



# TECHNICAL MEMORANDUM

MARCH 16, 2022

**TO:** THOMAS PARROTT, PE, CITY OF AIKEN  
**FROM:** TYLER MORGAN, PE  
**RE:** PROJECT PASCALIS – DOWNSTREAM ASSESSMENT

## 1 METHODS

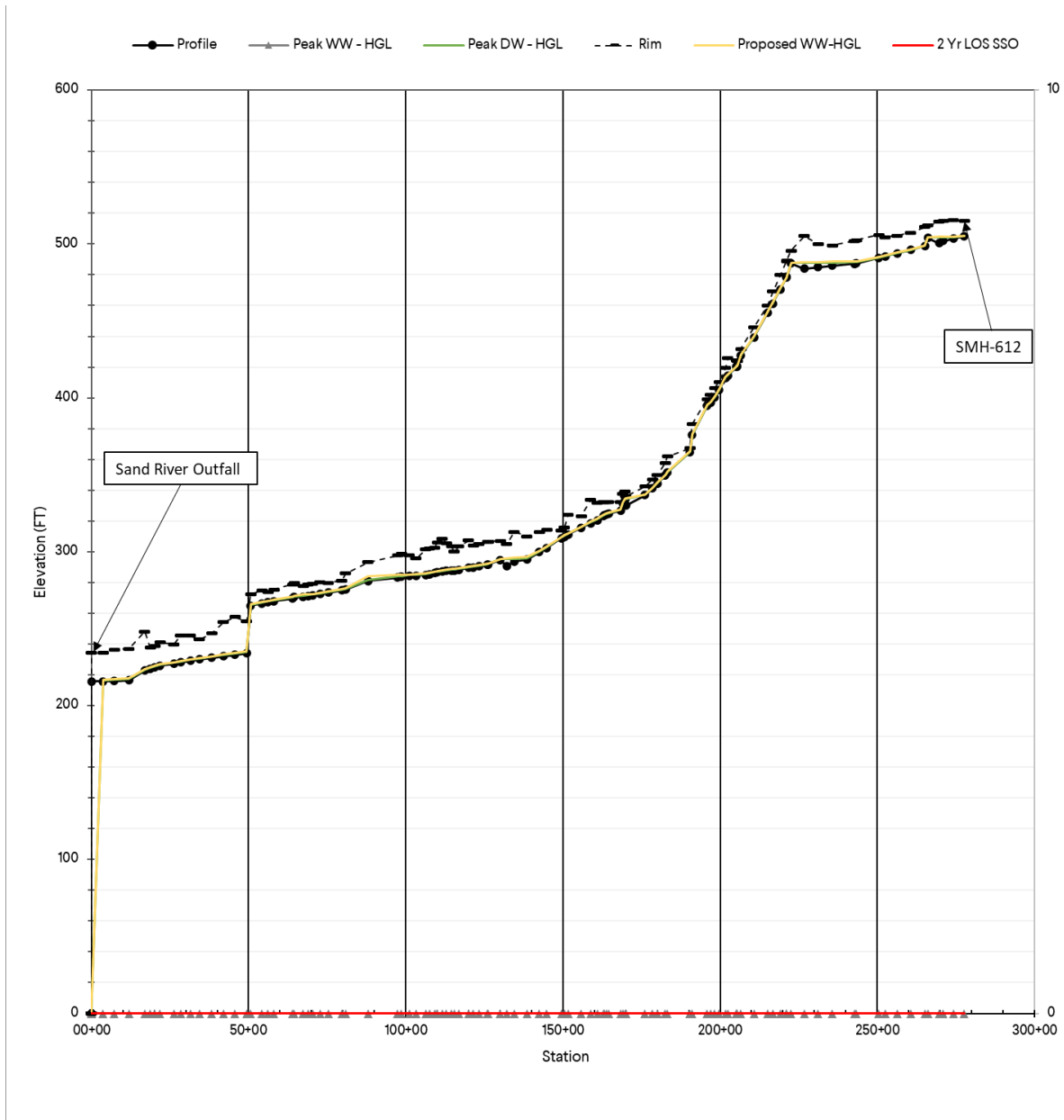
The City of Aiken requested the Project Pascalis development to be included in the model of the City’s sewer collection system to assess downstream effects. Per the City’s request February 23<sup>rd</sup>, 2022, GMC included the proposed capacity allocation of 143,250 GPD (99.5 gpm) at the tie-in location, SMH-612. The flow will be intercepted by the Sand River Outfall. Dry weather and wet weather flow scenarios were examined.

## 2 RESULTS

The Level of Service (LOS) goals are included in the table below. The additional capacity has negligible impacts on the downstream gravity sewer as defined by the established level of service. Based upon the modeling results, the City of Aiken has the capacity to accept this flow. Please see the attached HGL graph for further explanation of model results.

**Table 2-1. Level of Service (LOS) Goals**

<b>Goal Criteria</b>	<b>Metric</b>	<b>Asset Type</b>
<b>Gravity Sewer Capacity</b>	< 75% full	Gravity Sewer
<b>Manhole Capacity</b>	> 18-inch below rim	Manhole
<b>Forcemain Velocity</b>	2.4 – 4 ft/s	Force Main
<b>Forcemain</b>	< 80 psi	Force Main



**Figure 2-1.** Downstream Capacity Assessment.

**Table 2-2.** Summary of Proposed Flows in Model to Date

Name	Location	Tie-In	Flow (GPM)	Date Requested
Townhomes of Chukker Creek	Chukker Creek Road, Horshoebend Rd	SMH-15247	6.67	3/3/2021
Chukker Creek Landing Development	Chukker Creek Road, Horshoebend Rd	SMH-15247	37.50	3/2/2021
McLean Property - Phase I only	Whiskey Road, Oak Grove Road	Lowes PS	53.25	2/12/2021
Palomino Oaks Phase 1	South of Battle Field Road, West of HWY 1	SMH-3369	41.67	11/12/2021
Project Pascalis	Along Richland and Newberry Avenue	SMH-612	39.792	2/23/2022