



Audio Visual Proposal

Date	Reference #
03/22/16	G06551-02

City of Tuscaloosa
Chuck Crocker
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 Tuscaloosa, AL 35401
 35401

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Re: City of Tuscaloosa - Alberta Gateway Audio Video Project

#	Qty	Manufacturer	Model Number	Description	Unit Price	Ext. Price
Audio Equipment						
1	2	Shure	ULXS124/85-G3	Includes ULXS4 Diversity Receiver, ULX1 Bodypack Transmitter, Microflex WL185 Cardioid Lavalier Microphone, and ULX2/58 Handheld Transmitter with SM58 Microphone (Note: Bodypack and Handheld Transmitters cannot be used simultaneously)	\$935.75	\$1,871.50
2	2	Shure	UA874US	Active Directional Antenna with Gain Switch 470-698 MHz	\$311.25	\$622.50
3	1	Shure	MX418D/C	Cardioid-18" Desktop Gooseneck Condenser Microphone, Attached 10' XLR Cable, Logic Functions, Programmable Switch and LED Indicator, Attached Desktop Base	\$262.50	\$262.50
4	1	BIAMP Systems	TesiraFORTÉ AVB VI	TesiraFORTÉ DSP fixed I/O server with 12 analog inputs, 8 analog outputs, 8 channels configurable USB audio, 128 x 128 channels of AVB, Sona™ Acoustic Echo Cancellation (AEC) technology (all 12 inputs), and 2 channel VoIP interface	\$2,498.75	\$2,498.75

#	Qty	Manufacturer	Model Number	Description	Unit Price	Ext. Price
5	6	RDL	TXJ2	Unbalanced Input Transformer	\$61.25	\$367.50
6	2	QSC	CX204V	4 channels, 200 watts/ch at 70V	\$1,201.25	\$2,402.50
7	2	QSC	AD-S4T-WH AD-S4T-WH	4" Two-way surface speaker, 70/100V transformer with 8? bypass, 120° conical DMT™ coverage, includes X-Mount™ and weather input cup. Available in black or white. Priced individually but must be purchased in pairs.	\$123.75	\$247.50
8	8	QSC	AC-C8T	8" Two-way ceiling speaker, 70/100V transformer with 8? bypass, 100° conical coverage, includes C-ring and rails for blind mount installation. Priced individually but must be purchased in pairs.	\$123.75	\$990.00
9	6	SoundTube	SM31-EZ-T-WH	SM31-EZ speaker, white, with added transformer	\$85.00	\$510.00
10	6	QSC	AD-S8T-WH AD-S8T-WH	8" Two-way surface speaker, 70/100V transformer with 8? bypass, 105° conical DMT™ coverage, includes X-Mount™ and weather input cup. Available in black or white.	\$367.50	\$2,205.00
11	3	Atlas Sound	AT35D	ATN 35W 3DB 1GNG DECORA IV/WHT	\$20.03	\$60.09

Video Equipment

12	4	NEC PSP GOVT/EDUCATION	E585	E585 - 58" LED LCD Public Display Monitor w/built in ATSC/NTSC tuner, 1920x1080 (FHD) native resolution, limited RS-232 control, HDMI x3, VGA, RCA Component/Composite, USB Media Player, Built in speakers, Tabletop stand not included, 3 Year Warranty (Suggested Replacement Model for the E554)	\$1,404.00	\$5,616.00
13	4	NEC PSP GOVT/EDUCATION	E425	E425- 42" LED LCD Public Display Monitor w/built in ATSC/NTSC tuner, 1920x1080 (FHD) native resolution, limited RS-232 control, HDMI x3, VGA, RCA Component/Composite, USB Media Player, Built in speakers, Tabletop stand not included, 3 Year Warranty (Suggested Replacement Model for the E424)	\$664.80	\$2,659.20
14	1	NEC PSP GOVT/EDUCATION			\$890.40	\$890.40

#	Qty	Manufacturer	Model Number	Description	Unit Price	Ext. Price
			E505	E505- 50" LED LCD Public Display Monitor w/built in ATSC/NTSC tuner, 1920x1080 (FHD) native resolution, limited RS-232 control, HDMI x3, VGA, RCA Component/Composite, USB Media Player, Built in speakers, Tabletop stand not included, 3 Year Warranty (Suggested Replacement Model for the E464)		
15	2	Samsung Commercial	DC32E	32" 1080P screen	\$487.50	\$975.00
16	10	Chief Manufacturing	MTM1U	Micro-Adjust Tilt Wall Mount, Medium	\$136.80	\$1,368.00
17	1	Chief Manufacturing	MTMP1U	Micro-Adjust Tilt Port Wall Mount, Med	\$136.80	\$136.80
18	3	Axis Communications	0769-001	AXIS P5514 IP Dome Camera <i>→ P5515 RR</i>	\$1,050.99	\$3,152.97
19	1	Crestron	DMPS3-200-C	3-Series® DigitalMedia™ Presentation System 200	\$3,746.25	\$3,746.25
20	1	Crestron	DM-MD16X16	16x16 DigitalMedia™ Switcher	\$4,353.75	\$4,353.75
21	6	Crestron	DMC-4K-HD	4K HDMI® Input Card for DM® Switchers	\$405.00	\$2,430.00
22	9	Crestron	DMC-4K-C	HDBaseT® Certified 4K DigitalMedia 8G+® Input Card for DM® Switchers	\$658.13	\$5,923.17
23	1	Crestron	DMC-STR	Streaming Input Card for DM® Switchers	\$759.38	\$759.38
24	5	Crestron	DMC-4K-CO-HD	2-Channel HDBaseT® Certified 4K DigitalMedia 8G+® Output Card for DM® Switchers	\$658.13	\$3,290.65
25	3	Crestron	DMC-4K-HDO	2-Channel 4K Scaling HDMI® Output Card for DM® Switchers	\$1,012.50	\$3,037.50
26	5	Crestron	DM-TX-4K-100-C-1G-W-T	Wall Plate 4K DigitalMedia 8G+® Transmitter 100, White Textured	\$354.38	\$1,771.90
27	10	Crestron	DM-RMC-4K-SCALER-C	4K DigitalMedia 8G+® Receiver & Room Controller w/Scaler	\$911.25	\$9,112.50

#	Qty	Manufacturer	Model Number	Description	Unit Price	Ext. Price
28	2	D&M	DN500BDXUS	1RU Blu-ray Disc Player	\$350.00	\$700.00
29	2	Kramer	SID-X3N	4?Input Multi?Format Video over HDMI Transmitter	\$495.00	\$990.00
30	1	Apple	Apple TV	Apple TV	\$206.25	\$206.25

Control System Equipment

31	1	Crestron	CP3N	3-Series Control System®	\$1,462.50	\$1,462.50
32	2	Crestron	TST-902	8.7" Wireless Touch Screen	\$1,923.75	\$3,847.50
33	2	Crestron	CEN-RFGW-EX_EXCLUDES_PWE	infiNET EX® & ER Wireless Gateway	\$281.25	\$562.50
34	1	Crestron	DIN-CENCN-2-POE	Ethernet to Cresnet® Bridge w/PoE [Just Released]	\$309.38	\$309.38
35	2	Crestron	C2N-CBD-P-W-T	Cameo® Keypad, Standard Mount, White Textured	\$182.25	\$364.50
36	2	Crestron	*****Custom Engravable Button Caps	Backlit Engravable Button Caps for Cameo Keypads, White Textured	\$67.50	\$135.00

Connectivity and Wall Plates

37	2	Altinex	TNP328S	TILT 'N PLUG HYBRID. HDMI, VGA	\$339.50	\$679.00
38	4	Kramer	WXA-H(W)	"15?pin HD, 3.5mm Audio & HDM Wall Plate - White"	\$53.63	\$214.52
39	1	RDL	DCIJ3	Consumer Input Jacks - Mono	\$76.20	\$76.20

Equipment Rack and Power

#	Qty	Manufacturer	Model Number	Description	Unit Price	Ext. Price
40	1	Middle Atlantic Products	PD-2420SC-NS	24 OUTLET, 1X20A CIRCUIT	\$122.50	\$122.50
41	3	Middle Atlantic Products	PD-915RC-20	9OUT, 15A, RCKMNT PWR 20' CORD	\$94.38	\$283.14
SubTotal						\$71,214.30
42	64	Design & Field Engineering	ENGINEERING	Includes system design, testing/setting of system, etc.	\$100.00	\$6,400.00
43	40	System Programming	PROGRAMMING	Includes all programming of the control system to provide a finished product of controlling your A/V System.	\$100.00	\$4,000.00
44	40	Project Management	PROJECT MANAGEMENT	Includes all required construction and installation coordination.	\$85.00	\$3,400.00
45	72	Off Site Integration	PRE-INSTALL	Includes all fabrication, modification, assembly, rack wiring, etc. prior to on-site installation.	\$65.00	\$4,680.00
46	240	Field Installation	INSTALLATION	Includes all on-site installation, wiring, coordination, supervision, testing, and system check-out.	\$65.00	\$15,600.00
47	4	Training & Documentation	TRAINING	System operational training for normal usage and trouble-shooting. This includes a Quick Reference Guide and project as-built documentation delivered on a CD.	\$65.00	\$260.00
48	1	Hardware	HARDWARE	Includes cabling, connectors, labeling, unistrut, vented plates, terminal strips, lacing bars, etc.	\$6,222.58	\$6,222.58
49	1	General & Administrative	G&A	Includes all applicable Freight, Insurance, Permits, and Licenses as may be required by law.	\$3,219.15	\$3,219.15
SubTotal						\$43,781.73

SubTotal	\$114,996.03
Sales Tax	\$0.00
Total	\$114,996.03

Accepted

 3-22-16

Scope:

PROJECT OVERVIEW

The scope of work below is for the AV integration of the Alberta Gateway Technology Center for the City of Tuscaloosa.

SYSTEM DESCRIPTIONS

Central System

Directives:

- Provide and install a Crestron 16x16 matrix switcher to route two OFE PCs, a TI provided Blu-Ray player located in the main rack, an OFE cable TV box, a TI provided Apple TV, two lectern location input plates, and five HDMI only input plates. The switcher will output to the four displays located in the training room, the display in the coffee shop, the display in work lounge #1, the lobby display, the two exit displays, the main video wall, and the children's video wall.
- Provide and install a central DSP for the routing of the audio from the video system, the lectern, and a central wireless microphone, and volume control of the speakers located in the following zones and speaker types:
 - o Coffee Shop - surface mounted
 - o Training Room - ceiling mounted
 - o Work Lounge 1&2 - surface mounted
 - o Outside Area - surface mounted
 - o Children's Room - ceiling mounted
 - o Main Atrium - 2 zones surface mounted
- Provide and install a central control system to provide the following functionalities:
 - o Display power
 - o Video routing of the above mentioned zones
 - o Audio volume selection and volume control of the above mentioned zones
 - o Blu-Ray control of the rack mounted player
- NOTE: Control of the system will be provided via two 9" Crestron wireless touch panels and a wall mounted keypad located in the coffee shop. One of the wireless touch panels will be located on the OFE lectern
- All equipment will be located in the OFE equipment rack located in the IT closet behind the children's room.

Training Room

Directives:

- Provide and install a lectern based video presentation system to include a Crestron digital video switcher to switch between an OFE PC, OFE Laptop connected by HDMI or VGA with audio, and a TI provide Blu-Ray player. The switcher will output to an OFE local monitor and to the central Crestron Digital switcher.
- Provide and install four 58" NEC commercial grade displays to switch between the content sent from the central switcher and a local input plate located below each display. The displays will show the same content when in presentation mode, or their local input only when not in presentation mode.
- Provide and install a lectern microphone, and a Shure Wireless microphone located in the lectern for reinforcement of speech through the TI provided ceiling speakers.
- A wireless touch panel will be provided for the following control functions:
 - o Switching of the digital video feeds to the local monitor and the main switching system.
 - o The displays power and input: Note: the displays will either be showing the content from the DMPS in the lectern or the local input plates below the displays.
 - o Volume control for the lectern microphone and the wireless microphone will be provided as well as overall volume control for the room's ceiling speakers.
 - o The Blu-Ray player located in the lectern will be controlled by the lectern touch panel only.
- All equipment will be located inside the OFE lectern.

Coffee Shop

Directives:

- Provide and install a wall mounted 42" display to connect to the central video switcher and to an OFE cable TV set top box. The audio will be provided by the ceiling speakers. The display power will be controlled by the wall mounted keypad.
- Provide and install a wall mounted auxiliary audio input plate for the connection of an OFE playback device.
- Provide and install a Crestron button keypad to control the volume and video input selection between the cable box and the local input.

Work Lounge #2

Directives:

- Provide and install two 42" displays to be table mounted with local input plates to provide connections to an OFE device connected by HDMI and VGA with audio. The laptop connections will connect to the display through a Kramer automatic switcher. Audio will be provided by the display's internal speakers. The Display will be controlled by the supplied manufacturer's remote
- Provide and install a third 42" display to be wall mounted and connected to the central video switcher. The display will be controlled by the central control system.

Lobby

Directives:

- Provide and install two 32" displays and a 50" display to be wall mounted with the 50" display to be mounted in portrait orientation. The displays

