

Exhibit A

Wastewater Engineering Services for 2019

West Yost Associates

SCOPE OF SERVICES

West Yost scope of services supports the City of Hercules's staff in advancing its wastewater program. This scope corresponds to the City's objectives of regulatory compliance, providing reliable service, and designing for the future to accommodate planned growth.

The scope of services is divided into two tasks, described in more detail below.

- Task 1. Collection System Master Plan Update
- Task 2. Staff Augmentation

Task 1. Collection System Master Plan Update

A Collection System Master Plan Update, including hydraulic modeling will be performed to provide the information needed to expand the collection system to accommodate future growth and to update the near-term capital improvement project list. Updating the capital improvements list includes: a) defining the system modifications needed for decommissioning the Promenade Lift Station, b) scoping the expansion of the Industrial Lift Station, and c) validating the need to increase capacity for the sewer trunk line from Duck Pond Park to Partridge at Refugio Valley Road. The modeling will confirm the size and capacity of existing sewers and lift stations and will be used to plan for capacity expansions of the system.

Subtask 1.1 Flow Monitoring Plan

West Yost will identify the locations for up to 6 flow monitors and up to 2 rain gauges for a temporary wet weather flow monitoring study. The flow monitoring locations will be chosen to provide acceptable hydraulics for measurement while targeting flow inputs that directly quantify flows in potential capital improvement projects. A map of the flow monitoring locations and a table including the location and purpose of flow monitor will be provided. The results of the flow monitoring will be used to refine the hydraulic model developed in Subtask 1.2. The flow monitoring will be conducted by a flow monitoring firm contracted directly to the City.

Subtask 1.2 Hydraulic Model Development

West Yost will build a hydraulic model of the City's wastewater collection system using a commercially available and currently-supported hydraulic modeling software. The model will be a backbone model that includes the conveyance trunk mains in the collection system in addition to smaller pipelines that are identified as hydraulically significant. Hydraulic modeling efforts will focus on projecting flows in the City's major trunk lines with the express intent of validating and scoping the potential capital improvement projects listed in the City's 2008 Collection System Master Plan (e.g., Industrial Lift Station and Force Main, the Sycamore Trunk Sewer, and the Upper Sycamore Sewer).

Information and details of the collection system infrastructure used in the hydraulic model will come from the City's existing hydraulic model and the City's collection system GIS. Existing Average Dry Weather Flow (ADWF), Peak Dry Weather Flow (PDWF), and Peak Wet Weather Flow (PWWF) values will be developed and calibrated based upon flow monitoring data. Future flow values will be developed based upon buildout conditions established by the City.

Subtask 1.3 Master Plan Update Hydraulic Analysis and Technical Memorandum

West Yost will use its hydraulic model to evaluate the existing and future capacity conditions for the areas of the collection system identified for improvement in the 2008 Collection System Master Plan. The evaluation will be used to validate or modify the scope and timing of the capital improvement projects identified.

Task 1. Assumptions:

- The hydraulic model update will consist of a trunk sewer backbone model.
- Growth projections for the Buildout Scenario will be based upon City General Plan land uses and City staff's existing knowledge of future developments.

Task 1. Schedule:

Task 1 will start with notice to proceed and will last approximately six months. Preliminary sizing information for the Sycamore Sewer will be available approximately six weeks after receipt of the flow monitoring data.

Task 1 Deliverables:

- Flow Monitoring Locations – one table and one figure.
- Calibrated hydraulic model and development documentation.
- Draft and Final Collection System Master Plan Update Technical Memo.
- Project GIS shapefiles at the end of the project.

Task 2. Staff Augmentation

The purpose of Task 2 is to work with the City Engineer and City staff to accomplish tasks recommended in the City's 2016 Wastewater Program Assessment. Based on discussions with staff, some of the tasks that could occur in 2019 include, but not limited to:

- Review of structural defects identified in the City's CCTV inspection of the collection system
- Evaluating ability of the City's collection system infrastructure to accommodate future developments
- Scoping and potentially procuring engineering design consultants for the Industrial Lift Station and Force Main improvements project

- Daily management and technical support for the Wastewater Utility Financial Plan and Fee Review being completed by Willdan.
- Other tasks that arise through the course of the contract.

Task 2. Assumptions:

- Work under this task is subject to change. The City Engineer will prioritize work under this task as needed
- The scope of services will be limited to work that can be completed within the available budget

Task 2. Schedule:

West Yost will be available to begin as-needed services with the notice to proceed and will continue until the end date of the contract, or when budget is fully expended, whichever comes first.

Task 2 Deliverables:

- Deliverables will be determined when as-needed tasks are assigned