



CITY OF CORPUS CHRISTI

# CP&Y Professional Services Contract

SEPTEMBER 29, 2020





# Action Plan for Holly & Rand Morgan



Partner with CP&Y, Inc. to work with City staff on a custom design & plan. A short term goal to bring new water tanks online; knowing our distribution system & past challenges.



Our custom design from CP&Y has unique modifications made for our existing & new storage tanks. We can gracefully take the old storage tanks offline while bringing the new storage tanks online.



With CP&Y, the City can extend our Alternative Capacity Requirements (ACR) timeline, saving our community possible fines from the Texas Commission on Environment Quality (TCEQ).

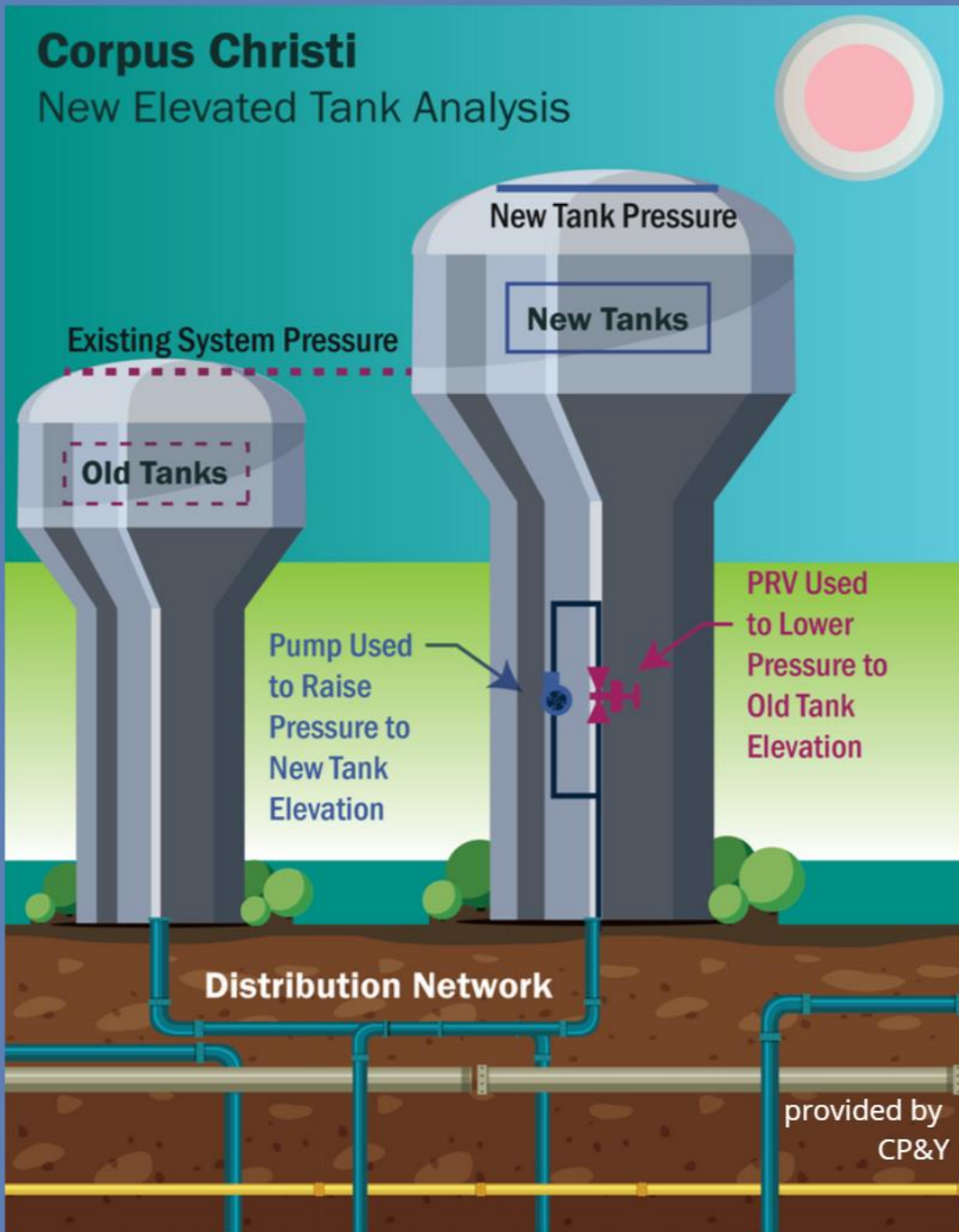


The teamwork of the City, CP&Y and TCEQ will result in fewer pipe breaks throughout our water distribution system & less disruptions to our community. Holly & Rand Morgan will be online by late Fall of 2022.



## Corpus Christi

### New Elevated Tank Analysis



# Rise up!

## Solution to bringing tanks online

- Install pressure reducing valve (PRV) & bypass pump for new tanks
  - Gracefully bring newly constructed tanks online
    - Holly & Rand Morgan
  - Existing tanks will remain in service
  - Operate the distribution system at the existing pressure

# Importance of an Ongoing Pipe Replacement Plan

## Vintage Water Pipes: Their Cause & Effect



### PROBLEM

Aged pipes made of dated material ("vintage") remain a working function of the current water distribution system.

### BIGGER PROBLEM

Vintage pipe can expose weaknesses in the water system infrastructure, increasing the chance of system failures.

### UNDER PRESSURE

Water systems with vintage pipe like ours have limitations on water pressure. Set too high, & pipes will break.

### OH, SNAP

When vintage pipe fails, a break occurs, requiring pipe replacement. CCTX has over 200 miles of vintage pipe in our system.

### UP TO NO GOOD

Limitations on pressure can lead to water aging in the pipe or stagnant water.

### CATASTROPHIC

The effect can lead to city-wide water boils.