

# PROPOSAL

## New Courthouse and Multi-Purpose Room

AZ State Contract No. ADSP017-184596

### Lake Havasu Municipal Court

2001 College Dr, #152  
Lake Havasu City, AZ 86403

Revision: 5  
Modified: 11/15/2022



Presented By:

### E1 Audiovisual Technologies

**Rick Kenamer, National Business Development Manager**

14601 S. 50th Street, Suite 120  
Phoenix, AZ 85044 USA  
480.763.1002 x140  
RKenamer@E1AVTech.com  
[www.E1AVTech.com](http://www.E1AVTech.com)



**AUDIOVISUAL**  
TECHNOLOGIES

# SCOPE OF WORK

## 1.0 Project Summary

E1 Audiovisual Technologies ("E1") shall provide an audiovisual system for the Lake Havasu Municipal Court building.

Courtrooms 1 & 2: E1 shall install one new DSP processor in the equipment rack. New gooseneck microphones shall be provided for the judge, witness, podium and both attorney tables. A new boundary microphone shall be installed on the bench. One (1) new handheld wireless microphone shall be installed in the rack and the antenna will be extended to the courtroom. Small desktop speakers shall be provided for the judge, witness, and clerk. Ceiling speakers shall be installed above the jury, attorney tables and gallery. Two (2) new multi-channel amplifiers shall be installed in the rack to power the speakers. One (1) new two channel assistive listening system shall be installed, with the IR emitter wall-mounted in the courtroom. USB audio interfaces shall be provided for the judge and clerk computers. One (1) new 24" monitor will be provided for the judge and each attorney table, and one (1) new 24" touch screen monitor will be installed on the witness table and will be used for annotation. The annotator will be installed in the rack and will allow annotations to be saved as pictures to a USB drive or a network share. Three (3) 22" monitors shall be mounted to the Jury rail using height adjustable mounts. Four (4) OFE displays shall be wall mounted in the courtroom. Four (4) cameras shall be wall mounted in the courtroom. One (1) new document camera shall be installed in the podium. HDMI inputs for the judge, podium, both attorney tables and the staff position shall be provided. An IP-Video distribution system shall be installed, allowing the video from any input to be routed to any of the displays or annotator. One (1) USB video interfaces will provide the ability for the Clerk to record video to Liberty and to host software-based video conferencing. One (1) control processor and one (1) 10" touch panel will provide control. One (1) network switch shall be installed in the rack to audio distribution, video distribution and control.

Virtual Courtroom: E1 shall install one new DSP processor in the equipment rack. New gooseneck microphones shall be provided for the judge, witness, podium and both attorney tables. A new boundary microphone shall be installed on the bench. One (1) new handheld wireless microphone shall be installed in the rack and the antenna will be extended to the courtroom. Ceiling speakers shall be installed above the judge, witness, attorney tables and gallery. Two (1) new multi-channel amplifier shall be installed in the rack to power the speakers. One (1) new two channel assistive listening system shall be installed, with the IR emitter wall-mounted in the courtroom. USB audio interfaces shall be provided for the judge and clerk computers. One (1) new 24" monitor will be provided for the judge and each attorney table, and one (1) new 24" touch screen monitor will be installed on the witness table and will be used for annotation. The annotator will be installed in the rack and will allow annotations to be saved as pictures to a USB drive or a network share. Two (2) OFE displays shall be wall mounted in the courtroom. Two (2) cameras shall be wall mounted in the courtroom. HDMI inputs for the judge, both attorney tables and the staff position shall be provided. An IP-Video distribution system shall be installed, allowing the video from any input to be routed to any of the displays or annotator. One (1) USB video interfaces will provide the ability for the Clerk to record video to Liberty and to host software-based video conferencing. One (1) control processor and one (1) 10" touch panel will provide control. One (1) network switch shall be installed in the rack to audio distribution, video distribution and control.

\* Price Includes Accessories

Jury Deliberation: One (1) OFE display shall be wall mounted. One (1) video decoder shall be mounted behind the display. Video and/or evidence from any of the three courtrooms can be routed to this display using the touch panels in the courtrooms.

Jury Assembly: One (1) HDMI input shall be provided for an OFE computer. Three (3) HDMI outputs shall be installed for the three OFE displays.

Docket Displays: One (1) 32" display shall be wall mounted in portrait orientation outside of each of the three courtrooms. One (1) 65" display shall be wall mounted in portrait orientation in the lobby. One (1) server software for an owner provided virtual server will be supplied. The signage players will be rack mounted and the HDMI video will be extended to the displays via Cat6.

Paging System: One (1) new paging mixer/amplifier shall be installed in the rack. One (1) new paging desktop microphone shall be installed in the clerk's area. Ceiling speakers will be installed in the ceiling of the waiting area and one multi-directional speaker shall be wall mounted in the lobby.

Multi-Purpose Room: One (1) new Tricaster TC1 Plus video production system shall be installed in the control room. This system can switch and record video, control cameras, mix audio, produce animated titles, transitions and chromakeying, and integrate with Zoom, Teams, and others. Factory training will be provided. Five (5) new HD PTZ cameras with 30x zooms and using the NDI protocol shall be wall mounted in the chambers. One (1) new 16x16 SDI router shall be installed to expand the IO capability of the Tricaster. Video inputs and outputs will be integrated with the presentation video system and audio inputs and outputs will be integrated with the DSP processor. One (1) new DSP processor will be installed in the rack and two (2) handheld, and two (2) lavalier wireless microphones shall be installed. Gooseneck microphones shall be installed at each dais and staff table seat. USB interfaces for audio and video shall be provided for the City Clerk's and City Manager's computers. Ceiling speakers will be installed above the dais, both side tables, the audience and in the lobby. Two (2) new multi-channel amplifiers shall be rack mounted to provide power to the speakers. One (1) new assistive listening system shall be installed. HDMI inputs will be provided for the City Clerk, City Manager, Dais, and podium. Eight (8) additional SDI inputs and outputs will be provided in the control room. Six (6) OFE displays shall be wall mounted. An IP-Video distribution system shall be installed, allowing the video from any input to be routed to any of the displays. One (1) HDMI output will be provided for each of the Dais positions to connect to the OFE switches and monitors. One (1) control processor and two (2) 10" touch panels will provide control. One touch panel will be provided for the control room, and the other for the dais. One (1) network switch shall be installed in the rack to audio distribution, video distribution and control.

All displays, mounts, network switches, and equipment racks by owner. 24" monitors for the judge, witness, and attorneys, and 22" monitors for the Jury by E1.

The owner is responsible for providing one (1) computer with internet access to be placed in an equipment rack. This computer will be used by E1 to provide remote support and maintenance services.

***If you come across an unfamiliar AV term in this document, please refer to E1's online glossary. <https://www.e1avtech.com/av-terminology>***

## **2.0 Site Access Requirements**

E1 will require access to the proposed job site for the period of fifty (50) days. Access shall be on a continuous basis of 8 AM-5 PM Monday through Friday unless otherwise negotiated in writing.

\* Price Includes Accessories

### **3.0 Acceptance, Training & Documentation**

At the completion of installation, a walkthrough shall be performed between E1 and the client. Any outstanding issues will be identified and documented at that time. Upon completion of outstanding items, system sign-off by the client contact shall occur.

E1 shall provide up to a total of eight (8) hours of training during the span of one visit to job site for the proposed system. The E1 project manager shall coordinate with client to set the date and time of training. All required personnel shall be made available for system training.

### **4.0 Infrastructure to be provided by E1:**

The following items represent infrastructure that will be provided by E1:

- E1 shall provide the necessary hardware to mount and install all permanently mounted equipment proposed in this system
- Cable management will be maintained to protect cabling from electrical interference and other destructive sources.

### **5.0 Inclusions, Exclusions & Assumptions**

E1 assumes clear pathways through conduit, walls, and ceilings for cabling, and that all existing equipment is functioning properly.

E1 assumes that the client's network is fully functional on commencement of the audiovisual installation if needed per scope of work.

All equipment removed from the existing system shall be returned to the client for proper disposal or reuse.

Pricing is valid for 30 days.

#### **Included – if applicable**

- low voltage AV cable
- control system programming
- AV system training
- eighteen-month warranty

#### **Excluded – if applicable**

- electrical conduit, junction boxes, and power receptacles
- structural in-wall blocking for displays
- site permits
- carpet modification, ceiling grid modification, millwork cut-outs

**For clients executing their first project with E1 Audiovisual Technologies, a deposit equal to 50% of the proposed project total is required prior to start of work.**

\* Price Includes Accessories



- 1 AJA Video Systems U-TAP HDMI** \$359.10  
Simple USB 3.0 Powered HDMI Capture



- 1 Audio Technica ATW-1302** \$466.65  
System 10 PRO digital wireless handheld microphone system



- 1 Audio Technica U841R** \$186.15  
Omnidirectional Condenser Boundary Microphone



- 8 Biamp Systems Desono CM60DTD** \$1,092.00  
6.5-inch two-way ceiling loudspeaker, 16 ohm or 70V/100V operation, coated paper driver, max SPL 110 dB; white

- 3 Biamp Systems Desono KUBO3-BL** \$231.00  
3-inch full range, compact design loudspeaker with bracket, 8 ohms, polypropylene driver, max SPL 101 dB (priced individually, but sold in pairs); available in black or white



- 2 Biamp Systems Tesira EX-UBT** \$1,078.00  
PoE AVB/USB expander with Bluetooth® wireless technology



- 1 Biamp Systems TesiraFORTÉ AVB VT** \$3,080.00  
Fixed I/O Server - 12 Analog input / 8 Analog Outputs



- 3 C2G 28102** \$13.47  
2M USB 2.0 A/B Cable -Black (6.6FT)



- 1 C2G 28103** \$4.49  
3M USB 2.0 A/B Cable-Black (9.8FT)



- 2 C2G 54174** \$19.48  
2m USB 3.0 A Male to B Male Cable (6.6ft)



- 5 C2G 56782** \$41.20  
3ft High Speed HDMI Cable with Ethernet - 4K 60Hz



- 2 C2G 56783** \$16.48  
6ft (1.8m) High Speed HDMI Cable with Ethernet - 4K 60Hz



- 10 C2G 56784** \$104.90  
10ft (3m) High Speed HDMI Cable with Ethernet - 4K 60Hz
















- 4 Crestron Electronics CBL-SERIAL-DB9-L-12** \$123.20  
Serial Cable, DB9F to Flying Leads, 12 ft (3.6 m)



- 1 Crestron Electronics TS-1070-B-S** \$2,310.00  
10.1 in. Tabletop Touch Screen, Black Smooth

\* Price Includes Accessories















	<b>1</b>	<b>Crestron Electronics VC-4-PC-3</b> Computer with Crestron Virtual Control Server Software	\$2,100.00
	<b>3</b>	<b>Ergotron 45-007-085</b> 400 Series Wall Monitor Arm (black) Single Monitor Mount	\$1,995.00
	<b>1</b>	<b>Extron RSB 129</b> 1U 9.5" Deep Basic Rack Shelf	\$55.90
	<b>1</b>	<b>Extron XPA U 1004</b> Four Channel Amp, 100 watts at 8 or 4 ohms	\$780.00
	<b>1</b>	<b>Extron XPA U 1004-70V</b> Four Channel Amp, 100 watts at 70 volts	\$1,046.50
	<b>1</b>	<b>Liberty Recording Solutions Digital Court Recorder - Software Only</b> Multi-channel audio/video court recording software, 4 Audio/1 Video Channel	\$2,040.00
	<b>1</b>	<b>Listen Technologies LA-141</b> ALS IR Expansion	\$495.20
	<b>1</b>	<b>Listen Technologies LA-304</b> Assistive Listening Notification Signage Kit	\$21.60
	<b>1</b>	<b>Listen Technologies LA-347-GY</b> Wall box mounting plate for LT-84/LA-141 radiator, dark gray	\$16.00
	<b>1</b>	<b>Listen Technologies LS-92-01</b> ListenIR iDSP Level III Assisted Listening System	\$2,137.60
	<b>1</b>	<b>Middle Atlantic UFA-8-F2</b> 1 RU UFA Rackshelf, 8 Inches Deep with 2 RU Faceplate	\$62.30
	<b>4</b>	<b>OFE Display</b> [OFE] - Owner Furnished Display & Wall Mounted Bracket	\$0.00
	<b>1</b>	<b>Planar PCT2435</b> 24" Wide touch screen monitor with USB 3.0 hub and dual-hinge desk stand, black	\$314.10
	<b>3</b>	<b>Planar PLL2450MW</b> 24"FDH wide view LED LCD VGA,HDMI,spkr,s,no VGA cable	\$510.30
	<b>3</b>	<b>Planar PLN2200</b> 22in wide black FHD LED LCD, VGA, HDMI, narrow bezels.	\$483.30
	<b>5</b>	<b>Sennheiser MAT 133-S B</b> Table stand for MEG 14-40-L II gooseneck microphone with 5-pin XLR-F (mic in), 5-pin XLR-M (mic out), 24-48 V phantom power and bi-color LED ring for status indication	\$1,087.30

\* Price Includes Accessories

	<b>5</b>	<b>Sennheiser MEG 14-40 B</b>	\$937.30
		40 cm Gooseneck Microphone	
	<b>4</b>	<b>Vaddio ZoomSHOT 30 QUSB System</b>	\$11,436.80
		ZoomSHOT 30 QUSB System	
	<b>1</b>	<b>Williams AV AN C5 P</b>	\$3,483.75
		Annotation System, 4K/UHD	
	<b>1</b>	<b>Wolfvision VZ-8.UHD</b>	\$3,321.00
		Visualizer VZ-8.UHD - Version A (HDMI)	
	<b>1</b>	<b>WyreStorm NHD-000-CTL</b>	\$506.40
		Controller for all NetworkHD Series (1 Per System) with Dual NIC Network Isolation	
	<b>1</b>	<b>WyreStorm NHD-000-RACK4</b>	\$317.60
		6U/12 Slot Rack Mount for NHD-100, NHD-200, NHD-400 Series & NHD-000-CTL	
	<b>14</b>	<b>WyreStorm NHD-400-RX</b>	\$9,811.20
		4K HDR Low Latency PoE Decoder with Standard / Mosaic Video Wall Processing and USB	
	<b>11</b>	<b>WyreStorm NHD-400-TX</b>	\$7,708.80
		4K HDR Low Latency PoE Encoder with HDMI Loop-out, USB and Audio De-embed	
	<b>6</b>	<b>WyreStorm NHD-RACK4-BLK</b>	\$187.20
		Spare Or Additional Blanking Plate for NHD-000-Rack4	
<b>Courtroom 1 Total</b>			<b>\$59,981.27</b>















\* Price Includes Accessories



	1	<b>AJA Video Systems U-TAP HDMI</b> Simple USB 3.0 Powered HDMI Capture	\$359.10
	1	<b>Audio Technica ATW-1302</b> System 10 PRO digital wireless handheld microphone system	\$466.65
	1	<b>Audio Technica U841R</b> Omnidirectional Condenser Boundary Microphone	\$186.15
	8	<b>Biamp Systems Desono CM60DTD</b> 6.5-inch two-way ceiling loudspeaker, 16 ohm or 70V/100V operation, coated paper driver, max SPL 110 dB; white	\$1,092.00
	3	<b>Biamp Systems Desono KUBO3-BL</b> 3-inch full range, compact design loudspeaker with bracket, 8 ohms, polypropylene driver, max SPL 101 dB (priced individually, but sold in pairs); available in black or white	\$231.00
	2	<b>Biamp Systems Tesira EX-UBT</b> PoE AVB/USB expander with Bluetooth® wireless technology	\$1,078.00
	1	<b>Biamp Systems TesiraFORTÉ AVB VT</b> Fixed I/O Server - 12 Analog input / 8 Analog Outputs	\$3,080.00
	3	<b>C2G 28102</b> 2M USB 2.0 A/B Cable -Black (6.6FT)	\$13.47
	1	<b>C2G 28103</b> 3M USB 2.0 A/B Cable-Black (9.8FT)	\$4.49
	2	<b>C2G 54174</b> 2m USB 3.0 A Male to B Male Cable (6.6ft)	\$19.48
	5	<b>C2G 56782</b> 3ft High Speed HDMI Cable with Ethernet - 4K 60Hz	\$41.20
	2	<b>C2G 56783</b> 6ft (1.8m) High Speed HDMI Cable with Ethernet - 4K 60Hz	\$16.48
	10	<b>C2G 56784</b> 10ft (3m) High Speed HDMI Cable with Ethernet - 4K 60Hz	\$104.90
	4	<b>Crestron Electronics CBL-SERIAL-DB9-L-12</b> Serial Cable, DB9F to Flying Leads, 12 ft (3.6 m)	\$123.20
	1	<b>Crestron Electronics TS-1070-B-S</b> 10.1 in. Tabletop Touch Screen, Black Smooth	\$2,310.00

\* Price Includes Accessories



	<b>1</b>	<b>Crestron Electronics VC-4-PC-3</b> Computer with Crestron Virtual Control Server Software	\$2,100.00
	<b>3</b>	<b>Ergotron 45-007-085</b> 400 Series Wall Monitor Arm (black) Single Monitor Mount	\$1,995.00
	<b>1</b>	<b>Extron RSB 129</b> 1U 9.5" Deep Basic Rack Shelf	\$55.90
	<b>1</b>	<b>Extron XPA U 1004</b> Four Channel Amp, 100 watts at 8 or 4 ohms	\$780.00
	<b>1</b>	<b>Extron XPA U 1004-70V</b> Four Channel Amp, 100 watts at 70 volts	\$1,046.50
	<b>1</b>	<b>Liberty Recording Solutions Digital Court Recorder - Software Only</b> Multi-channel audio/video court recording software, 4 Audio/1 Video Channel	\$2,040.00
	<b>1</b>	<b>Listen Technologies LA-141</b> ALS IR Expansion	\$495.20
	<b>1</b>	<b>Listen Technologies LA-304</b> Assistive Listening Notification Signage Kit	\$21.60
	<b>1</b>	<b>Listen Technologies LA-347-GY</b> Wall box mounting plate for LT-84/LA-141 radiator, dark gray	\$16.00
	<b>1</b>	<b>Listen Technologies LS-92-01</b> ListenIR iDSP Level III Assisted Listening System	\$2,137.60
	<b>1</b>	<b>Middle Atlantic UFA-8-F2</b> 1 RU UFA Rackshelf, 8 Inches Deep with 2 RU Faceplate	\$62.30
	<b>4</b>	<b>OFE Display</b> [OFE] - Owner Furnished Display & Wall Mounted Bracket	\$0.00
	<b>1</b>	<b>Planar PCT2435</b> 24" Wide touch screen monitor with USB 3.0 hub and dual-hinge desk stand, black	\$314.10
	<b>3</b>	<b>Planar PLL2450MW</b> 24"FDH wide view LED LCD VGA,HDMI,spkr,s,no VGA cable	\$510.30
	<b>3</b>	<b>Planar PLN2200</b> 22in wide black FHD LED LCD, VGA, HDMI, narrow bezels.	\$483.30
	<b>5</b>	<b>Sennheiser MAT 133-S B</b> Table stand for MEG 14-40-L II gooseneck microphone with 5-pin XLR-F (mic in), 5-pin XLR-M (mic out), 24-48 V phantom power and bi-color LED ring for status indication	\$1,087.30

\* Price Includes Accessories

	<b>5</b>	<b>Sennheiser MEG 14-40 B</b>	\$937.30
		40 cm Gooseneck Microphone	
	<b>4</b>	<b>Vaddio ZoomSHOT 30 QUSB System</b>	\$11,436.80
		ZoomSHOT 30 QUSB System	
	<b>1</b>	<b>Williams AV AN C5 P</b>	\$3,483.75
		Annotation System, 4K/UHD	
	<b>1</b>	<b>Wolfvision VZ-8.UHD</b>	\$3,321.00
		Visualizer VZ-8.UHD - Version A (HDMI)	
	<b>1</b>	<b>WyreStorm NHD-000-CTL</b>	\$506.40
		Controller for all NetworkHD Series (1 Per System) with Dual NIC Network Isolation	
	<b>1</b>	<b>WyreStorm NHD-000-RACK4</b>	\$317.60
		6U/12 Slot Rack Mount for NHD-100, NHD-200, NHD-400 Series & NHD-000-CTL	
	<b>14</b>	<b>WyreStorm NHD-400-RX</b>	\$9,811.20
		4K HDR Low Latency PoE Decoder with Standard / Mosaic Video Wall Processing and USB	
	<b>11</b>	<b>WyreStorm NHD-400-TX</b>	\$7,708.80
		4K HDR Low Latency PoE Encoder with HDMI Loop-out, USB and Audio De-embed	
	<b>6</b>	<b>WyreStorm NHD-RACK4-BLK</b>	\$187.20
		Spare Or Additional Blanking Plate for NHD-000-Rack4	
<b>Courtroom 2 Total</b>			<b>\$59,981.27</b>

\* Price Includes Accessories



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|---|--|----------|
| 1 | <b>AJA Video Systems U-TAP HDMI</b><br>Simple USB 3.0 Powered HDMI Capture | \$359.10 |
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|---|---|----------|
| 1 | <b>Audio Technica ATW-1302</b><br>System 10 PRO digital wireless handheld microphone system | \$466.65 |
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| 1 | <b>Audio Technica U841R</b><br>Omnidirectional Condenser Boundary Microphone | \$186.15 |
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|---|---|----------|
| 6 | <b>Biamp Systems Desono CM60DTD</b><br>6.5-inch two-way ceiling loudspeaker, 16 ohm or 70V/100V operation, coated paper driver, max SPL 110 dB; white | \$819.00 |
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|---|--|------------|
| 2 | <b>Biamp Systems Tesira EX-UBT</b><br>PoE AVB/USB expander with Bluetooth® wireless technology | \$1,078.00 |
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|---|--|------------|
| 1 | <b>Biamp Systems TesiraFORTÉ AVB VT</b><br>Fixed I/O Server - 12 Analog input / 8 Analog Outputs | \$3,080.00 |
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|---|---|---------|
| 3 | <b>C2G 28102</b><br>2M USB 2.0 A/B Cable -Black (6.6FT) | \$13.47 |
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|---|--|--------|
| 1 | <b>C2G 28103</b><br>3M USB 2.0 A/B Cable-Black (9.8FT) | \$4.49 |
|---|--|--------|



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|---|---|---------|
| 2 | <b>C2G 54174</b><br>2m USB 3.0 A Male to B Male Cable (6.6ft) | \$19.48 |
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|---|---|---------|
| 2 | <b>C2G 56782</b><br>3ft High Speed HDMI Cable with Ethernet - 4K 60Hz | \$16.48 |
|---|---|---------|



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| 4 | <b>C2G 56783</b><br>6ft (1.8m) High Speed HDMI Cable with Ethernet - 4K 60Hz | \$32.96 |
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|---|---|---------|
| 9 | <b>C2G 56784</b><br>10ft (3m) High Speed HDMI Cable with Ethernet - 4K 60Hz | \$94.41 |
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| 2 | <b>Crestron Electronics CBL-SERIAL-DB9-L-12</b><br>Serial Cable, DB9F to Flying Leads, 12 ft (3.6 m) | \$61.60 |
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|---|---|------------|
| 1 | <b>Crestron Electronics TS-1070-B-S</b><br>10.1 in. Tabletop Touch Screen, Black Smooth | \$2,310.00 |
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|---|---|------------|
| 1 | <b>Crestron Electronics VC-4-PC-3</b><br>Computer with Crestron Virtual Control Server Software | \$2,100.00 |
|---|---|------------|

\* Price Includes Accessories

	<b>1</b>	<b>Extron RSU 129</b> 1U 9.5" Deep Universal Rack Shelf Kit	\$113.10
	<b>1</b>	<b>Extron XPA U 1004-70V</b> Four Channel Amp, 100 watts at 70 volts	\$1,046.50
	<b>1</b>	<b>Liberty Recording Solutions Digital Court Recorder - Software Only</b> Multi-channel audio/video court recording software, 4 Audio/1 Video Channel	\$2,040.00
	<b>1</b>	<b>Listen Technologies LA-141</b> ALS IR Expansion	\$495.20
	<b>1</b>	<b>Listen Technologies LA-304</b> Assistive Listening Notification Signage Kit	\$21.60
	<b>1</b>	<b>Listen Technologies LA-347-GY</b> Wall box mounting plate for LT-84/LA-141 radiator, dark gray	\$16.00
	<b>1</b>	<b>Listen Technologies LS-92-01</b> ListenIR iDSP Level III Assisted Listening System	\$2,137.60
	<b>1</b>	<b>Middle Atlantic UFA-8-F2</b> 1 RU UFA Rackshelf, 8 Inches Deep with 2 RU Faceplate	\$62.30
	<b>2</b>	<b>OFE Display</b> [OFE] - Owner Furnished Display & Wall Mounted Bracket	\$0.00
	<b>1</b>	<b>Planar PCT2435</b> 24" Wide touch screen monitor with USB 3.0 hub and dual-hinge desk stand, black	\$314.10
	<b>3</b>	<b>Planar PLL2450MW</b> 24"FDH wide view LED LCD VGA,HDMI,spkr,s,no VGA cable	\$510.30
	<b>4</b>	<b>Sennheiser MAT 133-S B</b> Table stand for MEG 14-40-L II gooseneck microphone with 5-pin XLR-F (mic in), 5-pin XLR-M (mic out), 24-48 V phantom power and bi-color LED ring for status indication	\$869.84
	<b>4</b>	<b>Sennheiser MEG 14-40 B</b> 40 cm Gooseneck Microphone	\$749.84
	<b>2</b>	<b>Vaddio ZoomSHOT 30 QUSB System</b> ZoomSHOT 30 QUSB System	\$5,718.40
	<b>1</b>	<b>Williams AV AN C5 P</b> Annotation System, 4K/UHD	\$3,483.75

\* Price Includes Accessories



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|---|--|----------|
| 1 | <b>WyreStorm NHD-000-CTL</b><br>Controller for all NetworkHD Series (1 Per System) with Dual NIC Network Isolation | \$506.40 |
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|---|--|----------|
| 1 | <b>WyreStorm NHD-000-RACK4</b><br>6U/12 Slot Rack Mount for NHD-100, NHD-200, NHD-400 Series & NHD-000-CTL | \$317.60 |
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|---|--|------------|
| 9 | <b>WyreStorm NHD-400-RX</b><br>4K HDR Low Latency PoE Decoder with Standard / Mosaic Video Wall Processing and USB | \$6,307.20 |
|---|--|------------|



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|---|--|------------|
| 7 | <b>WyreStorm NHD-400-TX</b><br>4K HDR Low Latency PoE Encoder with HDMI Loop-out, USB and Audio De-embed | \$4,905.60 |
|---|--|------------|

**Courtroom 3 (Virtual) Total**

**\$40,257.12**

**Jury Deliberation**



- |   |   |        |
|---|---|--------|
| 1 | <b>C2G 56782</b><br>3ft High Speed HDMI Cable with Ethernet - 4K 60Hz | \$8.24 |
|---|---|--------|



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|---|--|---------|
| 1 | <b>Crestron Electronics CBL-SERIAL-DB9-L-12</b><br>Serial Cable, DB9F to Flying Leads, 12 ft (3.6 m) | \$30.80 |
|---|--|---------|



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|---|--|--------|
| 1 | <b>OFE Display</b><br>[OFE] - Owner Furnished Display & Wall Mounted Bracket | \$0.00 |
|---|--|--------|



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|---|--|----------|
| 1 | <b>WyreStorm NHD-400-RX</b><br>4K HDR Low Latency PoE Decoder with Standard / Mosaic Video Wall Processing and USB | \$700.80 |
|---|--|----------|

**Jury Deliberation Total**

**\$739.84**

\* Price Includes Accessories

## Jury Assembly



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|---|---|---------|
| 3 | <b>C2G 56782</b><br>3ft High Speed HDMI Cable with Ethernet - 4K 60Hz | \$24.72 |
|---|---|---------|



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| 3 | <b>OFE Display</b><br>[OFE] - Owner Furnished Display & Wall Mounted Bracket | \$0.00 |
|---|--|--------|



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| 3 | <b>WyreStorm NHD-400-RX</b><br>4K HDR Low Latency PoE Decoder with Standard / Mosaic Video Wall Processing and USB | \$2,102.40 |
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|---|--|----------|
| 1 | <b>WyreStorm NHD-400-TX-IW</b><br>4K HDR Low Latency 2-Gang In-wall PoE Encoder with HDMI / VGA inputs and USB | \$910.40 |
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### Jury Assembly Total

**\$3,037.52**

## Docket Displays



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|---|--|---------|
| 7 | <b>C2G 50606</b><br>18in (0.5m) High Speed HDMI® Cable with Ethernet - 4K 60Hz | \$47.18 |
|---|--|---------|



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|---|---|--------|
| 1 | <b>C2G 56782</b><br>3ft High Speed HDMI Cable with Ethernet - 4K 60Hz | \$8.24 |
|---|---|--------|

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| 1 | <b>INFAX Docket Display Custom Quote AZMCLH2022-233</b><br>Docket Displays | \$33,126.42 |
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| 4 | <b>Middle Atlantic UFA-8-F2</b><br>1 RU UFA Rackshelf, 8 Inches Deep with 2 RU Faceplate | \$249.20 |
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|---|---|------------|
| 4 | <b>WyreStorm EX-100-H2</b><br>4K UHD 4:2:0 60Hz HDBaseT™ Extender Set with PoH, USB 2.0, Audio Passthrough& RS-232 (4K: 100m/328ft) | \$2,540.80 |
|---|---|------------|

### Docket Displays Total

**\$35,971.84**

\* Price Includes Accessories



- 1**     **AtlasIED AA120G**  
6-Input, 120-Watt Mixer Amplifier

\$618.09



- 1**     **AtlasIED M600-DT**  
Paging/Conference Desktop Microphone

\$141.39



- 11**     **AtlasIED SD72W-KIT**  
SD72 Speaker, 62-8 Baffle, CS95-8 Back Box, and 81-8R T-Bar Bridge Kit

\$531.19



- 1**     **JBL Control HST**  
Wide-Coverage Speaker with 5-1/4" LF, Dual Tweeters and HST Technology

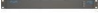












\$310.64

**Paging Total**
















**\$1,601.31**

\* Price Includes Accessories



	1	<b>AJA Video Systems KUMO 1616</b> Compact 16x16 3G-SDI Router	\$2,069.10
	1	<b>AJA Video Systems KUMO CP</b> Control Panel for KUMO 1604, 1616 and 3232 Routers	\$719.10
	1	<b>AJA Video Systems ROI-HDMI</b> HDMI to SDI with ROI Scaling	\$1,016.10
	1	<b>AJA Video Systems ROI-SDI</b> 3G-SDI to HDMI/3G-SDI Scan Converter with Region of Interest Scaling	\$1,016.10
	2	<b>Audio Technica ATW-1312/L</b> System 10 PRO Digital Wireless	\$1,613.30
	14	<b>Biamp Systems Desono CM30DTD</b> 4.25 Two-way design ceiling speaker 100-70 volt / 30 watts, 16 ohms / 60 watts, white (priced individually, but sold in pairs)	\$1,519.00
	20	<b>Biamp Systems Desono CM60DTD</b> 6.5-inch two-way ceiling loudspeaker, 16 ohm or 70V/100V operation, coated paper driver, max SPL 110 dB; white	\$2,730.00
	1	<b>Biamp Systems Tesira AMP-8175R</b> 8-Channel, 175W Amplifier	\$3,360.00
	3	<b>Biamp Systems Tesira EX-AEC</b> 4 Channel Mic/Line Input Expander with AEC and PoE+	\$4,200.00
	2	<b>Biamp Systems Tesira EX-UBT</b> PoE AVB/USB expander with Bluetooth® wireless technology	\$1,078.00
	1	<b>Biamp Systems TesiraFORTÉ AVB VT</b> Fixed I/O Server - 12 Analog input / 8 Analog Outputs	\$3,080.00
	1	<b>Biamp Systems TesiraXEL 1200.1</b> 4-Channel, 1200W Amplifier (Single Asymmetric Bank)	\$2,310.00
	1	<b>C2G 38998</b> 12M USB A/B Active Cable, 39.4FT	\$42.74
	1	<b>C2G 50194</b> 6ft (1.8m) DisplayPort™ Male to HDMI® Male Active Adapter Cable - 4K 60Hz	\$46.49
	6	<b>C2G 50606</b> 18in (0.5m) High Speed HDMI® Cable with Ethernet - 4K 60Hz	\$40.44

\* Price Includes Accessories

	3	<b>C2G 50612</b> 15ft High Speed HDMI Cable with Ethernet - 4K 60Hz	\$44.97
	9	<b>C2G 56782</b> 3ft High Speed HDMI Cable with Ethernet - 4K 60Hz	\$74.16
	3	<b>C2G 56783</b> 6ft (1.8m) High Speed HDMI Cable with Ethernet - 4K 60Hz	\$24.72
	7	<b>C2G 56784</b> 10ft (3m) High Speed HDMI Cable with Ethernet - 4K 60Hz	\$73.43
	5	<b>Crestron Electronics CBL-SERIAL-DB9-L-12</b> Serial Cable, DB9F to Flying Leads, 12 ft (3.6 m)	\$154.00
	2	<b>Crestron Electronics TS-1070-B-S</b> 10.1 in. Tabletop Touch Screen, Black Smooth	\$4,620.00
	1	<b>Crestron Electronics VC-4-PC-3</b> Computer with Crestron Virtual Control Server Software	\$2,100.00
	24	<b>Hosa Technology BNC-06-106</b> This cable is designed for use in low-power video and RF applications. It is ideal for use as an HD-SDI or word clock cable.	\$519.12
	1	<b>Listen Technologies LA-130</b> Remote antenna kit, 25 feet	\$99.20
	2	<b>Listen Technologies LA-401</b> Universal Ear Speaker	\$36.80
	2	<b>Listen Technologies LR-4200-072</b> Intelligent DSP RF Receiver (72 MHz)	\$352.00
	1	<b>Listen Technologies LS-55-072</b> Listen iDSP Prime Level III RF System	\$2,207.20
	1	<b>Middle Atlantic PD-2415SC</b> Slim Power Strip, 24 Outlet, 15A, Basic Surge Protection	\$210.00
	3	<b>Middle Atlantic UFA-8-F2</b> 1 RU UFA Rackshelf, 8 Inches Deep with 2 RU Faceplate	\$186.90
	6	<b>OFE Display</b> [OFE] - Owner Furnished Display & Wall Mounted Bracket	\$0.00
	5	<b>Panasonic AW-UE40WPJ</b> PTZ Camera with NDI Network Protocol, 24x Zoom, 4K/30	\$12,915.00

\* Price Includes Accessories



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|----------|---|----------|
| <b>5</b> | <b>Panasonic FEC-40WMW</b><br>Wall Mount for AW-HE40 / AW-UE70 PTZ Camera (White) | \$738.00 |
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| <b>2</b> | <b>Planar PXN2700</b><br>27" widescreen IPS LED LCD monitor that features a nearly borderless design, wide viewing angle, DisplayPort, HDMI, and VGA inputs, and speakers. | \$394.20 |
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| <b>13</b> | <b>Sennheiser MAT 133-S B</b><br>Table stand for MEG 14-40-L II gooseneck microphone with 5-pin XLR-F (mic in), 5-pin XLR-M (mic out), 24-48 V phantom power and bi-color LED ring for status indication | \$2,826.98 |
|-----------|--|------------|

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| <b>14</b> | <b>Sennheiser MEG 14-40 B</b><br>40 cm Gooseneck Microphone | \$2,624.44 |
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| <b>1</b> | <b>Sennheiser MZT 30</b><br>Flush mount with XLR-3 socket with MZH gooseneck | \$16.46 |
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| <b>1</b> | <b>WyreStorm NHD-000-CTL</b><br>Controller for all NetworkHD Series (1 Per System) with Dual NIC Network Isolation | \$506.40 |
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|-----------|--|------------|
| <b>11</b> | <b>WyreStorm NHD-400-RX</b><br>4K HDR Low Latency PoE Decoder with Standard / Mosaic Video Wall Processing and USB | \$7,708.80 |
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|----------|--|------------|
| <b>5</b> | <b>WyreStorm NHD-400-TX</b><br>4K HDR Low Latency PoE Encoder with HDMI Loop-out, USB and Audio De-embed | \$3,504.00 |
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| <b>4</b> | <b>WyreStorm SP-0104-H2</b><br>4K HDR 4:4:4 60Hz HDMI 1X4 Splitter | \$668.80 |
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### Multi-Purpose Room Total

**\$67,445.95**

## AV Closet



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|----------|--|--------|
| <b>1</b> | <b>OFE Equipment Rack</b><br>[OFE] - E1 Audiovisual Technologies to utilize the client provided Equipment Rack, provided by others | \$0.00 |
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### AV Closet Total

**\$0.00**

\* Price Includes Accessories

## Open Market - Not on State Contract

1	<b>NewTek ProTek Ultra for TriCaster 1 Pro</b> ProTek Ultra for TriCaster TC1 Pro (1 Year Coverage)	\$2,645.00
1	<b>NewTek ProTek Ultra for TriCaster TC1 Small Panel Control Surface</b> ProTek Ultra for TriCaster TC1SP (1 Year Coverage)	\$845.00
1	<b>NewTek Remote Commissioning</b> Remote System Commissioning	\$899.00
1	<b>NewTek Remote Training</b> Tricaster Live Online Training	\$799.00
1	<b>NewTek TC1 Small Panel Control Surface</b> Tricaster TC1 Control Surface	\$6,995.00
	1 <b>NewTek TriCaster TC1 Plus</b> TriCaster 1 Pro is an incredibly powerful production system for the modern producer, publisher, and content creator.	\$21,995.00

### Open Market - Not on State Contract Total

**\$34,178.00**

## Miscellaneous

	8 <b>Covid CSP3200-22-1KR</b> 22-2 Shielded Twisted Pair, Plenum, 1000'	\$1,489.52
	9 <b>Covid CVA3200-16-1KR</b> 16-2, Unshielded, Plenum Loudspeaker Cable, 1000'	\$3,365.55
	11 <b>Covid P-C6-BLK-1KB</b> Cat 6, 550 MHz, Black Jacket, Plenum	\$4,657.40
	1 <b>E1 Misc. Hardware &amp; Shop Supplies</b> Misc. Hardware & Shop Supplies	\$10,005.80
	1 <b>RCI Custom Custom Wall Plates</b> Custom Wall Plates	\$3,000.00

### Miscellaneous Total

**\$22,518.27**

### Project Subtotal:

**\$325,712.39**

\* Price Includes Accessories

# PROJECT SUMMARY

Equipment:	\$325,712.39
Labor:	\$218,840.00
Sales Tax:	\$28,011.27
Misc. Items:	\$12,212.86

<b>Grand Total:</b>	<b>\$584,776.52</b>
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**Client:**      **Lake Havasu City**

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**Date**

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**Contractor:**      **E1 Audiovisual Technologies**

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**Date**