

# PROPOSED PROFESSIONAL SERVICES AGREEMENT WITH HAZEN AND SAWYER FOR ENGINEERING DESIGN

Laguna Treatment Plant Electrical Infrastructure  
Improvements Project

BPU Contract Review Subcommittee

March 20, 2024

Greg Dwyer, Associate Engineer



OUR FUTURE IN EVERY DRÖP

# Project Purpose and Description

Much of the electrical infrastructure at the Laguna Treatment Plant (LTP) is at the end of its useful service life.

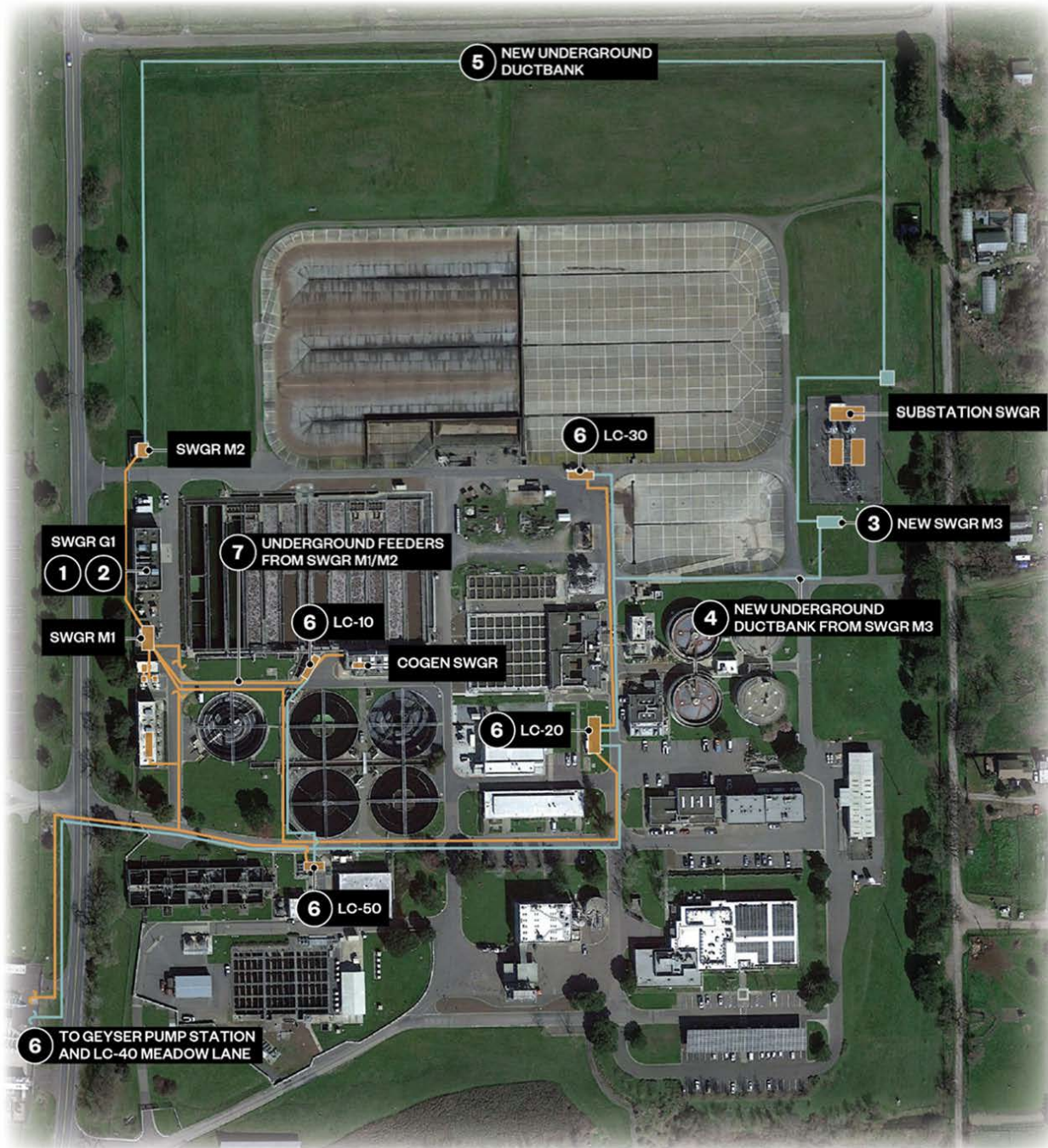


Project will replace major assets within the electrical distribution system to provide reliable services into the future.



The City is Seeking Professional Services for Engineering Design.

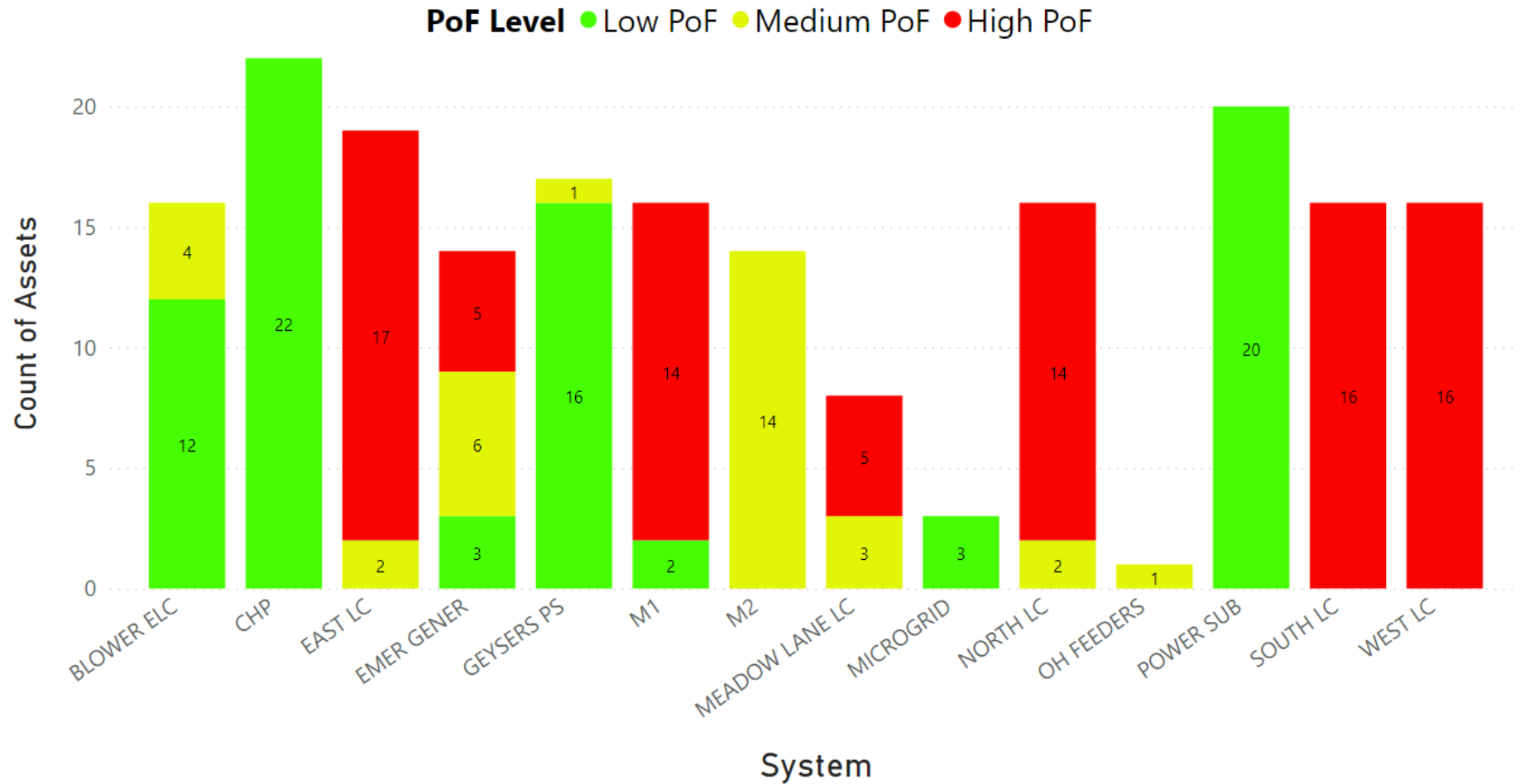
# Major Assets to be Replaced per Condition and Risk Assessments from the LTP Power Master Plan, January 2023



## ELECTRICAL DISTRIBUTION SYSTEM IMPROVEMENTS

- New    ■ Existing
- 1 SWGR G (Emergency Generator Switchgear) – Repair/Align Circuit Breaker Frame
  - 2 Standby Power System Redundancy – Add Redundant Circuits from SWGR G to Distribution Switchgear.
  - 3 Install new Switchgear M3 near LPS to replace SWGR M1.
  - 4 Install ductbank system from new SWGR M3 to Load Centers.
  - 5 Convert 15kV overhead to underground.
  - 6 Replace Existing Load Centers
    - a. LC-10 (West)
    - b. LC-20 (East)
    - c. LC-30 (North)
    - d. LC-40 (Meadow Lane)
    - e. LC-50 (South)
  - 7 Replace existing 15kV cables from SWGR M1/M2 to Load Centers

# Probability of Asset Failure from the LTP Power Master Plan, January 2023



OUR FUTURE IN EVERY DROP



# Convert Overhead Power Lines to Underground

---

- Existing 12kV overhead wooden power poles vulnerable to damage from inclement weather or natural hazards.
- Adds resiliency to the power distribution system and eliminates need for specialized overhead line work crew.
- Incorporate permit / mitigation measures for ground disturbing activities within California tiger salamander habitat.



# West Load Center (LC10)



# East Load Center (LC20)



OUR FUTURE IN EVERY DRÖP



# North Load Center (LC30)





Meadow  
Lane RD  
Load Center  
(LC40)



South  
Load  
Center  
(LC50)



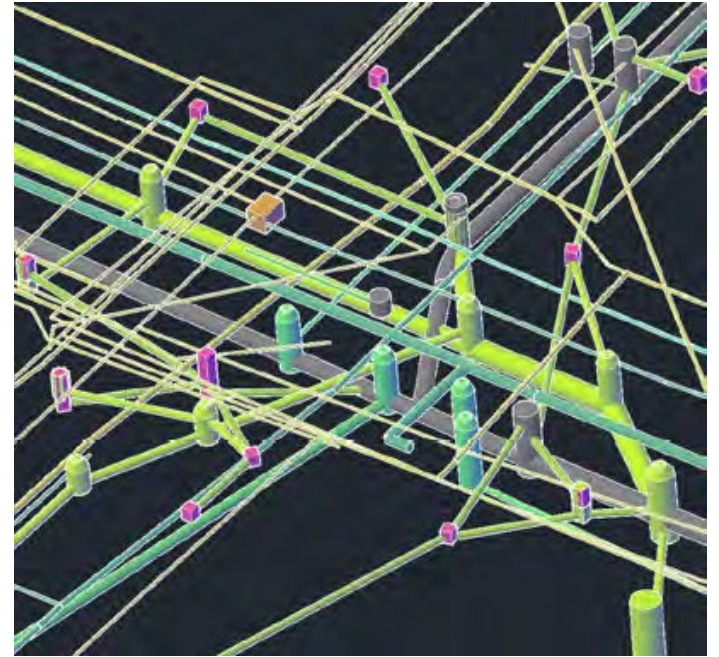
# Switchgear (SWGR M1)





3D Modeling to  
optimize duct bank  
routing/ resolve  
potential conflicts  
with existing  
Utilities

---



# Additional Studies

- Llano Pump Station Standby Power Study - Evaluate and confirm the capacity of existing standby power and cogeneration system in the event of a power outage (Fee: \$34,680).
- Staffing Analysis – Workforce level review to assess the need for staffing changes for the upgraded system (Fee: \$30,620).

# Project Schedule



Project Design: March 2024 to February 2025.



Environmental: March 2024 to December 2024.



Procurement: August 2024 to April 2028.



Anticipated BPU Consideration of Construction Contract Award: March 2026.



Projected Construction: April 2026 to December 2028.



# Proposal Fee Breakdown

<b><u>HAZEN AND SAWYER PROPOSAL COSTS</u></b>	
<b><u>Fee Description</u></b>	<b><u>Fee Cost</u></b>
Design	\$1,578,460
Project Management	\$249,500
Environmental	\$275,520
Procurement	\$151,990
Additional Studies	\$65,300
<b>Subtotal</b>	<b>\$2,320,770</b>
10% Contingency	\$232,077
<b>Total Consultant Fee</b>	<b>\$2,552,847</b>



OUR FUTURE IN EVERY DRÖP

# Proposal Metrics

<b>HAZEN AND SAWYER CONSULTANT FEE METRICS</b>		
<b>Description</b>	<b>Project Values</b>	<b>Industry Standard</b>
2026 Construction Cost	\$24M	
Total Fee (Not Including Contingency)	\$2.3M	
Design Fee	\$1.6M	
Project Management	\$250K	
<b>Design as a Percent of Construction Cost</b>	<b>7%</b>	<b>10% - 18%</b>
<b>Project Management as a Percent of Total Fee</b>	<b>10%</b>	<b>10%-20%</b>



OUR FUTURE IN EVERY DRÖP

# PSA Process

- Solicited proposals through the City's Professional Services Agreement (PSA) process.
- PSA is a competitive process.
- Includes Master Professional Services Agreement (MPSA) consultants who have proven technical abilities, experience and have already gone through the City's contract and insurance approval process.
- Provides an opportunity to reach interested consultants outside the existing MPSA consultant list.



# Selection Criteria

- Request for proposals (RFP) released September 26, 2023 for engineering design and engineering services during construction. (Note: It was decided to postpone engineering services during construction until construction funding has been encumbered).
- Five Hundred Fifty-Two (552) vendors were notified about the RFP via PlanetBids. Thirty-Seven (37) prospective firms downloaded the RFP documents during the Seven (7) week advertisement period of which two (2) submitted proposals.
- Key Selection Criteria:
  - Responsiveness to RFP
  - Qualifications of Project Team
  - Work Plan and Scope of Services
  - Demonstrated Technical Abilities
  - References



OUR FUTURE IN EVERY DRÖP

# Proposal Selection

## Review Panel

- Deputy Director
- Two (2) Associate Engineers
- Civil Engineering Technician III
- Supervising Electrical Technician
- Wastewater Maintenance Superintendent

## Two (2) Proposals Received

## Hazen and Sawyer

- Complete Proposal that met all RFP Requirements
- Strong Qualifications and Experience
- Detailed Work Plan and Project Understanding

## Contract Cost

- Not to Exceed Fee of \$2,552,847
- Consistent with City Staff Estimate



OUR FUTURE IN EVERY DRÖP

# Recommendation

It is recommended by the Public Works Department and Santa Rosa Water that the Contract Review Subcommittee recommend the Board of Public Utilities approve a Professional Services Agreement with Hazen and Sawyer to provide engineering design services for the Laguna Treatment Plant Electrical Infrastructure Improvements Project.

# Questions?



OUR FUTURE IN EVERY DRÖP