

Report of Findings Mobile Manor, Inc.



**Inspection and Report Completed by LCM Engineering, PLLC
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Certified General Contractor
License CGC 1528366
17 March 2020**

Introduction

On 17 March 2020, LCM Engineering PLLC, conducted an on-site inspection of the pedestrian foot bridge located in Mobile Manor Mobile Home Park. The property is located at 150 Lantern Lane, North Fort Myers, Florida, 33917. All inspections were visual in nature and all findings are listed in this report.

Preliminary Information

On 17 March 2020 representatives from LCM Engineering, PLLC, went to the location of Mobile Manor Mobile Home Park, located at 150 Lantern Lane, North Fort Myers, Florida. The purpose of the visit was to evaluate the condition of a pedestrian foot bridge and to assist in determining if the foot bridge posed any safety issues.

During the inspection of the foot bridge, I was accompanied by Justin Rumisek, EIT for LCM Engineering, PLLC. The foot bridge is constructed of prefabricated concrete beams supporting a concrete slab approximately 2 inches thick. The "T" beams have pre stressed steel cables imbedded in the concrete. The span of the foot bridge is approximately 60 feet in length. The width of the foot bridge is approximately 3 ½ feet. The foot bridge is primarily used for pedestrian foot traffic, however, several residents of the park travel over the foot bridge in golf carts.

Observations

Upon arrival at the site, representatives from LCM Engineering, PLLC (LCM) conducted a visual inspection of the foot bridge.



The primary construction is prefabricated and pre-stressed concrete. However, it was readily apparent that over time, several repairs were attempted to support the foot bridge. There was evidence present that prior repairs using pressure treated wood were attempted. Since golf carts are also used to cross the foot bridge, their use has contributed to the damage present. During the inspection, visible signs of pending failure were also observed.



The attachment points of the bridge to solid ground are failing, causing the foot bridge to move under pressure as can be seen in the above photograph. The entire structure has moved approximately 1-2 feet over time, causing separation of the concrete blocks (CMU) and any soil contained within to slip as well. This is visible on both sides of the foot bridge. In addition, there were visible cracks in the prefabricated concrete beams supporting the foot bridge. This is another area of potential failure which can occur at any time. Stresses in the pre-stressed steel cables contained within the concrete beams can cause the concrete beams to fail without any further signs. Due to these reasons, LCM Engineering PLLC, is under the opinion that the foot bridge is unsafe for pedestrian and vehicular traffic. The pre-stressed steel cable can fail at any time, possibly causing the foot bridge to collapse even without any additional loads. The foot bridge no longer has support from the embankments as these have also separated over time. The additional stresses put on the concrete and supports from golf carts will only expedite the failure of the bridge. The failure of the bridge can occur at any time without notice, especially if the pre-stressed cables break and fail.



Photo depicting attempted repairs for support of bridge



Significant cracks is concrete supporting beam



Significant cracks present in concrete slab

Conclusions

Due to the present condition of the pedestrian foot bridge, LCM Engineering PLLC, deems the foot bridge to be **UNSAFE** for both foot and any vehicular traffic. The condition of the foot bridge poses a significant hazard to human safety and all access should be stopped immediately.

It is also the recommendation of LCM that the current bridge be removed and replaced if desired by the community. It will be necessary for the contractor to be water certified, such as those who repair or replace seawalls due to the fact that the foot bridge crosses a small canal/stream.

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