

SB 326 INSPECTION REPORT – Summary

RIVIERA GARDENS

HOMEOWNERS ASSOCIATION

N Via Miraleste b/w E Vista Chino & E Via Escuela, Palm Springs, CA 92262

Report No.: 23-107

Date: 11/27/2023

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Introduction and Summary of Development:

In accordance with Senate Bill 326 (SB326,) Catapult Drafting (CD) submits this report for the inspection and evaluation of exterior elevated elements (EEEs) of the wood framed structures at the Riviera Gardens Homeowners Association (HOA) located on N Via Miraleste between E Vista Chino and E Via Escuela in Palm Springs, CA. The community was originally constructed circa 1980 and consists of 21 multi-unit buildings. The structures primarily consist of two-story conventional light-frame timber construction. The EEEs required to be inspected and included in this report are the balconies as well as the upper unit walkways. An inspection of these elements was conducted on 10/17/23 and 10/18/23 by CD and serves as the basis of this report.

This report will serve to fulfill the requirements of SB326 but does not release the HOA and/or management from continuing routine maintenance, inspections/repairs in accordance with previous standard practices, or serve as any kind of certification or guarantee of safety.

Purpose and Background:

SB326 mandates that EEEs must be inspected by a licensed structural engineer or architect and a report developed that includes the following:

- Identification of types of EEEs
- List of randomly generated EEEs that will need to be inspected to achieve a statistically significant sample
- Identification of building components comprising the load-bearing components and associated waterproofing system
- Current physical condition of the load-bearing components and associated waterproofing system, including whether the condition presents an immediate threat to the health and safety of the residents
- Expected future performance and remaining useful life of the load-bearing components and associated waterproofing system
- Recommendations for any necessary repair or replacement of the load-bearing components and associated waterproofing system

Inspections must take place once every nine years and consist of a random sample of EEEs

sufficient in number to provide a statistically significant sample. All EEEs made up of wood or wood-based structural members including decks, balconies, walkways, etc. must be included in the scope of the inspections and subsequent report. SB326 is in response to multiple fatalities and injuries that have occurred as a result of balcony, deck and other elevated structure collapses across the United States due to compromised EEEs. It is an attempt to ensure that decaying or deteriorated elements are identified and corrected to avoid future collapses.

Identification and Types of Exterior Elevated Elements

The types of EEEs at this community are balconies and upper unit walkways. The framing layout and structural systems of each are discussed below.

Randomly Generated Sample:

In order to gain a more complete understanding of any framing issues at the community, CD intended to inspect all of the EEEs in lieu of generating a random sample. However, access issues prevented certain unit balconies from being inspected. All walkways were inspected. A list of the balconies that were inspected along with a community map are included in Appendix B. The number of EEEs of each type inspected was sufficient in size to obtain the confidence level required by SB326.

Identification of Structural System and Load-Bearing Components:

Balconies:

The typical balcony framing at the community consists of a 6x14 edge beam that spans between exterior walls of the structures. Some of the balconies are slightly larger than the typical layout and have 6x6 post supports at approximately 1/3 the length of the edge beam in addition to the end supports at the walls. 2x8 joists spaced at 16" oncenter (o/c) span between the building exterior wall and out over the top of the edge beams. A rim board appears to be fastened to the ends of the joists and a 2x12 fascia member is fastened to the exterior edge of the balconies. Plywood sheathing sits on top of the joists and a cementitious waterproof surfacing has been applied to the top of the plywood. Many balconies also have tile or other finish surfaces that have been added over the typical coating.

The balconies are typically sloped to drain off the edges away from the structures.

The guardrails typically consist of a prefabricated metal railing system that has posts top-mounted to the plywood sheathing, beneath the cementitious coating. The railing also connects at each end at the top and bottom to the exterior walls of the structure.

Additional steel hardware and other strengthening measures appear to have been added to the metal railings at many of the buildings. A 2x6 wood top member is attached to the top of the metal railings and typically has an overall height of 42" above the balcony surfaces. Where tile or other materials have been added to the balcony surfaces, the height is reduced by the thickness of the material.

Walkways:

Typical walkway framing is similar to the balcony framing and consists of 6x10 edge beams that span along the walkway perimeters and are supported on 6x6 posts. At the walkway ends, the beams are supported within the exterior walls of the structures. There are 4x8 intermediate support beams near the stairs in order to frame out the stair openings. 2x6 joists spaced at 16" o/c span between the exterior walls and edge beams. A 2x10 fascia/rim board appears to be attached to the joist ends. Plywood sits on top of the joists and a concrete topping slab exists on top of the plywood. Although we were unable to inspect below the concrete topping slab, we expect there is a waterproof membrane or coating between the plywood and concrete.

Buildings numbered 7 and 17 have smaller upper unit walkways that consist of similar layouts but the edge beams appear to be 4x10 or 4x12 members and the joists are 2x8s. There does not appear to be well-defined drainage for the typical walkways other than a slight slope towards the stair openings.

The walkways have partial-height guard walls that appear to be framed out of 2x4 stud members and are coated on both sides with stucco. The walls have a height of 42" above the concrete walking surface. A prefabricated metal rail system similar to what is present at the balconies exists around the stair openings. Additional steel hardware and other strengthening measures appear to have been added to the metal railings at many of the buildings. The metal railings have heights of approximately 41.5" above the concrete surfaces.

Current Physical Condition & Repair Recommendations:

The EEE framing and waterproofing components are in generally acceptable physical condition for their age with the exception of specific items noted in this report. A list of specific locations and general repair recommendations is presented in Appendix A of this report, with photos of conditions encountered shown photographically in Exhibit C. The following issues and their repair recommendations were generally present throughout the community:

Framing and Guardrails Not Likely Able to Pass Current Code Loading Calculation Check

In recent years, the live load requirements of balconies have increased significantly. Although only held to building code requirements at the time of construction, it is unlikely that some of the load-bearing components at this community would be able to pass a calculation check under current code-required loads. No repair or upgrade is specifically required at this time due to this, but it is important to note that if these balconies are fully loaded to today's standards, as well as taking into account the damaged portions of components, they may fail. It is important that any damaged framing be repaired, and the structures be brought back up to at least the standards

that existed at the time of original construction.

Concrete Cracking of Walkway and Balcony Surfaces

There is a common condition at many of EEs where excessive cracking of the concrete or cementitious coatings is present. These cracks frequently emanate from where the metal guard rail posts are embedded in them. Although in most locations, this cracking does not appear to have caused any major moisture intrusion, it will eventually allow damage to occur to the membrane below and allow water to penetrate. For this reason, we recommend that these cracks be sealed as best as possible (especially at the walkways) where they occur.

Wobbly Metal Railings at Balconies and near Walkway Stairs

Many of the metal railings throughout the community are excessively wobbly, primarily at the walkways, and primarily where the surface concrete has cracked where the posts are embedded. Various measures appear to have been taken to strengthen these rails through additional hardware, braces, etc. Although these railings will not pass current code-required loading checks, they should be able to withstand loading in accordance with the governing codes at the time of original construction. Where the railings are excessively wobbly, we recommend that measures (such as those previously taken) be utilized in order to strengthen them as best as possible.

Exposed or Not Weatherproofed Tops of Beams at Walkways

There is a common condition at most of the building walkways where a small portion of the edge beams at one end are “free-flying” and exposed as they span the last length between where the walkways end and the exterior wall of the buildings provide support. The tops of these beams have various 2x4, plywood, or other members added to them but they are generally exposed to the elements and susceptible to accelerated decay. We recommend these beams be provided with some kind of metal flashing over the tops to prevent trapped moisture and decay. We also recommend that during the course of construction of these protective features, if decayed members are discovered, that they be replaced prior to the addition of flashing or other elements.

Lack of Drainage Detailing at Walkways

There is a general lack of well-defined drainage paths at the walkways. It appears that any water is supposed to be diverted to flow off of the stair openings but variations in slopes, cracked concrete, and other impediments have allowed water to pond at walls and areas where it has begun to result in damage. Particularly, at buildings where the walkways have a small bridge between structures, there is frequent evidence of ponding and staining of framing members. There is also evidence of measures such as drain holes drilled through walls, and area drains drilled through the concrete surfaces in some of these locations. Many of these drains appear to be blocked or clogged.

We recommend that this drainage issue be addressed in some way, whether full surface re-slope and/or scuppers being added through the guard walls, or simply adding local

drains at areas where ponding is occurring. We recommend that existing drains that have been added be cleaned and cleared so that they remain effective. We recommend that a contractor or construction manager be hired who is familiar with drainage issues such as these in order to discuss options and best address the problems in the most cost-effective way.

These repair recommendations are based on conditions observed at the time of these inspections. If conditions go unrepaired or continue to worsen, these repairs may no longer apply to adequately address the issues encountered.

CD discovered no immediate life-safety threats to the occupants in the community resulting from deficiencies in the inspected wood-supported EEs, although issues noted in this report should be addressed in a timely fashion. No further inspections are required at this time.

Expected Future Performance:

With the exception of items noted in the “Current Physical Condition & Repair Recommendations” section and Appendix A of this report, the EEs at this community have an expected remaining useful life of over 9 years.

This estimate also assumes that no major mechanical damages occur, maintenance and repair work is performed at regular intervals, and repair recommendations presented in this report are addressed in a timely manner.

Next Steps:

No immediately life-safety threats were discovered during our investigation, which would require us to submit this report to the local code enforcement agency. We do however recommend that the repair recommendations outlined in this report be addressed on a timely basis. The remaining useful life of these elements assumes that maintenance and repairs are conducted as needed including, at a minimum, painting/sealing of members, ongoing termite treatment, and repairs/replacement of members as routing deterioration proceeds.

END SUMMARY