

BRUNSWICK-GLYNN JOINT WATER AND SEWER COMMISSION REQUEST FOR QUOTATION NUMBER 23-020 THE PREPARATION OF ENVIRONMENTAL SITE ASSESSMENTS AND GEOTECHNICAL SURVEYS FOR EXIT 42 ELEVATED STORAGE TANK, JWSC PROJECT NO. 2213. April 18, 2023

BACKGROUND INFORMATION

The *Brunswick - Glynn County Joint Water and Sewer Commission (JWSC)* has initiated a water production improvements project to construct a 750,000-gallon capacity composite type elevated water storage tank, approximately 150 feet tall and supported on a cylindrical pedestal structure which will be approximately 35 feet in diameter at 118 Cherokee Trail, Brunswick, Georgia, 31525. The parcel number is 03-28132. Please see attached drawing entitled **"TOPOGRAPHIC SURVEY - EXHIBIT A"** for reference.

The completion of this project will have the elevated storage tank connected to the existing 12-inch waterline adjacent to the property. The project will also assist the JWSC in achieving the goal of providing a reliable water supply, pressure, and fire suppression need for the surrounding community and anticipated developments within the Exit 42 area in Brunswick, Georgia.

SERVICES REQUIRED

The following environmental site assessments and geotechnical surveying services are required in the area described above. The Consultant shall submit, electronically in PDF format, the Draft Reports to the JWSC for review prior to the submittal of the Final Reports. The Final Report deliverables shall be signed & sealed by a Georgia-Registered Professional Engineer.

The services may include one or more of the following:

- 1. Completion of Phase I ESA investigation and report in accordance with the ASTM Practice E1527-21 "Standard Practice of Environmental Site Assessments: Phase I Environmental Site Assessment Process."
- Completion of a limited Phase II ESA investigation and report (to standards recognized in ASTM E1903 11) based on known or suspected environmental concerns as identified by the JWSC or on the Phase I ESA recommendation and as based on the general past uses of the site.
- 3. If required, the Phase II ESA report to include soil, air, and groundwater testing and reporting to evaluate human health risks related to chemical contamination in any or all media. And design and implementation of hazardous chemicals and waste management programs in compliance with local, state, and federal agencies.
- 4. Obtain clearances and necessary permits, including encroachment permits, drilling permits, or other regulatory permits for the environmental site assessments and geotechnical surveying services.
- 5. The Geotechnical Engineer or another project team member shall call for underground utility locations at least 72 hours prior to the commencement of the work to reduce the opportunity of conflicting with any unforeseen obstructions. The Utilities Protection Center underground utility location service can be contacted at 1–800–282–7411 or 811.

- 6. Field exploration: Classify and log subsurface soil conditions encountered in the test borings at the time of drilling; obtain bulk samples of substrata from borings; present findings in standard reporting format.
- 7. Provide all labor and equipment necessary to facilitate site access as required. To include but not be limited to removal of small brush, vegetation, saplings, debris and ground cover.
- 8. Provide labor and equipment as needed to perform a minimum of five (5) borings as required. The four (4) bores should be equally spaced on the anticipated support structure diameter, which has the tank centerline as its center and one (1) bore located at the tank centerline. The Geotechnical Engineer or another project team member shall survey the location and elevation of boreholes. Any unusual conditions requiring additional borings should be reported during the field investigation. The Geotechnical Engineer shall determine the exact number of borings, depths, and locations as appropriate for the elevated storage tank construction. See attached "TOPOGRAPHIC SURVEY" for the approximate elevated storage tank location.
- 9. Borings in soil exclusive of rock should extend below the foundation to a depth of at least two (2) times the foundation diameter, with at least one boring extending to a minimum depth of 100 feet. When rock is present and may be utilized as a base for the foundation footings, piling, or caissons, at least one (1) boring should be carried a sufficient distance into the rock to determine if it is sound, contains layers of soil, or has voids. Additional soundings to explore continuity and changes in elevation of the rock surface may be necessary.
- 10. For loose or soft soils indicating the need for deep foundations, boring depths should be extended until a firm stratum is penetrated and confirmed. Total depth and number of borings required shall be determined by the Geotechnical Engineer.
- 11. Laboratory testing to perform strength tests, and index property tests, including soil classifications and gradation analysis, as appropriate.
- 12. Soil analysis and evaluation to develop design recommendations for proposed composite elevated storage tank foundations, slabs, pavement, walls, and other structures.
- 13. Soil analysis and corrosive evaluation to determine design recommendations for underground piping.
- 14. Evaluate seismic hazards including, but not limited to, ground movement near field sources, fault rupture, landslides, and liquefaction potential.
- 15. Evaluate expansion potential for near-surface soil and its effect on slabs on grade.
- 16. Estimate settlement of the ground surface from liquefaction or consolidation.
- 17. Estimate the settlement of compressible soil beneath the site.
- 18. Prepare and deliver a geotechnical report with field logs based on the results of the fieldwork, including design recommendations related to bearing capacity, soil lateral pressures, friction coefficient, pad preparation, recommended foundation types, foundation depths, foundation dimensions, dewatering, rock location and excavation, slope stabilization, removal of undesirable material, expansive soils, excess moisture, soil improvements, site construction issues, and other relevant design data as required by the landscape architect, civil, structural engineers, or licensed engineers.

19. The Final Report shall address all concerns necessary for the proper foundation construction of the proposed composite elevated storage tank, shall meet all requirements of the latest revision of AWWA D107, be consistent with current standard industry practices and shall comply with local, state, and federal regulations.

QUOTATION REQUIREMENTS

Please provide separate lump sum prices for preparing environmental site assessments and geotechnical surveys. Also, provide a definitive timetable for the completion of each task. Quotations shall be submitted in writing and signed via email to pcrosby@bgjwsc.org or mailed to the following address:

Brunswick-Glynn Joint Water & Sewer Commission 1703 Gloucester Street, Brunswick, Georgia 31520

Quotations must be received by 5:00 p.m. EST on Friday, April 28, 2023.

Please label the subject of your email submission or mail submission with the following reference:

"RFQ NO. 23-020 THE PREPARATION OF ENVIRONMENTAL SITE ASSESSMENTS AND GEOTECHNICAL SURVEYS FOR EXIT 42 ELEVATED STORAGE TANK, JWSC PROJECT NO. 2213."

If you have any questions, please call Todd Kline, P.E., Director of Engineering, at (912) 261-7122.