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August 14, 2020

Steve Stalvey, Utilities Director Lowndes County Utility Department c/o Mr. Tom H. Sloope, P.E. Carter & Sloope, Inc. 6310 Peake Road Macon, Georgia 31210

Subject:

South Lowndes County Land Application System Expansion, ±76-Acre Proposed Expansion of Spray Field Area at the South Lowndes LAS, 5398 Grassy Pond Road, Lake Park, Lowndes County, Georgia. Proposal No. 16-124-2020-1.

Dear Tom,

Nutter & Associates, Inc. (NAI) is pleased to provide the Lowndes County Utility Department this proposal for conducting a review of the suitability of the proposed expansion area and non-mechanical aspects of the South Lowndes land application system (LAS). We understand the expansion area was previously investigated by NAI in 2000 and was identified as part of the suitable area for wastewater application. NAI will refresh our assessment of the expansion area and determine whether the site and soil conditions have changed significantly regarding the suitability for land application. In addition, NAI will review contemporary nutrient loading given historic and projected future wastewater characteristics and flow volume.

## Task 1. Site Evaluation

For the soil investigation, NAI staff will advance and log approximately twenty soil borings using hand augers across the previously delineated suitable area. The area of investigation (AOI) is approximately 76 acres. The observed soils will be described, and soil logs will be completed in the field. The soil log descriptions will include texture, color, slope, depth to wetness indicators, and depth to water restrictive horizons.

Composite samples of soil from the surface and subsurface soil horizons will be retained for analysis of soil chemical properties critical to land application system design including soil pH, cation exchange capacity, percent base saturation, phosphorus adsorption, nutrients, and agronomic trace elements.

A minimum of three field tests for saturated hydraulic conductivity of the soil will be conducted for each suitable soil series using the constant head permeameter method. We anticipate a total of three permeameter field tests.