



2021-1003

Pflugerville Water Treatment Plant Expansion
Project Update
November 30, 2021



Project Background

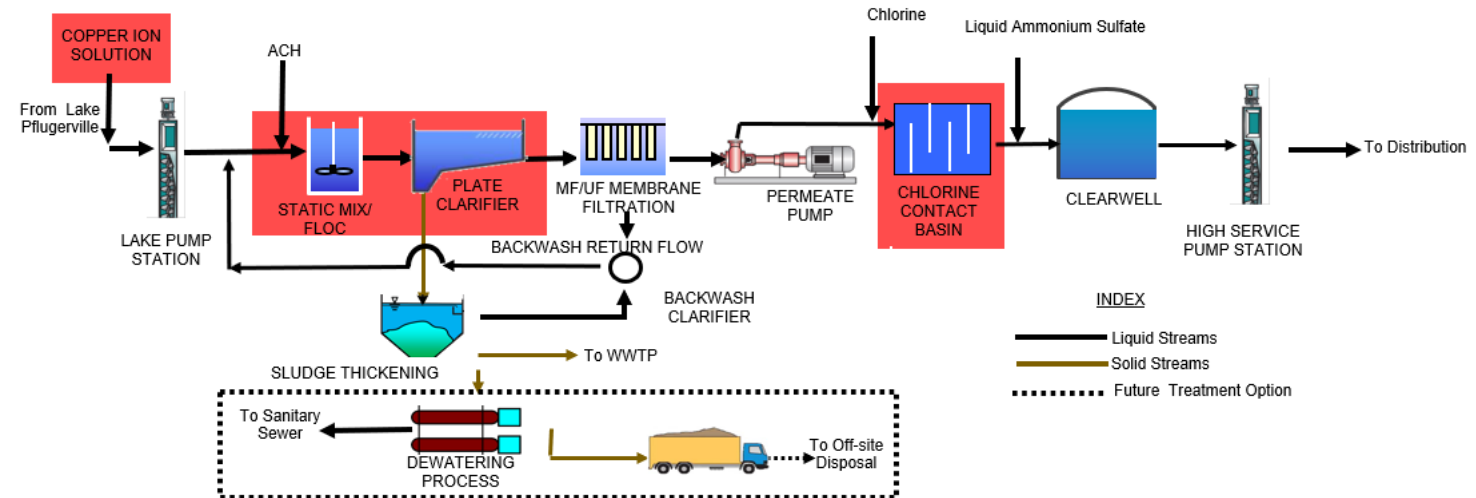
- 2020 City Water Master Plan Update
 - Surface water treatment plant expansion to 30 MGD
 - 15-MGD expansion increment
 - Ultimate buildout to 75 MGD
- Goals
 - Expand to 30 MGD
 - Meet and maintain TCEQ compliance
 - Improve treatment processes and technologies
 - Renew aging infrastructure
 - Optimize site buildout for future expandability
- Funding
 - EPA Water Infrastructure Finance and Innovation Act (WIFIA) fund
 - TWDB Drinking Water State Revolving Fund (DWSRF)
- Project Delivery
 - Competitive Sealed Proposal (CSP)





Project Overview

- Expansion of Lake Raw Water Pump Station
- New pretreatment with flocculation and high-rate plate settlers
- Membrane filtration retrofit
- New Chlorine Contact Basin
- New High Service Pump Station
- New Chemical Storage and Feed Facility
- New Solids and Residual Liquid Handling Processes
- Electrical and SCADA Improvements





Off-Site Improvement

Expansion of the Lake Raw Water Pump Station

- New chemical storage and feed facility

- New chlorine contact basin

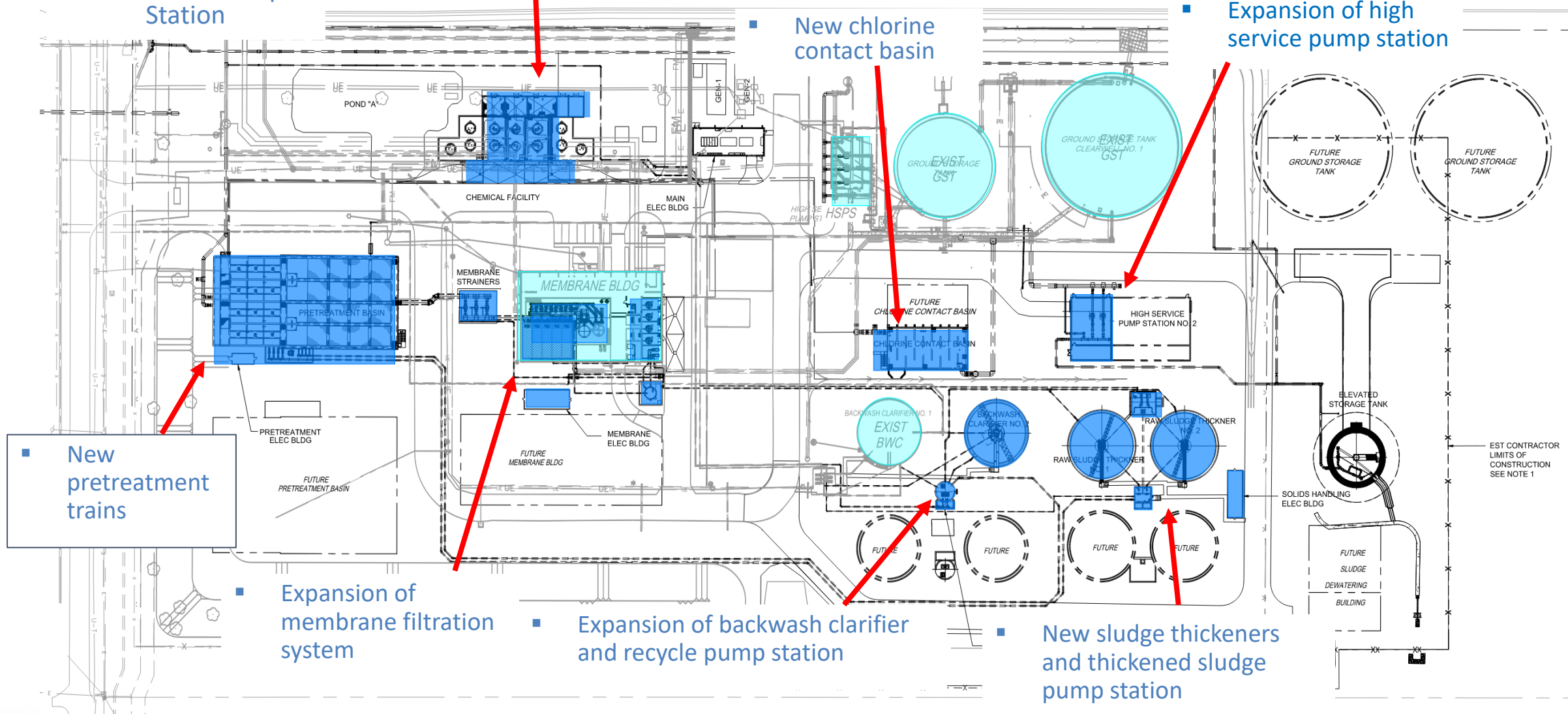
- Expansion of high service pump station

- New pretreatment trains

- Expansion of membrane filtration system

- Expansion of backwash clarifier and recycle pump station

- New sludge thickeners and thickened sludge pump station





Membrane Preselection

- **Two-Step Process**
 - Systematic approach
 - Transparent, defensible and documentable
- **Step 1: Pre-screen to select qualified suppliers to participate in full-scale procurement**
 - Issue Request for Qualifications
 - Submit Statement of Qualifications
- **Step 2: Procure a membrane supplier**
 - Issue membrane system equipment bid documents
 - Submit bid proposal



Step 1 – RFQ Process

- Draft RFQ Package prepared by Ardurra
- City/Garver reviewed, and comments incorporated
- Final RFQ posted on Civcast on 9/22/2021
- SOQ received by Ardurra on 10/11/2021
 - SUEZ Water technologies & Solutions
 - DuPont Water Solutions
- Qualification's evaluation completed on 10/21/21
- Qualified MFSS notified on 10/22/21

1	Firm's Capacity and Financial Capability to Support and Complete the Project
2	Relative Experience of Projects of a Similar Nature
3	Demonstrated Experience with Treating Water of Similar Raw Water Quality in North America
4	Regulatory Approval History with TCEQ for the specific membrane module proposed for this project and Texas Experience in Drinking Water Treatment
5	Ability to meet project schedule
6	Membrane Integrity Track Record in North America
7	Years of Operation as a Company and Years of Operation in Supplying Membrane Equipment
8	Local Technical Service Supports
9	Clarity and Presentation of SOQ



Step 2 – Membrane Procurement Status

- Issue Procurement Package: 11/5/2021 (completed)
- Pre-bid Meeting: 11/15/2021 (completed)
- MFSS bid proposal: 12/3/2021
- Evaluate Bid Proposal: 12/6/2021 ~12/15/2021
- MFSS Interview: 12/16/2021
- Evaluation Recommendation: 12/21/2021
- Award Recommendation: 1/11/2021

1	Capital cost
2	Operating Cost
3	Quality and Details of Proposal
4	Availability of Pilot and Ability to Meet the Project Schedule
5	Demonstrated Experience with Plant of Similar Capacity Treating Water of Similar Water Quality
6	Ability to Integrate New Membrane System into the Plant
7	Qualifications as Defined in Bidders Qualification Statement
8	Acceptance of Terms & Conditions
9	Complies with Equipment Specifications
10	Acceptance of Membrane Module Warranty Conditions



Contractor Outreach





Questions