Xanadu Condominium Association, Inc.
750 North Atlantic Avenue
Cocoa Beach, FL 32931

Existing Building Condition Survey and Observation Report

Project Consultant:

Karins Engineering
Firm Registration No. 8371

771 Fentress Boulevard, Suite 3-F, Daytona Beach, FL 32114
Telephone: 386-944-9244

March 15, 2023

Executive Summary

Karins Engineering Group, Inc. (KEG) was present at Xanadu Condominium (750 North Atlantic Avenue Cocoa Beach, FL 32931) to perform a professional evaluation of the existing building condition. This evaluation is based on the 553.899 Mandatory Structural Inspections for Condominiums and Cooperative Buildings, Milestone Inspection Phase I. The test standards employed by KEG are nationally/internationally recognized test standards that will accurately assess the "in service" condition of the various substrates, components, or individual elements and installation of the coatings, membranes, and sealants. Our observations were intended to identify symptoms of deterioration and/or distress at readily accessible structural components, and to determine in reasonable fashion if the building is safe for continued use under the present occupancy. This evaluation included all balconies (top, bottom, and edges), all 16 exterior walkways (top, bottom, and edges), structural components of the underground garage, and related components that were readily accessible.

The structure was previously evaluated for deterioration back in 2018. The structure has gone through a major restoration project for the last two years, and all the deficiencies and structural distressed areas have been repaired in accordance with the FBC, ASCVE, and ICRI standards. Based on our observation the building is safe for continued use with continued maintenance under the present occupancy. Phase II structural inspection is not required at this time.

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Xanadu Condominium Association, Inc.
Attn: John Miller, President, Board of Directors
Lynn Barratt, Treasurer, Board of Directors
750 North Atlantic Avenue
Cocoa Beach, FL 32931

RE: ***Xanadu Condominium – Milestone Inspection Report***
750 North Atlantic Avenue Cocoa Beach, FL 32931
KEG File # 18RD-0657

1.0 Introduction

Based on our agreement with Xanadu Condominium Association, Inc., Karins Engineering Group, Inc. (KEG) was present through the restoration phase of the building where we had access and observed 100% of the units, walkways, and garage, and related components that were readily accessible. The test standards employed by KEG are nationally and internationally recognized test standards that accurately assess the "in service" condition of the various substrates, components, or individual elements and the installation of coatings, membranes, and sealants.

Our observations were intended to identify symptoms of deterioration and/or distress at readily accessible structural components and to determine in reasonable fashion if the building is safe for continued use under the present occupancy. Our review was not exhaustive, nor was it intended to detect all design deficiencies, omissions, or conflicts. We did not attempt to verify the adequacy of the original structural design or construction nor to supplant the responsibilities of the Architect / Engineer of Record. As a routine matter, in order to avoid possible misunderstanding, nothing in this report should be construed directly or indirectly as a guarantee for any portion of the structure. To the best of our knowledge and ability, this report represents an accurate appraisal of the present condition of the building based upon careful evaluation of observed conditions, to the extent reasonably possible.

2.0 Description of Structure

Xanadu Condominium is a 16-story building which consists of 108 units, with 123 balconies, interior parking garage, detached parking garage, and an outdoor swimming pool. Units are accessed on each floor via exterior walkways. The walls appear to be comprised of CMU on all levels with a cementitious finish. Except for the community room area and select few balconies, all balcony floors have a hybrid urethane deck coating floor system. The walkway floors consist of a cementitious finish with acrylic paint. The construction of the building was completed in 1983 and the restoration project was completed in 2023.

3.0 Present Condition of Structure

As described in the following pages of this report, no evidence of concrete deterioration was observed throughout the building due to the current restoration project.

Given this information, the structural components of the building appear to be in good condition, and the building is safe for continued use with continued maintenance under the present occupancy.

3.1 General Alignment of Structure

The general alignment of the structure is good. No evidence of bulging, settlement, excessive deflections, or atypical expansion and contraction was observed at any structural members.

3.2 Surface Conditions

The walls appear to be comprised of CMU on all levels and select areas appear to have wood framed wall with a cementitious finish. The cementitious finish appears to be in good condition. This was repaired during the restoration project. Exterior wall sealants appeared to be in good condition with no evidence of detachment.

Overall, the condition of the exterior paint is good, the building has been repainted as part of the restoration project. No peeling paint was observed throughout the building, or large paint bubbles were observed at balcony ceilings.

The condition of the deck coating on the balconies and walkways are in good condition due to the replacement and recoating done during the restoration project. Some balconies, however, have tile installed on the floor.

The building had all the balcony rails replaced in accordance with current building code. According to the *Florida Building Code, Seventh Edition (2020)*, guardrails shall not be less than 42 inches high and shall not have openings that allow passage of a sphere four inches in diameter from the walking surface to the required guard height. In other words, the clearance underneath the bottom bar and the openings between pickets must not exceed four inches. All inspected guardrails on the balconies follow the height and opening requirements. The walkway rails were not replaced and are considered grandfathered-in. In the future any repair or replacement, they must comply with the existing FBC.

The condition of windows and sliding glass doors varied throughout the building. Some units have replaced their sliding glass doors at their balconies, other still have the original sliding glass doors. In many cases, the original sliding glass doors had rusted frames and fasteners and had exceeded their useful life. As part of the restoration project, the contractor replaced the sealant around the perimeter, but due to their condition, some might still allow water intrusion.

3.3 Cracks

Regarding the general condition of the building, no severe cracks were observed at the exterior walls of the building. As explained in Section 4.2, some additional hairline cracks were observed throughout the building, but they did not appear to be indicative of structural distress.

3.4 General Extent of Deterioration

No concrete deterioration was observed throughout the building. However, as explained in Section 4.3, concrete repairs were completed at the time of this report.

3.5 Previous Patching or Repairs

Evidence of previous repairs were observed throughout the building. Concrete repairs at the balconies were in good condition. At the interior parking garage, all repairs have been corrected as part of the current restoration project, and the concrete repairs at the exterior walkways have been corrected as part of the current restoration project.

3.6 Nature of Present Loading

The building is a residential condominium accommodating 108 units each with their own private balcony.

4.0 Concrete Framing System

4.1 Description of Structural System

The walls appear to be comprised of CMU on all levels with a cementitious finish. The stairwells and elevator towers are reinforced concrete, and the other exterior walls are constructed of concrete masonry units (CMUs).

4.2 Cracks

All cracks bigger than ¼" have been repaired as part of the restoration project. Hairline cracks were observed on various areas of the building. However, these cracks appear to be typical and do not appear to be indicative of structural distress.

4.3 General Condition

In addition to no severe cracks, no concrete spalls were observed throughout the building. Concrete spalls throughout the whole building had been recently repaired as part of the current restoration project. Concrete spall in the underground parking garage had been recently repaired as part of the current restoration project. From our understanding, no concrete spalls were found at the balconies since they have been repaired as part of the current restoration project.

4.4 Rebar Corrosion

No areas of deterioration on the exterior walkways were shown. This was recently repaired as part of the current restoration project.

Concrete spall typically occurs when the embedded reinforcement corrodes and breaks the surrounding concrete. As steel corrodes, it increases in volume, and this expansion stresses the surrounding concrete, causing it to crack and break. However, all identify spalls have been repaired through the restoration project.

5.0 Roof Evaluation

Xanadu has a flat roof with iso boards and tapered roof. At the roof there are two additional structures for the elevator, and staircases with flat roof as well. The roof is accessed through a staircase on the PH floor. All roof areas, the main roof and two additional roof buildings, show signs of deterioration and have exceeded its useful life. We recommend all roof areas have their existing roof coverings completely removed, stripped down to expose the concrete deck, shall have all existing vents replaced, all drip edge, flashings replaced, and a new roof system shall be installed.

6.0 Closing

These observations, and resulting opinions, are based upon construction standards and methods that are considered normal and customary as of the time of this report. The observations that were made were visual in nature and therefore were non-destructive unless otherwise described. KEG did not provide direction for removal of floor coverings, walls, ceilings or other interior or exterior cladding components so that hidden, covered or concealed conditions could be observed as a portion of the initial survey.

KEG has performed these services and prepared this report in accordance with generally accepted construction and engineering consulting practices, and makes no warranties, either expressed or implied as to the character and nature of such services. This report is not to be construed as a guarantee or warranty of future building conditions. KEG used its best engineering judgment and ability to observe and report the items presented herein, but KEG cannot guarantee that all past, present or potential deficiencies or defective conditions have been found during this assessment.

In accordance with the legislation 553.899 Mandatory Structural Inspections for Condominiums and Cooperative Buildings, Karins Engineering performed a Phase 1 evaluation and found no reason to perform a Phase 2 evaluation. No significant damage was observed, the building has performed a restoration project and all areas of distressed have been repaired.

This report does not include a representation of active or past termite infestation and/or treatments. Additionally, this report does not indicate nor include any investigation of environmental conditions at the subject property structures and grounds. This report does not make any representation as to the property being free of hazardous or toxic materials.

This report has been prepared for Xanadu Condominium Association, Inc. in conformance with KEG's agreement. Personal responsibilities of KEG, or any individual or company working on behalf of KEG, do not extend to a third party, other than as defined above, under any circumstances. An original copy of this report remains on file at the office of KEG, and no changes may be made to this report without the prior written permission of KEG. KEG reserves the right to modify this report upon discovery of additional information and charge an additional copying fee for release of this report to an additional party if requested.

If there are any questions or more information is required, please do not hesitate to contact our Professional Engineer, Hector Velazquez, at hv@karins.com or by phone at (386) 871-0783.

Respectfully Submitted,

Karins Engineering

Certificate of Authorization #8371

Hector Velazquez-Abreu

Hector Velazquez-Abreu, P.E.
Branch Manager
Florida P.E. No. 80204

HECTOR VELAZQUEZ-ABREU ★ LICENSE ★ No. 80204 ★ STATE OF FLORIDA ★ PROFESSIONAL ENGINEER

This item has been electronically signed and sealed by Hector Velazquez-Abreu, PE on the date indicated above using a Digital Signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

7.0 Photograph Log

Photo 1: West side and front of the building.

Photo 2: South side of the building.

Photo 3: Concrete repairs at underground parking garage.

Photo 4: Concrete repairs at underground parking garage.

Photo 5: Concrete repairs at underground parking garage.

Photo 6: Concrete repairs at underground parking garage.

Photo 7: Inside, exterior walkways at North side.

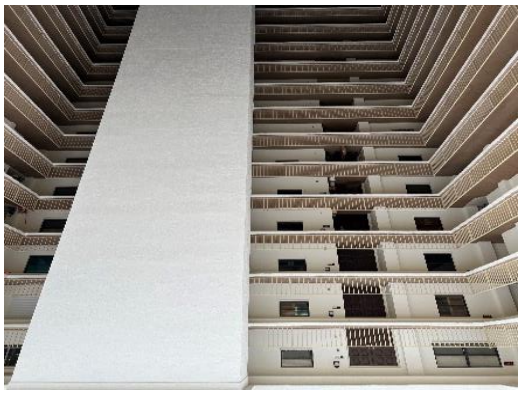

Photo 8: Inside, exterior walkways at East side.

Photo 9: Inside, exterior walkways at South side.

Photo 10: Balcony with replaced deck coating.

Photo 11: Balcony with replaced deck coating.

Photo 12: Deck coating installed at atrium.

Photo 13: Painted ceiling at balcony.

Photo 14: Painted roof structure.