

MBR – Upgrade Existing Facility or Build Greenfield Facility...Why Not Both?

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South Central Membrane Association
2021 Virtual Conference

**Solving Membrane Operation &
Management Challenges**

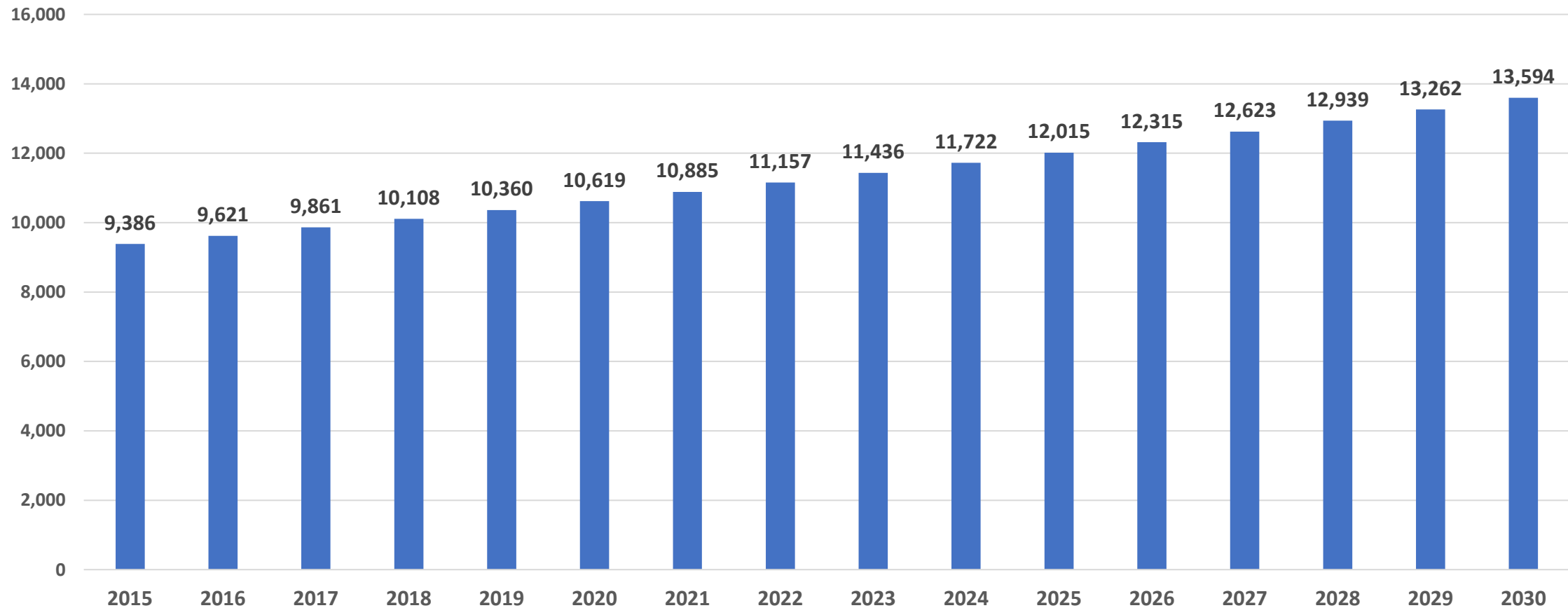
August 25th - 26th

Presentation Topics

- Why Do We Need Wastewater Improvements?
- Existing Granbury WW Facilities
- Wastewater Master Planning Goals
- MBR Technology Evaluation and Procurement
- South (Existing) WWTP Improvements
- Proposed East Satellite WWTP Improvements
- Current Status and Path Forward

Why Do We Need Wastewater Improvements?

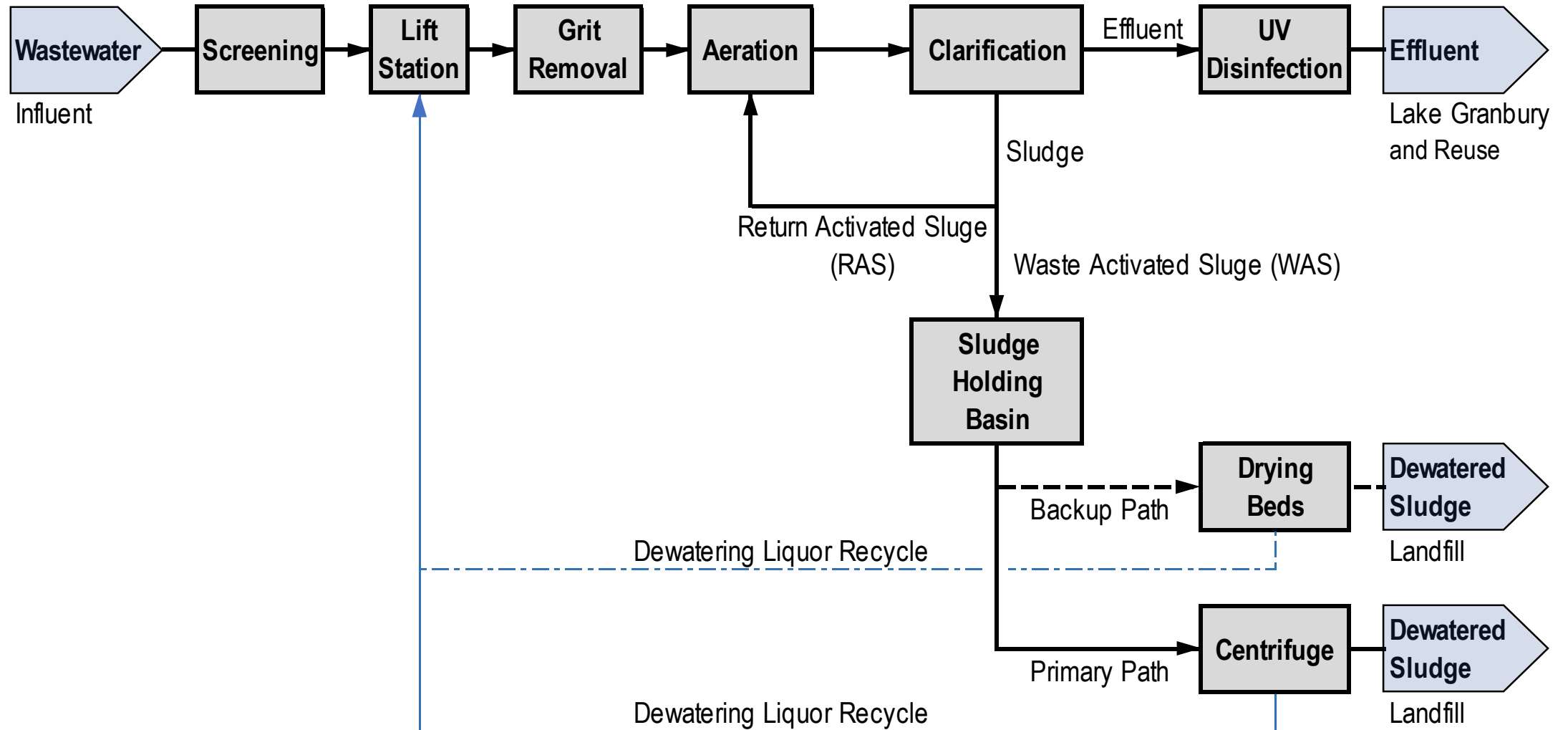
2.5% CAGR Granbury Comprehensive Plan




Existing Granbury WW Facilities



Existing Granbury WW Facilities

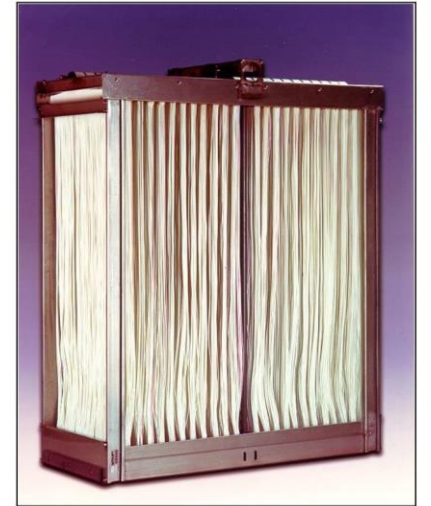


Wastewater Master Planning Goals

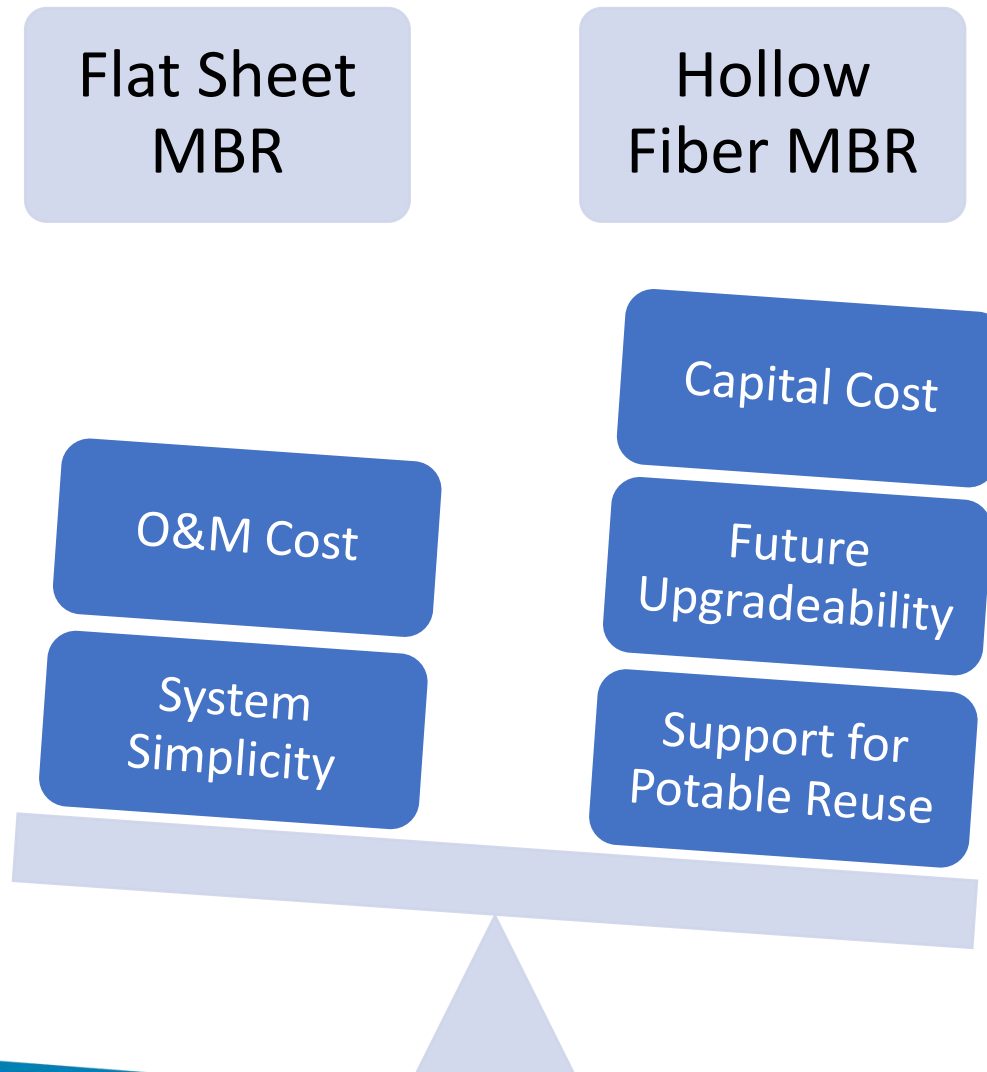
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- A decorative graphic on the left side of the slide consists of four white circles arranged vertically, connected by a thin blue line that enters and exits each circle. Each circle is positioned to the left of a blue rectangular box containing a goal.
- 1 Increase WWTP and WW collection capacity
 - 2 Add Type I non-potable reuse capability
 - 3 Create “building blocks” to support potable reuse in the future if needed
 - 4 Upgrade treatment processes to support more restrictive nutrient limits in the future

MBR Technology Evaluation and Procurement

- Flat Sheet or Hollow Fiber?



MBR Technology Evaluation and Procurement



MBR Technology Evaluation and Procurement

H2O Innovations MBR Selected

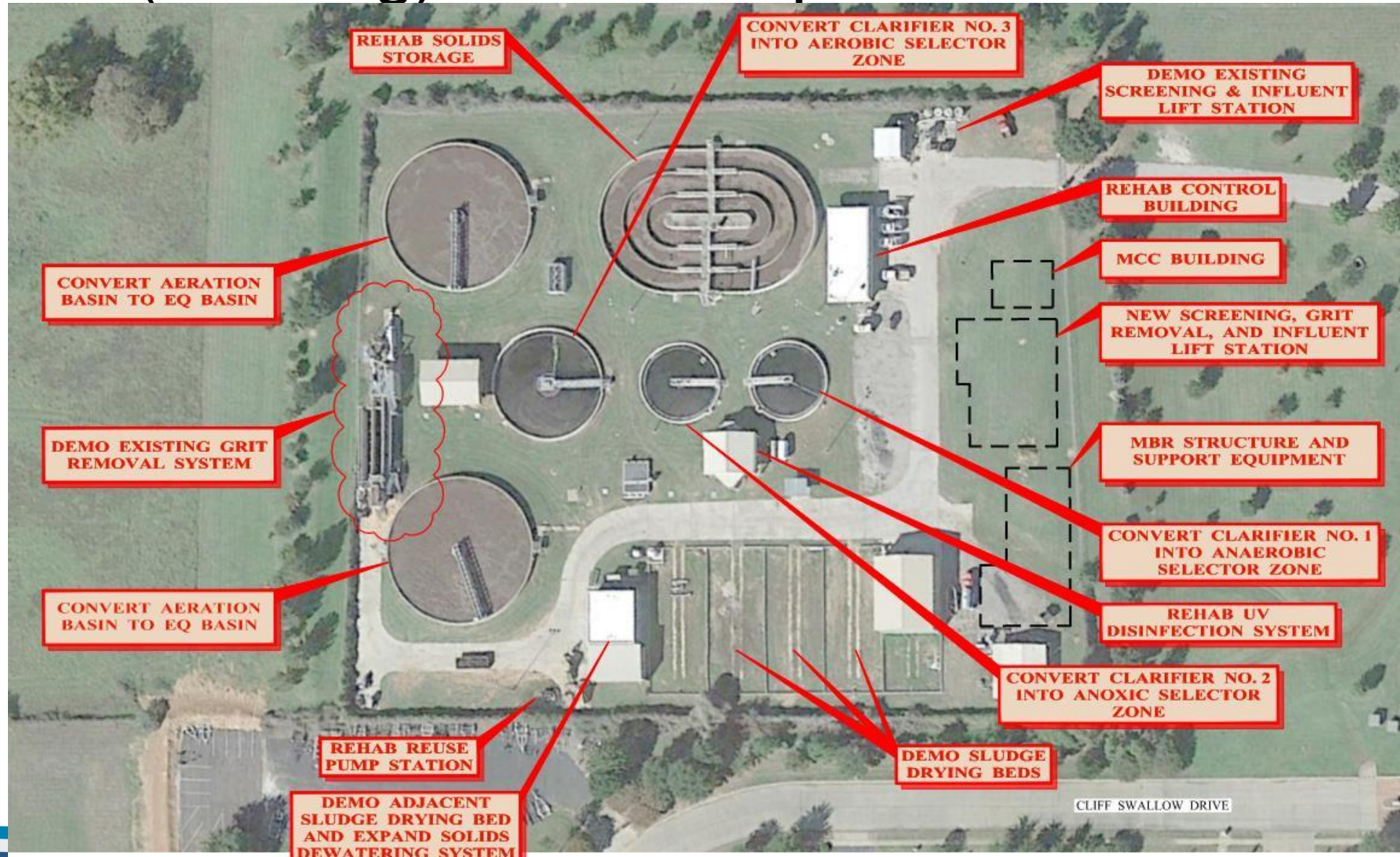
1

Flex Platform – Ability to Use Different MBR Cassettes in the Future to Take Advantage of Industry Advancements

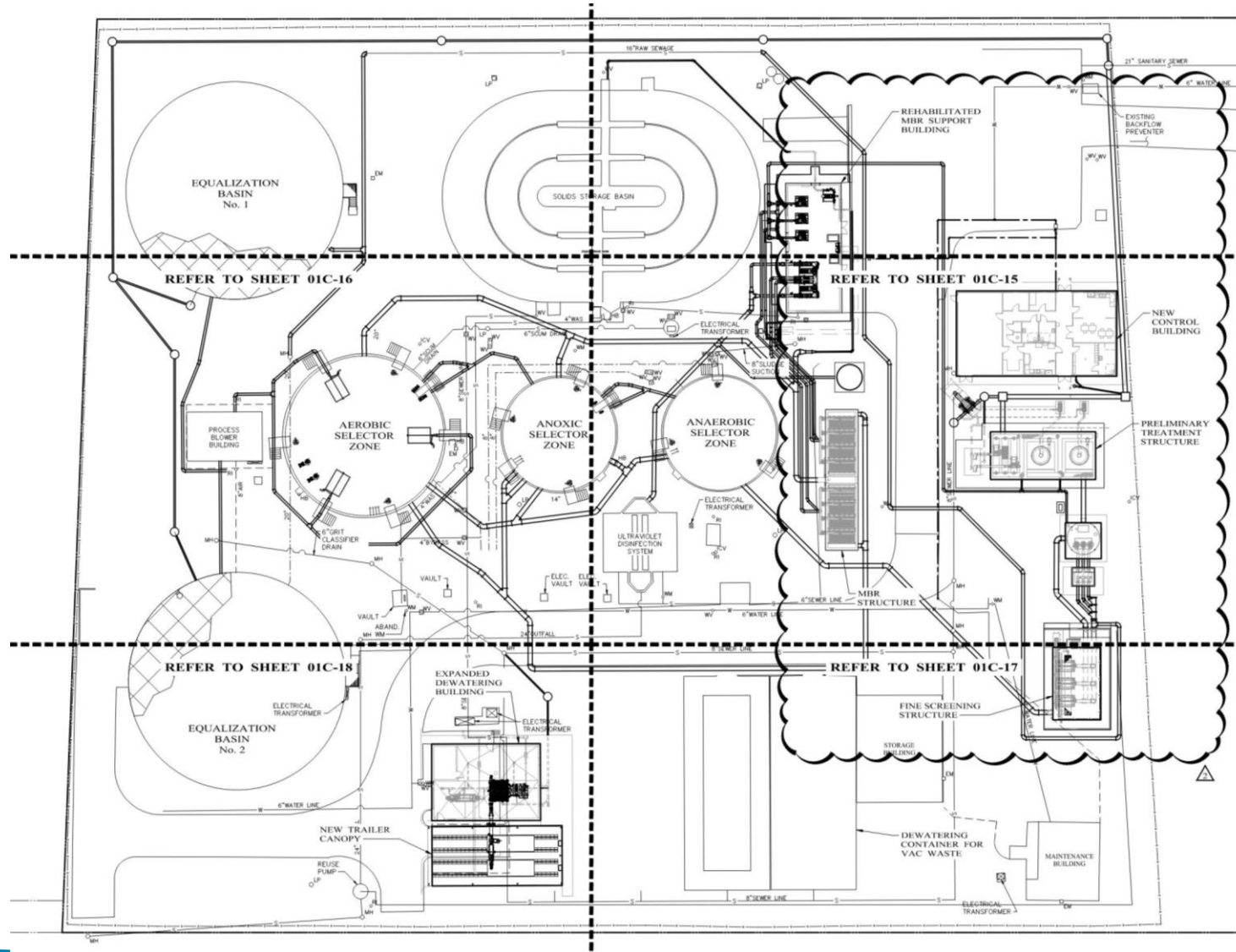
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Hollow Fiber Selected Following Site Visits to Both Hollow Fiber and Flat Sheet MBR WWTPs

South (Existing) WWTP Improvements



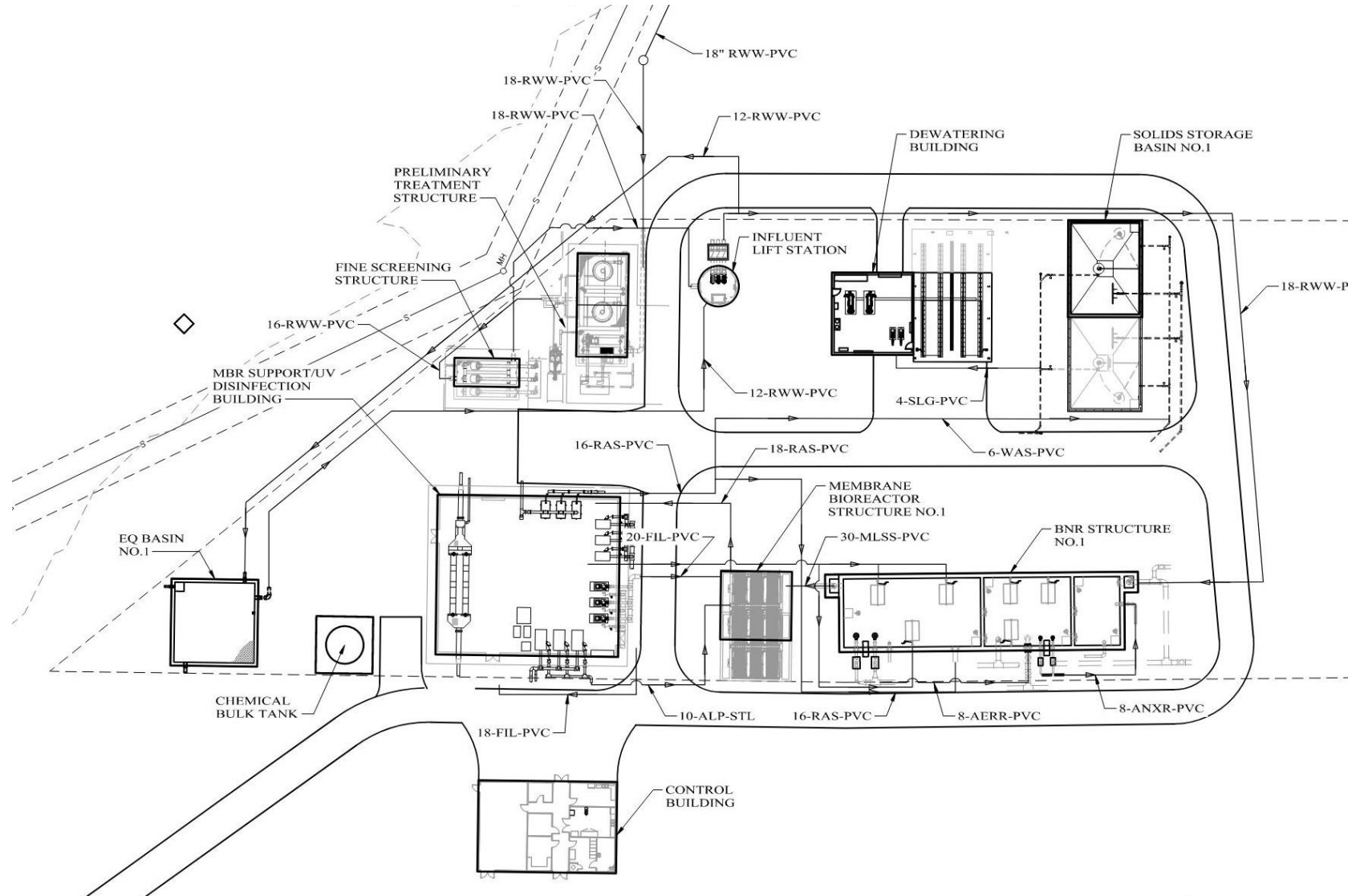
South (Existing) WWTP Improvements



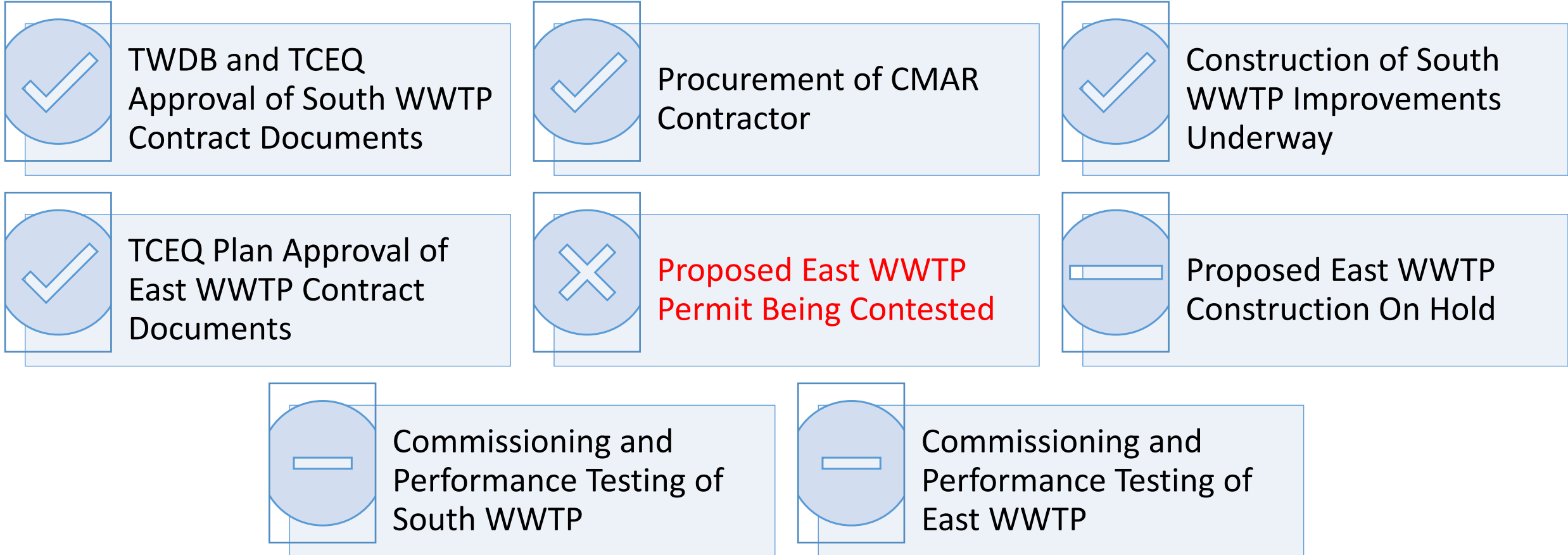
Proposed East Satellite WWTP Improvements



Proposed East Satellite WWTP Improvements



Current Status and Path Forward



Questions?