



# RIVERSIDE PUBLIC UTILITIES

## Board Memorandum

**BOARD OF PUBLIC UTILITIES**

**DATE: DECEMBER 9, 2024**

**SUBJECT: REQUEST FOR PROPOSAL NO. 2360 — PROFESSIONAL CONSULTANT SERVICES AGREEMENT WITH LEIDOS ENGINEERING, LLC, OF RESTON, VIRGINIA FOR LA COLINA SUBSTATION UPGRADE PROJECT, IN A NOT-TO-EXCEED AMOUNT OF \$1,292,028, FOR A 3.5 YEAR TERM AND INCREASE WORK ORDER NO. 2202776 IN THE AMOUNT OF \$1,680,000 FOR LA COLINA SUBSTATION UPGRADE PROJECT FROM \$5,400,000 TO \$7,080,000**

**ISSUES:**

Consider recommending approval of a Professional Consultant Services Agreement with Leidos Engineering, LLC, of Reston, Virginia, for the La Colina Substation Upgrade Project, for a term of 3.5 years from date specified in the Notice to Proceed once issued by City, in the amount of \$1,292,028; authorizing a 15% change order authority in the amount of \$193,804; and approval of an increase in the amount of \$1,680,000 for Work Order No. 2202776 for a total revised work order amount from \$5,400,000 to \$7,080,000.

**RECOMMENDATIONS:**

That the Board of Public Utilities:

1. Approve an increase to Work Order No. 2202776 in the amount of \$1,680,000, bringing the total Work Order amount from \$5,400,000 to \$7,080,000;

That the Board of Public Utilities recommend that the City Council:

2. Approve a Professional Consultant Services Agreement for Request for Proposal No. 2360 for La Colina Substation Upgrade Project with Leidos Engineering, LLC, of Reston, Virginia, for a term of 3.5 years from date specified in the Notice to Proceed once issued by City, in a not-to-exceed amount of \$1,292,028, with the option to extend for one additional two-year term;
3. Authorize a 15%, or \$193,804, change order authority for the contract with Leidos Engineering, LLC for Request for Proposal No. 2360 La Colina Substation Upgrade Project; and

4. Authorize the City Manager, or designee, to execute the Professional Consultant Services Agreement with Leidos Engineering, LLC, including making minor and non-substantive changes.

## **BACKGROUND:**

La Colina Substation, first commissioned in 1965, is one of the oldest substations in the Riverside Public Utilities (RPU) electrical system. Located at 599 Central Avenue in Ward 2, the substation includes four 66kV power transformers and four 15kV metal-clad switchgears, with much of its original equipment still operational.

Over the years, the operation of La Colina Substation has faced several challenges due to aging equipment. On December 17, 2010, the Board of Public Utilities approved the emergency purchase of Power Transformer No. 4 to replace the original unit after an irreparable failure. In the past two decades, switchgear equipment has experienced multiple component failures and two arc flash incidents. Electrical apparatus housed within the switchgears, such as 15kV power circuit breakers, are no longer supported by manufacturers, leading to costly, customized replacement solutions. Other devices in the switchgears, including power system meters, control equipment, data acquisition units, protection relays, and ancillary materials, are legacy items scheduled for replacement as part of RPU's Switchgear Relay Upgrade Program.

The La Colina Substation Improvement Project is a crucial initiative by RPU to modernize the station by replacing all four 15kV switchgears and four 66kV power transformers with two higher-capacity 66kV power transformers and two 15kV metal-clad switchgears. This project will upgrade the substation to meet RPU's latest engineering standards for electric system protection and substation automation, enabling both local and remote control of equipment and power metering. The new equipment will integrate with the innovative 66kV infrastructure gradually installed at the station over the past 12 years, including 66kV vacuum circuit breakers, RPU's state-of-the-art 66kV substation automation system, and 66kV relay protection panels located in the main electrical enclosure. The proposed design and modernization will significantly enhance system reliability and operational efficiency.

### **Board Actions**

On November 14, 2022, the Board of Public Utilities (Board) approved Work Order No. 2202776 for the La Colina Substation Upgrade Project with an initial capital expenditure of \$2,500,000. This included the design, inspection, and fabrication of the new 66kV Power Transformer No. 1. The procurement was initiated in anticipation of longer lead times, as experienced by the industry in recent years. The fabrication and delivery of the transformer were completed in September 2024.

On June 24, 2024, the Board approved an additional \$2,900,000 for Work Order No. 2202776, increasing the total from \$2,500,000 to \$5,400,000. This increase covered the design and fabrication of 15kV metal-clad Switchgear No. 1. Staff are currently working with the vendor to review the design and monitor the timely manufacturing of the switchgear, which is scheduled for delivery in December 2025. Securing the equipment early ensures that shop drawings will be available for the consultant to begin design work as outlined in the Notice to Proceed.

At the June 24, 2024, Board meeting, the Board was notified that staff would return to seek a recommendation for the City Council to approve a professional consultant services agreement for design consulting services for this project.



Existing transformer and switchgear equipment at La Colina Substation



Proposed new transformer and switchgear equipment at La Colina Substation

**DISCUSSION:**

RPU is committed to providing safe and reliable electric service to all customers. Planned system improvements and equipment replacements are prudent and responsible measures to minimize the risk of prolonged power outages due to equipment failures and to maximize system reliability and safety. As part of RPU’s efforts to identify and replace aging infrastructure, RPU plans to undertake the La Colina Substation Improvement Project over the next four calendar years. The table below provides an estimated cost for the entire project with the current request highlighted.

<b>Description of Work</b>	<b>Fiscal Year</b>	<b>Amount (\$)</b>
Bid No. 7927 Fabrication and Delivery of Power Transformer No. 1	Board approval on 11/14/2022	\$2,500,000
Bid No. 871: Procurement of 15kV Switchgear No. 1	Board approval on 6/24/24	\$2,900,000
<b>RFP 2360: Professional Consultant Services Agreement; and RPU Engineering (Initial Services)</b>	<b>Proposed on 12/9/2024</b>	<b>\$1,680,000</b>
Procurement of Power Transformer No. 2	Anticipated 2025	\$6,660,000
Procurement of Switchgear No. 2		
Miscellaneous Material		
RPU Engineering (final), Construction (phase 1 & 2), Field Testing, Commissioning and Miscellaneous Material	Anticipated 2025/2026 2026/2027	\$6,760,000
<b>Work Order Total</b>		<b>\$20,500,000</b>

Work Order

At this time, staff are seeking Board approval for a \$1,680,000 Work Order increase, bringing the total work order authorization to \$7,080,000. The funding is necessary for awarding Request for Proposal (RFP) 2360 for the La Colina Substation Upgrade Project for design consulting services and initial engineering costs for RPU staff.

The table below shows the breakdown for the work order amount increase requested at this time.

<b>Work Order 2202776 – La Colina Substation Upgrade Project</b>	<b>Amount</b>	
Approved on November 22, 2022		\$2,500,000
Approved on June 24, 2024		\$2,900,000
<b>Requested Work Order Increase</b>		
Leidos Engineering, LLC	\$1,292,028	
Contingency (15% of Consultant Cost)	\$193,804	
RPU Staff – Project Management and Engineering	\$194,168	
<b>Work Order Amount Requested (December 9, 2024)</b>	<b>\$1,680,000</b>	<b>\$1,680,000</b>
<b>Revised Work Order Amount</b>		<b>\$7,080,000</b>

Solicitation Process and Consultant Selection

The City’s Purchasing Division released RFP 2360 on the City’s online bidding system, Planet Bids on July 15, 2024, seeking prospective companies to provide professional consultant design services for La Colina Substation Upgrade Project. As a crucial step for potential bidders to

understand the project scope, a virtual pre-bid meeting was conducted on July 22, 2024, with 44 prospective bidders in attendance. The RFP notification is summarized in the following table.

**RFP 2360 Bidding Notification Summary Table**

Action	Number of Vendors
Vendors Notified	1343
Vendors Who Downloaded the RFP (includes manufactures and sub-contractors)	101
Questions and Answers Received	33
Addenda Submitted	3
Proposals Received	7

On August 19, 2024, RFP 2360 closed with a total of 7 responses. The Purchasing Division’s review found the seven vendors to be responsive and responsible, and three City staff members evaluated the proposals. After careful evaluations of the proposals, Purchasing staff recommended awarding Leidos Engineering, LLC, as they are the highest rated proposer and offered the best value to the City.

Under the guidance of the Purchasing Division, a Best and Final Offer (BAFO) was requested of Leidos Engineering, LLC, therefore offering total cost savings of 5% to the City. The total points and rankings are summarized in the table below. Leidos Engineering, LLC’s proposed cost was below the engineer’s estimated amount of \$1,500,000.

**Evaluation Results Table**

Selection Criteria	Max Score	Leidos Engineering, LLC	PAR Western Line Contractors	TRC Solutions	EPS – Engineering & Design	Aubrey Silvey Enterprises, Inc.	Power-Tech Engineers, Inc.	The Engineering Partners, Inc.
Qualifications and Experience	300	<b>285</b>	200	270	250	215	210	215
Approach and Methodology	300	<b>285</b>	205	265	255	200	230	220
Professional References	150	<b>145</b>	110	122.5	122.5	95	112.5	102.5
Cost Score	250	<b>102.95</b>	250	99.32	121.08	136.74	77.05	56.95
Total Score	1000	<b>817.95</b>	765	756.82	748.58	646.74	629.55	594.45
Rank		<b>1</b>	2	3	4	5	6	7

Design Consultant	City Location	Proposal Amount	Rank
<b>Leidos Engineering, LLC</b>	<b>Reston, VA</b>	<b>\$1,292,028.00</b>	<b>1</b>
PAR Western Line Contractors, LLC	Kansas City, MO	\$532,060.94	2
TRC Solutions	Irvine, CA	\$1,339,312.12	3
EPS – Engineering & Design	St. Louis, MO	\$1,098,550.00	4
Aubrey Silvey Enterprises, Inc.	Carrollton, GA	\$972,787.00	5
Power-Tech Engineers, Inc.	Walnut, CA	\$1,726,420.00	6
The Engineering Partners, Inc.	San Diego, CA	\$2,335,725.00	7

➤ *Engineer’s Estimate*

*\$1,500,000.00*

Purchasing Resolution 24101, Section 508 states, “Contract procured through Formal Procurement shall be awarded by the Awarding Entity to the Lowest Responsive and Responsible Bidder, except that...(c) Contracts procured through Formal Procurement for Services or Professional Services, where a Request for Proposals or Request for Qualifications was used to solicit Bids, shall be awarded by the Awarding Entity in accordance with the evaluation criteria set forth in the Request for Proposals or Request for Qualifications...”

The Purchasing Manager concurs that the recommended actions are in compliance with Purchasing Resolution No. 24101, Section 508.

The Consultant's responsibilities include providing physical, civil, structural, protection, and control design for La Colina Substation Upgrade Project. Additionally, the Consultant will offer construction support, followed by as-built documentation and standards development for the switchgear and transformers. The contract will span 3.5 years from the date specified in the Notice to Proceed, once issued by the City.

The project requires a phased approach because the electrical load cannot be fully transferred to nearby stations during construction. To manage this, construction will be completed in two phases, and the design will be delivered in corresponding phases. This approach ensures that any field redlines from the first phase are incorporated, preventing conflicts in the second phase. Phase 1 will involve designing the installation of Transformer T1 and Switchgear 1 (replacing T1, T2, and Switchgear 1 and 2). Phase 2 will involve designing the installation of Transformer T2 and Switchgear 2 (replacing T3, T4, and Switchgear 3 and 4). The overall construction is scheduled for completion by July 2028.

RPU Engineering Staff responsibilities include confirming that designs meet the Project's design criteria, ensuring that physical, electrical, and structural tasks adhere to the project schedule, and reviewing vendor calculations and drawings. Additionally, they provide oversight in project management by responding to RFIs, addressing design clarifications, and handling various administrative tasks. This includes performing field investigations of existing infrastructure, writing technical specifications, and managing communications with vendors and contractors. RPU staff also reports progress to the City, ensuring that all aspects of the project are aligned with the overall scope and timelines.

The La Colina Substation Upgrade Project is a comprehensive, multi-year construction project. Additional expenses for contracted services, RPU staff costs, and materials necessary to complete the project will be returned for approval at future meetings. Specifically, RPU staff will return to the Board for an award recommendation for procuring power equipment for Phase 2 construction around late spring 2025.

### **STRATEGIC PLAN ALIGNMENT:**

This item contributes to Strategic Priority No. 6 Infrastructure, Mobility and Connectivity and Goal No. 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.

This item aligns with each of the five Cross-Cutting Threads as follows:

1. **Community Trust** – Planned replacement of deteriorating infrastructure with equipment that complies with current standards will improve safety and reliability of the electric system is a prudent and responsible action that helps build community trust and results in the

greater public good. A collaborative and efficient approach has been used to replace the aging electric infrastructure to minimize potential disruptions to our customers during construction.

2. **Equity** – The replacement of the substation transformers and switchgears has been established based on engineering planning and operational criteria, with equitable distribution of services to ensure every member of the community has equal access to share the benefits of community progress.
3. **Fiscal Responsibility** – This item represents fiscal responsibility by identifying and replacing aging infrastructure, providing optimal electrical system reliability, safety, and efficiency, and reducing potential equipment and system failures and overall operational costs. The lowest price for the replacement units and thereby the best value for RPU' s customers was ensured through a competitive bidding process and negotiating a Best and Final Offer (BAFO) with the recommended Consultant.
4. **Innovation** – RPU is committed to identifying creative solutions to meet the needs of our community members, effectively and efficiently by providing innovative infrastructure improvements. The project will feature state-of-the-art Substation Automation Systems (SAS), relay protection for the 15kV systems, along with additional auxiliary control systems, adhering to the latest standards in the industry.
5. **Sustainability & Resiliency** – This project ensures that new substation transformers and switchgears provide grid modernization and reliability that is expected to last well into the future.

### **FISCAL IMPACT:**

The fiscal impact is \$1,680,000 for increasing Work Order No. 2202776 from \$5,400,000 \$7,080,000. Sufficient funds are available in Public Utilities Substation Transformer Upgrade Capital Account No. 6130100-470632 for Fiscal Year 2024/2025.

Prepared by: Daniel Honeyfield, Utilities Assistant General Manager/Energy Delivery  
Approved by: David A. Garcia, Utilities General Manager  
Certified as to  
availability of funds: Kristie Thomas, Finance Director/Assistant Chief Financial Officer  
Approved by: Rafael Guzman, Assistant City Manager  
Approved as to form: Jack Liu, Interim City Attorney

### Attachments:

1. Project Site Map
2. Bid Award Recommendation
3. Presentation