

July 26, 2017

City of La Center  
Attn: Tony Cooper  
305 NW Pacific Hwy  
La Center, WA 98629

**RE: Existing Sewer Conveyance Capacity Analysis**

Dear Tony,

The Riverside Estates Subdivision and the Sunrise Terrace Subdivision have both been proposed to be constructed along Old Pacific Highway in the northwest corner of the City of La Center. Unfortunately, there is no existing sanitary service to this portion of the city. As a result, a sanitary pump station has been proposed in the southeast corner of the Riverside Estates Subdivision to provide the necessary service for both developments. Due to the size of both projects, it was prudent to verify the capacity of the impacted portion of the City of La Center's existing sanitary sewer conveyance system to ensure it is sized sufficiently to accommodate the increased flows. The following analysis and documentation is intended to confirm that the existing sanitary sewer conveyance system is sufficient to safely convey the additional sewer generated from both developments.

As part of this analysis, Romtec Utilities was contracted to complete a preliminary pump station design and size the proposed sanitary force main which will convey the effluent from the proposed pump station to the City of La Center's existing sanitary conveyance system. A basin analysis was previously completed to establish peak flow rates generated from the total buildout of the Riverside Estates Subdivision and the Sunrise Terrace Subdivision. These flows were provided to Romtec Utilities who used them to complete the preliminary pump station design. The preliminary design resulted in a 6' I.D. wet well structure and a 687 valve vault structure with 4" discharge piping, valves, and fittings. The pump station will use a 6" force main and will generate a total flow rate of 305 gpm. A spreadsheet depicting the design assumptions and friction losses, along with the conceptual plan and profile, has been included with this analysis.

As directed by city staff, the analysis of the sanitary sewer conveyance system was limited to the portion of the system that will be impacted by the increased flows generated from the proposed developments to the beginning of the new 18" gravity main recently installed by the City of La Center. As can be seen in the provided plan and profile, the force main will discharge into the existing sanitary manhole located at the north end of W E Avenue. This manhole is labeled as Manhole E18 on the City of La Center's Appendix B Collection System Map. After discharging into Manhole E18 the effluent will gravity flow south down W E Avenue through Manhole E17

