

Phase I Structural Assessments Phase II Structural Forensic Evaluations Structural Intergrity Reserve Studies

August 25, 2023

Janette Barcena The Landing Condominium Association, Inc. 953 Salt Pond Place Altamonte Springs, Florida 32714

Re: The Landing Condominiums – Building 9 Structural Integrity Reserve Study (SIRS) 957 Salt Pond Place Altamonte Springs, FL 32714 UES Project No: 0811.2300006.0000

Dear Ms. Barcena:

UES Milestone Inspections, LLC (UES) has completed the mandatory Structural Integrity Reserve Study ("SIRS") as required for condominiums and cooperative buildings for the above referenced property. UES's assessment was performed in general accordance with Florida Statute (FS)718.112(2)(g) (or 719.106(3)(k) for Cooperatives) (effective May 26, 2022) and local requirements of the Authority Having Jurisdiction (AHJ).

Please contact the undersigned if you have any questions concerning UES's Structural Integrity Reserve Study. UES appreciates this opportunity to provide professional services to The Landing Condominium Association, Inc. Pursuant to FS 553.899; UES provides herein a Summary of Material Findings and Recommendations.

Respectfully Submitted, UES Milestone Inspections, LLC Registry #36640

This item has been digitally signed and sealed by Miguel A. Santiago P.E., S.I. and digitally signed by Ricardo Solis, P.E. on the date indicated here. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Miguel A. Santiago, P.E., S.I. Principal Engineer Florida Professional Engineer No. 74520 <u>MSantiago1@teamues.com</u> Ricardo Solis, P.E. Structural Engineer Florida Professional Engineer No. 95850 <u>RSolis@teamues.com</u>

TABLE OF CONTENTS

1.0	INTRODUCTION	•
2.0	EXECUTIVE SUMMARY	•
3.0	PURPOSE AND SCOPE OF SERVICES	
4.0	LEVEL OF SERVICE	6
5.0	SOURCES OF INFORMATION	6
6.0	PROPERTY DESCRIPTION	ł
7.0	COMMON COMPONENTS	ł
8.0	STRUCTURAL INTEGRITY RESERVE STUDY ITEMS4	ł
8.1	Roof4	ŀ
8.2 stru	Structure, including Load-bearing walls and other Primary Structural Members and primary ctural systems5	
8.3	Fireproofing and Fire Protection Systems5	,
8.4	Plumbing6	,
8.5	Electrical Systems6	,
8.6	Waterproofing and Exterior Painting6	;
8.7	Windows and Exterior Doors7	,
8.8	Deferred Maintenance Items as dictated by Florida Statute (FS)553.899.	,
9.0	CURRENT DEFICIENCIES	,
10.0	EXPECTED LIFE AND VALUATION	,
10.1	Opinions of Useful Life	,
10.2	Estimates of Cost8	,
11.0	FINANCIAL ANALYSIS	,
11.1	Reserve expenditure projections9	1
11.2	Current Funding9	1
12.0	STANDARD OF CARE AND WARRANTIES)

APPENDICES

Common Area Building Component Inventory, Financial Exhibits, Reserve Report	A
Site Location Map	В
Photographs	
Qualifications of Key Personnel	

1.0 INTRODUCTION

Per authorization of UES proposal 2211.0223.00049, sent June 20, 2023, by The Landing Condominium Association, Inc., UES has conducted a Structural Integrity Reserve Study (SIRS) of the 12-unit residential condominium building located at 957 Salt Pond Place, Altamonte Springs, Florida 32714.

This report must be reviewed in its entirety to understand UES findings and their limitations. The Appendices are an integral part of this report and must be included during review. Please refer to the Appendices for definitions of common terms of reference used within.

UES has conducted the reserve study in general accordance with the National Reserve Study Standards published by the Association of Professional Reserve Analysts (APRA) and in general accordance with Florida Statute 718.112(2)(g)(or 719.106(3)(k) for Cooperatives) (effective May 26, 2022) and local requirements of the Authority Having Jurisdiction (AHJ).

This study was conducted by a Florida licensed Professional Engineer(s). Please refer to **Appendix D** for the qualifications of the project team.

UES's professionals Ricardo Solis, P.E. and Justin Szafranski, E.I. performed this study and visited the site on July 19, 2023. This report is principally based on UES's visual inspection of The Landing Condominium Building 9 and a review of relevant association documents.

In reviewing the engineering assumptions, cost estimates and projected fund values herein, UES understands their accuracy will likely vary beyond Year 5. Long-term physical plant maintenance projections are intended only to indicate the pattern of reserve expenditures and to guide financial planning. UES agrees with the Association of Professional Reserve Analyst recommendations that reserve studies should be updated regularly to allow periodic adjustment of facility plans and funding strategies.

PLEASE NOTE THAT PURSUANT TO FS 718.112(2)(G) (OR 719.106(3)(K) FOR COOPERATIVES) AN 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 A RESULT, THE NEXT SIRS WILL NEED TO BE COMPLETED BY:

AUGUST 25, 2033

2.0 EXECUTIVE SUMMARY

In summary, as a result of UES's site inspection, we find the common area components to be in fair general condition. UES observed some deficiencies which are noted in subsequent sections herein. UES has included an inventory of "common area" components the Association has responsibility over which will require periodic repair or replacement over the term of this evaluation. UES has developed the opinions of the remaining useful life of each component and has estimated their current cost of required reserve expenditures for their repair or replacement. UES's projections have been included as annual reserves over its estimated remaining useful life.

3.0 PURPOSE AND SCOPE OF SERVICES

An association must have a **Structural Integrity Reserve Study (SIRS)** 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 which includes, at a minimum, a study of the following items as related to the structural integrity and safety of the building:

- Roof.
- Structure, including load-bearing walls and other primary structural members and primary structural systems as those terms are defined in s. <u>627.706</u>.
- Fireproofing and fire protection systems.
- Plumbing.
- Electrical systems.
- Waterproofing and exterior painting.
- Windows and exterior doors.
- 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 as determined by the visual inspection portion of the structural integrity reserve study.

Integration into any existing association reserve fund summaries is NOT included in this scope.

The assessment was based on non-intrusive, non-destructive observations of the readily accessible areas of the property and the information available at the time of UES's site visit. Therefore, UES's descriptions, conclusions and recommendations were based solely on the observations of the various components and experience with similar projects. UES makes no representations that this report is a building code, safety, regulatory, environmental, or all-encompassing compliance inspection report.

The intent of this reserve study is to determine a structural integrity reserve needs plan for the Association, evaluate the current rate of contribution to the reserve fund, and, if required, to suggest alternate funding strategies. This study is in addition to the full reserve study required by (FS)718.301(4)(p).

This report is intended to be used as a tool by the Association's Board for considering and managing its future financial obligations, for determining appropriate reserve fund allocations, and for informing the individual Owners of the Association's required reserve expenditures and the resulting financial opinion.

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

- Operation and maintenance (O&M) of commonly held elements of real property and other assets. These O&M expenses usually include taxes, insurance, property management costs and other service fees.
- Reserve expenditures for major periodic repairs or replacement of commonly- held elements.

Normal, recurring O&M costs are typically paid by the individual Owners through periodic assessments or service fees equal to their share of the annual budget, which is estimated based on cost projections of either actual or average levels of expense. Some additional contingency amounts may be included in annual O&M budgets to result in a year-end surplus which is carried forward year-to-year to cover variations in annual costs or any uninsured losses. This carry-over is often referred to as an operating reserve.

These O&M costs, the funding and operating reserves are not typically considered by a Reserve Study. Long-term reserve expenditures, the funding plan and ensuring adequate Reserve Fund balances are the focus of this Reserve Study. Studies of this nature are important to ensure that a community will have sufficient funds for long-term, periodic reserve expenditure requirements to help preserve the value of the community and the units within it.

4.0 LEVEL OF SERVICE

Per the Association of Professional Reserve Analysts (APRA) there are three levels of Service

- I. Full Study
- II. Update with Site Visit Study
- III. Update without Site Visit Study

For the purpose of this evaluation, UES has conducted a full study which has included the evaluation of common area elements as dictated by Florida Statute (FS) 718.112(2)(g) (or 719.106(3)(k) for Cooperatives) (effective May 26, 2022) and local requirements of the Authority Having Jurisdiction (AHJ).

5.0 SOURCES OF INFORMATION

The following people were interviewed during UES's study: Property manager Janette Barcena and maintenance workers Alex and Austin.

The interiors of the units were not inspected at the time of inspection.

The following documents/information was provided:

- Estimate for building exterior painting project, dated October 2, 2019.
- Exhibit B Roof total amounts for individual buildings.

UES engineers determined expected and replacement useful lives (EUL & RUL) of the common area components required as part of the SIRS and cost estimates for reserve expenditure budgets based on UES's evaluation of actual conditions and experience with similar building systems. In addition, UES also utilizes the following industry publications for data:

- On-Line RS Means Construction Cost Data
- Fannie Mae Expected Useful Life Tables
- National Association of Home Builders Life Expectancy of Components

6.0 **PROPERTY DESCRIPTION**

The Landing Condominiums – Building 9 is located at 957 Salt Pond Place, Altamonte Springs, FL 32714 in Seminole County. The building is 1 of 18 residential condominiums located on the property. Building 9 consists of 3 floors with 4 condominium units on each floor.

The primary vehicle entrances are off of Great Pond Drive at the east of the property via a paved driveway. Additionally, there are asphalt-paved drives and surface parking areas located throughout the property.

Building 9 has a wood framed superstructure with a combination of wood beams, wood shear walls, and prefabricated wooden floor and roof trusses.

Underground utility services include public water and sewer, including fire hydrants, electric power, telephone, and broadband cable.

Landscaping consists of trees, shrubs, and grassy areas along the perimeter of the building.

7.0 COMMON COMPONENTS

Please refer to **Appendix A** for UES's Common Area Component Inventory. Condominium Association common components include:

- Building structure
- Roof.
- Common hallways/balconies.
- Common stairwells.
- Building perimeter.
- Site landscaping including trees, shrubs, landscaping planters, fountains, hardscape, and lawns.

Individual Unit Owners are responsible for maintenance & repairs of their units including the mechanical, plumbing, electrical components, doors, and windows within their respective units.

8.0 STRUCTURAL INTEGRITY RESERVE STUDY ITEMS

8.1 ROOF

Description and Observations

The roof system of the building is composed of architectural asphalt shingles. At the time of inspection, no damage was observed in the roof system. The roof system was observed to be in good condition.

Common Components and Required Reserve Expenditures

An asphalt shingle roof with proper installation, care, and maintenance has an average expected useful life (EUL) of 20 years. Proper maintenance includes but not limited to visually inspecting the roof at least once a year to ensure water is properly draining, inspecting shingles after every strong thunderstorm, trim branches that overhang the roof, and ensuring flashing at penetrations are not damaged or loose. See **Appendix A** for estimated cost and estimated contributions required.

8.2 STRUCTURE, INLCUDING LOAD-BEARING WALLS AND OTHER PRIMARY STRUCTURAL MEMBERS AND PRIMARY STRUCTURAL SYSTEMS

Description and Observations

Pursuant to FS 627.706, "Primary structural member" means a structural element designed to provide support and stability for the vertical or lateral loads of the overall structure and "Primary structural system" means an assemblage of primary structural members.

The building consists of exterior and interior wood framing walls and wood beams. The exterior walls are sheathed in plywood and stucco finished. The floor systems consist of prefabricated wooden floor trusses at the elevated units and reinforced concrete slabs at the elevated exterior stairway landings, walkways, and balconies. The roof framing system consists of prefabricated wooden roof trusses. The stairways consist of steel stringers with precast reinforced concrete steps. At the time of inspection, damage to the wood beam located at the balcony edge of Unit 201 was observed (Photograph No. 10). Damage was observed to the metal balcony and stairway landing edge flashing in multiple locations (Photographs No. 11 through 13). Cracks in the elevated concrete slabs were observed in multiple locations (Photograph No. 16). Cracks were observed in the precast concrete steps in multiple locations (Photographs No. 18). Corrosion and damage to the metal handrails was observed in the south stairway (Photograph No. 19). See **Appendix C** for refence site photographs.

Common Components and Required Reserve Expenditures

A wood-framed structure and exterior reinforced concrete slabs with proper maintenance has a life span expectancy of 50 to 100 years. Proper maintenance includes but not limited to visually inspecting the exterior at least once a year to ensure water is properly shedding away from the building and evaluating the condition of the sealant material around penetrations and openings. Additional proper maintenance includes, repainting the building, annual visual inspection of all concrete slabs looking for signs of spalled concrete, cracks, and exposed steel reinforcement, and annual visual inspection of exposed wood framing members looking for signs of wood decay and wood deterioration. See **Appendix A** for estimated cost and estimated contributions required.

8.3 FIREPROOFING AND FIRE PROTECTION SYSTEMS

Description and Observations

The fire protection system of the building consists of a wet pipe fire sprinkler system with sprinkler heads located in the units. In addition, a riser system and fire alarm are located at the exterior of the building. No issues or concerns were observed or reported at the time of inspection.

Common Components and Required Reserve Expenditures

Fire protection systems have a life expectancy of 40 to 50 years with proper maintenance. However, corrosion issues can cause wet water systems (sprinkler systems) to start failing in 15 to 25 years. Proper maintenance includes but is not limited to routine inspections by a certified technician that looks for signs of wear and tear, corrosion, and damaged parts. See **Appendix A** for estimated cost and estimated contributions required.

8.4 PLUMBING

Description and Observations

The plumbing system of the building was limited to visible inspection. Based on the age of the building, the plumbing system is likely PVC. No issues or concerns were observed or reported at the time of inspection.

Common Components and Required Reserve Expenditures

Plumbing systems have a life expectancy of 50 years with proper maintenance. Proper maintenance includes but not limited to routine inspections by certified personnel that looks for signs of damage or corrosion, and assuring all plumbing fixtures work properly. See **Appendix A** for estimated cost and estimated contributions required.

8.5 ELECTRICAL SYSTEMS

Description and Observations

The visible electrical systems inspected at the time of inspection included electrical meters, main disconnects, air conditioning disconnects on each unit, and electrical conduits. At the time of inspection, no damage or deficiencies were observed to the electrical systems.

Common Components and Required Reserve Expenditures

Electrical systems have a life expectancy of 20 to 30 years with proper maintenance. Proper maintenance includes not limited to routine inspections by certified personnel who examines the condition of circuit breakers, ensures all connections are proper, and spot checks electrical components to ensure they are properly working. See **Appendix A** for estimated cost and estimated contributions required.

8.6 WATERPROOFING AND EXTERIOR PAINTING

Description and Observations

The exterior finishes of the building consists of painted stucco finishes. At the time of inspection, cracks and damage to the exterior stucco finishes were observed in multiple locations (Photographs No. 13 through 15). Overall, the general condition of the exterior finishes is in good condition. See **Appendix C** for refere site photographs.

Common Components and Required Reserve Expenditures

Waterproofing and exterior paint have a life expectancy of approximately 7 to 10 years with proper maintenance. Proper maintenance includes but not limited to pressure washing exterior surfaces, routine inspections of exterior finishes to ensure paint peeling, bubbling and other imperfections are not present, and to seal all cracks and gaps with proper sealant. See **Appendix A** for estimated cost and estimated contributions required.

8.7 WINDOWS AND EXTERIOR DOORS

Description and Observations

The building has no common windows or doors. All windows and exterior doors are the unit owner's responsibility.

8.8 DEFERRED MAINTENANCE ITEMS AS DICTATED BY FLORIDA STATUTE (FS)553.899.

Description and Observations

There are no additional deferred maintenance items in which failure to replace or maintain would negatively affect the items listed above.

9.0 CURRENT DEFICIENCIES

Based on UES's observations, UES identified the following construction deficiency, which may require corrective action:

- Damage to the wood beam located at the balcony edge of Unit 201 was observed. See Appendix
 C Photograph No. 10.
- Damage was observed to the metal balcony and stairway landing edge flashing in multiple locations. See **Appendix C** Photographs No. 11 through 13.
- Cracks and damage to the exterior stucco finishes were observed in multiple locations. See **Appendix C** Photographs No. 13 through 15.
- Cracks in the elevated concrete slabs were observed in multiple locations. See **Appendix C** Photograph No. 16.
- Separation of the steel framing from the stairway landing slab was observed located in the south stairway. See **Appendix C** Photographs No. 17 and 18.
- Cracks were observed in the precast concrete steps in multiple locations. See **Appendix C** Photographs No. 18.
- Corrosion and damage to the metal handrails was observed in the south stairway. See Appendix
 C Photograph No. 19.

10.0 EXPECTED LIFE AND VALUATION

10.1 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 (EUL) for the type of feature:

Component's Frequency of Reserve Expenditure = Component's EUL

The remaining useful life (RUL) of a component before the next reserve expenditure for its repair or replacement is equal to the difference between its EUL and its age:

RUL = EUL – AGE

The condition and rate of deterioration of actual site improvements and building elements rarely conform to such simple analysis. And, often, a property's history and available documentation does not provide any record of a particular component's actual age.

In UES's experience, the effective age and actual RUL of an installed item 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. UES's opinion of the effective age, EUL and RUL of each common component included in the SIRS is based on UES's evaluation of its existing condition and consideration of the aforementioned factors.

As a result, in preparing the Reserve Expenditure schedule for the SIRS, UES factored in the following considerations:

- Accelerate the schedule of work for components found to be in poorer condition than expected for their age.
- Defer work for components observed to be in unusually good condition.

In reality, reserve repair and replacement work for some components is often spread over a number of years. This may be done because not all on-site installations of a particular type of component age or deteriorate at the same rate; Or work may be scheduled in phases to limit disruption or ease cash flow.

For these reasons, when it seems appropriate, UES will spread some budgets over multiple years. However, it is beyond the scope of this reserve study to prioritize the need for work between a number of buildings or installed locations or to closely specify or breakdown phased work packages.

In summary, UES has based these opinions of the remaining service life and expected frequency and schedule of repair for each common component on some or all of the following:

- Actual or assumed age and observed existing condition
- Association's or Property Manager's maintenance history and plan
- UES experience with actual performance of such components under similar service and exposure
- UES experience managing the repairs and replacements of such components. The following documentation was used as a guide for UES's considerations:
 - Fannie Mae Expected Useful Life Tables
 - National Association of Home Builders Life Expectancy of Components

10.2 ESTIMATES OF COST

In developing UES's estimate of reserve expenditure for most common components included in the SIRS, UES has estimated a quantity of each item and a unit cost 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'. Unless directed to take a different approach, UES assumes that contract labor will perform the work and apply appropriate installers mark-ups on supplied material and equipment. When required, UES's estimated costs include demolition and disposal of existing materials, and protection of other portions of the property. When appropriate for large reserve projects, UES has included soft costs for design and project management, and typical general contractor's cost for general conditions, supervision,

overhead and profit. UES's opinions of unit and lump sum costs are based on some or all the following:

- Records of previous maintenance expenses
- Previously solicited Vendor quotations or Contractor proposals
- Provided reserve budgets developed by others
- UES project files on repairs and replacements at other properties

In addition, UES uses the following publications to guide the considerations:

- On-Line R S Means Construction Cost Data
- Marshall & Swift Valuation Service Facility Cost Index

Annual aggregated reserve expenditure budgets have been calculated for all years during the study period by inflating the annual amounts of current dollar cost estimates and compounding for inflation at 3.0% per year.

11.0 FINANCIAL ANALYSIS

Please refer to **Appendix A** which contains UES's outline illustrating the findings.

11.1 RESERVE EXPENDITURE PROJECTIONS

Based on UES's explorations and estimates described in Section 8 of this report, UES has identified likely reserve expenditures throughout the term.

In summary, the 30-year total of projected reserve expenditure budgets, at an inflation rate of 3% is \$516,809.

11.2 CURRENT FUNDING

UES's analysis is based on initial information provided by the Association's Board. The parameters of the analysis are listed below:

- Fiscal year Starting Date: January 1st, 2024
- For Designated Year: 2053
- Starting Balance: \$14,102
- Proposed Contribution Rate: \$12,647.96 per year
- Planned Increases: 3% per year
- Planned Special Assessments: NA
- Projected Average Return on Investment: NA
- Projected Rate of Inflation: 3%

12.0 STANDARD OF CARE AND WARRANTIES

UES performed the **Structural Integrity Reserve Study (SIRS)** as defined in (FS) 719.103(24), using methods and procedures and practices conforming to Florida Statute (FS) 718.112(2)(g) (or 719.106(3)(k) for Cooperatives) (effective May 26, 2022) and local requirements of the AHJ.

UES warrants that the findings contained in this report have been formulated within a reasonable degree of engineering certainty. These opinions were based on a review of the available information, associated research, onsite observations, as well as UES's education, knowledge, training, and experience. UES reserves the right to revise or update any of the assessments and/or opinions within this report as conditions change or additional information becomes available. UES's design professionals performed these professional services in accordance with the standard of care used by similar professionals in the community under similar circumstances.

The methodologies include reviewing information provided by other sources. UES treats information obtained from the document reviews and interviews concerning the property as reliable, note UES is not required to independently verify the information as provided. Therefore, UES cannot and does not warrant or guarantee that the information provided by these other sources is accurate or complete.

No other warranties are expressed or implied.

APPENDIX A COMMON AREA BUILDING COMPONENT INVENTORY FINANCIAL EXHIBITS RESERVE REPORT

The Landing Condominiums - Building 9 Altamonte Springs, Florida **RA Threshold Funding Model Summary**

		Report Parameters
Report Date	August 25, 2023	Inflation 3.00%
		Annual Assessment Increase 3.00%
Budget Year Beginning Budget Year Ending	January 1, 2024 December 31, 2024	Interest Rate on Reserve Deposit 0.00%
Total Units	12	2024 Beginning Balance \$14,102

Threshold Funding Model Summary

- This is a 12 unit condominium that is located at 957 Salt Pond Place, Altamonte Springs, FL 32714.
- A pooled reserve balance of \$253,843.34 (Total for all 18 buildings) for the condominium association was provided to UES by Janette Barcena.
- The starting balace is 1/18th of the pooled reserve balance provided.

Threshold Funding Model Summary of Calculations	
Required Annual Contribution	\$12,647.96
\$1,054.00 per unit annually	
Average Net Annual Interest Earned	\$0.00
Total Annual Allocation to Reserves	\$12,647.96
\$1.054.00 per unit annually	



The Landing Condominiums - Building 9 RA Threshold Funding Model Projection

Beginning Balance: \$14,102

U		,			Projected	Fully	
	Current	Annual	Annual	Annual	Ending	Funded	Percent
Year	Cost	Contribution	Interest	Expenditures	Reserves	Reserves	Funded
2024	55,650	12,648		13,500	13,250	27,076	49%
2025	57,319	13,027		7,725	18,552	32,118	58%
2026	59,039	13,418		7,957	24,014	37,437	64%
2027	60,810	13,821		19,123	18,712	31,791	59%
2028	62,635	14,235		8,441	24,506	37,366	66%
2029	64,514	14,662		8,695	30,474	43,246	70%
2030	66,449	15,102		17,314	28,262	40,837	69%
2031	68,442	15,555		9,224	34,594	47,112	73%
2032	70,496	16,022		9,501	41,115	53,726	77%
2033	72,611	16,503		9,786	47,832	60,695	79%
2034	74,789	16,998		31,582	33,248	45,885	72%
2035	77,033	17,508		10,382	40,374	52,945	76%
2036	79,344	18,033		10,693	47,714	60,387	79%
2037	81,724	18,574		11,014	55,273	68,228	81%
2038	84,176	19,131		11,344	63,060	76,485	82%
2039	86,701	19,705		50,868	31,898	44,818	71%
2040	89,302	20,296		23,268	28,926	41,181	70%
2041	91,981	20,905		28,925	20,906	32,178	65%
2042	94,740	21,532		12,768	29,670	40,133	74%
2043	97,583	22,178		13,151	38,697	48,536	80%
2044	100,510	22,844		24,382	37,158	46,246	80%
2045	103,525	23,529		13,952	46,735	55,271	85%
2046	106,631	24,235		14,371	56,599	64,796	87%
2047	109,830	24,962		14,802	66,759	74,842	89%
2048	113,125	25,711		35,574	56,896	64,496	88%
2049	116,519	26,482		15,703	67,674	75,027	90%
2050	120,014	27,276		31,271	63,680	70,583	90%
2051	123,615	28,095		16,660	75,115	81,820	92%
2052	127,323	28,938		17,159	86,894	93,668	93%
2053	131,143	29,806		17,674	99,025	106,154	93%



The Landing Condominiums - Building 9 RA Component Funding Model Assessment & Category Summary

		A Constant of the second secon		×	SOCK	0 X	and a series	, ,
Description		2 - CALL CONT	128 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Act.	Recht - Constitution	CHERT COST	Robert Contraction	En England
Plumbing								
Plumbing Syst. Ro Plumbing - Tot	outine Maint. and Insp. tal	2024	1	0	0	$\frac{2,500}{$2,500}$	$\frac{2,500}{$2,500}$	$\frac{2,500}{$2,500}$
Roofing								
Asphalt Shingle R Roofing - Tota		2039	20	0	15	$\frac{25,150}{\$25,150}$	0	$\frac{6,287}{\$6,287}$
Painting								
Exterior Painting		2027	7	0	3	10,000	602	5,714
Stucco Repairs Painting - Tota	1	2030	10	0	6	<u>7,000</u> \$17,000	$\frac{0}{\$602}$	$\frac{2,800}{\$8,514}$
Structural Co	mponents							
Concrete and Stai	rway Repairs	2024	10	0	0	3,000	3,000	3,000
Wood Framing Re Structural Com	epairs nponents - Total	2024	10	0	0	$\frac{3,000}{\$6,000}$	<u>3,000</u> \$6,000	<u>3,000</u> \$6,000
Electrical Syst	tems							
Elect. Syst. Routin Electrical Syste	ne Maint & Insp.	2024	1	0	0	$\frac{2,500}{$2,500}$	$\frac{2,500}{$2,500}$	$\frac{2,500}{$2,500}$
Fire Protective Fire Protective Sy Fire Protective		2024	1	0	0	<u>2,500</u> \$2,500	<u>2,500</u> \$2,500	$\frac{2,500}{$2,500}$
		Total	Asset Sı	ımmar	у	\$55,650	\$14,102	\$28,302
			<mark>t Fully F</mark>		50%			
	Current Average Liability	v per Unit (To	otal Unit	s: 12)	-\$1,1	83		



Description	Expenditures
No Replacement in 2024	
Replacement Year 2025	
Concrete and Stairway Repairs	3,090
Elect. Syst. Routine Maint & Insp. Fire Protective Syst. Maintenance	2,575 2,575
Plumbing Syst. Routine Maint. and Insp.	2,575
Wood Framing Repairs	3,090
Total for 2025	\$13,905
Replacement Year 2026	
Elect. Syst. Routine Maint & Insp.	2,652
Fire Protective Syst. Maintenance	2,652
Plumbing Syst. Routine Maint. and Insp.	2,652
Total for 2026	\$7,957
Replacement Year 2027	
Elect. Syst. Routine Maint & Insp.	2,732
Exterior Painting	10,927
Fire Protective Syst. Maintenance	2,732
Plumbing Syst. Routine Maint. and Insp.	2,732
Total for 2027	\$19,123
Replacement Year 2028	
Elect. Syst. Routine Maint & Insp.	2,814
Fire Protective Syst. Maintenance	2,814
Plumbing Syst. Routine Maint. and Insp.	2,814
Total for 2028	\$8,441
Replacement Year 2029	
Elect. Syst. Routine Maint & Insp.	2,898
Fire Protective Syst. Maintenance	2,898
Plumbing Syst. Routine Maint. and Insp.	$\frac{2,898}{2,898}$
Total for 2029	\$8,695



Replacement Year 2030	
Elect. Syst. Routine Maint & Insp.	2,985
Fire Protective Syst. Maintenance	2,985
Plumbing Syst. Routine Maint. and Insp.	2,985
Stucco Repairs	8,358
Total for 2030	\$17,314
Replacement Year 2031	
Elect. Syst. Routine Maint & Insp.	3,075
Fire Protective Syst. Maintenance	3,075
Plumbing Syst. Routine Maint. and Insp.	3,075
Total for 2031	\$9,224
Replacement Year 2032	2 167
Elect. Syst. Routine Maint & Insp.	3,167
Fire Protective Syst. Maintenance Plumbing Syst. Routine Maint. and Insp.	3,167
	3,167
Total for 2032	\$9,501
Replacement Year 2033	
Elect. Syst. Routine Maint & Insp.	3,262
Fire Protective Syst. Maintenance	3,262
Plumbing Syst. Routine Maint. and Insp.	3,262
Total for 2033	\$9,786
Replacement Year 2034	2 260
Elect. Syst. Routine Maint & Insp.	3,360
Exterior Painting Fire Protective Syst. Maintenance	13,439 3,360
Plumbing Syst. Routine Maint. and Insp.	3,360
Total for 2034	\$23,519
Replacement Year 2035	
Concrete and Stairway Repairs	4,153
Elect. Syst. Routine Maint & Insp.	3,461



Description	Expenditures
Replacement Year 2035 continued Fire Protective Syst. Maintenance Plumbing Syst. Routine Maint. and Insp. Wood Framing Repairs	3,461 3,461 4,153
Total for 2035	\$18,687
 Replacement Year 2036 Elect. Syst. Routine Maint & Insp. Fire Protective Syst. Maintenance Plumbing Syst. Routine Maint. and Insp. Total for 2036 	3,564 3,564 3,564 \$10,693
Replacement Year 2037	
Elect. Syst. Routine Maint & Insp. Fire Protective Syst. Maintenance Plumbing Syst. Routine Maint. and Insp. Total for 2037	3,671 3,671 <u>3,671</u> \$11,014
Replacement Year 2038	
Elect. Syst. Routine Maint & Insp. Fire Protective Syst. Maintenance Plumbing Syst. Routine Maint. and Insp. Total for 2038	3,781 3,781 <u>3,781</u> \$11,344
10tai 101 2030	\$11,577
Replacement Year 2039Asphalt Shingle Roof ReplacementElect. Syst. Routine Maint & Insp.Fire Protective Syst. MaintenancePlumbing Syst. Routine Maint. and Insp.Total for 2039	39,183 3,895 3,895 <u>3,895</u> <u>\$50,868</u>
10tal 101 2037	\$30,000
Replacement Year 2040 Elect. Syst. Routine Maint & Insp. Fire Protective Syst. Maintenance Plumbing Syst. Routine Maint. and Insp.	4,012 4,012 4,012



Description	Expenditures
Replacement Year 2040 continued	
Stucco Repairs	11,233
Total for 2040	\$23,268
Replacement Year 2041	
Elect. Syst. Routine Maint & Insp.	4,132
Exterior Painting	16,528
Fire Protective Syst. Maintenance	4,132
Plumbing Syst. Routine Maint. and Insp.	4,132
Total for 2041	\$28,925
Replacement Year 2042	
Elect. Syst. Routine Maint & Insp.	4,256
Fire Protective Syst. Maintenance	4,256
Plumbing Syst. Routine Maint. and Insp.	4,256
Total for 2042	\$12,768
Replacement Year 2043	
Elect. Syst. Routine Maint & Insp.	4,384
Fire Protective Syst. Maintenance	4,384
Plumbing Syst. Routine Maint. and Insp.	4,384
Total for 2043	\$13,151
Replacement Year 2044	
Elect. Syst. Routine Maint & Insp.	4,515
Fire Protective Syst. Maintenance	4,515
Plumbing Syst. Routine Maint. and Insp.	4,515
Total for 2044	\$13,546
Replacement Year 2045	
Concrete and Stairway Repairs	5,581
Elect. Syst. Routine Maint & Insp.	4,651
Fire Protective Syst. Maintenance	4,651
Plumbing Syst. Routine Maint. and Insp.	4,651
Wood Framing Repairs	5,581
Total for 2045	\$25,114



Description	Expenditures
Replacement Year 2046 Elect. Syst. Routine Maint & Insp.	4,790
Fire Protective Syst. Maintenance	4,790
Plumbing Syst. Routine Maint. and Insp.	4,790
Total for 2046	\$14,371
Replacement Year 2047	
Elect. Syst. Routine Maint & Insp.	4,934
Fire Protective Syst. Maintenance	4,934
Plumbing Syst. Routine Maint. and Insp.	4,934
Total for 2047	\$14,802
Replacement Year 2048	
Elect. Syst. Routine Maint & Insp.	5,082
Exterior Painting	20,328
Fire Protective Syst. Maintenance	5,082
Plumbing Syst. Routine Maint. and Insp.	5,082
Total for 2048	\$35,574
Replacement Year 2049	
Elect. Syst. Routine Maint & Insp.	5,234
Fire Protective Syst. Maintenance	5,234
Plumbing Syst. Routine Maint. and Insp.	5,234
Total for 2049	\$15,703
Replacement Year 2050	
Elect. Syst. Routine Maint & Insp.	5,391
Fire Protective Syst. Maintenance	5,391
Plumbing Syst. Routine Maint. and Insp.	5,391
Stucco Repairs	15,096
Total for 2050	\$31,271
Replacement Year 2051	
Elect. Syst. Routine Maint & Insp.	5,553
Fire Protective Syst. Maintenance	5,553



Description	Expenditures
Replacement Year 2051 continued	5 552
Plumbing Syst. Routine Maint. and Insp.	5,553
Total for 2051	\$16,660
Replacement Year 2052	
Elect. Syst. Routine Maint & Insp.	5,720
Fire Protective Syst. Maintenance	5,720
Plumbing Syst. Routine Maint. and Insp.	5,720
Total for 2052	\$17,159
Replacement Year 2053	
Elect. Syst. Routine Maint & Insp.	5,891
Fire Protective Syst. Maintenance	5,891
Plumbing Syst. Routine Maint. and Insp.	5,891
Total for 2053	\$17,674



Plumbing Syst. Routine	Maint. and Insp	2024	
		1 EA.	@ \$2,500.00
Asset ID	1004	Asset Actual Cost	\$2,500.00
		Percent Replacement	100%
Category	Plumbing	Future Cost	\$2,500.00
Placed in Service	January 2023	Assigned Reserves	\$5,000.00
Useful Life	1		
Replacement Year	2024	No Future Assessments	
Remaining Life	0		



Plumbing - Total Current Cost	\$2,500
Assigned Reserves	\$5,000
Fully Funded Reserves	\$2,500



Asphalt Shingle Roof Replacement - 2039

Remaining Life

Asset ID	1001	
Category Placed in Service	Roofing January 2019	
Useful Life Replacement Year	20 2039	λ
1	,	

1 Lump Sum	@ \$25,150.00
Asset Actual Cost	\$25,150.00
Percent Replacement	100%
Future Cost	\$39,182.88
Assigned Reserves	\$25,150.00

No Future Assessments



15

Roofing - Total Current Cost	\$25,150
Assigned Reserves	\$25,150
Fully Funded Reserves	\$6,287



Exterior Painting - 2027)	1 Lump Sum	@ \$10,000.00
Asset ID	1006	Asset Actual Cost	\$10,000.00
		Percent Replacement	100%
Category	Painting	Future Cost	\$10,927.27
Placed in Service	January 2020	Assigned Reserves	\$10,000.00
Useful Life	7		
Replacement Year	2027	No Future Assessments	
Remaining Life	3		



Stucco Repairs - 2030		1 Lump Sum	@ \$7,000.00
Asset ID	1007	Asset Actual Cost	\$7,000.00
		Percent Replacement	100%
Category	Painting	Future Cost	\$8,358.37
Placed in Service	January 2020	Assigned Reserves	\$7,000.00
Useful Life	10		
Replacement Year	2030	No Future Assessments	
Remaining Life	6		



Stucco Repairs continued...



Painting - Total Current Cost	\$17,000
Assigned Reserves	\$17,000
Fully Funded Reserves	\$8,514



Concrete and Stairway Repairs - 2024

Asset ID 1008

Category Structural Components		
Placed in Service	January 2024	
Useful Life	10	
Replacement Year	2024	
Remaining Life	0	

1 Lump Sum	@ \$3,000.00
Asset Actual Cost	\$3,000.00
Percent Replacement	100%
Future Cost	\$3,000.00
Assigned Reserves	\$6,000.00

No Future Assessments



Concrete and Stairway Repairs for year 2024 shall include repairs to cracked cocnrete and corrosion to the steel framing referenced within this report.

Wood Framing Repairs	- 2024
wood Franning Repairs	2024
Asset ID	1009
Category Struc	ctural Components
Placed in Service	January 2024
Useful Life	10
Replacement Year	2024
Remaining Life	0

1 Lump Sum	@ \$3,000.00
Asset Actual Cost	\$3,000.00
Percent Replacement	100%
Future Cost	\$3,000.00
Assigned Reserves	\$6,000.00

No Future Assessments



Wood Framing Repairs continued...



Wood Framing Repairs for year 2024 shall include repairs to the damaged wood beam referenced within this report.

Structural Components - Total Current Cost	\$6,000
Assigned Reserves	\$12,000
Fully Funded Reserves	\$6,000



Elect. Syst. Routine N	Maint & Insp 2024	1 EA.	@ \$2,500.00
Asset ID	1005	Asset Actual Cost	\$2,500.00
		Percent Replacement	100%
Category	Electrical Systems	Future Cost	\$2,500.00
Placed in Service	January 2023	Assigned Reserves	\$5,000.00
Useful Life	1		
Replacement Year	2024	No Future Assessments	
Remaining Life	0		

The Landing Condominiums - Building 9
RA Detail Report by Category

Electrical Systems - Total Current Cost	\$2,500
Assigned Reserves	\$5,000
Fully Funded Reserves	\$2,500



Fire Protective Syst. Ma	aintenance - 2024	1 EA.	@ \$2,500.00
Asset ID	1003	Asset Actual Cost	\$2,500.00
		Percent Replacement	100%
CategoryFire I	Protective Systems	Future Cost	\$2,500.00
Placed in Service	January 2023	Assigned Reserves	\$5,000.00
Useful Life	1	-	
Replacement Year	2024	No Future Assessments	
Remaining Life	0		



Fire Protective Systems - Total Current Cost	\$2,500
Assigned Reserves	\$5,000
Fully Funded Reserves	\$2,500

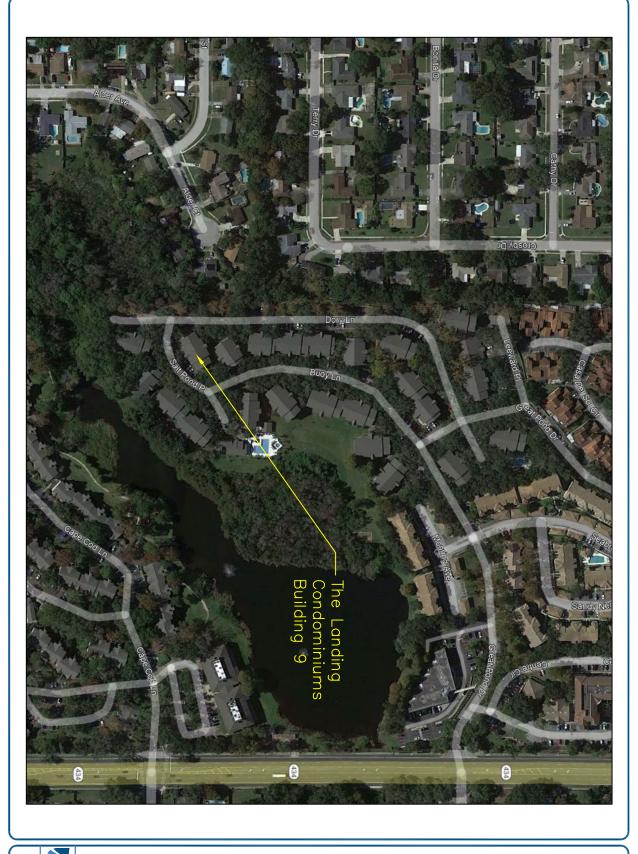


The Landing Condominiums - Building 9 RA Category Detail Index

Asset II	DDescription	Replacement	Page
1001	Asphalt Shingle Roof Replacement	2039	11
1008	Concrete and Stairway Repairs	2024	14
1005	Elect. Syst. Routine Maint & Insp.	2024	16
1006	Exterior Painting	2027	12
1003	Fire Protective Syst. Maintenance	2024	17
1004	Plumbing Syst. Routine Maint. and Insp.	2024	10
1007	Stucco Repairs	2030	12
1009	Wood Framing Repairs	2024	14
	Total Funded Assets	8	
	Total Unfunded Assets	<u>0</u>	
	Total Assets	$\frac{0}{8}$	



APPENDIX B SITE LOCATION MAP



APPENDIX B

SITE LOCATION MAP

APPENDIX C PHOTOGRAPHS



Photograph No. 1: East elevation.



Photograph No. 2: South elevation.

SITE PHOTOGRAPHS

The Landing Condominiums – Building 9 957 Salt Pond Place Altamonte Springs, Seminole County, Florida 32714 Photograph Date: Wednesday, July 19, 2023 UES Project No. 0811.2300006.0000 UES Report No. 1



Photograph No. 3: West elevation.



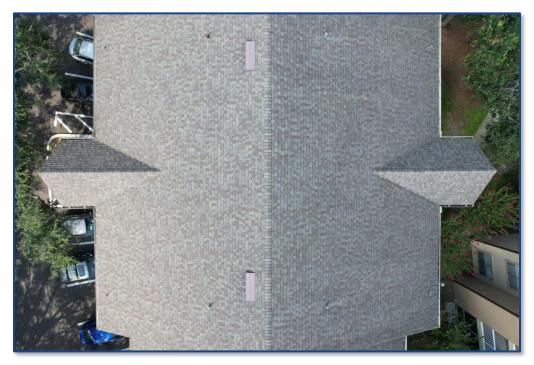
Photograph No. 4: North elevation.

SITE PHOTOGRAPHS

The Landing Condominiums – Building 9 957 Salt Pond Place Altamonte Springs, Seminole County, Florida 32714 Photograph Date: Wednesday, July 19, 2023 UES Project No. 0811.2300006.0000 UES Report No. 1

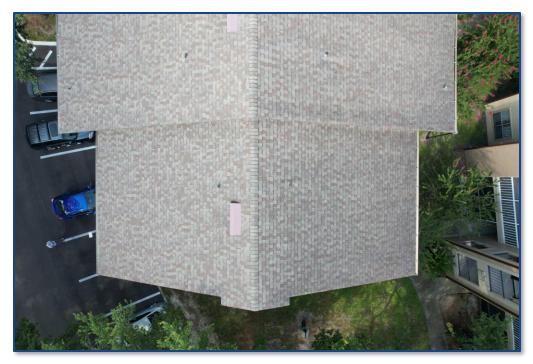


Photograph No. 5: View of the west roof section.



Photograph No. 6: View of the central roof section.

The Landing Condominiums – Building 9 957 Salt Pond Place Altamonte Springs, Seminole County, Florida 32714



Photograph No. 7: View of the east roof section.



Photograph No. 8: General view of the prefabricated wooden roof trusses.

The Landing Condominiums – Building 9 957 Salt Pond Place Altamonte Springs, Seminole County, Florida 32714



Photograph No. 9: View of the balconies and stairway on the south side of the building.



Photograph No. 10: Damage to the wood beam located at the balcony edge of Unit 201.

The Landing Condominiums – Building 9 957 Salt Pond Place Altamonte Springs, Seminole County, Florida 32714



Photograph No. 11: Damage and separation to the metal flashing at the edge of the balcony slab on Unit 303.



Photograph No. 12: Corrosion and damage to the metal flashing at the edge of the stairway landing slab at the north stairway.

The Landing Condominiums – Building 9 957 Salt Pond Place Altamonte Springs, Seminole County, Florida 32714



Photograph No. 13: Cracks in the stucco wall finish and corrosion and damage to the metal flashing at the edge of the stairway landing slab at the south stairway.



Photograph No. 14: Damage to the previously patched exterior wall stucco located at the drainage scupper in the north stairway.

The Landing Condominiums – Building 9 957 Salt Pond Place Altamonte Springs, Seminole County, Florida 32714

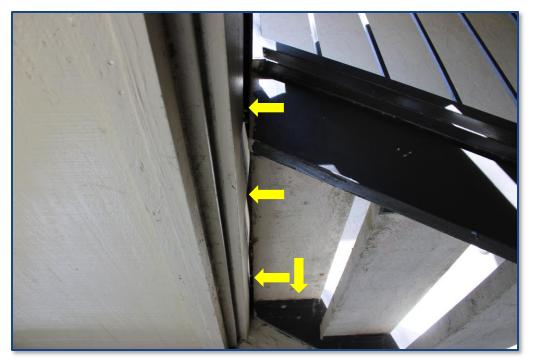


Photograph No. 15: Cracks in the exterior wall stucco finish located on the south side of the building.



Photograph No. 16: Cracks in the stairway landing in the south stairway.

The Landing Condominiums – Building 9 957 Salt Pond Place Altamonte Springs, Seminole County, Florida 32714



Photograph No. 17: Crack in a concrete step and separation of the steel framing from the stairway landing slab located in the south stairway.



Photograph No. 18: Close-up view of the damages in Photograph No. 17.

SITE PHOTOGRAPHS

The Landing Condominiums – Building 9 957 Salt Pond Place Altamonte Springs, Seminole County, Florida 32714



Photograph No. 19: Damage and corrosion to the metal guardrail located in the south stairway.



Photograph No. 20: Fire riser system and fire alarm.

The Landing Condominiums – Building 9 957 Salt Pond Place Altamonte Springs, Seminole County, Florida 32714

APPENDIX D QUALIFICATIONS OF KEY PERSONNEL

MIGUEL SANTIAGO, P.E., S.I.

Professional Engineer / Special Inspector / Director Milestone Prog.

SUMMARY OF QUALIFICATIONS

Mr. Santiago is the Director of UES Milestone Inspection Program and Vice President of UES Construction Services Division. He has experience in building inspections, structural evaluations, geotechnical investigations, and construction process evaluations. He has over 25 years of construction, design and inspection experience dealing with all phases of project development including permitting, geotechnical, environmental, civil, and architectural design. He also has experience in pavement, foundation design, forensic analysis of construction defects, roofing consultation, construction project management and quality control/quality assurance. Mr. Santiago is a licensed Threshold Inspector in the State of Florida where he performs structural inspections for various types of projects including shoring/ reshoring and design/plan compliance.

REPRESENTATIVE PROJECT EXPERIENCE

Commercial

Citadel I and Citadel II, Tampa, FL: Facility Evaluator. Performed a property • ACI AGGREGATE & FIELD-TESTING condition and roofing assessment for two eight-story office buildings with a shared six-story parking garage. Cost projections were completed over a year term. Project • ACI CONCRETE was completed within 10 days of authorization.

San Juan Integra Building, PR: Commercial 7 story retrofit, interior rebuild and • FDOT SOILS TECHNICIAN structural modifications to the structure and parking / garage area. Provided geotechnical assistance during design and construction as well as guality control during construction operations.

Trinity Corporate Park, Tampa, FL: 3 story settling structure, prepared evaluation report and recommended adequate foundation system.

Government

Fort Bragg Landfill Density Testing, Fort Bragg, NC, 2009: Mr. Santiago was project principal for subsurface exploration of the SCS Energy Facility Expansion.

Fort Bragg TEMF, Fort Bragg, NC: Prepared proposal, assisted in planning and coordinating field exploration, and analyzed subsurface conditions. Provided a geotechnical report of findings, evaluations and recommendations for foundation, parking area design and construction considerations. This project was design and build of tactical vehicle maintenance facilities and retaining wall design.

NCDOT, DMV Facility Fayetteville, NC: Assisted in planning and coordinating field exploration, and analyzed subsurface conditions. Provided a geotechnical report of findings, evaluations and recommendations for foundation, parking design and construction considerations.

Sypris Electronics, Tampa, FL, 2015: Facility Evaluator. Performed a property condition and roofing assessment for a 300,000 sq. ft. facility. Cost projections were completed over a 10 year term. This project was an existing electronics manufacturing facility for the Department of Defense, due to homeland security; this report was



YEARS WITH THE FIRM 3.5

YEARS WITH OTHER FIRMS 25

EDUCATION

B.S., CIVIL ENGINEERING, UNIVERSITY OF CENTRAL FLORIDA, 1998

LICENSES & CERTIFICATIONS

- FLORIDA PROFESSIONAL ENGINEER, SPECIAL INSPECTOR #74520
- TECHNICIAN
- ACI CONCRETE FIELD INSPECTOR
- FDOT LBR TECHNICIAN
- MASONRY SPECIAL INSPECTOR
- POST TENSION LEVEL I & II INSPECTOR
- RADIATION SAFETY OFFICER
- STRUCTURAL STEEL LEVEL I INSPECTOR

completed with no photo documentation under strict guidelines of disclosure. Project was completed within 10 days of authorization.

Healthcare

Hima San Pablo Hospitals, Caguas and Bayamon, PR, 2015: Facility Evaluator. Performed a property condition and roofing assessment for 2 1.3M sq. ft. facilities. Completed both assessments and submitted final reports within 30 days of authorization.

Sinai Assisted Living Facility, Boca Raton, FL: Mr. Santiago was the project principal for Private Provider Inspections for the construction of the four-story independent living building and the three-story skilled nursing and assisted living facility building.

Baptist South Tower, Jacksonville, FL: Mr. Santiago was the project principal and Threshold Inspector during the construction of an 8-story medical tower. He provided construction quality control and quality assurance.

Institutional

Nocatee K-8 School KK, St. Johns County, FL: Threshold Engineer. Provided Geotechnical Engineering, Construction Materials Testing, Threshold Inspection, and Settlement Monitoring services. The construction included a new 1 to 3-story school building of concrete and steel construction as well as associated paved parking and drive areas, a new stormwater management pond, and athletic fields. Site-elevating fills on the order of four to five feet were required to achieve final grade. Also included unsuitable soil removal and roofing testing and inspection.

Aberdeen K-8 School LL, St. Johns County, FL: Threshold Engineer Provided Geotechnical Engineering, Construction Materials Testing, Threshold Inspection, and Settlement Monitoring services. The construction included a new 1 to 3-story school building of concrete and steel construction as well as associated paved parking and drive areas, a new stormwater management pond, and athletic fields. Site-elevating fills on the order of four to five feet were required to achieve final grade. Also included roofing testing and inspection.

North Star Villages Student Complex, Tampa, FL: Performed subsurface exploration and conducted geotechnical engineering analyses for the proposed student housing project – North Star Villages at 1400 North 46th Street in Tampa, FL. ECS will perform construction materials testing and threshold observation services during construction, 2nd quarter of 2015.

Multifamily Residential

Bayshore Multifamily Complex, Tampa, FL, 2013: The Bayshore multifamily complex consisted of a 3 building, 8-story, 220-unit apartment complex with associated parking, amenity and drive areas. Provided geotechnical consultation and exploration services as well as construction materials testing and threshold observation services during construction.

Encore, REED Multifamily Complex, Tampa, FL, 2014: Prepared the proposal and performed construction quality control services for the REED at Encore which consisted of a senior living multifamily complex for the Tampa Housing Authority. Provided construction materials testing and threshold observation services during construction.

Yabucoa Real, Yabucoa, PR: Residential development, Owner's representative/Inspector during design, permitting and construction of an 86-unit residential development. Provided geotechnical design and value engineering during construction.

Industrial

Renewable Resources Plant, West Palm Beach, Florida: Mr. Santiago was one of the project principals involved during the construction of the deep foundation system implemented during the construction process of this 80-acre renewable resources power facility.

Niagara Bottling Plant: Mr. Santiago was the project principal and Threshold Inspector during the construction of a 350,000 square foot, bottling plant. He provided construction quality control and quality assurance.

Pipeline Supply Company Facility, Fayetteville, NC: Prepared proposal, assisted in planning and coordinating field exploration, and analyzed subsurface conditions. Provided a geotechnical report of findings, evaluations and recommendations for foundation, parking design and construction considerations.

Transportation

Orlando International Airport (OIA), FL: Provided geotechnical engineering and construction materials testing for several runway and apron rehabilitation projects within the airport. Projects consisted of new runway construction and existing apron and runway rehabilitations.



Education

BS, Civil Engineering (Emphasis in Structural Engineering) - University of South Florida

Years of Experience

4

Licenses

 Professional Engineer, FL #95850

Ricardo Solis, PE

Structural Engineer

Mr. Solis has over 4 years of combined experience in the construction and forensics industries as a structural engineer. His construction experience is built on the design and management of low-rise commercial/industrial buildings, residential homes, and threshold building inspections. His experience covers a wide range of project development including maintenance of client relationships, construction documents, and construction administration. This experience includes developing framing concepts and selecting framing systems, which include reinforced concrete, tilt-up construction, structural steel, light gauge steel, load-bearing masonry, and timber. Mr. Solis' forensics experience includes investigations of residential sites to determine the cause and origin of structural failures, damage or defects, and analyzing damage to structures caused by catastrophic events such as hurricanes and sinkholes. Additionally, Mr. Solis has experience in Enercalc, MathCAD, RISA, and AutoCAD.

PROJECT EXPERIENCE

Infinity Business Park

Orlando, Florida

Mr. Solis was responsible for the structural design, detailing, coordination, and quality control of multiple tilt wall buildings in the business park. He managed projects to completion from pre-design, meetings, and through construction shop drawing review.

Gratigny Logistics Center Buildings

Miami, Florida

Mr. Solis was responsible for the structural design, detailing, coordination, and quality control of two 220,000-SF tilt wall buildings in Miami. He managed projects to completion from pre-design, meetings, and through construction shop drawing review.

Marion Street Office Building

Tampa, Florida

Mr. Solis was responsible for the structural design, detailing, coordination, and quality control of this four-story masonry building on shallow concrete foundations and composite floor/roof framing system. He managed the project to completion from pre-design, meetings, and through construction shop drawing review.

Wish Farms

Plant City, Florida

Mr. Solis was responsible for the structural foundation design, detailing, coordination, and quality control of this 118,000-SF pre-engineered metal building. He managed the project to completion from pre-design, meetings, and through construction shop drawing review.

Amazon Warehouse

Seffner, Florida

Mr. Solis was responsible for the structural design, detailing, coordination, and quality control of the light gauge stud framing canopies and front entry. He managed the project to completion from pre-design, meetings, and through construction shop drawing review.

Winthrop Town Center Buildings

Riverview, Florida

Mr. Solis was responsible for the structural design, detailing, coordination, and quality control of this two-story masonry building on shallow concrete foundations and composite floor/roof framing system. He managed projects to completion from pre-design, meetings, and through construction shop drawing review.