Subject: FW: 2601 Marion Dr. Seawall

From: Tim < timhart@lovellmarine.com > Date: January 6, 2021 at 1:46:34 PM EST

To: Butch Konover <br/>
<br/>
bkonover@3twenty3builders.com>

Cc: M Castro < mcastro@lovellmarine.com >, Alejandra Medina < amedina@lovellmarine.com >

Subject: 2601 Marion Dr. Seawall

As you know I went out and visually inspected the seawall at 2601 Marion Dr. Here's what I found:

There is substantial leakage from the wall illustrated by the loss of soil across the length of the wall. The cap is in good shape (damaged on the west side) and the seawall face, king piles and batter piles are covered with a heavy coat of marine life which makes it difficult to determine where the soil loss is coming from. There are two possibilities:

- The king piles are vertical concrete and steel piles that are used for wall support and also to seal the
  panels that comprise the face of the wall. If the panels are not sealed properly soil leaks out from the
  joints. Unfortunately the joints are covered with a thick coating of marine life and you're unable to see
  them. This is the most likely source.
- 2) I cannot see if there is a footer in front of the wall. A footer sits at the bottom of the wall and is comprised of metal corrugated panels driven into the bottom about a foot from the wall that are then filled with concrete. The footer provides additional support and keeps the soil from leaking out from under the seawall panels. I cannot determine visually if there is a footer. Often times the soil washes away from the bottom of the seawall panels and leaves a space for the soil to escape. If there is no footer and the soil is escaping from the bottom adding a footer would solve that problem.

## Recommendation:

A seawall inspection is needed to determine where the leaks are coming from and if there is leakage from under the seawall. A proper Seawall inspection has a diver go in the water and probe the seals on the king panels and also probe the bottom to see if it is secured properly. They will also examine the seawall face, the concrete piles and the cap to determine if there are holes or cracks that need repairing. A report will be issued along with pictures and video to highlight troubled areas. The marine life needs to be removed from the entire seawall including the piles. Marine life leaches out the calcium from the cement and weakens the wall and piles. Over time this causes the steel inside the wall to be exposed further weakening the wall. Removing the marine life will also need to be done to administer the necessary repairs.

I use a very competent Seawall Inspector, Angelo Menezes of Certified Inspectors for the Inspections. He's very good, thorough and professional. He can be reached at 561 797 4620

Please let me know how your client wishes to proceed. I'm available to answer questions from them if they'd like to speak with me.

Thank you,

Timothy Hart Lovell Marine Construction Mobile (954) 918-3282 Office (954) 467-5055 timhart@lovellmarine.com

Call us for all your Marine Construction Needs!