

September 8, 2020

Theresa Schefstad, Director Pointe Towers Condominium, Inc. theresajhs@yahoo.com

RE:

Pointe Towers Condominium, Inc.

555 Gulf Way

St. Pete Beach, Florida 33607

KEG File #20RP-0462: Additional Services – Owner Plumbing

## Pointe Towers Board of Directors:

In September of 2017, Pointe Towers completed the vertical stack sanitary pipe restoration and the underground pipes utilizing a method of cleaning and installing a CIPP lining within the pipes. Blue Works, Inc. completed this work along with replacement of cast iron fitting when the fitting was cracked or damaged beyond repair. During this plumbing restoration, KEG was made aware of conditions outside of the main vertical stacks within the building that required repairs. These conditions were identified as owner-owned plumbing, such as the horizontal or lateral lines for sewer within the units and fresh water copper lines.

The existing structure is a seven-story waterfront condominium with a total of fourteen living units, built in 1969. Copper lines within the units are approximately 52 years of age. The life span of a typical copper water supply line is approximately 50 to 70 years. Municipalities use chemicals to treat water which can cause the water to become acidic or alkaline causing a reaction with the copper. Iron deposits from rusty water heaters can also cause pitting and corrosion of the copper pipes. Pitting can lead to pinholes and then bursting of pipes.

In a previous letter written to Pointe Towers regarding owner-owned plumbing dated March 3, 2018, KEG explained that similar to the vertical stacks for the discharge or sewer lines, the horizontal or lateral lines to the vertical stacks are at the end of their life span. Evidence of this has been seen within units where owners have remodeled and were required to remove and replace piping. Detergents, grease, chemicals, sands or salts, bodily waste all contribute to the deterioration of the cast iron pipes.

Most recently on August 10, 2020, KEG visited Pointe Towers again to observe the piping for Unit #1S, #2S and #3S. KEG was unable to see any sign of cracking or active water leaking at the exterior of the piping. The interior of the pipes condition is unknown and was not accessible for KEG to observe. KEG did observe the exterior pipe to have some suspect spots and staining especially located within the maintenance room of the pipes of 2S and the lateral of 3S observed in 2S. KEG has provided drawing details to provide an illustration of the lateral and vertical pipes in each unit and approximate location of the pipes.

The lateral pipe and p-trap from Unit #4S was removed by plumbers for repair after a major leak had occurred into the units below 4S. KEG observed these failed components during the site visit. The p-trap showed no visible cracking on the exterior, however the interior of the p-trap was completely clogged and debris of the blockage could be seen at the both ends of the pipe. The lateral pipe had a severe crack observable from the exterior of the pipe.

Firm Registration Number 8371 www.karins.com





P-Trap Blockage of Unit 4S



Cracked Pipe from Shower Drain of Unit 4S



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As previously stated in the letter to Pointe Towers dated March 3, 2018, KEG's professional opinion is that the piping and horizontals are past their serviceable life. KEG highly recommends for the Owners to replace the lateral pipes and fittings that have extended beyond the useful life as previously recommended to Pointe Towers in 2018. If the pipes are not replaced, KEG recommends that the Owners have an inspection completed for the interiors of the lateral pipes and fittings to access the condition of the pipe. A high probability of failures, such as cracks and bursting pipes are imminent due to age and debris build-up on the interior of the pipe. Similar to the sanitary lines, the portable water lines are nearing the end of the useful life. The maintenance, detection, and replacement of the sanitary and portable pipes are much more cost effective than a catastrophic flood from a burst pipe to the owner and surrounding units.

We trust this information is helpful. Should questions arise, please do not hesitate to call.

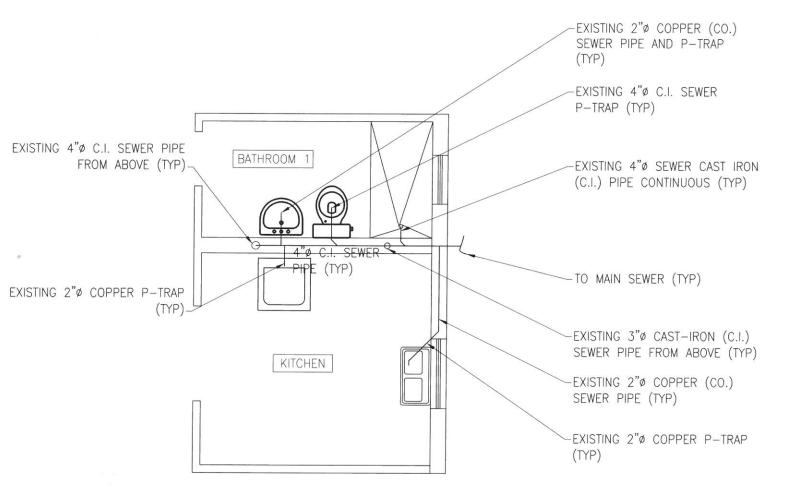
Sincerely,

Karins Engineering Group, Inc.

Thomas Buffington P.E.

Florida Registration # 67546

St. Petersburg Branch Manager



TYPICAL WASTE WATER LAYOUT SCALE: 1/4" = 1'-0"

BATHROOM 1 - 1ST FLOOR

## NOTES:

- 1. INTENT OF DRAWINGS IS TO SHOW CONFIGURATION OF FIELD CONDITIONS AND LAYOUT OF VERTICAL AND LATERAL SANITARY PIPES.
- 2. ALL DIMENSIONS ARE APPROXIMATE AND SHALL BE FIELD MEASURED.

POINTE TOWERS
555 GULF WAY
ST PETE BEACH, FLORIDA 33706

POINTE

**PLUMBING** SEWER AYOUTS

20RP-0462 AS NOTED 09/03/2020

PRELIMINARY NOT FOR CONSTRUCTION

P-1.0

