



Midpeninsula Regional
Open Space District

R-24-95
Meeting 24-20
July 24, 2024

AGENDA ITEM 6

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Award of Contract to RACOM Corporation to Replace an Existing Very High Frequency (VHF) Analog Conventional System with a P25 Digital Conventional System for the Radio System Assessment and Upgrade Project

GENERAL MANAGER'S RECOMMENDATIONS *den*

1. Award a contract to RACOM Corporation to provide equipment, services, installation, and testing for the Radio System Assessment and Upgrade project for a not-to-exceed base amount of \$1,893,479.
2. Authorize a 5% contingency in the amount of \$94,674 to cover unforeseen issues related to the upgrade project, for a total contract amount not-to-exceed \$1,988,153.
3. Authorize the General Manager to execute a Support Agreement with RACOM for firmware, software, and technical support to the new radio system (once completed) with annual operating costs totaling \$39,481 per year for years two through five, and \$43,809 per year for years six through ten, for a total contract amount not to-exceed \$376,969.

SUMMARY

The Midpeninsula Regional Open Space District's (District) radio system requires upgrades as the equipment is reaching end-of-life and manufacturers are no longer fabricating replacement parts or providing support. In February 2024, a request for proposals (RFP) was issued for a primary vendor to provide equipment, engineering and technical services, installation and testing of a new radio system and related equipment. RACOM was selected as the most qualified and best suited provider.

DISCUSSION

In July 2019, the Board of Directors (Board) awarded a contract to Forrest Telecom Engineering (FTE) to prepare a radio system assessment report and master plan in support of the Radio System Assessment and Upgrade Project #65407 (R-19-92). The FTE consultant presented the findings and recommendations from the report in November 2020. The Board approved the following improvements (R-20-110):

- 1) Replace the existing Patrol Simulcast System with new equipment.
- 2) Replace the existing Maintenance/Administrative System with new equipment.

- 3) Install common site equipment in each tower and install a microwave backhaul link between the Pise tower and Santa Clara County Communications hub.
- 4) Replace the Skeggs Point tower with a repeater on the Allen Peak tower.
- 5) Upgrade the entire system to P25 digital.
- 6) Upgrade the Maintenance/Admin system to simulcast.
- 7) Upgrade the Redwood tower from receive only to transmit and receive.
- 8) Replace Tomita tower with a repeater at the McQueen Ridge tower.
- 9) Install a new repeater at the Pigeon Point tower.

In September 2022, the Board approved an amendment to the FTE agreement to expand the systems engineering services and to revise the project roles between FTE and Santa Clara County (County) (R-22-103). Before and since the 2022 amendment, a concerted effort was made by staff, FTE, and the County to obtain a suitable sole-source proposal from Motorola, the manufacturer of the District’s current system and the service provider for the County. A sole source contract was proposed because the District utilizes the County’s system backbone and shares equipment and space with many of the County’s systems. Unfortunately, numerous discussions over ~20 months and two submitted proposals did not yield an acceptable solution from the manufacturer. After consulting with FTE and the County, the District determined the next best course of action was to issue a Request for Proposals (RFP). Staff issued an RFP for a two-way radio system upgrade on February 1, 2024, with the following scope of work requirements:

Replace an existing VHF analog conventional system with a P25 digital conventional system. The selected Contractor shall engineer, furnish, and install the system for the District. Systems and equipment must include:

- Repeaters, receivers, comparators, frequency references
- Associated antenna systems
- Control station for dispatch integration
- Microwave radio and associated antenna systems
- Networking equipment (routers, switches, etc.)
- DC backup power systems (reuse of newer batteries at some sites)

The solicitation closed on April 1, 2024. The following three proposals were received. Subscribers (handheld and vehicle radios) will be procured separately.

Firm	Cost of Services and Infrastructure
RACOM	\$1,893,479
Golden State	\$2,447,840
JVCKENWOOD	\$3,385,412

Evaluation criteria were determined by the review team (one District staff, one FTE staff and two County staff) prior to the release of the RFP that included the quality of the proposal, project approach, company expertise, experience in similar projects, past performance, personnel and subcontractor qualifications, proximity to the District, reasonable timeline and cost. After careful review of all proposals, RACOM was deemed as the most qualified and best suited for the project at a fair and reasonable price.

RACOM is an engineering company and has been designing and delivering end-to-end solutions in the communications industry since 1972. As part of Eastern Communications, they are 200+ full-time workers, including over 100 engineers and technical staff. They specialize in engineering, design, and build, as well as technical support services for radio equipment. RACOM has installed and maintained numerous simulcast radio systems throughout the country that employ the same technology as the proposed District system. RACOM provided a list of 20+ projects and a list of 16 references. Staff contacted three of those references at public safety agencies with similar projects. All references were satisfactory.

Additionally, the General Manager recommends entering into a Support Agreement with RACOM for ongoing technical support after the project is complete and the system is out of the one-year warranty. This includes: 1) 24-hour, seven days a week technical support and 2) an online client service portal and technical resources. The agreement is for a total contract amount not to exceed \$376,969 over 10 years, with annual operating costs totaling \$39,481 per year for years two through five, and \$43,809 per year for years six through ten. The new radio system is expected to have a life of ten to fifteen years, which is typical. The current system has been in place since 2011 and is being replaced due to end-of-life equipment.

FISCAL IMPACT

The FY25 budget includes \$2.3 million for the 65407 Radio System Assessment and Upgrade project. There are sufficient funds in the project budget to cover the cost of the recommended capital improvement expenditures for work completed this fiscal year. Funds for Year 2 of the project will be recommended as part of the annual Budget and Action Plan process. The project is expected to be fully implemented by the end of FY26, with most of the work completed in FY25.

Funds for operational costs, including annual firmware, software, and technical support, will be recommended in future fiscal year operational budgets, which will commence after the project is complete and the equipment is out of warranty.

The recommended actions are not funded by Measure AA.

Radio System Assessment and Upgrade 65407	Prior Year Actuals	FY25 Adopted	FY26 Projected	FY27 Projected	Estimated Future Years	TOTAL
District Funded (Fund 40):	\$170,362	\$2,236,075	\$200,000	\$0	\$0	\$2,606,437
Total Budget:	\$170,362	\$2,236,075	\$200,000	\$0	\$0	\$2,606,437
Spent-to-Date (as of 6/25/24):	(\$170,362)	\$0	\$0	\$0	\$0	(\$170,362)
Encumbrances:	\$0	\$0	\$0	\$0	\$0	\$0
RACOM Contract:	\$0	(\$1,643,479)	(\$250,000)	\$0	\$0	(\$1,893,479)
RACOM Contract Contingency (5%):	\$0	(\$82,174)	(\$12,500)	\$0	\$0	(\$94,674)
Budget Remaining (Proposed):	\$0	\$510,422	(\$62,500)	\$0	\$0	\$447,922

PRIOR BOARD AND COMMITTEE REVIEW

- **July 10, 2019:** The original award of Agreement with FTE was authorized by the Board ([R-19-92, minutes](#)).
- **November 18, 2020:** The Board approved the General Manager's recommendations to upgrade the District's radio system ([R-20-110, minutes](#)).
- **September 14, 2022:** The Board approved the first amendment to the FTE agreement ([R-22-103, minutes](#)).

PUBLIC NOTICE

Public notice was provided as required by the Brown Act. No additional notice is required.

CEQA COMPLIANCE

The proposed project to replace and upgrade existing radio system equipment is exempt in accordance with State CEQA Guidelines section 15301 (Existing Facilities) and section 15302 (Replacement or Reconstruction).

NEXT STEPS

Following Board approval, the General Manager will execute a contract with RACOM to provide equipment, services, installation, and testing for the Radio System Assessment and Upgrade project. Additionally, the General Manager will execute a 10-year contract with RACOM for ongoing technical support of the new radio system.

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