

UHF-to-VHF TRANSITION

SCOPE

KVCR will be transitioning from ultra-high frequency (UHF) channel 24 to very-high frequency (VHF) channel 5. The scope includes replacing the existing transmitter and antenna solutions systems located at 10550 Box Springs Mountain Rd., Moreno Valley, CA 92324. District Facilities Planning & Construction and KVCR have formed a collaborative and expert team and are working towards the successful delivery of this project.

SCHEDULE

The project has five major milestones. The District has successfully fulfilled the first two.

- 1. File FCC construction permit by July 12, 2017. ✓
- 2. Tower permit received on October 2, 2018. ✓
- 3. Complete construction of new tower by December 30, 2018.
- 4. Complete installation of both antenna and transmitter solution systems by January 31, 2019.
- 5. KVCR goes live with VHF transmission by April 12, 2019.

CHALLENGES

- The existing KVCR FM antenna attached to the existing tower (3-leg) would not fit into the configuration of the new 345-foot broadcasting tower (4-leg). This will require a new FM antenna. After further negotiation with Jampro Antenna, Inc., the new FM antenna will cost the District about \$148,000 for labor, materials, equipment, taxes, shipping and handling. The amendment was approved by the Board of Trustees on September 13, 2018. Coordination work is still ongoing between different vendors and consultants.
- It has been uncovered recently that the antenna systems at the KVCR studio tower at SBVC need to be replaced and raised higher on the tower profile in order to provide the proper transmission frequency to the new antenna systems at new tower at Box Spring at Moreno Valley. This may require DSA involvement in order justify the loading requirements, and procurement and installation of these antenna systems. The program team is in the process of evaluating the requirements and finalizing the assessment and recommendation.

PROCUREMENT

- Antenna: Jampro Antenna, Inc. (BOT approved on October 12, 2017 and subsequently September 13, 2018) is procuring the TV and FM antenna.
- <u>Transmitter</u>: GatesAir (BOT approved on March 8, 2018) is procuring Transmitter system. The District selected GatesAir and Salvador Castillo (BOT approval requested October 11, 2018) as independent contractors to provide technical services for the transmitter facility and the integration scope with the new antenna/tower systems.



New Broadcasting Tower: Sabre Communications Corporation (BOT approved on March 8, 2018) is procuring the new tower.

CONSTRUCTION PROGRESS

- The new tower design has received all federal, states, and local permits, and construction will start the week of October 8, 2018.
- The design of the new TV antenna system by Jampro Antenna is in progress.
- The design of the new TV transmitter by GatesAir Inc. is in progress.
- Survey the new tower facility area per the approved design at Box Spring and fence it up.

THINGS TO FOLLOW

- Potentially amending the lease agreement with the property owner at Moreno Valley.
- Procuring contractor to remove the old transmitter and install GatesAir Transmitter.
- Installing Tower by December 1, 2018. TV and FM antenna installation by December 31, 2018;
 Transmitter installation by January 31, 2019.

TECHNOLOGY CORE MODERNIZATION

SCOPE

KVCR will be transitioning from ultra-high frequency (UHF) channel 24 to very-high frequency (VHF) channel 5 and will need to upgrade its existing technology and equipment to accommodate the transition. The project scope includes modernizing and updating the TV and radio studio to better serve the station and community.

The overall scope of this initiative includes two major components:

- Technology & Equipment Upgrades to TV and Radio Station at KVCR facility.
- 2. Space Repurposing, Reutilization, and Maximization.

SCHEDULE

- Hire a professional consultant (program manager) to oversee the project from programming development to closeout under the supervision of District staff. ✓
- Scope development, perform needs assessment, and develop an overall budget. ✓
- Solicit a design professional team to design the system upgrade by February 8, 2018. ✓
- Procure TV and Radio station equipment separately by August 2018. Recommendation has been submitted to the BOT in August 9, 2018. ✓
- Solicit an integrator (contractor) to procure, install the technology upgrade by June 30, 2018.
- Complete the design of the building repurposing and received DSA permit by January 10, 2019.
- Complete the building repurposing, procure furniture, and staff move by June 30, 2019.



CHALLENGES

- It is imperative that the "portion of" technology core equipment and system upgrades are complete and the transition is complete to maintain FCC deadline in order to mitigate any potential penalties and loss of license.
- System design implementations:
 - Introduce and implement advanced television system committee (ATSC 3.0) for KVCR.
 - Discuss and implement offsite master control, which could potentially save in the technology core upgrade project budget and will lower KVCR annual operating cost.
- Part of the scope is repurposing the existing space, which will require a building architect and engineer to maximize for potential KVCR/FNX staff growth.
- Due to the technology rapid evolving and new ATSC 3.0 generation, many new high tech companies are warping up their design packages to launch the new system generation. Therefore, the District, KVCR alongside with the system engineer team have decided to restrategize integration procurement package. The District under an RFP process will procure the main TV and Radio station equipment separately and the installation will be part of the construction (integration) services procured under RFQ/RFP process.
- Since KVCR is looking at repurposing more of the broadcast areas to maximize their efficiency and accommodate the new technology, some of large piece of the integration will move after the repurposing is complete. Since KVCR facility is under the Division of State Architects (DSA) umbrella, it is expected to take longer than planned. We are discussing this internally to see the impact to the overall schedule and talk to DSA/consultant for expeditions.

PROCUREMENT

- Procure a design professional team through an RFQ/RFP. ✓
- Engage the District with Public Media Management (PMM) for the master joint control. Some of the benefits to the District/KVCR for the master control system are: no up-front investment is required, cloud -based sourcing, reduced cost of station operation, significant reduction of capital investment at the station level, retention of control over KVCR local schedule deadlines, no need for expensive dedicated high-capacity fiber connectivity, general reduction in KVCR's need for storage, built-in disaster recovery, etc. BOT approved this contract on July 12, 2018. ✓
- Procure the radio and TV production systems and equipment. To be installed by the integrator.
 Pending BOT approval August 9, 2018. ✓
- For the technology core modernization scope, the District staff issued a request for qualification (RFQ) and secured (3) prequalified vendors. RFP is due in January 8, 2019 for February 11, 2019 BOT approval.
- Procure a general contractor for building repurpose via RFQ/RFP process and recommend approval to BOT for approval on February 11, 2019.

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CONSTRUCTION PROGRESS

- The tech core (technology and equipment upgrade) system design by Key Code Media is in the progress. The design will complete by November 30, 2018.
- The district has engaged DLR Group for architectural services, under a district master services agreement, to start the space design and repurposing for phase1 (broadcast space associated with technology upgrade) and phase 2 (open offices and FF&E upgrades and space maximization). The design will need to be submitted for Division of the State Architect (DSA) review and approval. Potentially, there is a contract amendment to DLR for added scope of design into their services, will be sent out to BOT for approval on November 8, 2018.

THINGS TO FOLLOW

- Finish the design for the technology and equipment upgrade by November 30, 2018.
- Issue a Request for Proposal (RFP) for the (3) prequalified vendors for the technology core project and submit to the board for approval in February 11, 2019.
- Finish the design of the space and repurposing of phase 1 and phase 2. Receive DSA approval and bid the project.
- Start the technology system integration and construction services.

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Overall Project Support \$621,978

UHF-to-VHF Transition \$4,517,387

Technology Core Modernization \$10,860,635

Consultants \$84,570

- Russ Walker
- Kessler & Gehman

Legal Counsel \$450,000

- Womble Bond* (FCC)
- Burke Sorenson (Ed Law)
- *Formerly Bennet & Bennet

Contingency \$87,408

Consultants \$311,093

- NCA (Project Management)
- Trileaf (Environmental)
- Snipes-Dye (Engineering)
- CHJ (Geotechnical)
- Knowland (Inspection)
- TBD (Tranmitter Design)
- Gates Air (Site Assessment)
- Salvador Castillo (RF Technical)
- Magnum Tower (Structural Analyst)
- P&R Tower (Structural Analyst)

Construction \$3,550,642

- Sabre Communication (Tower)
- Jampro (Antenna)
- TBD (Transmitter Demo/Installation)
- TBD (Satellite Shed at CHC)
- TBD (Antenna at SBVC)

Equipment \$627,652

- GatesAir (Transmitter)

Other \$28,000

- Advertising
- **County Permits**

Consultants \$701.996

- NCA (Project Management)
- · Key Code (Engineering)
- TMS (ATSC3.0* and PBS)
- DLR Group (Architectural)
- TBD (Inspection)
- *Advanced TV Systems Committee Standards

Construction \$7,845,000

- TBD (Technology Upgrades Integrator)
- TBD (Building)

Furniture, Fixtures & Equipment \$2,248,639

- Sony (4K Upgradable Camera System)
- Evertz (Ultra-High Definition Router)
- Sony (Master Control)
- TBD (Furniture, Fixtures & Equipment)
- TBD (IT for Offices & Editing)
- TBD (Field Camera, Sound & Lighting)

Other \$65,000

- Moving Services
- Division of the State Architect Fees
- Advertising

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Vendor Name	Scope of Work or Services	Category	Project #	Forecast to Complete	
Russ Walker	Project Management	Consultant	03-1617-06	\$	11,200.0
Bennet & Bennet	FCC Attorney	Counsel	03-1617-06	\$	150,000.0
Womble Bond Dickinson	FCC Attorney	Legal Counsel	03-1617-06	\$	200,000.0
Burke, Williams & Sorensen	Education Law Attorney	Legal Counsel	03-1617-06, 03-1718-10	\$	100,000.0
Kessler & Gehman Associates	Communication Engineer	Consultant	03-1617-06	\$	73,370.0
Contingency	TBD	NA	NA	\$	87,408.0
, ,				\$	621,978.0
UHF-to-VHF Transition					
Vendor Name	Scope of Work or Services	Category	Project #	Forec	ast to Complete
Sabre Communication Corp	Construction of new broadcasting tower	Contractor	03-1617-06	\$	2,292,071.1
Jampro Antenna Inc.	Construction of new TV antenna system;	Contractor	03-1617-06	\$	796,570.4
GatesAir Inc.	Equipment Transmitters	Equipment	03-1617-06	\$	627,652.0
GatesAir Inc.	Transmitter Site Assessment	Independent Contractor	03-1617-06	\$	7,817.0
Trileaf Environmental	Environmental - Workplan & FEMA	Consultant	03-1718-09	\$	13,400.0
Trileaf Environmental	Environmental - Tibes Monitoring	Consultant	03-1718-09	\$	13,470.0
Snipes-Dye	Surveyor & Land Use	Consultant	03-1617-06	\$	15,440.0
CHJ Consultants	Geological/Geotech	Consultant	03-1617-06	\$	10,900.0
Riverside County	Permit Fees	Permit	03-1617-06	\$	25,000.0
TBD	Transmitter Demo Scope	Contractor	03-1617-06	\$	22,000.0
TBD	Transmitter Installation Scope	Contractor	03-1617-06	\$	110,000.0
TBD	Transmittere MEP/Structural Scope	Contractor	03-1617-06	\$	82,500.0
TBD	Transmitter MEP/Structutal Design Consutlant	Consultant	03-1617-06	\$	44,000.0
Knowland Construction	Inspector of Record	Consultant	03-1617-06	\$	25,400.0
Daily Journal	Advertisement	Advertisement	03-1617-06	\$	3,000.0
NCA Studio	Project Management	Consultant	03-1718-09	\$	50,666.0
Salvador Castillo	RF Technical Consulting Services (tower transition)	Consultant	03-1617-06	\$	100,000.0
Magnum Tower, Inc.	Structural analysis for the tower	Consultant	03-1617-06	\$	15,000.0
P&R Tower Company	Structural analysis for the tower	Consultant	03-1617-06	\$	15,000.0
TBD	KVCR Satellite Shed at CHC	Contractor	03-1819-03	\$	82,500.0
TBD	KVCR Antenna at SBVC	Contractor	03-1819-03	\$	165,000.0
				\$	4,517,387.00
Technology Core Modernizat	ion				
Vendor Name	Scope of Work or Services	Category	Project #	Forec	ast to Complete
Key Code Media, Inc.	Consultant - Engineer Designer	Consultant	03-1718-10	\$	366,400.0
NCA Studio	Consultant - Project Management	Consultant	03-1718-10	\$	87,296.0
Daily Journal	Advertisements	Advertisement	03-1718-10	\$	5,000.0
TBD	Technology Upgrades Integrator/GC	Contractor	03-1718-10	\$	6,195,000.0
Sony Electronics Inc.	4K Upgradable Camera System; Multi-format Switcher	Vendor	03-1718-10B	\$	657,051.9

KVCR Transition and Modernization Project Update -- Cost

Vendor Name	Scope of Work or Services	Category	Project #	Forecast to Complete	
Evertz	One UHD Video Router	Vendor	03-1718-10B	\$	331,587.30
Sony Electronics Inc.	Master Control Providers	Vendor	03-1718-10	\$	630,000.00
TMS, Inc.	Professional consultant for ATSC 3.0, PBS, etc.	Consultant	03-1718-10	\$	44,000.00
TBD	Field Eqipment (camera, sound, lights, etc)	Vendor	03-1718-10	\$	350,000.00
TBD	Inspector of Record	Consultant	03-1718-10	\$	22,000.00
DLR Group	Building Architect (phase 1, 2, and 3)	Consultant	03-1718-10A	\$	149,300.00
TBD	Moving services - logitical scope	Vendor	03-1718-10A	\$	33,000.00
TBD	Furniture, Fixture & Equipment (FF&E purchase)	Equipment	03-1718-10A	\$	180,000.00
TBD	IT equipment for office and editor rooms	Equipment	03-1718-10B	\$	100,000.00
TBD	Inspector of Record	Consultant	03-1718-10A	\$	33,000.00
TBD	Permit Fees - DSA	Permit	03-1718-10A	\$	27,000.00
TBD	Building Construction	Contractor	03-1718-10A	\$	1,650,000.00
				\$	10,860,635.00
KVCR UHF-to-VHF Transition and Technology Core Modernization Project Total					16,000,000.00