

June 5, 2022

Development Services
City of Delray Beach

RE: 1033 Waterway Lane – Nautical/Safe Navigation Report for Reilly Property

To Whom It May Concern:

My name is Mitch Bryant. I am in Sales at B&M Marine Construction Inc. My company constructs and maintains docks, seawalls, finger piers, dolphin piles, and other marine structures throughout South Florida. I have 15 years of experience in the marine industry and my company has a combined 140 years of experience in the marine industry.

My company was hired by Eugene Reilly to help design, permit, and construct marine structures in the waterway behind his property at 1033 Waterway Lane. Mr. Reilly indicated early on in the design process that he wanted the ability to dock a vessel approximately 60-90 feet in length. We obtained a bathymetric survey to analyze whether there was sufficient water depth behind his property. The survey revealed there was not sufficient depth so we recommended dredging in this area.

However, as we analyzed the existing conditions further, we discovered dredging alone would not be sufficient to allow safe navigation and mooring of a large vessel in this space. This is because the waterway adjacent to Mr. Reilly's property experiences a large volume of wave activity, far in excess of what is normally seen in most areas of the Intracoastal Waterway. The waterway west of Mr. Reilly's property line is, in essence, a basin aside from the main part of the Intracoastal. This area of the Intracoastal does not have a wake restriction. Together, this means during busy boating times boats make large wakes which have time to turn into waves as they approach Mr. Reilly's seawall. This makes getting a large boat in and out of this basin very difficult and dangerous.

We analyzed whether a 25 foot finger pier could be configured in such a way to allow for safe mooring but unfortunately deemed it would be impossible under these nautical conditions. Therefore, based on my company's experience and expertise, we recommended Mr. Reilly construct a 46-50 foot finger pier and dolphin piles, both configured perpendicular to his property. This length will allow safe navigation to and from the mooring structures. This is consistent with quite a few other finger piers in this area.

In conclusion, it is my professional opinion that a 25 foot finger pier will not allow for safe navigation of a large vessel in this area of the waterway behind Mr. Reilly's property. At least 46-50 feet of finger pier and dolphin length is needed due to the large waves/wakes in this area.

Sincerely,



Mitch Bryant