

EXHIBIT A
AMENDMENT NO. 1 SCOPE OF SERVICES
TO
AGREEMENT FOR ARCHITECTURAL, ENGINEERING, AND LAND
SURVEYING SERVICES
FOR
THE CITY OF INDEPENDENCE, MISSOURI

Owner: City of Independence, Missouri
Engineer: Black & Veatch Corporation
Project: Addition of Lime Slaking Equipment at Existing Lime Silo

The scope of services for this Amendment is described in this Exhibit A.

I. SCOPE OF SERVICES

Under the terms of Amendment No. 1, the Owner and Engineer agree to modify the scope of services for the Project to include the following additional engineering services:

- a. Preliminary Design:** Evaluate the potential to provide larger capacity lime slaking equipment to allow feeding to additional basins. Evaluation would include developing alternative system configurations, coordination with the equipment manufacturer, obtaining preliminary equipment costs, and developing preliminary layouts to assess the impact of the larger equipment on the new slaking building footprint. Perform a structural evaluation of an extension to the existing foundation to allow the footprint of the new building to be increased to accommodate the larger capacity lime slaking equipment. Evaluation would include preparing a preliminary structural model to determine whether the extension could be cantilevered from the existing foundation or whether pile supports would be required.
- b. Detailed Design/Construction Phase Services:**

 - i. Design an approximately 11-foot-wide extension to the existing concrete lime silo structure foundation to accommodate a larger lime slaker building. New foundation will be supported on helical piles. Engineer will develop a performance specification for Contractor to supply helical pile design/pile installation as part of the project bid. Includes preparation of additional drawings and specifications for the foundation extension and review of associated shop drawing submittals.
 - ii. Prepare detailed design drawings and technical specifications for inclusion into the bidding documents to provide for an elevated

steel framed catwalk between the elevated platform at the existing lime silo and the existing catwalk located on top of Sludge House No. 4. The design of the catwalk will be based on use of a 3-foot clear width pre-engineered catwalk “bridge” with structural steel support columns and bracing. Grated stair steps will be incorporated into the catwalk to accommodate the change in elevation between the lime silo platform and the existing catwalk. The catwalk will be painted steel with galvanized steel grating to match existing unless it is determined that the existing catwalk structure cannot support the loads imposed by the new catwalk; under those conditions, the new catwalk will be fabricated reinforced plastic (FRP) specified with a UV resistant resin. The guardrail at the existing catwalk will be modified to accommodate the new catwalk. The scope of work shall also include responding to bidder questions and review of shop drawing submittals related to the new catwalk.

- c. **Configuration Services:** Configure the Owner’s SCADA and PLC software to interface with the new lime slaking system. Develop associated SCADA graphic displays, trends, and reports. Provide assistance during Site Acceptance Testing of the new lime slaking system after the Contractor has completed checkout and preliminary field tests.