



NOT FOR SIGNATURE

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Task Order No. 23-08
City of Whitewater, Wisconsin (OWNER)
and Strand Associates, Inc.® (ENGINEER)
Pursuant to Agreement for Technical Services dated December 30, 2020

Project Information

Services Name: Biosolids Study

Services Description: General engineering services to review alternatives for biosolids processing and disposal at the OWNER's wastewater treatment facility (WWTF).

Scope of Services

ENGINEER will provide the following services to OWNER:

1. Review operating parameters of OWNER's existing biosolids land application process and evaluate potential future biosolids regulatory constraints.
2. Review biosolids process considerations including digestion capacity, foaming concerns, performance, and mixing strategies.
3. Assist OWNER in development of a capital improvements plan for the rehabilitation or replacement of anaerobic digester components including the covers, concrete surfaces, gas piping, and thickening equipment at the WWTF.
4. Prepare opinions of probable operation and maintenance costs associated with the following scenarios:
 - a. Current liquid biosolids land application through an outside vendor.
 - b. Liquid biosolids land application using new equipment and OWNER's staff.
 - c. New biosolids dewatering equipment with land application through an outside vendor.
 - d. New biosolids drying equipment to achieve Class A biosolids with and without a regional biosolids drying facility.
 - e. Hauling biosolids to a regional biosolids drying facility through an outside vendor.
 - f. Hauling biosolids to a regional biosolids drying facility using new equipment and OWNER's staff.
5. Develop opinions of probable capital costs, total present worth costs, and nonmonetary considerations for the following alternatives:
 - a. Continuing with anaerobic digestion with existing thickening equipment and liquid biosolids land application.
 - b. Continuing with anaerobic digestion with new thickening equipment and liquid biosolids land application.

