



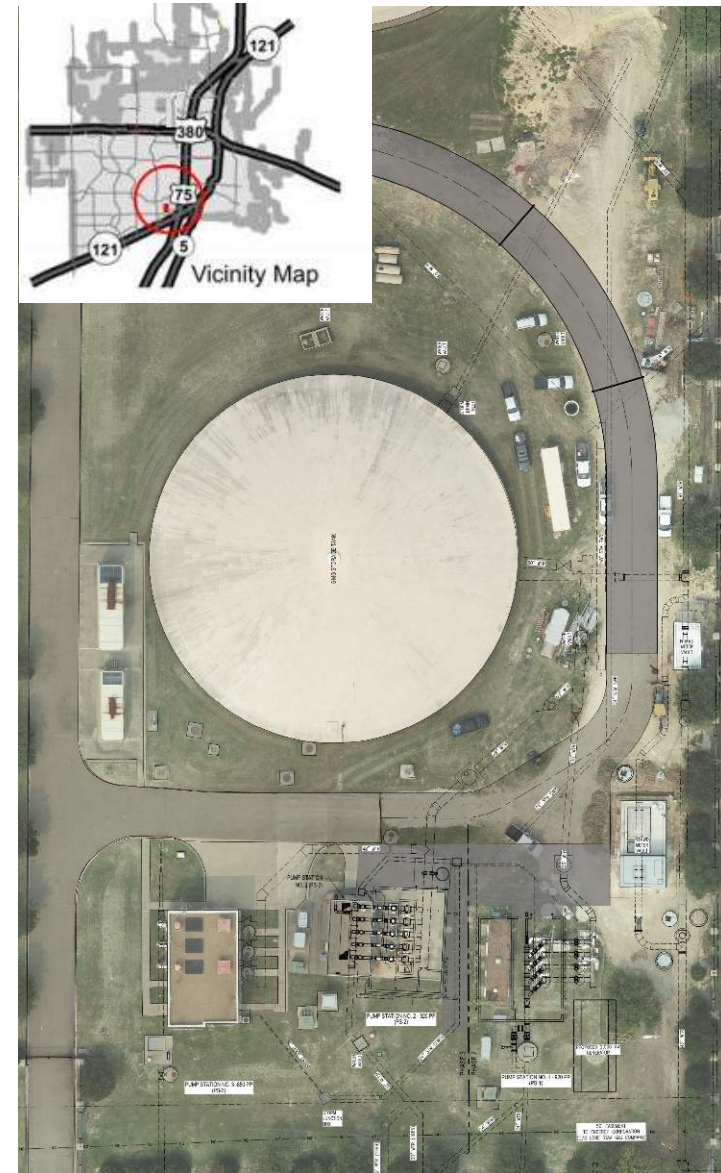
McKinney Ranch Pump Station Improvements CIP Project WA1626

January 18, 2022



McKinney Ranch – Current Pump Station Overview

- Serves as one of four pump station facilities serving McKinney water customers.
- Receives water from the North Texas Municipal Water District and currently distributes/pumps water to approximately 82,000 residents.
- Current capacity is 30 million gallons per day (MGD) with a planned buildout capacity of 45 MGD.
- Significant portions of this pump station are currently exceeding 30 years since original construction and have reached the end of their serviceable life.



Project Justification & Need

- **Aging Infrastructure** – Pump station equipment has reached the end of their useful life.
- **Capacity Improvements** – Improvements will improve capacity by 15 MGD.
- **Electrical Improvements** – Improve operator safety by separating pumps and electrical components.
- **Operational Improvements** – Variable Frequency Drives (VFD) will lower energy demand at start up and provide greater operational flexibility. Improvements will be more compatible with future citywide pump station control systems.
- **Reliability Improvements** – Currently pumps and motors are located outside. Proposed project moves equipment inside in controlled environment. Will expand backup generators to additional pumps.

Project Scope of Improvements



- A. Reconstruct Pump Station No. 1 including Pumps, Motors, and Electrical Equipment.
- B. Construct New Pump Station No. 2 Building including Pumps, Motors, Electrical Equipment, and Backup Generator.
- C. Various Site Pipeline Improvements to Support Pump Station Improvements.
- D. Install New Fire Lane.

Construction has been phased in order to maintain existing operations of the pump station during construction.

McKinney Ranch Pump Station Improvements Bid Evaluation and Award of Construction

- Project advertised for competitive sealed proposals on August 22, 2021 (21-64CSP)
- 1 Proposal received on November 4, 2021

Bid No.	Bidder	Bid Amount
1	Archer Western Construction, LLC (A-W)	\$17,832,000
	Add Alternate SCADA Proposal	
	1. RLC Controls	\$169,400*
	2. Prime Controls	\$202,860
	3. TESCO Controls	\$245,000
	4. Wheco Controls	\$264,000
	Archer Western Construction, LLC and RLC Controls	\$18,001,400

- Archer Western Construction, LLC proposal cost did exceed the City's estimated construction costs, however project costs submitted by Archer Western Construction, LLC take into account historically significant construction inflation over the duration of construction as well as risks and phasing associated with the specific work.

McKinney Ranch Pump Station Improvements Bid Evaluation and Award of Construction

- Alternatives Considered by Staff to Reduce Project Cost

- Reduce Project Scope
- Revise Design and Re-Bid
- Defer Improvements

All alternatives considered did not address current pump station needs or substantially reduce long-term cost of the needed improvements.

- Budget Ordinance Companion Item

- Covers Additional Project Cost Exceeding Current Budget
- \$1.4 Million Utilizing Collected Water Impact Fees

- Staff Recommends

- Award of the Project to Archer Western Construction, LLC with RLC Controls (Alternate Bid)

- Pending award, construction will begin in February 2022 and is estimated to be completed by August 2024.