WATER SUPERVISORY CONTROL AND DATA ACQUISITION (SCADA) PHASE II - DESIGN-BUILD AGREEMENT AND PROFESSIONAL SERVICES AGREEMENT

Public Utilities Department

City Council

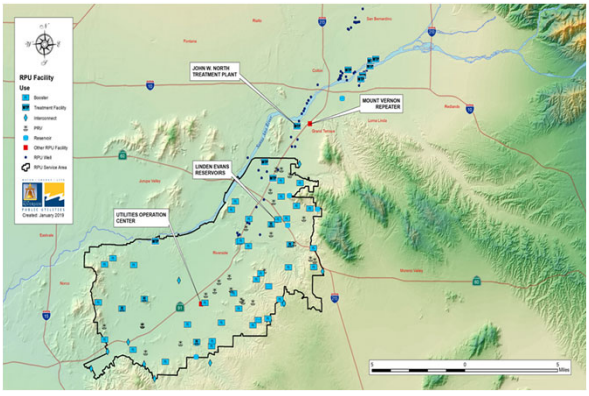
December 6, 2022

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BACKGROUND

RPU Water has many remote assets including:

- 52 Wells
- 32 Booster Stations
- 16 Reservoirs
- 6 Treatment Plants
- Inter-Agency Connections
- Future sites



2

2

BACKGROUND

Supervisory Control and Data Acquisition (SCADA)

- Controls and Monitors
- Allows Remote Operation
- Provides Critical Data
- Alerts System Operators



BACKGROUND

RPU Water SCADA System was developed in the 1990s

- Obsolete Technology
- Unsupported
- Failed components
- Lack of replacement components
- Increased O&M Costs



DISCUSSION

1. RPU Water's SCADA system had 29 findings in the 2016 SCADA Vulnerability Assessment.
2. RPU Water launched a multi-phased project to address the aging infrastructure and the critical findings.
3. SCADA Phase I – Communications upgrade was completed in 2022.
4. SCADA Phase II – Technology upgrade will be a 5-year project, discussed herein.
5. SCADA Phase III – Site specific instrumentation upgrades, will be brought back, at a later date.



DISCUSSION

Multiple RFPs for SCADA Phase II:

1. RFP 2031 SCADA Software Application (pricing included as a subcontractor of Design Build RFP) - Inductive Automation
2. RFP 2056 Design-Build Construction Services – Tesco Controls
3. RFP 2109 Owners Representative – Eramosa International, Inc.
4. Ongoing Maintenance & Service Agreement – Inductive Automation
5. RPU Staff Support

DISCUSSION

Task Description	Performed By	Total	Percent of Total
Design-Build Construction Services	Tesco Controls	$9,318,000	78%
10% Construction Contingency	-	$931,800	8%
	Sub-total	$10,249,800	
Consulting Services – Owner's Representative Professional Services	Eramosa International, Inc.	$1,303,286	11%
10% Professional Services Contingency	-	$130,329	1%
	Sub-total	$1,433,615	
Annual Maintenance & Service Agreement – 4 Years	Inductive Automation SCADA Software	$120,000	1%
Water Operations Support & Inspections	RPU Operations	$186,360	1%
Work Order Total		$11,989,775	100%

STRATEGIC PLAN ALIGNMENT

Strategic Priority 6 - Infrastructure, Mobility & Connectivity

Goal 6.2 - Maintain, protect, and improve assets and infrastructure within the City's built environment to ensure and enhance reliability, resiliency, sustainability, and facilitate connectivity.

Cross-Cutting Threads

- Community Trust
- Fiscal Responsibility
- Sustainability & Resiliency
- Equity
- Innovation

RECOMMENDATIONS

That the City Council:

1. Approve the Design-Build Agreement for Water SCADA Technology Upgrade from RFP No. 2056 with Tesco Controls of Sacramento, California in the amount of $9,318,000 plus 10% change order authority in the amount of $931,800;
2. Authorize the City Manager, or designee, to execute the Design-Build Services Agreement including making minor and non-substantive changes and to sign all documents and instruments necessary to complete the transactions;

RECOMMENDATIONS (CONT.)

3. Approve the Professional Services Agreement for Owner's Representative Services for the Water SCADA Technology Upgrade Project from RFP No. 2109 with Eramosa International, Inc. of Overland Park, Kansas, for a term through December 31, 2028, in the amount of $1,303,286, plus 10% change order authority in the amount of $130,329; and
4. Authorize the City Manager, or designee, to execute the Professional Services Agreement including making minor and non-substantive changes and to sign all documents and instruments necessary to complete the transactions.