve Specialist, in coordination with the client, will determine the methodology for including these components in the study. Typical evaluation techniques for consideration include:

- Inclusion of long-life components with funding in the study.
- Addition of long-life components with funding at the time when they fall within the 30-year period from the date of study preparation.

- Identification of long-life components in the component inventory even when they are not yet being funded in the 30-year funding plan.

Component Method (also known as Straight Line): A method of developing a reserve funding plan where the total funding is based on the sum of funding for the individual components.

Condition Assessment: The task of evaluating the current condition of the component based on observed or reported characteristics. The assessment is limited to a visual, non-invasive evaluation.

Effective Age: The difference between [useful life](#) and estimated [remaining useful life](#). Not always equivalent to chronological age since some components age irregularly. Used primarily in computations.

Financial Analysis: The portion of a reserve study in which the current status of the reserves (measured as cash or [percent funded](#)) and a recommended reserve funding plan are derived, and the projected reserve income and expense over a period of time are presented. The financial analysis is one of the two parts of a reserve study. A minimum of 30 years of income and expense are to be considered.

Fully Funded: 100 percent funded. When the actual (or projected) [reserve balance](#) is equal to the fully funded balance.

Fully Funded Balance (FFB): An indicator against which the actual (or projected) reserve balance can be compared. The reserve balance that is in direct proportion to the fraction of life “used up” of the current repair or [replacement cost](#). This number is calculated for each component, and then summed for an association total.

FFB = Current Cost X Effective Age/Useful Life

Example: For a component with a \$10,000 current replacement cost, a 10-year useful life, and effective age of 4 years, the fully funded balance would be \$4,000.

Fund Status: The status of the reserve fund reported in terms of cash or [percent funded](#).

Funding Goals:

The three funding goals listed below range from the most aggressive to most conservative:

Baseline Funding

Establishing a reserve funding goal of allowing the reserve cash balance to approach but never fall below zero during the cash flow projection. This is the funding goal with the greatest risk of being prepared to fund future repair and replacement of major components, **and it is not recommended** as a long-term solution/plan. Baseline funding may lead to project delays, the need for a [special assessment](#), and/or a line of credit for the community to fund needed repairs and replacement of major components.

Threshold Funding

Establishing a reserve funding goal of keeping the [reserve balance](#) above a specified dollar or percent funded amount. Depending on the threshold selected, this funding goal may be weaker or stronger than “fully funded” with respective higher risk or less risk of cash problems. In determining the threshold, many variables should be considered, including things such as

investment risk tolerance, community age, building type, components that are not readily inspected, and components with a [remaining useful life](#) of more than 30 years.

Full Funding

Setting a reserve funding goal to attain and maintain reserves at or near 100 percent funded. Fully funded is when the actual or projected reserve balance is equal to the fully funded balance.

It should be noted that, in certain jurisdictions, there may be statutory funding requirements that would dictate the funding requirements. In all cases, these standards are considered the minimum to be referenced.

Funding Plan: An association's plan to provide income to a reserve fund to offset anticipated expenditures from that fund. The plan must be a minimum of 30 years of projected income and expenses.

Funding Principles: A funding plan addressing these principles. These funding principles are the basis for the recommendations included within the reserve study:

- Sufficient funds when required.
- Stable funding rate over the years.
- Equitable funding rate over the years.
- Fiscally responsible.

Initial Year: The first fiscal year in the financial analysis or funding plan.

Life Estimates: The task of estimating [useful life](#) and [remaining useful life](#) of the reserve components.

Life Cycle Cost: The ongoing cost of deterioration which must be offset in order to maintain and replace common area components at the end of their useful life. Note that the cost of preventive maintenance and corrective maintenance determined through periodic structural inspections (if required) are included in the calculation of life cycle costs and often result in overall net lower life cycle costs.

Maintenance: Maintenance is the process of maintaining or preserving something, or the state of being maintained. Maintenance is often defined in three ways: preventive maintenance, corrective maintenance, and deferred maintenance. Maintenance projects commonly fall short of "replacement" but may pass the defining test of a reserve component and be appropriate for reserve funding. Maintenance types are categorized below:

Preventive Maintenance: Planned maintenance carried out proactively at predetermined intervals, aimed at reducing the performance degradation of the component such that it can attain, at minimum, its estimated useful life.

Deferred Maintenance: Maintenance which is not performed and leads to premature deterioration to the common areas due to lack of preventive maintenance.

This results in a reduction in the remaining useful life of the reserve components and the potential of inadequate funding. Typically, deferred maintenance creates a need for corrective maintenance.

Corrective Maintenance: Maintenance performed following the detection of a problem, with the goal of remediating the condition such that the intended function and life of the component or system is restored, preserved, or enhanced.

Many corrective maintenance projects could be prevented with a proactive, preventive maintenance program. Note that when the scope is minor, these projects may fall below the threshold of cost significance and thus are handled through the operational budget. In other cases, the cost and timing should be included within the reserve study.

Percent Funded: The ratio, at a particular point in time clearly identified as either the beginning or end of the association's fiscal year, of the actual (or projected) [reserve balance](#) to the fully funded balance, expressed as a percentage.

While percent funded is an indicator of an association's reserve fund size, it should be viewed in the context of how it is changing due to the association's reserve funding plan, in light of the association's risk tolerance and is not by itself a measure of "adequacy."

Periodic Structural Inspection: [Structural system](#) inspections aimed at identifying issues when they become evident.

Additional information and recommendations are included within the Condominium Safety Public Policy Report. www.condosafety.com

Physical Evaluation: The portion of the reserve study where the component inventory, condition assessment, and life and [valuation estimate](#) tasks are performed. This represents one of the two parts of the reserve study.

Preventive Maintenance Schedule: A summary of the preventive maintenance tasks included within a maintenance manual which should be performed such that the useful lives of the components are attained or exceeded. This schedule should include both the timing and the estimated cost of the task(s).

Remaining Useful Life (RUL): Also referred to as "remaining life" (RL). The estimated time, in years, that a component can be expected to serve its intended function, presuming timely preventive maintenance. Projects expected to occur in the initial year have zero remaining useful life.

Replacement Cost: The cost to replace, repair, or restore the component to its original functional condition during that particular year, including all related expenses (including but not limited to shipping, engineering, design, permits, installation, disposal, etc.).

Reserve Balance: Actual or projected funds, clearly identified as existing either at the beginning or end of the association's fiscal year, which will be used to fund reserve component expenditures. The source of this information should be disclosed within the reserve study.

Also known as beginning balance, reserves, reserve accounts, or cash reserves. This balance is based on information provided and not audited.

Reserve Study: A reserve study is a budget planning tool which identifies the components that a community association is responsible to maintain or replace, the current status of the reserve fund, and a stable and equitable funding plan to offset the anticipated future major common area expenditures.

This limited evaluation is conducted for budget and cash flow purposes. Tasks outside the scope of a reserve study include, but are not limited to, design review, construction evaluation, intrusive or destructive testing, preventive maintenance plans, and structural or safety evaluations.

Reserve Study Provider: An individual who prepares reserve studies. In many instances, the reserve study provider will possess a specialized designation such as the Reserve Specialist® (RS) designation administered by Community Associations Institute (CAI). This designation indicates that the provider has shown the necessary skills to perform a reserve study that conforms to these standards. In some instances, qualifications in excess of the RS designation will be required if supplemental subject matter expertise is required.

Reserve Study Provider Firm: A company that prepares reserve studies as one of its primary business activities.

Responsible Charge: A Reserve Specialist (RS) in responsible charge of a reserve study shall render regular and effective supervision to those individuals' performing services that directly and materially affect the quality and competence of services rendered by the Reserve Specialist. A Reserve Specialist shall maintain such records as are reasonably necessary to establish that the Reserve Specialist exercised regular and effective supervision of a reserve study of which he or she was in responsible charge. A Reserve Specialist engaged in any of the following acts or practices shall be deemed not to have rendered the regular and effective supervision required herein:

1. The regular and continuous absence from principal office premises from which professional services are rendered; except for performance of field work or presence in a field office maintained exclusively for a specific project;
2. The failure to personally inspect or review the work of subordinates where necessary and appropriate;
3. The rendering of a limited, cursory or perfunctory review of plans or projects in lieu of an appropriate detailed review; and
4. The failure to personally be available on a reasonable basis or with adequate advance notice for consultation and inspection where circumstances require personal availability.

Site Visit: A visual assessment of the accessible areas of the components included within the reserve study.

The site visit includes tasks such as, but not limited to, on-site visual observations, a review of the association's design and governing documents, review of association precedents, and discussion with appropriate representative(s) of the association.

Special Assessment: A temporary assessment levied on the members of an association in addition to regular assessments. Note that special assessments are often regulated by governing documents or local statutes.

Special assessments, when used to make up for unplanned reserve fund shortfalls, may be an indicator of deferred maintenance, improper reserve project planning, and unforeseen catastrophes and accidents, as well as other surprises.

Structural System: The structural components within a building that, by contiguous interconnection, form a path by which external and internal forces, applied to the building, are delivered to the ground. This is generally a combination of structural beams, columns, and bracing and is not included within the reserve study, although it is reviewed as part of the recommended periodic structural inspections.

It is important to recognize that individual structural components which are not a part of the structural system, such as decks, balconies, and podium deck components may be included for reserve funding if they otherwise satisfy the three-part test.

Useful Life (UL): The estimated time, in years, that a reserve component can be expected to serve its intended function if properly constructed presuming proactive, planned, preventive maintenance.

Best practice is that a component's Useful Life should reflect the actual preventive maintenance being performed (or not performed).

Valuation Estimates: The task of estimating the current repair or [replacement costs](#) for the reserve components.

APPENDIX C

QUALIFICATIONS



BUILDING INSPECTION ENGINEERS
PROUDLY SERVING NORTH AMERICA SINCE 1957

Casey Cromer, P.E.
President / Senior Engineer



Casey Cromer is a Professional Engineer and a native of Miami, Florida. Within the Greater Miami area, he has over 10 years of forensic engineering and construction experience and has consulted on projects varying from single-family residences, to high-rise condominiums, to construction collapses. His primary focus has been the building envelope including stucco, fenestrations, roofing, waterproofing, concrete protection, and more.

His practice areas include forensic investigations, expert witness services, litigation support, fenestrations, waterproofing, claddings, roofing, property condition assessments, post-tension cable inspections, aerial drone surveys, and more.

EDUCATION, PROFESSIONAL LICENSES, AND AFFILIATIONS

The University of Central Florida (UCF) – Orlando, Florida

Bachelor of Science, Civil Engineering

Licensed Professional Engineer

State of Florida, No. 87329

ASTM Committee C11 (Gypsum and Related Building Materials and Systems), Voting Member

Stucco Institute – Sealed Stucco System Technician

FAA Certified Remote Pilot (Drone)

WHY I DO WHAT I DO

"I have always been fascinated by buildings and have a knack for problem solving – so what better way to put those two together than engineering! Being able to consult and work on buildings of all sizes has kept my days interesting and the knowledge gained throughout each project has been invaluable."

PROJECT HIGHLIGHTS

Building Envelope Investigations

- Acqualina Resort & Residences (52-story, five-star hotel and residence) – Entire façade (stucco and EIFS) via swing stage and drone for structural integrity of wall claddings, including recommendations and repairs.
- Akoya Condominium (47-story luxury condo) – Entire façade (stucco) via swing stage for structural wall repairs during stucco remediation. Daily inspections to sign off on structural repairs.
- 800 Waterford (250,000 sq. ft. Class-A office) – Entire façade (precast panels and curtainwalls) via swing stage for water tightness including water testing of repaired areas.

Construction Defect Projects

- Represented developers, general contractors, subcontractors, associations, and/or owners.
- Acqualina Mansions, Aria (Longboat Key, FL), Aria on the Bay, Asia Brickell Key, Axis Brickell, Chateau Beach, CitySide (Sarasota, FL), Continuum South Beach, Crimson Condo, Eloquence on the Bay, Fendi Chateau, Jade Ocean, Grove at Grand Bay, Iconbay Condo, Mint Condo, Nine at Mary Brickell, Nordica Condo, Ocean 7, Peninsula Aventura, Toscano at Dadeland, Vista Del Mar (Myrtle Beach, SC), Vizcayne, W South Beach, 1100 Millecento, 321 Ocean, 900 Biscayne...

Structural Collapse Investigations

- Champlain Towers (Surfside, FL) – Investigated and lead team of subject experts for in-service condominium collapse.
- Miami-Dade College Parking Garage – construction collapse investigation to determine collapse origin, original design requirements, and repair feasibility.
- Key West International Airport – Litigation support for a construction collapse.

Property Loss Investigations

- Cause and origin investigations on hundreds of residential and commercial buildings.
- Determine structural and material failures as related to construction defects, storm damage, water intrusion, normal wear and tear, etc.



BUILDING INSPECTION ENGINEERS
PROUDLY SERVING NORTH AMERICA SINCE 1957

H. Alan Mooney, P.E. *Founding President*



Alan Mooney is a civil and structural engineer with over 40 years of experience as a consulting engineer. From 1988 until 2018 he was President and principal owner of Criterium Engineers, a national consulting engineering firm with affiliate offices throughout North America.

His experience includes:

- complex multi-million-dollar engineering and construction projects
- forensic engineering
- construction quality assurance services
- numerous building envelope quality assurance and commissioning projects
- thousands of residential and commercial building inspections

In addition to his own projects, he continues to serve as an advisor/consultant for inspections, structural evaluations, investigative engineering, structural design and trainer for the Criterium Engineers staff.

As a structural engineer, he has designed a variety of structures in wood, concrete and steel. These structures include bridges, multi-story buildings, parking garages and marine facilities.

Mr. Mooney has also established an impressive track record as a noted seminar leader and author, both locally and nationally, on construction-related issues, construction quality, and building inspection procedures and standards.

EDUCATION AND PROFESSIONAL AFFILIATION

Rutgers University, New Brunswick, NJ – 1969
Bachelors of Science, Civil Engineering

Licensed Professional Engineer in ME, NH, VT, MA, CT, NY, NC, NJ, AZ, NV, FL, KS, WA
CAI Reserve Specialist (RS)
Licensed Reserve Study Specialist in NV

CAI (Community Associations Institute)
ASCE (American Society of Civil Engineers)
The Order of the Engineer

WHY I DO WHAT I DO

"Building technology is always changing; keeping up is an exciting challenge. Diagnosing problems means using good judgment and capitalizing on years of experience. It's even more challenging and exciting because every client's needs are different. What we do represents the essence of being a professional engineer."

WHY CRITERIUM ENGINEERS

"I founded Criterium Engineers to allow other engineers to discover their full potential as professionals."

SELECT PROJECT HIGHLIGHTS

- **Silo Point, Baltimore, Maryland** – provided transition study and follow-up consulting for a unique, high-end condominium complex involving the conversion of an abandoned grain handling complex.
- **Sun City Anthem, Las Vegas, Nevada** – provided comprehensive reserve fund study for a large (10,000 residents), high end home owner association in Las Vegas.
- **San Diego Airport Expansion** – envelope commissioning
- **Phoenix Sky Harbor Airport** – envelope quality assurance
- **IKEA** – facilities review of all locations in the U.S.
- **Wimar-Tahoe** – provided expert testimony for building performance in a \$100 million dispute involving a Lake Tahoe casino complex.
- **American Residential Properties** – provided property evaluation reports for a national client purchasing thousands of homes as rental properties across the country

EXPERIENCE HIGHLIGHTS

- 30 years' experience as a construction quality consultant including collaboration with several major builders to develop effective quality assurance programs.
- 30 years' experience as a construction expert in construction disputes, including serving as an expert witness on numerous occasions.
- Has performed more than 15,000 building inspections personally
- Criterium Engineers now performs over 20,000 building inspections annually to standards Mr. Mooney developed and refines on an ongoing basis
- Founding president of the National Academy of Building Inspection Engineers (NABIE), 1989-1993.
- Co-author of the NABIE Standards of Practice for Home Inspections
- Author of the National Association of Home Builders (NAHB) Quality Construction for the Master Builder
- 30 years experience as a seminar leader; presented seminars to builders, appraisers, real estate agents in more than 30 states
- National and regional speaker for CAI conferences
- Chosen Speaker of the Year by the Dallas, TX chapter of the Community Associations Institute (CAI), 2001