Omussee WWTP Upgrade

• Project commenced August 2016
• Estimated completion April 2019
• Increase hydraulic capacity to:
  7.12 mgd average day flow
  24.9 mgd maximum day flow
Omussee WWTP Upgrade

• Scope of Work:
  Influent Pump Station, headworks, aeration basin, clarifier, filters, UV disinfection, sludge dewatering, FOG/septage receiving and treatment, emergency power, etc.

Construction Cost = $39,225,000
Why is this Project a Big Deal to the City?

- Large Financial Endeavor: Largest, Single PO Issued by the City
- Solutions to Treatment Challenges: Additional Hydraulic Capacity
Why is this Project a Big Deal to the City?

- More Efficient Operations: Only City Location for FOG/Septage Receiving & Redundancy in Sludge Treatment & Handling Operations
- Safety: Conversion from Gas Chlorination to UV Disinfection
Our Recipe for Success

7 Cups of City Commission Support +
1 Cup of a Good Design +
1 Package of an Experienced Contractor +
1 Pinch of Responsible City Staff

Combine all ingredients in a safe environment and simmer for 2 years

YIELDS ONE SUCCESSFUL PROJECT
Owner’s Project Insight

- Identify Operational Problems and Challenges
  - Involve your Operators in Design
  - Talk to your Maintenance Crews
  - Involvement in Design Meetings
Owner’s Project Insight

- Prioritize What’s Important
  - Understand Budget and Develop Scope Accordingly
    - “Change orders are ugly”
  - Plan for Unforeseen Circumstances
    - “Something will always get missed”
  - Consider O&M Costs of Completed Project
    - “Costs you live with forever”
- Select the Right Technology that’s Right for your Staff
  - “Do your own research and ask questions”
Omussee Basin
EXISTING CLARIFIERS
RAS/WAS
UV DISINFECTION
Grease Related SSOs

- 25 in 2012
- 15 in 2013
- 16 in 2014
- 13 in 2015
- 11 in 2016
- 6 in 2017
- 5 in 2018
Lessons Learned

• Geotech
  • Dewatering-Underdrains
  • Testing Allowance
• Hydraulic Forecasts
  • Conservative vs TOC
  • IPS Control Narrative
• Construction Schedule
  • Critical Path Management
  • Submittal Review and Delivery Times