



City of Norman, OK

Municipal Building
Council Chambers
201 West Gray
Norman, OK 73069

Master

File Number: K-1819-63

File ID: K-1819-63

Type: Contract

Status: Consent Item

Version: 1

Reference: Item 8

In Control: City Council

Department: Information Technology

Cost: \$204,821.00

File Created: 01/28/2019

File Name: Data Center HVAC Replacement

Final Action:

Title: CONSIDERATION OF AWARDING OF BID 1819-25, APPROVAL OF CONTRACT K-1819-63 BY AND BETWEEN THE CITY OF NORMAN, OKLAHOMA, AND STREETS, L.L.C., IN THE AMOUNT OF \$204,821, PERFORMANCE BOND B-1819-9, STATUTORY BOND B-1819-10, MAINTENANCE BOND MB-1819-34 FOR THE CITY OF NORMAN DATA CENTER HVAC REPLACEMENT PROJECT, RESOLUTION R-1819-5 GRANTING TAX EXEMPT STATUS, BUDGET APPROPRIATION FROM THE CAPITAL FUND BALANCE, AND BUDGET TRANSFER BETWEEN PROJECT ACCOUNTS.

Notes: ACTION NEEDED: Motion to accept or reject all bids meeting specifications; and, if accepted, award the bid in the amount of \$204,821 to Streets, L.L.C., as the lowest and best bidder meeting specifications; approve Contract K-1819-63, authorize the execution thereof and the Mayor to sign the performance, statutory, and maintenance bonds contingent upon the City Attorney's approval; adopt Resolution R-1819-5; appropriate \$36,821 from the Capital Fund Balance (050-0000-253.20-00) and a transfer of \$30,000 from Project EF0179 Data Center Return Air System, Construction (050-9677-419.61-01) to Project BG0068 City Data System Replacement, Construction (050-9365-419.61-01).

ACTION TAKEN: _____

Agenda Date: 02/12/2019

Agenda Number: 8

Attachments: Text File, K-1819-63, R-1819-5, PR Streets

Project Manager: Kari Madden, Network Manager

Entered by: summer.buesing@normanok.gov

Effective Date:

History of Legislative File

Ver- sion:	Acting Body:	Date:	Action:	Sent To:	Due Date:	Return Date:	Result:
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Text of Legislative File K-1819-63

Body

BACKGROUND: The fiscal year 2014-2015 (FYE 2015) Capital Budget included \$30,000 to address an issue with poor return air in the City's primary data center. A mechanical engineer was brought on site to inspect the return issue. It was identified that a more in-depth project would be needed to correct the situation and it was suggested to budget a replacement of the computer room air conditioning units to complete this. The FYE 2018 Capital Budget included \$160,000 to replace the computer room air conditioning units, hire a consultant to write specifications, provide engineer plans, and oversee the implementation.

The existing computer room air conditioning units were installed in 2011 during the renovation of Building C. Since that time one of the units has a system board with continual issues while both have undergone multiple repairs. Both units are out of warranty and parts are not readily available. The City's Data Center must be maintained at a consistently cool temperature at all times.

In December 2017, Information Technology Department staff solicited the professional services of ADG to be architect and prepare plans for the replacement of the air conditioning system, prepare the bid document, evaluate responses and pricing, and oversee installation. ADG projected that the funding should be sufficient to complete the project so no additional funds were requested at that time. The City had three (3) vendors respond to a mandatory pre bid conference and project walk-through; Streets LLC; Harrison-Orr Air Conditioning, LLC; and Saker Mechanical.

DISCUSSION: The City's Building Maintenance Division is presently supporting two (2) aging computer room air conditioning (CRAC) units in the Information Technology Data center that experiencing more frequent maintenance and repairs. The systems are out of warranty with parts not readily available and in need of replacement to optimize air flow and conditioning of the space. The present systems design does not adequately pull the hot air out of areas behind the equipment racks (referred to as "hot rows" in a data center). It is imperative to not only keep this critical equipment cool but to adequately move the hot air away from the units and recirculate it for cooling. It was also identified that the ceiling tiles are not suitable for a data center environment. They are a drop ceiling tile that are found in general type office spaces and will absorb or "wick" moisture from the air. Data center air conditioners have built in humidity controls to prevent the air in the room from becoming too dry and becoming susceptible to electrostatic discharge (ESD). The humidity should be maintained between 45% and 55% at all times. It is part of the proposal to also replace all of the ceiling tiles with a "clean room ceiling tile" which are a hard surface tile designed to help control contamination and humidity within the room.

A total of two (2) bids were received on January 24th, 2019 at the public bid opening for this project:

Streets Mechanical LLC, \$204,821 (\$36,821 over budget)
Harrison Orr Air Conditioning LLC, \$238,800 (\$70,800 over budget)

The original budget being \$190,000, there is now \$168,000 remaining after the award of \$22,000 to the consultant to assist with the bid and project. The consultant reviewed the bids to see if there were any areas out of range or areas that cost savings may be achieved. They advised the City that similar equipment has seen a price increase of 12% from 2017, due to steel tariff threats which accounts for roughly \$10,000 of the cost increase. All other work required in the bid was priced very fair in their opinion. No other work can be removed nor is it recommended to change the type of air conditioning units. The Liebert CRAC units that were specified will have parts readily available as well as support locally.

Funding of \$30,000 is proposed to be used from Data Center Return Air System, Construction (account 050-9677-419.61-01; project EF0179) and \$160,000 is proposed to be used from City Data System Replacement, Design (account 050-9365-419.62-01; project BG0068). A transfer will be needed to move the money from in Project EF0179 to BG0068. A budget appropriation of \$36,821 will also be required for the overage.

RECOMMENDATION NO 1: Staff requests a budget appropriation from the Capital Fund Balance (050-0000-253.20-00) in the amount of \$36,821, and a transfer from Project EF0179 Data Center Return Air System, Construction (050-9677-419.61-01) in the amount of \$30,000 to Project BG0068 City Data System Replacement, Construction (050-9365-419.61-01).

RECOMMENDATION NO 2: Staff recommends awarding the bid to Streets, L.L.C., and approval of Contract K-1819-63 in the amount of \$204,821 and the subsequent maintenance, performance, and statutory bonds as well as the adoption of the project agent resolution.



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