

CITY OF NORMAN, OK STAFF REPORT

MEETING DATE: 11/26/2024

- **REQUESTER:** Steve Hardeman, Water Reclamation Facility (WRF) Manager
- **PRESENTER:** Ken Giannone, Capital Projects Engineer
- ITEM TITLE: CONSIDERATION OF APPROVAL, ACCEPTANCE, REJECTION, AMENDMENT AND/OR POSTPONEMENT OF CHANGE ORDER ONE TO CONTRACT K-2324-80: BY AND BETWEEN THE CITY OF NORMAN UTILITIES AUTHORITY AND INDUSTRIAL HYDRO SERVICES FOR THE REMOVAL AND DISPOSAL OF BIOSOLIDS FROM DIGESTER, IN THE AMOUNT OF \$18,760.29, FINAL ACCEPTANCE OF THE PROJECT, AND FINAL PAYMENT IN THE AMOUNT OF \$18,760.62.

BACKGROUND:

Part of the sludge treatment process at the Norman Wastewater Reclamation Facility (WRF) is "anaerobic digestion". In this step, sludge (thick liquid bi-product of the treatment processes) that has been separated from the wastewater entering the WRF is pumped into large closed tanks, called "digesters". In the digesters, the sludge is slowly mixed while microorganisms are used to anaerobically (i.e. without oxygen) break down the sludge. The resultant material, termed "biosolids", is sufficiently concentrated and biologically stable enough that it can then be dewatered and legally disposed via land application. In order to maintain treatment efficiency, it is recommended that each digester be removed from service every 5 to 10 years so it can be cleaned out and inspected.

On August 11 and 18, bids were advertised in the Norman Transcript for the project entitled, Removal and Disposal of Biosolids from Digester, for the periodic clean out and inspection of Digester 2 at the WRF. The bidding documents solicited a unit price per gallon to clean out the digester by removing, processing and legally disposing of 800,000 gallons of biosolids via land application. The quantity estimate of 800,000 gallons of biosolids was based on quantity removed during past digester clean outs at the WRF.

Bids were received for this project on August 31, 2023. The lowest and best bidder was determined to be Industrial Hydro Services (IHS) of Maysville, Oklahoma with a unit price of \$0.235 per gallon of biosolids and a resultant total contract amount of \$188,000. Consequently, Contract K-2324-80 was awarded to IHS on October 24, 2023, and Notice to Proceed was issued on January 11, 2024. IHS mobilized and commenced work soon after.

DISCUSSION:

Upon starting the work, it became apparent that Digester 2 contained more rags and debris than was typical on past cleanout projects. As a result, IHS was required to use substantially more water than anticipated in order to wash out and remove all debris from the digester. This, in

turn, resulted in IHS dewatering and disposing of a greater quantity of biosolids than contemplated by the Contract. After negotiations, it was agreed that IHS had been required to dewater and legally dispose of a total of 879,831 gallons of biosolids; 79,831 gallons more than the contractual amount. This results in an additional cost to the Contract of \$18,760.29.

Assuming this Change Order is approved, it would result in a new contract total of \$206,760.29, which is a 9.98% increase over the original contract amount. No time extension has been requested.

Funding for this Change Order is available from the funds already allocated to this project in the Wastewater Reclamation Fund, Bio-Solids Removal: Business Services-Sludge Removal (Account 32955145-44121).

On October 10, 2024, IHS advised that all biosolids had been removed from Anaerobic Digester 2 and the digester had been fully cleaned. WRF staff inspected the digester and confirmed that work had completed in accordance with the Contract. Anaerobic Digester 2 was then returned to service.

To date, IHS has billed a total of \$187,999.67 for their work on the Contract. Therefore, assuming this Change Order is approved, IHS is due a final payment in the amount of \$18,760.62, which would include the \$0.33 remaining on their base contract amount plus \$18,760.29 for Change Order 1.

RECOMMENDATION 1:

Staff recommends that Change Order 1 to Contract K-2324-80, Removal and Disposal of Biosolids from Digester, in the amount \$18,760.29 be approved.

RECOMMENDATION 2:

Staff recommends that Final Acceptance of Contract 2324-80, Removal and Disposal of Biosolids from Digester, be approved.

RECOMMENDATION 3:

Staff recommends that Final Payment in the amount of \$18,760.62 to Industrial Hydro Services for Contract K-2324-80, Removal and Disposal of Biosolids from Digester, be approved.