



16-707

TITLE: Consider/Discuss/Act on a Resolution Authorizing the Interim City Manager or City Manager to Execute a Contract and Any Supplemental Agreements with Freese and Nichols, Inc. Related to the Water System Nitrification Action Plan Project - Phases 2 and 3

COUNCIL GOAL: Operational Excellence

MEETING DATE: July 19, 2016

DEPARTMENT: Public Works

CONTACT: Morgan Dadgostar, PE, Water Utilities Superintendent
David Brown, PE, Director of Public Works

RECOMMENDED CITY COUNCIL ACTION:

- Approval of the Resolution

ITEM SUMMARY:

- This Resolution authorizes the Interim City Manager or City Manager to execute a contract in the amount of \$92,200 and all required supplemental agreements thereto, with Freese and Nichols, Inc. to provide professional services for the Water System Nitrification Action Plan Project - Phases 2 and 3.

BACKGROUND INFORMATION:

- The City of McKinney receives treated water from the North Texas Municipal Water District. The treated water is disinfected by a chloramination process that provides for a longer lasting chloramine residual. Nitrification is a process that can occur in water systems that use chloramine for their residual disinfectant.
- The Texas Commission on Environmental Quality (TCEQ) requires that any water system distributing chloraminated water must create a Nitrification Action Plan.
- Nitrification can degrade a distribution system's water quality and negatively affect regulatory compliance. One of the indicators of nitrification is a decreased/low chloramine residual during the hot summer months. Nitrification increases the rate at which the chloramine residual decays. By measuring the

nitrite and nitrate levels at various locations throughout the distribution system, we will be able to identify those areas of the water distribution system where we will need to increase/adjust our maintenance practices to address these matters.

- Freese and Nichols, Inc. was selected based on their experience with Nitrification Studies and their response to 15-59RFQ to provide professional services for a three-phase project in the development of a Nitrification Action Plan for the city's water distribution system.
- Phase 1 of the project was approved by the City Council under Resolution No. 2015-09-097 and enacted September 1, 2015. This phase of the project was completed under a separate contract that involved development and implementation of a focused sampling plan.
- Phases 2 and 3 will involve the analysis and development of recommendations and operational modifications to maintain appropriate water quality, as well as assisting with the development and review of the city's Nitrification Action Plan.

FINANCIAL SUMMARY:

- The Resolution authorizes a professional services contract with Freese and Nichols, Inc. for an amount not to exceed \$92,200 for the Water System Nitrification Action Plan Project - Phases 2 and 3.
- Funds are available in the Utility Operating Budget for Professional Services 003 -8205-503-8516.

BOARD OR COMMISSION RECOMMENDATION: N/A

SUPPORTING MATERIALS:

[Resolution](#)
[Phases 2 and 3 Agreement](#)