

June 13, 2016

Karl Kennedy, PE
City of Pembroke Pines
8300 S. Palm Drive
Pembroke Pines, FL

**Re: Altis Pembroke Gardens & Pembroke Centre
Existing Sanitary System Repairs**

Dear Karl,

On May 18, 2016, a letter was distributed from your office to the owners of Permit No. 2016-57 regarding a video report done by Proline Vactor Services on May 9th, 2016 for their portion of the existing sanitary sewer main built, certified, and accepted by the City of Pembroke Pines under Permit No. 2013-72. This existing main was formally accepted by the County (via certification letter on 2/21/14) and the City (via sign off letter on 6/3/14), illustrating that the main, at the time of final certification, was installed per the approved design, met the Florida Department of Environmental Protection and Broward County Environmental Licensing and Building Permitting Division – Domestic Wastewater Licensing Program requirements, and would perform as designed.

Since that time, certain portions of the existing main appear to have settled, are collecting influent, and do not now meet the minimum slope requirements. In response to your 5/18/16 letter, this letter serves to outline our recommendations to correct the existing sewer main to ensure that the system will continue to operate as originally designed, constructed and certified.

Our corrective measures include the following options

- 1) The Site Contractor (Contractor) will excavate and expose the existing sanitary main (as listed in the schedule shown below) via the City's trench detail.
- 2) Once exposed, the Contractor will make one of the following corrections depending on the conditions encountered in the field:
 - A. Re-bed the existing pipe material needing repair (SDR 26 C-900 pipe). In addition to the areas identified below, the Contractor will need to re-bed a minimum of two joints before and after the area needing remediation to ensure the section has been seated properly and minimum slopes are maintained.
 - B. If it is encountered that minimum slopes or other requirements cannot be maintained utilizing option A, then the Contractor will need to do the following:
 - i. Contractor will isolate the system by plugging the most upstream (northernmost) manhole and either:
 1. Operate on off-business hours to ensure no disruption of service to the PNC Bank, who has been utilizing the sanitary line since their CO in 2014 or
 2. Temporarily pump any influent during the duration of repair.
 - ii. After the system has been isolated, the section of pipe needing repair will be replaced with the same material (SDR 26 C-900) a minimum of two joints before and after the areas identified below.

The areas we have identified as needing repair are the following (MH 1 is identified as the most upstream MH in this system and numbering goes downstream or south):

- Between MH 2 and MH 3 – Area of concern begins 108 ft south of MH 1 and extends for another 44 ft.
- Between MH 4 and MH 5 – Area of concern begins at 116ft. south of MH 4 and extends to 123ft. (the end of the run).
- Between MH 5 and MH 6 – Area of concern begins 112 ft south of MH 5 and extends for another approximately 20-ft.

Between MH 9 and MH 10, the TV results indicate a slight depression in the line. Given that this location is the most downstream, we do not feel it is necessary to excavate and correct this portion of the existing sanitary line. This portion of the line will receive the most flow and will operate as designed.

Upon review of this information, should you like additional information or clarification, please feel free to contact me. If the above explanation is acceptable to the City, please confirm by reply to this letter so this work can be scheduled immediately. Thank you in advance for your time, and I look forward to your reply.

