MILESTONE INSPECTION – PHASE I FOR PORT BELLEAIR NO. 2 CONDOMINIUMS 147 BLUFF VIEW DRIVE BELLEAIR BLUFFS, FLORIDA 33770

PREPARED FOR:

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#### **SECTION ONE**

#### **PROFILE • OBJECTIVE**

Carter Nelson, E.I.T., of Ray Engineering, Inc., conducted a Milestone Inspection – Phase I Per the Florida Statute Title XXXIII, Chapter 553, Section 899 and in conformance with the scope of work specified in SB 4-D & SB 154 – Building Safety, Dated May 26, 2022, and all other executed amendments to SB 4-D & SB 154, revisions Dated May 4, 2023, and, signed by the governor on June 9, 2023, passed by the state, as per the date of this report. The purpose of the Milestone Inspection – Phase I is to assess the subject property and determine the present condition of all of the major structural elements and components of the building(s), highlighting any deferred maintenance, commenting on on-site management issues as they relate to the care of the property, and documenting all observed deficiencies.

It is understood that Ray Engineering, Inc., did not evaluate the adequacy of the original construction system or materials used and does not ensure the adequacy and sufficiency of any documents or improvements reviewed. This assessment does not purport to encompass every report, record, permit, or other documentation relevant to the property and does not create or imply any guarantee of future building conditions or value.

The purpose of the property review was to assess the subject property and to determine the present condition of the following:

- **BUILDING/STRUCTURAL:** Roofs, exteriors, breezeways, structural elements, stairwells, and foundation.
- **FIRE SAFETY, PLUMBING, AND ELECTRICAL:** Life Safety and sprinkler systems, common area plumbing, and common area electrical systems.

We did not gain access to all areas, operate any specific equipment, or perform any tests. Ray Engineering, Inc., identified those areas that, in our opinion, require remedial work or restoration. This report is based on our professional opinion and field observations. It should be noted that site development drawings were not provided for our review.

Ray Engineering, Inc., has been retained by Port Belleair No. 2 Condominium Association, Inc. to prepare a Milestone Inspection – Phase I report of Port Belleair No. 2 Condominiums in Belleair Bluffs, Florida.

This report is a summary of the property walkthrough and search of the project documents (as available). The purpose of this report is to provide the Client with the Consultant's opinion of the general disposition of the common elements.

Our report is not intended to assume any responsibility of the Architect or Engineers of Record, and the comments reflected in this report are presented only for the Client's consideration.

This report does not confirm the absence of asbestos, PCBs, toxic soils, or any other environmental concerns on this property.

#### **EXECUTIVE SUMMARY**

Port Belleair No.2 is a condominium building that is located within the Port Belleair Condominium complex located at 147 Bluff View Drive in Belleair Bluffs, Florida (reference photograph 1). The community was constructed in 1969 and consists of a total of 32 units. The building transitions from four stories to five stories from east to west, with the west end of the building being five stories. The east end of the building is constructed most likely on a slab-on-grade foundation supported by spread perimeter footings on a stem wall with a perpendicular foundation wall splitting the foundation system of the building. The west end of the building is supported by a cast-in-place parking deck structure with load bearing, shear walls, and isolated columns supporting the floor above. The building is constructed with post-tension slabs and concrete masonry block (CMU) walls. Along the north side of the building are the breezeway and stairwells, with the south elevation of the building primarily the balconies and sunrooms for the units. The roof structure consists of a flat roof membrane and perimeter mansard-asphalt tile accenting. Note, it is our understanding that the Association is not responsible for the exterior doors or windows in the community.

The most significant issue we noted on site is the presence of shear cracks in structural members, such as load-bearing walls, shear walls, beams, and post-tension slabs. The cracks we have noted in the stucco should be exposed to confirm if the crack is mirrored in the structural elements, or if the issue is worse and hidden.

From our observation, the structural components and elements were generally found to be in fair condition; however, due to the above-mentioned evidence of structural capacity concerns due to large shear cracks a Milestone – Phase II is required, which will include the thermal investigation of water infiltration in the structure, as well as the removal of finishes to confirm the true nature of the shear cracks located in the main structural elements.

#### 3.1 <u>Roofs</u>

The building's roofing system consists of a combination of a flat roof membrane system with perimeter concrete tile accenting sloped roofing (reference photograph 2). Note, that the roofing system is wood-framed, tied into the CMU block load-bearing wall systems (reference photograph 3). Overall, the flat roof system is in poor condition and has reached the end of its useful service life; however, the concrete tiles are in generally good condition.

• The flat roof membrane throughout the entire building is severely deteriorated in multiple spots, peeling/delaminated, and severely stained (reference photographs 4-11).

To confirm if water has infiltrated and impacted the roof, we recommend thermal imaging testing and possible destructive testing depending on what is found in Phase II. We recommend annual inspections, as well as inspections directly after large storm events to ensure the roofing is intact. It is recommended that gutter downspout outlets be cleared of vegetation and debris, to avoid water accumulation. In addition, all gaps in the flashing should be sealed with NP100 or an equivalent alternative, approved by Ray Engineering, Inc.

For the purpose of the reserve, the following are the estimated useful lives of the components of the roofs:

Flat Roof- Replace w/ 60 Mils TPO	Every 15-20 years
Concrete Roof– Repairs As Needed	Every 5 years
Gutters & Downspouts – Replace	Every 15-20 years

We have provided budgets for each of the referenced items above and have included them in the reserve.

#### 3.2 <u>EXTERIORS/BREEZEWAYS/BALCONIES</u>

The exterior of the building consists of a stucco exterior finish, clad to the first level parking deck reinforced concrete, and the CMU block above that parking level. The north side of the building is primarily breezeways while the south side of the building is primarily the sunrooms and balconies for the units (reference photographs 12-15). As stated previously, it is our understanding that the windows and exterior doors are not the Association's responsibility. The open breezeways have a waterproofing coating that is in generally good to fair condition for its age; however, there are no proper expansion joints in the concrete which is allowing excessive movement and cracking to happen at these joints, which will reduce the service life of the breezeways (reference photograph 16). The balconies are all enclosed, therefore observations for balcony issues will be included with the general exteriors. Below are the following issues we noted during our inspection:

- Multiple areas along the north side of the building, towards the west side of the structure, appeared to have improper stucco patches which are causing the stucco and coating to delaminate (reference photograph 17).
- Near the foundation wall on the north face of the structure, the metal lath behind the stucco is corroded and bleeding through, indicating the joints have failed and are allowing water into the structure (reference photograph 18). Note, this needs to be addressed immediately to reduce future impact on the structure.
- A general issue we observed in the exterior of the structure is a lack of control joints in the stucco, which will eventually develop cracks due to excessive movement in the stucco system (reference photograph 19). Located at the northeast end of the building, at the unit stack of 110, 210, and 310, multiple joints are separated, and stair step cracking is occurring, which is most likely the result of the lack of control joints (reference photograph 20). Because of the size of the area impacted, we are requiring these cracks and joints to be exposed in a Phase II inspection to review the extent of

# damage in the structure itself, as this is a nontypical issue in the building exterior.

- Due to poor construction methods, multiple edge details along the beam of the parking deck have unsightly cold joints; however, this is not a structural issue and can be sealed/repaired if the edges deteriorate over time (reference photograph 21).
- Joint sealant along the breezeways where the floor meets the walls and columns is significantly deteriorated throughout and should be repaired in 2024, which will extend the service life of the coating (reference photograph 22).
- An improper patch was performed on the HVAC components of Unit 308 and should be remediated to prevent water infiltration into the stucco (reference photograph 23).
- While reviewing the parking deck level, we observed a single non-typical shear crack in a beam header located above 310, that should be exposed and investigated further in a Phase II inspection (reference photograph 24).
- Located within the electrical room, a spalled post-tension joint has exposed reinforcing. Because of the location and structural components, the corrosion needs to be inspected to determine the extent of damage (reference photograph 25).
- Located on the second-floor breezeway in front of Unit 102, we noted a shear crack that developed from the slab along a column. Due to the location and nature of this shear crack, we need to expose the area and determine the conditions in the concrete behind the stucco (reference photograph 26).
- Located in front of Unit 104, a shear wall appears to have had a repair; however, a shear crack appears to have developed along the patch, therefore we recommend removing the stucco in a Phase II inspection to determine the condition of the concrete behind the stucco (reference photograph 27).
- <u>The beam in the breezeway between Units 106 and 107 shows evidence of</u> water infiltration, and it appears a repair was performed at some point

(reference photograph 28). Due to the location of this issue and that it is impacting a beam, we recommend the stucco be exposed in a Phase II inspection.

• In front of Unit 110, a large shear crack has developed from the beam above the stairwell opening down towards the slab which indicates the stress is due to the connection at the level above, therefore this needs to be exposed to determine the extent of the crack (reference photograph 29).

For the stucco issues, we recommend immediately repairing any cracks and delamination with the appropriate repair material for the stucco substrate to prevent water from severely delaminating the stucco in these areas. All open gaps should be caulked with NP100 immediately to prevent further water infiltration.

For the purpose of the reserve, the following are the estimated useful lives of the components of the exterior/breezeways/balconies:

Exterior Stucco- Repair/Paint	Every 6-8 years
Balcony Joint Sealants- Route & Seal	Every 8-10 years
Breezeway Railing – Replace	Every 15-20 years
Breezeway Coating-Remove & Recoat	Every 20-25 years
Breezeway Joint Sealant – Route & Seal	Every 12-15 years
Expansion Joints for Breezeways – Install	Every 15-20 years
Cracks/Spalls Throughout the Community – Repairs	Every 15-20 years

We have provided budgets for each of the referenced items above and have included them in the reserve.

#### 3.3 <u>STRUCTURAL ELEMENTS</u>

During our review, we did not observe any readily visible issues in the structural elements of the building that would indicate immediate structural repairs. However, we did note multiple issues in the exteriors along the structural elements, but we cannot

definitively state if the structural member is significantly impacted until the Phase II inspection is completed.

#### 3.4 <u>STAIRS</u>

The concrete stairs at the community did not have any readily visible significant structural issues; however, the stairs should be included in the breezeway repairs, as the waterproofing system should be continuous and not terminate at the stairs.

#### 3.5 FOUNDATIONS

We observed no readily visible evidence of differential settlement or significant drainage issues along the foundation that would result in structural issues.

#### 4.1 <u>Fire Safety</u>

The building's fire safety systems consist of the life safety system equipment, the fire sprinkler system, and the fire safety standpipes in both stairwells (reference photographs 30 & 31). During the inspection, the equipment looked to be in generally fair condition and did not require any testing at this time.

We recommend that during the annual testing of the systems, the board makes the contractor aware of any corrosion issues on equipment.

For the purpose of the reserve, the following are the estimated useful lives of the components of the fire safety equipment:

Life Safety Systems Equipment– Replace	. Every	15-20 years
Fire Sprinkler System– Repairs As Needed	. Every	35-40 years
Fire Safety Standpipe – Replace	. Every	30-35 years

We have provided budgets for each of the referenced items above and have included them in the reserve.

#### 4.2 <u>PLUMBING</u>

The building's common area plumbing consists of the domestic water line, which we observed no significant issues with this system, therefore testing is not necessary.

For the reserve, we have provided a budget for the repairs of the domestic waterlines every 12 years.

#### 4.3 <u>ELECTRICAL SYSTEMS</u>

The building's common area electrical systems consist of the site lighting and elevator systems, and we observed no significant issues with this system, therefore testing is not necessary (reference photograph 32 & 33).

For the reserve, we have provided a budget for the repairs of the electrical systems every 10 years.

# **PHOTOGRAPHS**



1. View of the subject building.



2. View of the main roofs.



3. View of typical roof framing.



4. View of the membrane peeling along the top flat roof.



5. View of the membrane peeling along the west lower flat roof.



6. View of the membrane peeling along the top flat roof.



7. View of the membrane peeling along the top flat roof on the south side.



8. An example of significant deterioration on the flat roof, along the north side of the building, on the lower east flat roof.



9. An example of significant deterioration on the flat roof, along the north side of the building, on the lower west flat roof.



10. An example of significant deterioration on the TPO roof, along the south side of the building, on the lower west flat roof.



11. An example of significant deterioration on the TPO roof is the west flat roof.



12. View of the west elevation of the building.



13. Enclosed sunrooms are located on the south elevation of the building.



14. Breezeways are located on the north elevation of the building.



15. View of the main corridor of the first-floor parking level, on the west side of the building.



16. Cracks are occurring at the control joints in the breezeways, due to the age and design of the joints.



17. Delaminated portions of the stucco were painted over and not repaired properly on the underside of the second floor towards the west end of the north side of the building.



18. Corrosion from what is suspected to be the lath that the stucco is attached to indicates evidence of water infiltration into the stucco system.



19. Example of stucco EFIs with no control joints which is resulting in cracking.



20. <u>Stairstep cracks are located on the exterior of the building at Units 110, 210, and 310.</u> <u>These horizontal joints and stairstep cracks should be exposed for a Phase 2</u> <u>investigation.</u>



21. The poor construction method and formwork placement have resulted in a crack at the joint along the beam; however, this is not a structural concern at this time.



22. Joint sealant along the bottom of a column between 305 and 306 is opened and needs to be repaired.



23. The patch around the HVAC unit at 308 was improperly done and should be remediated to prevent water from infiltrating into the building.



24. <u>A shear crack developing in the beam located above parking spot 310, should have the stucco removed for a Phase 2 inspection.</u>



25. <u>Spalled concrete in the electrical room is exposing rebar to the elements</u>. <u>This rebar</u> <u>should be exposed to confirm how much corrosion is present in a Phase 2 investigation</u>.



26. <u>A shear crack is located in the column by the stairwell in front of Unit 210. The stucco</u> <u>should be removed for further investigation in Phase 2.</u>



27. <u>A shear crack is located in the column by the stairwell in front of Unit 104. The stucco</u> <u>should be removed for further investigation in Phase 2.</u>



28. Evidence of an old patch or possible water infiltration at the beam in the breezeway between Units 107 and 106. This should be opened up in the Phase 2 investigation.



29. <u>The shear crack propagating from the beam in front of Unit 110 should be exposed in a</u> <u>Phase 2 investigation.</u>



30. Typical example of fire safety equipment.



31. Example of life safety equipment.



32. View of a portion of the elevator equipment.



33. Example of the main electrical system conduits and meters.