From: <u>Dennis O"Keefe</u>

To: Chris Linsbeck; Robert Talmage
Cc: Kim Brady; Thomas Drummonds
Subject: Linda Pedersen Park Tower
Date: Monday, June 9, 2025 8:45:54 AM

**Viewing Tower Structural Condition Report** 

Location: Linda Pedersen Park

**Structure Name: Hernando Beach Viewing Tower** 

**Date:** June 9, 2025

#### 1. Overview

This report outlines the condition of the aging viewing tower based on two on-site structural inspections conducted on **July 14**, **2023**, and **June 6**, **2025**. The observations highlight progressive structural deterioration due to aging materials, exposure to the elements, and inadequate fastening methods. The tower was constructed of heavy timber in 1994. The structure currently poses safety hazards to users and requires immediate attention.

# 2. Inspection Summary

**Inspection Date: July 14, 2023** 

Key findings included:

## Entry Ramp Issues:

The entry ramp exhibited signs of sagging and structural instability. There was evidence of wood decay near ground contact areas and uneven decking that presents a tripping hazard.

#### Guard Rail Deficiencies:

Multiple sections of the guard rails were loose, with some posts failing to resist lateral pressure. Fastener corrosion and poor attachment to the support structure were observed.

#### Joist Fastening Failure:

Numerous joists were found to be **end-nailed**, a practice not suitable for sustained load-bearing use. Several joists were **dropping** as the fasteners had loosened or failed entirely.

#### Rim Board Separation:

The **rim boards were detaching** from the joists, creating gaps that weaken the platform's lateral stability and load transfer.

**Inspection Date: June 6, 2025** 

New and ongoing issues noted:

# Missing Deck Plank:

A decking plank was completely missing from the main viewing platform, creating a **fall hazard** for visitors and exposing structural components to further weather damage.

#### Main Column Deterioration:

The tops of the **main vertical support columns** are **exposed to weather** and show signs of **internal deterioration**. Not sure how deep the moisture ingress has compromised the wood's integrity.

### Stair Tread Instability:

The stair treads are supported by **galvanized angles attached to risers**, but the **fasteners have backed out**, causing the treads to **rock and shift** during use, increasing the risk of slips and falls.

• **Decking Attachment:** Decking in some areas has been re-attached several times. The surface area of the underlying joists should be evaluated for replacement.

## 3. Safety Concerns

- Risk of **falling** due to unstable treads and missing decking.
- Risk of structural failure in high-load areas, especially where joists and rim boards have separated or are inadequately fastened.
- Risk of **guard rail failure at entry ramp** due to weakened posts and insufficient fastening.

## 4. Recommendations

#### Immediate Actions (within 30 days):

- Restrict access to the structure until emergency repairs or stabilization can be completed.
- Secure or replace all rocking stair treads and reinstall missing decking planks.
- Install **temporary shoring or bracing** in areas with joist or column compromise.

#### **Short-Term Repairs (within 3–6 months):**

- Remove and **reinstall joists with proper hanger systems** or through-bolted framing anchors, eliminating all end-nailed connections.
- Reattach or replace rim boards to ensure complete perimeter support.
- Replace or reinforce all guard rail posts and connections to meet current safety standards.
- Cap or seal main columns to prevent further moisture ingress; consider invasive inspection or partial dismantling to assess internal decay.

## **Long-Term Options:**

- Develop a **comprehensive rehabilitation plan** or explore full replacement if deterioration is too advanced.
- Use **weather-resistant materials** and modern fastening systems for any rebuild or refurbishment.
- Incorporate **code-compliant design features**, including ADA accessibility, antislip stair finishes, and updated guard rail dimensions.

## 5. Conclusion

The viewing tower has undergone significant deterioration over the years, with several safety-critical elements now in a state of failure or near-failure. The structure is currently **unsafe for public use** and requires either immediate stabilization and phased repairs or full decommissioning pending reconstruction. Failure to act promptly may lead to a complete structural failure, increasing liability and risk to public safety. For further analysis of structural capacities and main frame inspection, a Licensed Structural Engineer should be consulted for remedial work.



Dennis J. O'Keefe, CBO | Hernando County Building Official

Building Division | Development Services Department

789 Providence Blvd., Brooksville, FL 34601

**Phone**: (352) 754-4050 ext. 29021

**Fax**: (352) 754-4159

Email: dokeefe@hernandocounty.us

**Website**: https://www.hernandocounty.us Office Hours: Monday-Friday, 7:30 AM – 4:00 PM