

December 5, 2023

Mr. Eric Augst, Special Projects Designer
City of Key West
1300 White Street
Key West, Fl. 33040

Re: Martin Luther King Pool-Structural Shoring Inspection 12/5/2023
304 Catherine Street

Dear Mr. Augst,

This letter is a supplement to the inspection report letter dated 11/16/2023. On December 4th, I met onsite with representatives of Sharpedge Construction, LLC to discuss the scope of work to be considered for concrete repair pricing under their contract with Key West. We discussed the contractor perform a representative repair to the ceiling slab in the Men's dressing room to get an understanding of the severity of the slab deterioration and if the slab can be repaired or if it should be replaced. The scope of work we reviewed would be to repair all spalling concrete that had the potential to delaminate and fall, creating a hazard the general public, life guards, or any other person that has access to the building.

As part of that review of the scope we discovered additional areas of spalling in addition to what was reported in the 11/16/2023 report. Most notably was the ceiling and floor of the life guard station near the elevator. A large section of the ceiling slab concrete had fallen away exposing the deteriorated reinforcing steel.



Exposed rebar under floor of
life guard station.
Cracking tie beam

Underneath Lifeguard Station

The Lifeguards were advised to immediately restrict access to this area.



Cracked and spalling concrete in lifeguard station.

Top of floor shown in previous picture.

Lifeguard Station



The ceiling at the top of the stairwell leading to the pool is cracked with delaminating concrete

Top of stairwell

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Delaminating concrete can be difficult to see. Sounding the concrete by tapping it with a hammer helps determine the extent of it. By sounding the concrete, we are aware of many more areas that are delaminating in the ceilings and walls that cannot be seen simply by looking at them. **Hazards caused by falling concrete as has happened under the Lifeguard station exist throughout the facility.**

Also, the extent of repairs that are ultimately needed to repair deteriorated steel reinforced concrete cannot be determined until the loose, spalling concrete is chipped away and the reinforcing steel exposed. It is possible that full depth replacement of the slab will be required. Therefore we recommend a representative section of the slab be chosen for an exploratory repair to determine if a typical slab repair will likely be sufficient or if the entire slab should be replaced to achieve the most expedient and cost effective solution to extend the life of the facility.

Respectfully Submitted,



REYNOLDS ENGINEERING SERVICES, INC.
James C. Reynolds, PE

Cc: Perez Engineering