WATER TREATMENT SYSTEM IMPROVEMENTS

CITY OF KEMP

April 2019
OVERVIEW

- Objective
  - Review Project & Update on Status

- Agenda
  - Project Overview
  - Application for Funding
  - Regulatory Reviews
  - Timeline & Anticipated Schedule
  - Current Project Status

- Q & A
PROJECT OVERVIEW – EXISTING TREATMENT PROCESS

Cedar Creek -> Raw Water Pump Station -> 100,000 gal -> Package Plant -> Effluent Pump -> Parallel Line -> Clearwells

Intake Pump Station -> 560 gpm

Raw Water Pump Station -> 560 gpm

Package Plant -> Backwash Pump

Package Plant -> Effluent Pump

High Service Pump Station -> 620 gpm -> 560 gpm -> Distribution

Sludge Lagoon

Sludge Lagoon

Sludge Lagoon

Sludge Lagoon
PROPOSED IMPROVEMENTS – INTAKE PUMP STATION

- Replace Intake Screens
- Replace Existing Pumps & Valves
- Replace Electrical Feed & Equipment
PROPOSED IMPROVEMENTS – RAW WATER PUMP STATION

• Replace One Pump & Discharge Header Valves
• Replace Electrical Equipment & Controls
PROPOSED IMPROVEMENTS – WATER TREATMENT PLANT

- Rehab ClariCone & Provide Diversion Line
- Replace Package Treatment Units
- Replace Laboratory & Office
- Chemical Feed System Improvements
- Decommission Clearwell 1 & Rehab Clearwell 2
- Modify Lagoon & Recycle Piping
PROPOSED IMPROVEMENTS – HIGH-SERVICE PUMP STATION & DISTRIBUTION SYSTEM

- Replace High-Service Pumps, Valves, & Controls
- Update Elevated Storage Tank Monitoring Equipment
- Replace Prioritized Segments of Distribution System Piping
- Install Secondary Connection to Distribution System
PROJECT OVERVIEW

- **Study & Report Phase**
  - Funding Application
  - Conceptual Design & Preliminary Engineering Report
  - Environmental Assessment

- **Design Phase**
  - Preliminary Design
  - Final Design

- **Advertisement/Bid Phase**

- **Construction Phase**

- **Post-Construction Phase**
  - Warranty Assistance
  - O&M Manual
APPLICATION FOR FUNDING

- Funding Application
  - United States Department of Agriculture (USDA) Rural Development
  - Texas Water Development Board (TWDB)
- Conceptual Design & Preliminary Engineering Report
- Environmental Assessment
POTENTIAL FUNDING SOURCES

- TWDB - $3.2M Approved
  - Not accepted by the City
- USDA - $6.5M Approved
  - Funds Obligated – March 21, 2018
LOAN & GRANT TERMS

- Loan - $4,144,000
  - 40-year Term
  - 2.75% Interest Rate*

- Grant - $2,426,000

- Reserves
  - Debt Service Reserve
  - Short-Lived Asset Reserve

* Approximate – Finalized upon closing
AFTER FUNDS ARE OBLIGATED

- Preliminary Design
- Final Design
  - Regulatory Review
- Advertisement/Bid
  - Loan Closing After Bid Award is Approved
- Construction
- Post-Construction
  - Warranty Assistance
  - O&M Manual
REGULATORY REVIEW

- Texas Commission on Environmental Quality
- USDA Rural Development
- Tarrant Regional Water District

- After Startup → Package Treatment Systems Testing (TCEQ)
timeline & current status

- January 2017 – Begin Work
- March 2017 – Submit USDA Application
- June 2017 – Preliminary Approval for 2018 USDA Funding
- December 2017 – Submit TWD Application
- February 2018 – Preliminary Approval for TWDB Funding
- March 2018 – Receive Notification of Approval From TWDB & USDA (USDA > TWDB)
- August 2018 – Begin Preliminary Design
- January 2019 – Begin Final Design
- May 2019 – Scheduled Submittal to Regulatory Agencies for Review
- August/September 2019 – Anticipated Advertisement Phase to Begin
THANK YOU!

Questions?

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