



# Upgrades To The Skinner Ozone Control System

Engineering and Operations Committee

Item 7-2

November 4, 2019

# Current Action

- Award \$476,000 procurement contract to Royal Industrial Solutions for control system equipment
- Authorize \$320,000 agreement with Suez Treatment Solutions, Inc. for programming and support services

# Distribution System



# Background

- Ozone is primary disinfection process at all treatment plants
- Ozone PLC\* type used at Skinner was introduced in 1988
- Equipment is no longer supported by manufacturer
- Similar upgrades
  - Jensen - 2018
  - Mills – 2021

\*PLC: Programmable Logic Controller



Ozone Generators



Power Supply Unit

# Planned Upgrades

- Replace ozone PLCs, HMIs\*, & computer communication equipment
- Update ozone control system software using specialized technical support

\* HMIs: Human Machine Interface



Control Panel

# Award of Procurement Contract

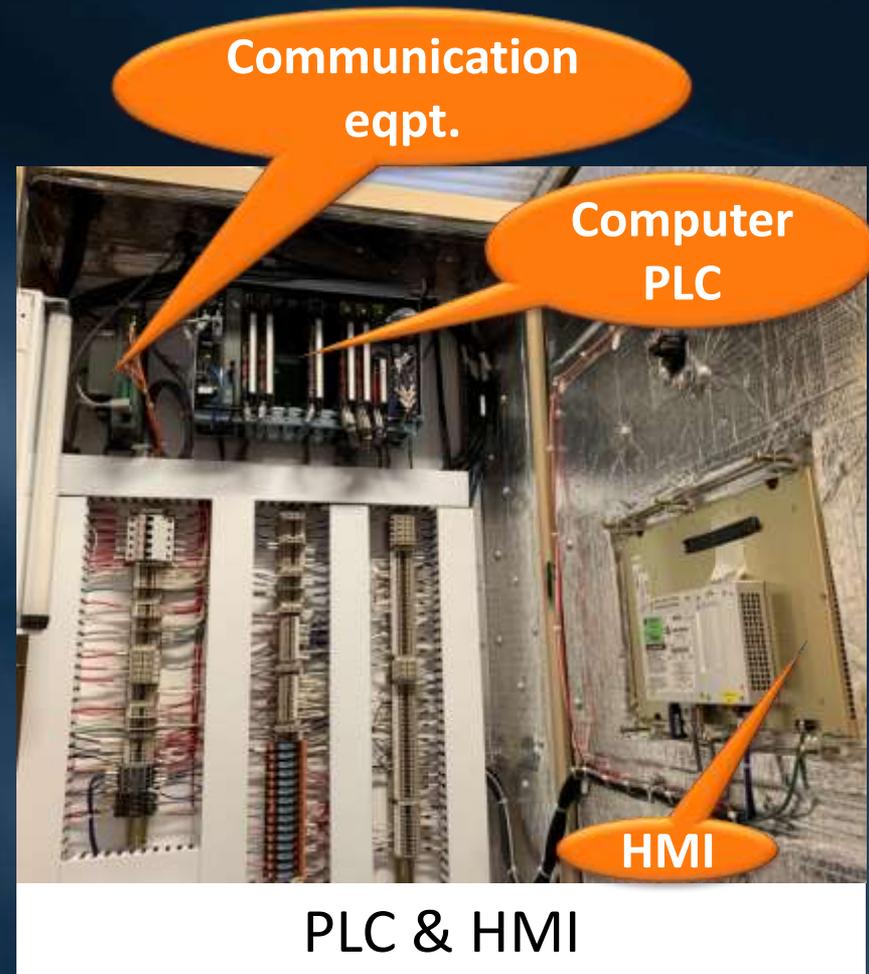
- Background
  - Metropolitan standardized on Allen-Bradley PLCs in 2009
  - Sole source procurement recommended to retain District-wide continuity
- Scope of procurement - Royal Industrial Solutions
  - Supply 12 Allen-Bradley PLCs, HMI Screens & related hardware
- Amount of contract NTE \$476,000
  - PLC prices are consistent with previous procurements

# Professional Services Agreement

- New Agreement w/Suez Treatment Solutions, Inc.
  - Competitively selected in 1998 to supply original ozone equipment
  - Sole source agreement for proprietary software
- Scope of Work
  - Update ozone system software for Skinner plant
  - Install the control system software, provide start-up, & software testing assistance
- Agreement amount NTE - \$320,000

# Metropolitan Scope

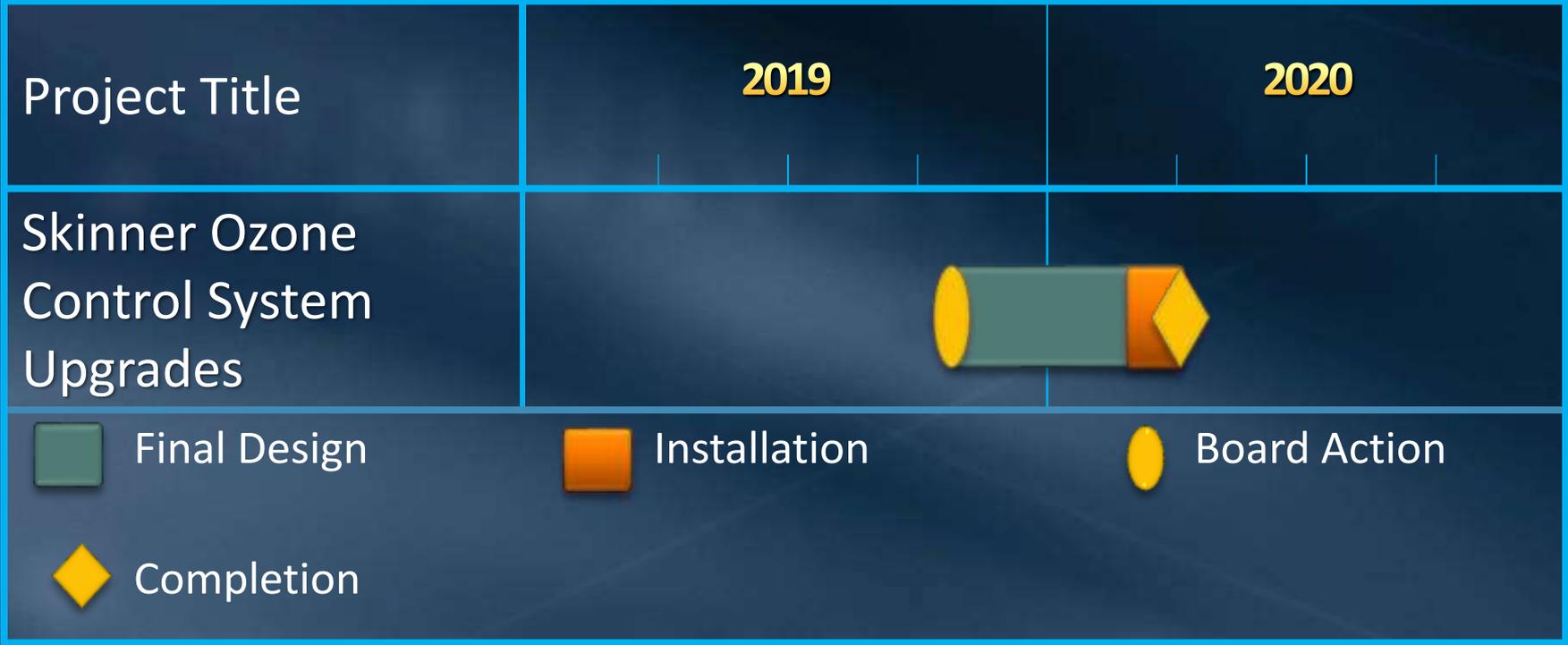
- Install PLCs & HMIs
- Relocate wiring outside PLCs
- Perform integration tests & confirm functionality



# Allocation of Funds

Metropolitan Labor	
Final Design	126,000
Program mgmt. & contract admin.	115,000
Force Construction	145,000
Materials & Incidentals	
Royal Industrial Solutions	476,000
Communication Equipment	77,000
Professional Services	
Suez Treatment Solutions, Inc.	320,000
Remaining Budget	196,000
	<hr/>
	<b>Total</b>
	<b>\$1,455,000</b>

# Project Schedule



# Board Options

## ● Option #1

- Award \$476,000 procurement contract to Royal Industrial Solutions for the ozone control system equipment for the Skinner plant
- Authorize an agreement with Suez Treatment Solutions, Inc. for a not-to-exceed total of \$320,000 for specialized technical support of the upgrade

## ● Option #2

- Do not proceed with this project at this time

# Staff Recommendations

- Option #1

