

Table of Contents

SECTION 1 – Instructions to Bidders

1.01	Definitions.....	6
1.02	Pre-Bid meeting.....	6
1.03	Examination.....	6
1.04	Interpretations and Addenda Changes.....	7
1.05	Proposal Response Form.....	7
1.06	Document Submission and Delivery.....	8
1.07	Withdrawal of Proposals.....	9
1.08	Method of Evaluation and Award.....	9
1.09	Unit Prices.....	9
1.10	Alternates.....	9
1.11	Exceptions.....	10

SECTION 2 – Special Terms & Conditions

1.01	Payment Procedures.....	10
1.02	State Excise and Use Tax.....	10
1.03	Bid Bond.....	10
1.04	Performance Bond.....	10
1.05	Insurance.....	11
1.06	Indemnification.....	12
1.07	Term & Termination.....	12
1.08	Breach.....	13
1.09	Legal and Code Compliance.....	13
1.10	Safety.....	14
1.11	Permits and Inspections.....	14
1.12	Americans with Disabilities Act of 1990.....	14
1.13	Non-Disclosure and Confidentiality.....	14

SECTION 3 – Quality Assurance

1.01	Manufacturer.....	15
1.02	Contractor.....	15
1.03	Installer Certifications.....	15
1.04	Designer Certifications.....	16
1.05	Resume of Work	16
1.06	References.....	16

SECTION 4 – Schedule of Events & Sequencing

Timeframes.....	16
-----------------	----

SECTION 5 – General Conditions

1.01 Overview..... 17

SECTION 6 – Technology Requirements

Part 1 – General..... 17

1.01 Project Summary..... 17
1.02 Definitions..... 18
1.03 Examination of Existing Conditions..... 18
1.04 Drawing Symbols..... 19
1.05 Product Delivery, Storage and Handling..... 19
1.06 Change Order Procedures..... 20
1.07 Owner Furnished Equipment..... 21
1.08 Contractor Supplied Products..... 21
1.09 Construction Progress Meetings & Documentation..... 21
1.10 Submittal Procedures..... 22
1.11 Closeout Procedures..... 22

Part 2 – Products..... 23

2.01 Basic Equipment & Materials Requirements..... 23
2.02 Racks, Cabinets, Hardware..... 23
2.03 Power Devices..... 24
2.04 Cables & Connectors..... 24
2.05 Cable Management..... 25
2.06 Compatibility of Related Equipment..... 25
2.07 Maintenance Manuals..... 25

Part 3 – Execution..... 25

3.01 General..... 25
3.02 Coordination..... 25
3.03 Basic Requirements..... 26
3.04 Preparation..... 26
3.05 Cutting, Patching, Restoring..... 27
3.06 Cleaning..... 27
3.07 Fire stopping..... 27
3.08 Waterproofing..... 27
3.09 Equipment Installation..... 27
3.10 Cables..... 28
3.11 Connectors..... 29
3.12 Labeling..... 29
3.13 Additional Engineering Services..... 30

<u>Part 4 – Testing</u>	30
4.01 General.....	30
4.02 Testing.....	30
4.03 Grounding.....	30
4.04 Commissioning.....	30

SECTION 7 - AV/MULTIMEDIA GENERAL REQUIREMENTS

<u>Part 1 – GENERAL</u>	31
1.01 Reference.....	31
1.02 Scope Summary.....	31
1.03 Standards.....	31
1.04 Submittals.....	31
1.05 Correction Period.....	33

<u>Part 2 – PRODUCTS</u>	33
2.01 Product Requirements.....	33
2.02 Product Specifications.....	34
2.03 Misc. Material.....	34
2.04 Cables.....	34
2.05 Connectors.....	36
2.06 Interface Panels.....	36

<u>Part 3 – EXECUTION</u>	37
3.01 Equipment.....	37
3.02 Interconnection.....	37
3.03 Cable Management.....	37
3.04 Connector termination.....	38
3.05 Training.....	38
3.06 Project Close-out.....	38

<u>Part 4 – TESTING</u>	39
<u>4.01</u> Testing & Inspection.....	39

SECTION 8 – AUDIO-VISUAL SYSTEM REQUIREMENTS

<u>Part 1 – GENERAL</u>	39
1.01 Reference.....	39
1.02 Scope.....	39
1.03 Submittals.....	39
1.04 Correction Period.....	41

Part 2 – PRODUCTS..... 41

2.01 Product Specifications..... 41
2.02 ALTERNATE 1..... 42
2.03 Misc. Parts & Materials..... 42
2.04 Cable Sleeving..... 42

Part 3 – EXECUTION..... 43

3.01 Equipment Location..... 43
3.02 Equipment Configuration..... 43
3.03 Labeling..... 43
3.04 Training..... 43

Part 4 – TESTING..... 44

4.01 System Testing..... 44

SECTION 9 – INTERGRATED CONTROL SYSTEM REQUIREMENTS

Part 1 – GENERAL..... 45

1.01 Reference..... 45
1.02 Scope Summary..... 45
1.03 Visual display requirements..... 45
1.04 Information Technology Coordination..... 45
1.05 Ownership Rights..... 46
1.06 Deliverables..... 46
1.07 Firmware..... 46

Part 2 – PRODUCTS..... 47

2.01 Product Specifications..... 47

Part 3 – EXECUTION..... 47

3.01 Equipment Location..... 47
3.02 Configuration..... 47
3.03 Touch Panel/Button Layout..... 47
3.04 Training..... 51

Part 4 – TESTING..... 51

4.01 Testing..... 51

List of Drawings – Appendix A..... 52
Price Summary – Appendix B..... 52
Equipment Schedule – Appendix C..... 53
Bid Form – Appendix D..... 57
Signature Page – Appendix E..... 60
Exceptions – Appendix F..... 61
Addendum Receipt – Appendix G..... 62

SECTION 1 - Instructions to Bidders

1.01 DEFINITIONS

The following Terms may be used with this document:

- A. Documents: The complete Proposal and Contract Requirements consisting of sections, drawing, schedules, and addenda that comprise this Request for Proposal.
- B. Work: Products and/or services required to meet the specifications of this document.
- C. Notice to Commence: Purchase Order submission provided by SECC to the Contractor indicating agreement to begin Work and establish completion date.
- D. Owner: Refers to SECC
- E. Consultant: Refers to Pratt Audio-Visual & Video Corporation
- F. Bidder: Vendor who is requesting consideration by the Owner and Consultant by submitting a Proposal.
- G. Contractor: Bidder selected by the Owner to complete contracted work.

1.02 PRE-BID MEETING

A Pre-Bid meeting will be held **at 10:00 a.m. on December 20, 2010, at 1100 East 46th Street (NE corner of 46th and Tremont), Davenport, IA.** Park in asphalt parking lot directly east of building; overflow into Davenport Public Works parking lot if necessary. Interested firms/vendors are required to be in attendance. Discussion and scope of work will take place at that time and participating firms shall be afforded an opportunity to tour the installation location.

1.03 EXAMINATION of DOCUMENTS and SITE

- A. Bidder shall examine all documents, visit the site, and note their observation, and shall inform themselves of all conditions affecting work performed. These include the structure, any obstacles, and all conditions of the documents including inspection and control of the Work, environmental

controls, completion time, subcontractor list, and any other relevant material that may affect the process or Work.

- B. Failure to make the examination shall not result in any change order requests.
- C. Proposals shall be based on materials in compliance with the plans and specifications, as required on the proposal form.

1.04 INTERPRETATIONS and ADDENDA CHANGES

A. If any bidder is in doubt as to the meaning of any part of the plans or specifications, the contractor shall submit a written request to SECC for an interpretation of that part. It is the responsibility of the Bidder to gain comprehensive understanding of the required proposal documents and obtain interpretations or clarifications prior to proposal submission. Any interpretation or change will be made only by addendum numbered, dated, and issued to each bidder recorded as receiving proposal documents. Neither Pratt Audio-Visual & Video Corporation nor SECC shall be responsible for any other explanations or interpretations of the documents.

B. Questions should be directed to:

Dave Donovan, Project Manager
ddonovan@scottcountyiowa.com

- C. Questions may be submitted only until December 27, 2010.
- D. Addenda will be sent via email. Bidders shall respond to Project Manager indicating receipt of addenda documents (or by read receipt).

1.05 PROPOSAL RESPONSE FORM

- A. The Bidder shall submit a proposal using the attached form no later than 2:00 p.m. on Tuesday, January 4th, 2011; a public bid opening will be held immediately thereafter in Conference Room 605, 6th floor of the County Administrative Center, located at 600 W. 4th Street, Davenport, IA 52801.
- B. **Late proposals will not be considered. The response must be in ink or typewritten. Pencil is not acceptable. A proposal containing an alteration of any price within the proposal may be rejected unless the alteration is clearly corrected.**

- C. Any alteration or erasure may be done so in ink adjacent to it and initialed in ink by proposal signor.
- D. The Bidder must submit with his/her proposal all catalogs, drawings, specifications, and details of equipment or materials included in their proposal but not included in this specification. Failure to comply may be cause for rejection.
- E. Proposal must contain the signature of the agent authorized to empower and bind the Bidder to contract.

1.06 DOCUMENT SUBMISSION AND DELIVERY

A. Bidders shall submit proposals via email as a PDF document.

B. Proposals shall contain the following:

1. Cover Letter
2. List of Exceptions (if applicable)
3. Proposed Project Team Qualifications
4. Programming Certifications
5. List of References
6. Pricing Summary Page
7. Detailed Unit Pricing
8. Bid Form
9. Signature Page(s)

C. Proposals will be accepted via email to:

1. Purchasing, purchasing@scottcountyiowa.com
2. Reference SECC AV Sealed Bid in the subject line

D. Bids will be accepted by mail or hand delivery at the below address:

Scott County FSS
Purchasing Division
600 West 4th Street
Davenport, IA 52801

E. Faxed bids will be accepted at 563-328-3245; marked **ATTN: Purchasing – SECC AV Sealed Bid**

- F. Verification of bid receipt may be obtained from Barb Schloemer by phone at 563-326-8793.
- G. Scott County is not responsible for transmission errors or delays, or postal/courier delays or loss.

1.07 WITHDRAWAL OF PROPOSALS

- A. Bidders may withdraw their proposal at any time prior to bid receipt deadline. Notice must be sent via email to all above listed proposal recipients.

1.08 METHOD of EVALUATION and AWARD & ACCEPTANCE

- A. Scott County reserves the right to select the best proposal, not necessarily the lowest bid. Scott County also reserves the right to reject any and/or all proposals or re-bid this project in the future.
- B. A proposal once submitted, shall be final and binding on the Bidder, and shall assign the option for the Owner to enter into a contract set forth in the proposal terms and conditions. All prices must be valid for 60 days from date of proposal submission.
- C. Owner reserves the right to award the proposal in whole or in part, by item, and/or group of items serving the best interest of the Owner. Owner reserves the right to award alternates in any order that is best suited for the Owner's interests.

1.09 UNIT PRICES

- A. The portion of proposal that includes a unit price basis, establish approximate quantities that will be used to make comparisons of proposals. Each bidder is required to make his/her own calculations of actual quantities and pricing.
- B. Unit prices will be called for in applicable sections. The unit price may be used to add or deduct quantities of units as represented by the unit price.
- C. Failure to provide requested unit prices, or a proposal with unbalanced pricing may result in rejection.

1.10 ALTERNATES

- A. The implementation of the systems within this document is based on the provision, installation, and commissioning of the equipment listed in Appendix C – Equipment Schedule. Alternates may be available for some of the equipment items. Alternate equipment will only be considered if submitted and approved prior to bidding.

1.11 EXCEPTIONS

- A. Bids that indicate any condition not included in these specifications, documents, or drawings shall have written justification for such stipulation(s) on the Appendix F- Vendor Exceptions of the proposal response.

SECTION 2 – SPECIAL TERMS & CONDITIONS

1.01 PAYMENT PROCEDURES

- A. The successful Vendor shall submit an itemized invoice for payment. Scott County will make payment to the successful Vendor within thirty (30) days after receipt of invoice, satisfactory delivery and acceptance.

B. Invoices must be submitted to :

Tammy Speidel
Scott County FSS
600 W. 4th Street
Davenport, IA 52801

1.02 STATE EXCISE & USE TAX

- A. When submitting the proposal, the bidder is aware that SECC as a component unit of Scott County government and is tax exempt. The successful Contractor shall be issued a tax exempt certificate that may be used to procure materials and equipment sales tax free. Do not include sales tax in bid amounts.

- 1.03 **BID BOND:** Bid bond or 5% bid security in the form of a cashier's check in the amount of 5% of the bidder's total bid amount. The cost of said bid bond is the responsibility of the bidder and is not subject to reimbursement by SECC, regardless of bid award.

1.04 PERFORMANCE BOND: Successful Contractor is required to produce a performance contract covering the entire project amount within 10 days of bid award and prior to the commencement of any work. Bidder shall include the cost of said bond in the bid amount.

1.05 INSURANCE

A. The contractor shall have in force during the period of this contract, insurance coverage as listed below which covers the contractor's employees, subcontractors, or anyone employed by them; the public, and Scott County employees while in the buildings and on the grounds of Scott County:

1. General Liability:

Personal Injury – each person	\$1,000,000
Personal Injury – each occurrence	\$1,000,000
Personal Injury – Aggregate	\$1,000,000
Broad form Liability Extension	\$1,000,000

2. Automotive Liability – Owner, Non-Owned and hired vehicles:

Personal Injury – each person	\$1,000,000
Personal Injury – each occurrence	\$1,000,000
Personal Damage – each occurrence	\$1,000,000

3. Property Insurance – Coverage shall be all risk and shall be in broad form basis, including coverage for explosion, collapse, and damage in and around facilities. The coverage should also include off-site and in-transit exposures.

4. Worker's Compensation: shall be maintained during the life of this contract for all employees to be engaged in work under the contract.

5. State: Statutory

6. Applicable Federal: Statutory

7. Employer's Liability: shall not be less than \$1,000,000.

B. Certificates shall name the Owner as an additional insured on all liability policies. Certificates shall be provided to Owner prior to the commencement of work. The company providing insurance must be licensed to do business in the State of Iowa. The successful bidder shall be responsible for all losses that fall under any deductibles on required insurance coverage.

1.06 INDEMNIFICATION

- A. To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner and their agents and employees against all claims, damages, losses and expenses, including but not limited to attorney's fees, arising out of or resulting from the performance of the Work, provided that any such claim damage, loss or expense is:
1. Attributed to bodily injury, sickness, disease or death or to injury to loss of use resulting there from, and
 2. Caused in whole or in part by any negligent act or omission of the Contractor, and subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or otherwise reduce and otherwise exist as to any party or person described in this section.
- B. In any and all claims against the Owner or any of their agents or employees by any employees of the Contractor, any subcontractor, anyone directly or indirectly employed by any of them or anyone whose acts any of the may be liable, the indemnification obligation under this paragraph shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any subcontractor under workers' or workmen's compensation acts, disability benefit acts or other employee benefit acts.
- C. The Owner shall also be indemnified for any attorney's fees it incurs in enforcing this indemnification provision or any other indemnification provision in the contract.

1.07 TERM & TERMINATION

- A. Any supplemental terms, conditions, modifications, or waiver of these terms and conditions must be in writing and signed by the Scott County FSS Director and the Contractor.
- B. Either party may terminate the Contract with ninety (90) days written notice

to the other.

- C. Force Majeure: Neither party will be held responsible for delay or failure to perform when such result is due to the following unforeseen and unpreventable reason: fire, flood, epidemic, strikes, wars, acts of God, unusually severe weather, acts of public authorities, or delays caused by public carriers, provided the defaulting party gives notice of inability to perform as soon as such result is known.
- D. Inability to Perform: The Contractor shall make every reasonable effort to maintain staff, facilities, and equipment to deliver the services to be purchased by the Owner. The Contractor shall immediately notify in writing whenever it is unable to (or reasonably believes it will be unable to) provide the agreed upon contract. In the event of such notice, the Owner shall determine whether such performance requires a cancellation or modification of the contract.
- E. Both parties shall make every effort to mitigate damages that might be incurred by reason of any event requiring remedy.

1.08 BREACH

- A. If a breach or violation of any term, condition, or provision of this agreement occurs by Contractor, Scott County shall notify Contractor in writing that such violation has occurred. If satisfactory demand is not fulfilled within ten (10) days from such written notice, Scott County may, at its option, terminate this agreement and obtain an alternate provider to furnish all required materials. This provision shall not prohibit the pursuit of other remedies for breach of contract allowable by law.

1.09 LEGAL & CODE COMPLIANCE

- A. Winning bidder must comply with all current Federal, State, and local laws, statutes, ordinances, rules and regulations or those subsequently enacted applicable to this contract, or the facilities, and organization for which the successful bidder is accountable.
- B. If there is a discrepancy between codes and regulations with jurisdiction over this installation, and specifications, these codes and regulations shall determine the method or equipment used.
- C. All changes to the system made after start of contract, in order to comply with applicable codes or requirements of the Inspector, shall be made by the Contractor at no cost to the Owner.

1.10 SAFETY

- A. The successful bidder will comply with all State and Federal laws as they relate to employee safety, i.e. AHERA, OSHA, Confined Space Entry, Employee Right to Know, Respiratory Protection, NESHAP, etc.

1.11 PERMITS & INSPECTIONS

- A. Contractor shall obtain all applicable permits and licenses, and:
- B. Pay all applicable charges for said permits or licenses that may be required, and:
- C. Pay all charges arising out of required inspections due to codes, permits, licenses or as otherwise required by an authorized entity.

1.12 AMERICANS WITH DISABILITIES ACT OF 1990

- A. Successful bidder shall have thorough and complete knowledge of the Americans with Disabilities Act of 1990. The successful Bidder shall provide complete capabilities to meet or exceed all requirements of this Act for this project with regard to the products and services supplied by bidder.

1.13 NON-DISCLOSURE and CONFIDENTIALITY

- A. In order to protect the integrity of the contracting process, proposals will not be disclosed until after award and signing of any and all contracts that may result from this RFP. All materials provided to SECC are subject to the State of Iowa public disclosure laws. Any information contained in the proposal that the vendor desires to claim as proprietary and exempt from disclosure must be clearly designated, including identifying the page and particular exception(s) from disclosure.
- B. SECC will try to respect all material identified by the Vendor as being confidential, but requests that Vendors be highly selective as to what they mark as confidential. SECC will make a disclosure decision derived upon applicable laws and can choose to disclose information despite its being marked as confidential and proprietary. Marking the entire proposal as

proprietary will NOT be recognized, and may result in disclosure of the entire proposal or disqualification of the proposal solely at the discretion of SECC.

- C. Documents identified as confidential will not be treated as such if public disclosure laws take precedence, the information is publicly available, SECC already has possession of the information, the information is obtained from third parties without restrictions on disclosure, the information is independently developed by SECC, or the information is required to be disclosed by order of a court or other governmental entity.

SECTION 3 – QUALITY ASSURANCE

1.01 MANUFACTURER

- A. Prime manufacturers who retain a service center capable of providing parts, maintenance and repairs with a 24-hour maximum response time and is regarded as an industry-qualified vendor shall be utilized.

1.02 CONTRACTOR

- A. By submitting this proposal, Bidder certifies the listed requirements:
 - 1. Has completed three or more projects of at least 75% of the size or value being proposed.
 - 2. Has access to all necessary equipment and has organizational capacity and required competency to complete work properly and to conformity.
 - 3. Maintains a permanent place of business.
 - 4. Maintains a minimum of three (3) full time installers/technicians.
 - 5. Will use employee or sub-contractor certified by Crestron as a Crestron Certified Programmer or Crestron Authorized Independent Programmer to perform programming of Crestron system. Copy of certificate shall be submitted with Proposal.
 - 6. Is bondable for the terms of the contract.
 - 7. Has a record of successfully completing past projects in accordance with Contract Documents, established timetables and guarantee requirements.

- B. Before award of contract, Owner shall be satisfied Contractor meets above requirements. Owner reserves right to reject Proposal if evidence submitted by, or investigation of, Bidder fails to establish the ability to carry out contractual obligations and complete Work.

1.03 INSTALLER CERTIFICATIONS

- A. Installers shall be an authorized representative of the successful bidder and have completed at least three (3) projects of similar size and scope. He or she shall have not less than two (2) consecutive years work experience in the system integration industry.
- B. Contractor shall have on staff, at least one (1) installation technician who holds a current CTS-I designation as earned through InfoComm International.

1.04 DESIGNER CERTIFICATIONS

- A. Contractor shall have on staff, at least one (1) Design Engineer who holds a current DMC-E designation as earned through Crestron Electronics Digital Media.

1.05 REFERENCES

- A. Each Vendor must include with its proposal a list of no less than three (3) references that have purchased similar products or services within the last two (2) years; as well as list three (3) projects completed in that timeframe in similar scope and size. The list must include the name of the company and the name, phone number, and email address of a contact person for each company.

SECTION 4 – SCHEDULE OF EVENTS & SEQUENCING

December 20, 2010 – Pre-bid conference at 10:00 am, including tour of project location and conditions. Meeting will be held at the project site, located at 1100 East 46th Street (NE corner of 46th and Tremont), Davenport, IA. Please park in the east asphalt lot or overflow in the adjacent Davenport Public Works parking lot

December 27, 2010 – All questions must be submitted by this date.

January 04, 2011 – Bid deadline; bids due prior to 2:00 pm on this date.

January 14, 2011 – Anticipated bid award date.

March 18, 2011 - Substantial completion date; systems to be substantially complete and operational.

SECTION 5 – GENERAL CONDITIONS

1.01 OVERVIEW

- A. The specifications of the Proposal package are binding upon the Contractor to provide and install such items, services, and operations without additional charge to the Owner. Exceptions are noted with acronyms NIC (Not in Contract) or OFE (Owner Furnished Equipment). If this notation does not appear, then Contractor shall assume the need to provide the item in question.
- B. No allowances will be given to the Contractor because of omissions in work due to unfamiliarity or misunderstanding of Proposal package details or construction documents.
- C. The drawings and specifications documents form are contiguous to the contract and shall be considered bound therein.
- D. The submission of proposals shall be deemed evidence of the Contractor's knowledge, review, and examination of construction documents, drawings, specifications, and addenda issued for this project. No allowances will be made for any unfamiliarity of any portion.
- E. A 10% retainage will be withheld until punch-list completion, submission of all closeout materials, and conclusion of required training.
- F. The Bidder agrees not to hold the Owner or Project Consultant responsible for simple typos, minor omissions, misspelling of words, or other specification inconsistencies where reasonable persons, familiar with the type of work specified, would understand the scope as though such situations did not exist.

SECTION 6 – TECHNOLOGY REQUIREMENTS

PART 1- GENERAL

1.01 PROJECT SUMMARY

- A. Scope: Successful Bidder shall provide, install, configure, and provide warranty service for audio-visual systems, including data/video projectors, mounted flat-panel monitors, audio/video/graphics switching and distribution systems, touchpanel-based integrated control systems, operator control console, loudspeakers, equipment racks, lecterns and other equipment described herein.
- B. Room Types: Audiovisual systems will be installed in dispatch center (A136), offices (A147, A148, A149), training room (A114), and JIC (A113), EOC (A109) and supporting areas.

1.02 DEFINITIONS

- A. Documents: The complete package of Bid and Contract Requirements, Technology & A/V Requirements, related drawings, schedules, and addenda that make up this Request for Proposal.
 - B. Work: The provision of products and/or services to meet the specified document requirements.
 - C. Owner: Scott Emergency Communication Center (SECC)
 - D. Consultant: Pratt Audio-Visual & Video Corporation
 - E. OFE: Owner Furnished Equipment. Item will be provided by Owner.
 - F. OFCI: Owner Furnished Contractor Installed. Item will be provided by Owner and installed by Contractor.
 - G. NIC: Not In Contract. Item will be the responsibility of others.
 - H. Approved or Approval: Where approval is required, only authorized persons may grant such. Owner reserves all rights to govern and grant approval and will appoint authority of agents acting on their behalf.
 - I. As Required: Contractor shall provide the quantity of said item that is necessary. Owner and Consultant reserve the right to make the final determination.
-

1.03 EXAMINATION of EXISTING CONDITIONS

- A. Examination: Contractor shall examine the facility and construction documents to the extent necessary to plan for competent installation strategies prior to the delivery of materials to the site or commencement of work. Failure to adequately complete the examination shall not result in change order requests. Arrangements for site visits outside the pre-bid conference will be on a scheduled basis. Visits must be scheduled at least 3 working days in advance and are at the convenience of the Owner (SECC). SECC is not responsible for scheduling conflicts. Bidders are advised to complete all needed site visits at least one week prior to the bid deadline.
- B. Acceptance of Conditions: Commencement of work by Contractor shall indicate acceptance of existing conditions, unless written notice of exceptions has been provided to Owner prior to commencement. Contractor shall verify that all existing conduits are suitable for reuse.
- C. Observation: If Contractor observes-during preliminary examinations or subsequent work-existing violations of fire-stopping, electrical wiring, grounding, or other safety or code related issues, Contractor shall report these with haste to Owner.
- D. Pre-Existing Damage: If Contractor observes damage to finished areas before installation begins in any area, Contractor shall document with digital photos of damage and immediately notify Construction manager via Email, with photos attached.
- E. Damage during Installation: Any damage caused by, or reasonably believed by the Construction Manager to be caused by the Contractor shall result in back-charges for said damages.

1.04 DRAWING SYMBOLS

- A. Equipment or materials defined on any drawing in this package will be expected to be provided by Contractor unless otherwise indicated.
- B. Work shall be installed as expressed diagrammatically on drawings and as described in written specifications. Contractor shall not provide incomplete work or non-functioning system by limiting interpretation of drawings.

1.05 PRODUCT DELIVERY, STORAGE & HANDLING

- A. Audio-visual system components, equipment, materials, and accessories shall be delivered to project site in original packaging, and be handled so as to avoid damage.
- B. Items should not be delivered to the site until the building is enclosed and other construction is completed as to not impede installation.
- C. Storage of materials shall remain full responsibility of Contractor until Acceptance.
- D. All necessary precautions should be taken to protect material from theft, vandalism, dents, dust, weather, paint, or any hazardous condition.
- E. Installed materials remain the responsibility of the Contractor until Acceptance. Care should be made to ensure safety and security of installed materials.

1.06 CHANGE ORDER PROCEDURES

- A. Changes to the contract may be initiated by the Owner, or Contractor.
- B. If change originates with Owner, Owner shall issue a Change Order Request to Contract.
- C. If a change originates with Contractor, Contractor shall submit a Change Order Proposal to Owner to review.
- D. A Change Order Proposal shall reference the work to be performed, as well as any cost change to the project and/or change in timeline or completion.
- E. Consultant may request additional information to be supplied for consideration with Change Order Proposal.
- F. Owner reserves right to accept or reject Change Order Proposals.
- G. A Change Order is a modification of the Contract:
 - 1. If a Change Order is approved, Owner will issue a Change Order that references request. A Change Order is not valid until it has been signed by Owner.
 - 2. Work performed or equipment supplied without an approved Change Order is done at Contractor's own risk.

1.07 OWNER-FURNISHED EQUIPMENT

- A. Owner is responsible for delivery of OFE to project site, unless otherwise specified in contract.
- B. Contractor is responsible for locating, inspecting, and moving OFE to final installation placement.
- C. Contractor shall report any damages, discrepancies in quantity, type or function to Owner and Consultant immediately upon notice of such.
- D. Contractor is not responsible for any material warranty coverage for OFE. Contractor shall be responsible for integrating, cabling, and installing OFE under same warranty conditions as other Contractor supplied products.

1.08 CONTRACTOR SUPPLIED PRODUCTS
See Appendix C – Equipment Schedule

1.09 CONSTRUCTION PROGRESS MEETINGS & DOCUMENTATION

Contractor shall hold progress meetings every other week on a recurring schedule mutually agreed upon by the owner and contractor. The facilitation, agenda, minutes, etc. are the responsibility of the contractor. The agenda should include (at a minimum) the following topical areas:

- 1) Discussion and revisions to the prior meeting minutes – attendees should have the opportunity to amend or correct prior meeting minutes; minutes should be distributed via e-mail no less than 3 working days prior to the next progress meeting to allow for review;
- 2) Schedule – detailed schedule at first meeting; include progress made since last meeting; schedule updates if necessary; expected progress in the ensuing two week period;
- 3) Materials – discuss status of material and equipment orders including delivery coordination, delays, coordination with other activities on site;

- 4) Coordination/Logistics – discuss coordination of primary contract work with other trades and vendors that are on site;
- 5) Safety – discuss any safety issues or concerns;
- 6) Project Close-out (include when the schedule includes these activities in the next two week period) – discuss training, as-built documentation, manuals, warranty information, service recommendation information and contracts, punch list inspection and completion of punch list items, final payments, and any other pertinent close-out topics; use **Closeout Procedures 1.12** as a guide for this agenda topic.

1.10 SUBMITTAL PROCEDURES

- A. Submittals shall be provided in electronic (PDF) format prior to commencement of work to: **Dave Donovan, Project Manager.**
- B. Submittals shall be provided within ten (10) days after Notice to Commence.
- C. Submittals must be received and stamped “Reviewed” by SECC prior to procurement of materials or start of work. Any procurement or performance of work prior to approval is at Contractor’s own risk.
- D. Failure to include submittals as required may result in payment withholding and/or cancellation of contract.
- E. Review by SECC does not constitute any warranty or endorsement by the owner. Review by SECC does not include a functional review. The contractor is fully responsible for ensuring that provided components have the necessary capacity and capabilities, are system compatible and will function as intended in the bid documents.

1.11 CLOSEOUT PROCEDURES

- A. Notice: Contractor shall provide written or electronic notification to Consultant and Owner when Contractor has reached Substantial Completion and inspection phase.
- B. Punch List: Work or materials found to be incomplete, or failing to meet specifications or quality standards outlined in the contract shall be documented by the Owner and provided to the Contractor to remedy.

Contractor shall provide written or electronic notification to Owner once all punch list items are completed.

- C. Contractor shall provide closeout submittals to SECC in accordance with requirements listed in these documents no less than three (3) business days prior to scheduled Final Inspection.
- D. Punch list shall be considered complete only after having been signed by Owner.
- E. Final payment will be authorized only after all closeout procedures and requirements have been satisfied by the Contractor and have written approval by Owner, including punch-list(s) and/or re-inspection(s) and conveyance of closeout deliverables.

PART 2 – PRODUCTS

2.01 BASIC EQUIPMENT and MATERIALS REQUIREMENTS

- A. Equipment and materials shall meet engineering, operational, functionality, and quality performance standards as defined in this document.
- B. Reference to specific equipment manufacturers does not imply that all products made by that manufacturer meet the required specifications.
- C. Equipment shall be new and unused with full manufacturer's warranties. Warranties shall be supplemented as required by specifications by Contractor.
- D. Products outlined that meet the needs of the system shall not be modified to any point that would void the factory warranty.
- E. Like materials used shall be of the same manufacturer, model, and quality unless otherwise specified.
- F. No software or firmware is to be used without specific authorization by Owner.

2.02 RACKS, CABINETS, HARDWARE

- A. Equipment racks will be supplied by owner as specified in documents and drawings. Contractor shall verify that the existing racks provided are

complete and must bring any discrepancies to the attention to the Owner and Consultant prior to the commencement of installation.

- B. Hardware shall be installed in racks in a secure manner. Screws shall not be over-tightened or deform washers.
- C. Where cross-connections are required between equipment, cable management of interconnections shall be orderly.
- D. Rack mounted equipments shall be secured per manufacturer's recommendations and consider such requirements for airflow, power, and in/out connections.
- E. Shelves and mounts are to be supplied by Contractor as required to support system and perform essential functions.

2.03 POWER DEVICES

- A. All power strips shall be UL Listed, surface mounted, rated for 15 am continuous electronic loads. Outlets shall be 125 volt, 15 amp, three-wire grounded, NEMA 5/15R. Cords shall be 14/3 SJT with molded plug.
- B. Power distribution panels shall be UL listed, rack mounted, rated for 15 amp continuous electronic loads with switch and pilot light. Up to eight (8) outlets shall be mounted to the back, each rated 125 volt, 15 amp, three-wire, grounded, NEMA 5-15R. Switch and pilot shall be mounted to the front. Cords shall be 14/3 SJT with molded plug.
- C. Contractor shall provide acceptable power distribution units as required to supply power to Contractor-furnished and Owner-furnished equipment included on drawings and equipment schedules. This may be in addition to any power distribution equipment indicated on equipment schedules.

2.04 CABLES and CONNECTORS

- A. Cables shall be selected and implemented in a manner defined by signal type, in accordance with industry standards. Highest quality products shall be used ensuring transmission characteristics, termination methods, resistive and complex impedance at operating frequencies, and insulating characteristics and maintained.

- B. Highest quality connectors shall be used with strain reliefs and cable clamps sized for the connector and cable. The transmission characteristics, termination methods, resistive and complex impedance at operating frequencies, and insulating characteristics should be maintained.
- C. Cable and connector color shall be coordinated to maintain consistency with cable connector color schemes used by other trades.
- D. Installed DVI cables shall have Gold plated contacts, be silver coated, tinned copper conductors 22 AWG (25 feet or longer) or 24 AWG (12 feet or less), tinned Copper Drain Wire, PVC jacket.
Extron 60-649 Series or equal.

2.05 CABLE MANAGEMENT

- A. Nylon plastic cable ties, appropriate screw fittings, or mounting clips shall be used above ceilings for wire management. Black Velcro straps shall be used to tie cables below ceiling level.

2.06 COMPATIBILITY OF RELATED EQUIPMENT

- A. Existing Equipment: Equipment and systems specified in these documents shall be assumed to be compatible with the systems already installed at Owner site(s) and as identified in this document as related to this project.
- B. Installed Equipment: Contractor is responsible for compatibility and proper interaction of specified equipment and systems as it relates to all other equipment.

2.07 MAINTENANCE MANUALS

- A. Contractor shall supply a maintenance manual, indicating equipment connectivity and any special procedures necessary for proper operation and maintenance of the systems.

PART THREE – EXECUTION

3.01 GENERAL

- A. Contractor is to provide, furnish, deliver, transport, install, configure and connect all of the material and equipment listed and depicted in bid package document or drawing, closing with highest operating standards.

3.02 COORDINATION

- A. In the event of conflict on space requirements or device locations, refer the matter to the Owner for final decision.
- B. Contractor is responsible for coordination with other trades engaged in the project and shall proceed in the best interest of the Owner when installing audio-visual system.
- C. Contractor shall sequence the system work in coordination with established general construction schedule as managed and provided by the Owner.
- D. Delays: Contractor shall coordinate with all other trades to avoid any delay in installation schedule.
- E. Contractor shall coordinate with General Contractor and SECC Project Manager its requirement for proper AC power that services all equipment called-out in this bid request.
- F. Contractor shall coordinate with General Contractor and SECC Project Manager for its grounding system requirement to the provided equipment.

3.03 BASIC REQUIREMENTS

- A. Contractor is responsible for adhering to industry best-practices, and following manufacturer recommendations for applicable items installed, connected, used and adjusted.
- B. Work area shall be properly protected during construction, including shielding material from dirt, dust, floor traffic, while protecting floor box lids and temporarily plugging open conduits throughout construction. Once complete, area shall be thoroughly cleaned and all tools, equipment, obstructions, and debris removed from the site.
- C. Contractor shall keep work area free from accumulation of waste materials. Rubbish shall be moved to the job-site receptacle as determined by the General Contractor or Owner.
- D. Contractor shall not hang cable supports from ceiling grid wire.

3.04 PREPARATION

- A. Prior to installation, Contractor shall ensure that required equipment is secured and ready for installation.
- B. Prior to any installation, the contractor shall ensure site is prepared by removing debris, verifying information and systems indicated are in-place and ready for use, and equipment racks are level.

3.05 CUTTING, PATCHING, RESTORING

- A. Contractor is responsible for coordinating any cutting or drilling work that is required for installation of specified system.
- B. Contractor is responsible for returning all surfaces (walls, floors, and ceilings) to their previous condition after any alteration.

3.06 CLEANING

- A. Contractor shall remove excess packing and other non-equipment related material or debris at the end of each work day.
- B. Contractor shall ensure no damage is incurred as a result of their work, and care should be taken to prevent wire debris from entering carpet fibers by covering carpets.

3.07 FIRESTOPPING

- A. Contractor is required to apply fire-stopping material in and around any openings it creates, or are created for it where code suggests necessary. Contractor shall be in compliance with appropriate codes relating to such.

3.08 WATERPROOFING

- A. Any and all openings to the outside environment created by the contractor must be sealed and waterproofed and ensure that these methods meet code and are applied in good engineering practices.

3.09 EQUIPMENT INSTALLATION

- A. General: Manufacturer's guidelines for installation shall be followed. Discrepancies or inability to complete installation due to material shortage or faulty equipment shall be reported to the Owner immediately upon

discovery. Contractor shall ensure that the system is operational and secure in placement upon configuration.

- B. Equipment shall be located as indicated on drawings unless otherwise specified. End-user operable devices must be positioned within the range of ADA standards.
- C. Equipment shall be installed as directed by the manufacturer.

3.10 CABLES

- A. Cable shall be stored and handled such that it is not stretched, kinked, crushed, or notched in any way. Bend radiuses shall meet manufacturer requirements. Cables should not be installed in ambient temperatures or moisture conditions misaligned with manufacturer ratings.
- B. No splices shall be made to any cable less than five hundred (500) feet in length for any multimedia/video application.
- C. No splices are permitted in any voice or data cable application.
- D. Lengths: Cable lengths are based on the lengths of the undetermined signal conductors. Where cables are to be of equal lengths, variations are to be less than ½ inch.
- E. Cables shall be marked with a labeling system approved by Owner, regardless of length, and separated and grouped into like category according to signal and power level.
- F. Power cables shall be grouped on one side of the equipment rack while low-level cables placed on the opposite side.
- G. Cables shall be neatly dressed and have service loop.
- H. Rack cabling shall be adequately supported with Velcro wire straps and horizontal support cable managers fastened to rack frame. Wire-ties may be used if additional support of cable bundle is required.
 - 1. Ties and straps shall be installed so as to not deform cable insulation. No sharp burrs shall remain where excess length of cable tie has been cut.

- I. External wire cables shall be supported at least every 5 feet from the structure or as required to maintain not more than 12" cable sag between supports and without tensioning the cables.
- J. Cables shall be supported by J-hooks, cable tray, or ladder rack.
- K. Any obstruction or hazard in the pathway provided by others shall be notified to Owner by Contractor upon discovery.

3.11 CONNECTORS

- A. Proper crimping tools and stripping devices shall be used when the method is required.
- B. Connectors shall be carefully fitted to mating devices on equipment to avoid damage to contact points. If specialized termination is necessary it shall be in accordance with manufacturer standards and specifications when directed.
- C. Soldering terminations must be executed by person knowledgeable and practiced in such skill. Contractor may be required to re-terminate a connector with excessive insulation displacement.
- D. Adapters shall be used with Consultant's approval only where there is anticipation of future equipment upgrades or with Owner-provided equipment.

3.12 LABELING

- A. Rack-mounted equipment and hardware shall be clearly, logically, and permanently labeled in a manner suitable to the Owner. This includes connectors, jacks, receptacles, outlets, cables, cable terminations, terminal blocks, rack mounted equipment, active card-frame system clots, etc.
- B. Proposed wording and or numbering schemes for labeling must be provided to Owner for review and written approval prior to installation.
- C. Labels must be permanent and secure.
 - 1. Labels shall be sized to match like items and like labels.
 - 2. Installer and Consultant identification shall be labeled on rack.

3. Custom panels shall be engraved, etched, or screened, with label sample layouts approved by Owner prior to procurement.

3.13 ADDITIONAL ENGINEERING SERVICES

- A. Contractor is responsible for securing engineering services where needed to ensure installation needs are met.
- B. Owner will approve of a change order only when a Contractor can indicate that additional engineering services are needed as the result of change in scope of services.

PART FOUR – TESTING

4.01 GENERAL

- A. Contractor shall supply testing equipment needed to verify testing compliance and be completed prior to inspection by Owner.
- B. Testing may be repeated during the inspections process at Owner's behest.

4.02 TESTING

- A. Prior to testing or charging the system, certify the following:
 1. Products are installed in accordance with manufacturer instructions.
 2. Products are neat, clean and intact securely attached with all dust and debris removed.
 3. Cables should be dressed, routed and labeled with consistent polarity.
 4. All electronic devices are properly grounded.
 5. Each AC power receptacle is tested with a circuit checker for proper hot, neutral, and ground connections prior to plugging in equipment.

4.03 GROUNDING

- A. Grounding and bonding system should be inspected for tightness and proper installation, using reliable test instruments to measure resistance to ground of system.

4.04 COMMISSIONING

- A. The Systems included in the bid documents are to be complete and fully functioning systems. The Project Manager will make periodic job site observations during the construction period. The system start-up, testing, configuration, and satisfactory performance are the responsibility of the Contractor. This shall include all calibration and adjustments of equipment controls, equipment settings, software configuration and verification. Troubleshooting and adjustments for comprehensive operation are to be commissioned for system completion.
- B. All operating conditions and control sequences shall be simulated and tested during the start-up period and performed by a DMC-E certified technician.

SECTION 7 – AUDIO-VISUAL & MULTIMEDIA SYSTEM GENERAL REQUIREMENTS

PART ONE – GENERAL

1.01 REFERENCE

- A. Provisions of Section 6 and Construction Documents are referenced and required in this section.

1.02 SCOPE SUMMARY

- A. This section contains general AV/Multimedia requirements for the provision, installation, configuration and documentation unless specifically noted otherwise.

1.03 STANDARDS

- A. AV Installation Handbook.
InfoComm International. 2007
11242 Waples Mill Road, Ste. 200
Fairfax, VA 22030
Phone: 703-273-7200
Fax: 703-278-8082

1.04 SUBMITTALS

- A. **Three** types of submittals are required:

1. **Preconstruction**; including shop drawings
 - a. Block Diagrams: interconnection diagrams, including cable identification detail, and specific input/output port identification.
 - b. Mounted Elements: Structurally mounted elements, generally including projectors, screens, monitors, loudspeakers. Including both plan view placement, and structural mounting techniques utilized.
 - c. Identification: Layout and demarcation of custom products, including wall plates and interconnection panels.
 - d. Cable: Make and model of bulk cable and connectors, cable labels and connector detail.
 - e. Changes: Proposed changes to block diagrams and elevations provided with the proposal documents. Required changes are detailed in Section(s) to follow.
 2. **Progress**; including progress reports and schedules.
 - a. Weekly written report to be submitted to Owner via email by 5 pm each Monday, noting previous week's progress, schedule of events for current week, and any coordinating issues that may require Owner attention.
 3. **Closeout**; including as-built drawings, equipment manuals, quick reference guides, and custom software programming/configurations.
 - a. Complete set of equipment manuals in organized 3-ring binder for each room.
 - b. Quick-reference guide describing normal system operation and basic troubleshooting for each room. Subject to Owner review and approval upon close-out.
 - c. Serial number listing for supplied applicable components on a per-system basis.
- B. As-built drawings shall be provided with changes clearly marked in red.
- C. Contractor shall provide additional submittals as required by noted sections.
-

1.05 CORRECTION PERIOD

- A. Correction period shall be in effect for one year, and Contractor shall repair any equipment and cabling problems at no cost to the Owner for that duration.
- B. Commencement of Correction period shall begin at the Final Acceptance date.
- C. Final Acceptance shall be deemed the date at which all contract work (with exception to correction period) is complete, with written acceptance of substantial completion by Owner verifying such.
- D. Calls placed to the Contractor for service issues arising during normal business hours shall be responded to within 4 hours of placement throughout correction period.
- E. In the event that issue cannot be resolved over the phone, the Contractor shall respond on-site within 8 business hours to address service issue.
- F. Contractor shall make equipment available for loan to replace any broken, defective, or non-functioning components that cannot be repaired and returned within one week. Equipment shall be comparable performance and specifications as determined by Owner. All shipping, delivery and re-integration are to be at no-charge to the Owner.
- G. Projection lamps are to be warranted for a minimum of 90 days by Contractor, or for manufacturer indicated lamp hour expectancy, whichever comes first.
- H. Equipment that is damaged due to intentional misuse, abuse or negligence is not warranted under this agreement.

PART TWO – PRODUCTS

2.01 PRODUCT REQUIREMENTS

- A. Substitutions may be proposed during the bid process. Consultant or Owner reserves the right to determine and authorize equitability of proposed substitution(s).

2.02 PRODUCT SPECIFICATIONS

- A. Specified products are included in enclosed sections to Contractor for appropriate configuration and application to indicate key features required or possible substitutions.
- B. Where no product specification is included, Contractor may use manufacturer's guidelines for appropriate substitutions. Substitutions are subject to Owner approval.
- C. Any product deviations of significant characteristics (non-approved substitutions) shall be removed and replaced with specified products at no additional charge to Owner.

2.03 MISCELLANEOUS MATERIAL

- A. Contractor shall provide all components reasonably required to complete an operational system if not specifically highlighted in Drawings, Appendices, or Specifications including but not limited to: cables, connectors, accessories, adaptors, rack mounting adapters and shelves, power supplies, power strips, cover plates and panels, remotes antenna mounts, terminal blocks, relays and switches, and required termination hardware not supplied with the equipment.

2.04 CABLES

- A. Cable shall be supplied and installed as detailed. Non-conformity or non-approved cables shall be removed and replaced at sole expense of Contractor.
- B. Installed Video signal coaxial cables shall have #18 solid copper center conductor, gas-injected high density Polyethylene or Fluorinated Ethylene Propylene insulation, copper braid shield of at least 95% coverage and 100% dual-sided solid and black PVC jacket unless color is otherwise noted. Cable shall be designated as a low loss serial digital video cable. Belden 1649A, WestPenn 6350, Canare L-5CFB, Liberty 18-CMR-SD, or equal. Plenum cable, Belden 1695A, WestPenn 256350, Liberty 180-CMP-VID-COAX, or equal.

- C. Flexible Video cables that are intended to be moveable on a regular basis may be constructed of a stranded bare copper center conductor RG-59/equivalent cable with >94% copper braid shield and polyethylene dielectric. Canare LV-61S, Belden 1505A, WestPenn 819, or equal.
- D. High Resolution RGBHV Graphics/Video cable type and size shall be selected to provide a minimum of 250 MHz bandwidth (-3dB) at over the length of each RGBHV signal path from source to display, including cable path losses and gains, signal processing, switching and distribution equipment. Suitable cable for high-resolution use shall be designated by the manufacturer. Extron MHR-5, Liberty RGB5C-CM or equal. Plenum cable, Extron MHR-5P, Liberty RGB5C-25-CMP, or equal.
- E. Installed (single) Line Level and Microphone: Audio Signal cables shall have twisted pair #22 stranded bare copper conductors, PL-PVC insulation, aluminum-poly foil shield, #24 stranded tinned copper drain wire in contact with foil shield and PL-PVC jacket. Liberty 22-2C-PSH or equal
- F. Broadband Video Antenna Cable shall be RG-59 for runs shorter than 15 feet. For runs ranging from 15-50 feet cables shall be RG-6.
- G. Wireless Antenna Extension Cable shall be 50-Ohm coaxial cable, as indicated by microphone manufacturer.
- H. Loudspeaker wire shall be 16 AWG minimum.
- I. UTP Cable shall be consistent with Owner standards for UTP cable, unless otherwise specified or advised by hardware manufacturer.
- J. Control cable shall be as recommended by equipment manufacturer, including applicable and required conductors.
- K. Digital media cables and connectors shall be Crestron for Digital Media distribution system. Contractor shall be required to use Crestron cable and connectors to assure proper system functionality.
- L. Labels shall consist of white paper or vinyl slip with typed or machined printed designations, secured in place with a wider section of clear heat shrink tubing or integral clear adhesive-backed plastic.

- M. Labeling scheme: labels should clearly state the source or destination connection cable is assigned and/or cable number associated with cable schedule. Example: (M-1001 SRC>Lectern Microphone).
- N. Specialized terminating hardware shall be provided as required.
- O. Contractor shall submit cable schedule prior to installation for Owner to review cable types that will be used on the project.

2.05 CONNECTORS

- A. Connectors shall be provided by Contractor and installed per manufacturer's specifications.
- B. Connectors must be commercial quality grade and installed with manufacturer approved crimp and die tools (Liberty, Belden, Neutrik, ProCo, etc.)
- C. DM: Shall be Crestron shielded RJ-45 and fiber connectors, as recommended by manufacturer.
- D. Contractor shall submit schedule to Owner for review prior to installation indicating utilized connectors.

2.06 INTERFACE PANELS

- A. Interface plates and connector panels shall be as described on drawings and as specified. Finish on custom wall interface plates shall match that of electrical and other work and shall be coordinated with Owner prior to ordering. Connector panels in equipment racks shall match rack frame finish and specified blank panels unless otherwise noted.
- B. Floor box plates shall be provided by Contractor wherever connectivity through a floor box is indicated on drawings.
- C. Interface plates and connector panels shall be engraved to show connector functionality, and shall be engraved unless otherwise approved by Owner.
- D. Verify engraving detail and custom panels in preconstruction submittal prior to fabrication.

- E. Where no box is provided, Contractor shall make appropriate opening for plate and provide corresponding mud-ring/caddy to securely affix plate to wall.
- F. Contractor shall provide and install all blank rack panels required to fill openings in OFE in AV equipment racks.

PART THREE - EXECUTION

3.01 EQUIPMENT

- A. As required by Section 6.
 - 1. Contractor shall use proper structural installation techniques and maintain a minimum 3:1 safety margin.
 - 2. Custom mounting hardware shall be painted by Contractor to match wall, ceiling, or equipment, at Owner's preference.

3.02 INTERCONNECTION

- A. As required by Section 6.
 - 1. Contractor shall make system interconnections as indicated on Drawings and specified herein. Contractor shall provide power and control lines to and from power supplies, as well as remotely controlled equipment and devices as required.
 - 2. Contractor shall be responsible for associated equipment signals not specifically documented in provided drawings, including: synchronized signals, transmitting and receiving antennas, and LAN connections to equipment provided and/or installed by Contractor.
 - 3. Contractor shall not be responsible for unrelated low voltage wiring unless it pertains to interface boxes, interface plates, and integrated control system.

3.03 CABLE MANAGEMENT

- A. As required by Section 6.

1. Cabling located above the ceiling shall be tied off and supported by ceiling supports or other structures at a minimum of eighteen (18) inches above the ceiling whenever able.
2. Cable shall not lie on the ceiling.
3. Cables installed horizontally along wall surfaces shall be installed in Owner approved surface raceway.
4. Cabling placed at floor level shall be installed in the shortest possible route to the nearest wall considering traffic patterns and in a means that will protect it from traffic.
5. Where cabling is installed inside desk furniture, cables shall be protected and affixed so as to not impede workspace.
6. Where conduit is stubbed and exposed through the floor, Contractor shall wrap cables in sleeving and secure at least 3" below top of conduit level.

3.04 CONNECTOR TERMINATION

A. As indicated in Section 6.

1. Video connectors (BNC, RCA, and F) shall be terminated with crimp and die tools specific to the applicable connectors.
2. Terminate XLR type connectors wired pin 2 high, pin 3 low, and pin 1 shield.
3. UTP cables terminated with crimp tools or as per manufacturer specifications.

3.05 TRAINING

A. As required by Section 6; and coordinated with Owner's schedule, and provided by Contractor's personnel as agreed to by Owner.

3.06 PROJECT CLOSE-OUT

A. System shall be deemed complete when the following has been satisfied:

1. Testing has been completed to the satisfaction of Owner.
2. Punch-list items have been rectified to Owner's approval.
3. As-built drawings and system documentation has been submitted to Owner.
4. Training for system operation has been conducted with Owner's staff.

- B. Contractor shall submit notice of Substantial Completion for Owner acceptance and procure authorized signature, constituting date of Acceptance.

Part 4 – TESTING

4.01 TESTING & INSPECTION

- A. As required in Section 6.
- B. Contractor shall perform complete testing on system before inspection. Selected systems may be retested during inspection at discretion of Owner.
- C. Contractor shall ensure that outputs from the system are high-quality with no noticeable distortion or feedback during normal course of operation.
- D. Contractor shall ensure all inputs and outputs are correctly wired and labeled.
- E. Computer graphics shall be properly registered, with proper color alignment.
- F. Projectors shall be squarely mounted with display area properly filled based on the aspect ratio that is confirmed with Owner prior to mounting. No horizontal or vertical keystone shall be perceptible, and no digital keystone correction shall be used without prior approval of Owner.

SECTION 8 – AUDIO-VISUAL SYSTEM

PART 1 - GENERAL

1.01 REFERENCE

- A. The provisions of section 6, section 7, Construction Documents, drawing and appendices are included as a requirement of this section herein.

1.02 SCOPE

- A. Provide, install, configure, train, and service for audio-visual system.

1.03 SUBMITTALS

- A. As required by Sections 6 & 7.
- B. Block diagrams are intended to indicate general scope of design and system intent. Shop drawings shall be submitted by Contractor to document installation details.
- C. Shop drawing submittals shall include the following:
 - 1. Wiring diagrams showing cable and connector designations and interconnections.
 - 2. Rack elevations
 - 3. Custom connector panels and wall plate layout with engraving detail.
 - 4. Plan view of all structurally mounted and installed equipment.
 - 5. Mounting view of structural mounting techniques.
 - 6. Pin-by-pin termination detail for all multi-conductor connectors.
 - 7. Cable and Connector schedule
- D. Preconstruction Submittal review:
 - 1. Contractor shall meet with Owner to review drawings, with any hardcopy revisions sent to Owner following meeting for final review.
- E. As-built drawings shall be delivered in format acceptable to Owner and in 2 sets of hardcopies, showing the following:
 - 1. Entire set of as-built shop drawings, updated with any changes made during installation.
 - 2. Review set shall be submitted to Consultant prior to final hard-copy and electronic copy production.
 - 3. Upon approval of Review set, 3 sets shall be produced for submission to Owner.
- F. Contractor submitted User-Manuals shall include the following:
 - 1. Quick Reference Guide for system set-up and operation for each room.

2. User manuals from each piece of equipment, bound alphabetically in 3-ring binder.
3. Equipment remotes shall be delivered to Owner, along with included batteries, cable, duplicate manuals, and other parts included with the equipment. Contractor shall record date and signature of delivering said materials.
4. Serial Number listing when applicable for items.

1.01 CORRECTION PERIOD

- A. Products shall be covered by Contractor correction period as required in Section 6 and Section 7. Obligation for Correction Period shall not nullify manufacturer's warranty periods.

PART 2 – PRODUCTS

2.01 PRODUCT SPECIFICATIONS

- A. General Information as required by Sections 6 and 7.
 - B. Equipment schedule shall be provided as listed in Appendix A. Any substitutions require Owner approval.
 - C. Contractor shall be required to provide cover plates for wall and floor box openings for audiovisual system components.
 - D. Mounts shall be fabricated for loud speakers, projectors, monitors, and cameras as required, to optimal mounting configurations, with hardware detailed in shop drawing submittals.
 1. All hardware essential for secure equipment mounting shall be provided by the Contractor; including but not limited to: Unistrut, threaded pipe, column extensions, flanges, yokes, clamps, threaded rod, and aircraft cabling.
 2. All ceiling tile perforation shall be finished with a plate, grommet and/or escutcheon ring.
 - E. UTP cable shall be used as recommended by the manufacturer to optimally transmit bandwidth and signal timing. Cable type shall be detailed in submitted shop drawings.
-

F. The following custom items are noted in the equipment schedules:

1. CFP-01 shall consist of one single-gang, clear anodized aluminum custom facility panel with a single 3-pin XLR Male connector. Labeling shall be custom engraved with black lettering, per Owner.

2.02 ALTERNATE 1

A. Scott County is seeking an LED Alternate to the LCD television and LCD displays within this bid. Contractor is to provide a line-item LED alternate to the specified LCD television and Commercial LCD displays throughout this facility.

B. Display Requirements:

1. RS232 Control Port
2. HDMI input must accept PC resolutions.
3. HDCP is ideal, but not required.
4. Acceptable Manufacturer's are Sharp, Samsung, or approved equal.

2.03 MISC. PARTS & MATERIALS

A. As required by Sections 6 & 7.

B. Contractor shall provide all computer interconnection cables shown in project drawings, including breakout cables for laptops. These shall have integrated audio, where applicable, and shall be equal or greater in quality to the Extron 26-566 series cable. Any substitutions require prior approval by Owner; as is Digital cable selection (HDMI/DVI/Display Port).

C. HDCP Keys for like equipment shall be identical.

D. Contractor shall provide extension pipes (painted flat black) as required to avoid keystone without using digital keystone correction.

E. Contractor shall provide a grommet cover or blank wall plate in brushed stainless steel to cover all openings in boxes provided for AV system where equipment racks are fixed.

2.04 CABLE SLEEVING

- A. Shall consist of expandable black sleeving, with tie-wrapped, turned under, or heat-shrunked ends. Cables requiring sleeving include:
 - 1. Racks, carts, and credenza service loops.
 - 2. Exposed cabling outside of wire management in desks and furniture.
 - 3. Cable extensions connecting to wall, floor, or ceiling plates consisting of more than one wire.

- B. All CAT-6 patch cords and CATV patch cords shall be run inside AV sleeve at wall plate/panel or lectern/rack at connection.

PART THREE – EXECUTION

3.01 EQUIPMENT LOCATION

- A. Contractor shall coordinate with Owner for desired location of any devices not indicated on rack console elevations and project drawings.

- B. Wall-mounted monitor heights shall be verified by Contractor on preconstruction submittals.

- C. Final location of all loudspeakers shall be field-coordinated and verified with Owner.

3.02 EQUIPMENT CONFIGURATION

- A. Refer to Section 10 for ICS configuration.

- B. Contractor shall configure equipment for regular use and set all levels and presets accordingly. Small adhesive labels shall be affixed and delineate nominal settings.

- C. ICS controller shall be secured to relay rack assembly.

- D. Monitors in EOC and JIC shall be connected to CATV system and patch cable provided by AV Contractor, wall jack by others.

3.03 LABELING

- A. Typical labeling scheme as referenced as well as any floor box connections with conspicuous labels ensuring proper lectern connections.

3.04 TRAINING

- A. As required by Sections 6 & 7.
- B. Contractor shall provide three (3) training sessions:
 - 1. One session for Owner technology staff on overall system operations, operation of control racks, and conference room configurations.
 - 2. One session of training for Owner technology staff on Dispatch Center operations.
 - 3. One session of training on control system operation/management with project programmer present.
- C. Training shall be scheduled with Owner at least fifteen (15) business days in advance. Training shall include all manual switching necessary to operate Crestron system in the event of malfunction.
- D. Quick-Reference Guides shall be compiled for system operation and basic trouble-shooting. The guide shall be provided at the training session, and shall include stepping through guide with trainees.

PART FOUR - TESTING

3.01 SYSTEM TESTING

- A. All cables shall be properly labeled and secured by Contractor prior to substantial completion inspection.
- B. All work areas shall be clear of all debris, tools, extra parts, and waste by Contractor prior to substantial completion.
- C. Contractor shall ensure all equipment and systems are functional prior to inspection for substantial completion.
- D. Signal quality shall be verified from each input and output including floor box HDMI/VGA/audio input locations prior to substantial completion inspection.

SECTION 9 – INTERGRATED CONTROL SYSTEM

PART ONE – GENERAL

1.01 REFERENCE

- A. The conditions in Sections 6, 7 and 8, the complete proposal and requirements, drawing and appendices are included as a portion of this section as obligated herein.
- B. Programming systems are covered under The Copyright Act of 1976.

1.02 SCOPE SUMMARY

- A. Contractor shall provide, install, program and configure a full functional Integrated Control System (ICS).
- B. All software shall be of current versions as of substantial completion date.

1.03 VISUAL DISPLAY REQUIREMENTS

- A. Button labels shall be engraved.
- B. Graphic representations and icons shall be easily identifiable and icons used wherever possible.
- C. ICS screen shall consist of sans serif text of a clearly readable size. No unusual abbreviations shall be used on the screen.

1.04 INFORMATION TECHNOLOGY COORDINATION

- A. Contractor shall coordinate with Owner's IT department for IP/MAC addresses, firewall access, and other issues pertaining to successful integration for connection between components or control features tied into such.

- B. Contractor is responsible for obtaining required information and seeking permissions for implementing the system. Any delays in coordinating access to the LAN or Wan shall be made evident to the Owner for resolve.

1.05 OWNERSHIP RIGHTS

- A. Upon project completion all programming and configuration of control system hardware and other devices shall be property of the Owner.
- B. Contractor shall not set passwords restricting Owner access to code files except as specified herein.
- C. Owner retains rights to the editable source code, and is to be provided by Contractor.

1.06 DELIVERABLES

- A. Pre-Installation Submittals:
 - 1. Button layouts and description for each ICS/ICT/ICB device.
 - 2. Button label details.
 - 3. Changes requested in pre-installation ICS review by Owner and/or Consultant shall be made by Contractor.
- B. Close-out submittals: 2 copies of ICS programming CD containing files listed below.
 - 1. Crestron
 - a. Control Processor and all custom modules and editable source code.
 - b. Touch Panel Files including Icons, Custom Graphics and Fonts.
 - 2. Clear One
 - a. Converge Site File

1.07 FIRMWARE

- A. Upgrades shall be current with the date of Acceptance, with Contractor upgrading firmware and software throughout project course so as to provide most current version upon final completion.

PART TWO – PRODUCTS

2.01 PRODUCT SPECIFICATIONS

- A. As identified in Appendix C.
- B. Equipment necessary to operate stated functional requirements shall be supplied by Contractor, whether or not all said items are listed in Appendix A. Any major changes requiring special consideration shall be listed in Proposal Exceptions.
- C. IRP devices shall have heavy-duty IR emitter boots as provided by the Contractor.

PART THREE – EXECUTION

3.01 EQUIPMENT LOCATION

- A. ICS items shall be situated with equipment as outlined in Section 7.

3.02 CONFIGURATION

- A. Software shall be configured by Contractor to meet all functionality requirements.
- B. Programming adjustments shall be made as requested by Owner, up to issuance of Substantial Completion at no charge, as long as said changes relate to bid package.

3.03 TOUCH PANEL/BUTTON PANEL LAYOUT

- A. START-UP: Upon starting, page shall appear stating “System is warming up. Please wait.”
- B. SHUTDOWN: Page shall appear asking, “Does User wish to shut-down?” when OFF button is pressed.
- C. Automatic Shutdown: System shall shut-down projector automatically at a time specified by Owner (or set time of day) after three hours of touch panel inactivity. Warning age notice shall appear five (5) minutes before shut-down stating “System will turn off in 5 minutes.” When applicable, audible warning tone shall sound through touch panels.

D. **JIC**

- 1. LCD Televisions on/off (Individual Display power control as per required by owner)
- 2. Select Sources for each LCD Television
 - a. **Cable TV**
 - i. Channel Up/Down & number pad for channel selection
 - b. **DigitalMedia System** – source selection & destination (Selectable by display)
 - i. Two (2) Presentation laptop inputs in room
 - ii. Training Stations 1 through 4
 - a) Inter System control is required between the CP2E in the Server Room and each MPC in the Training Room for source selection from the EOC and JIC
 - iii. WEB EOC Computer (if available)
 - iv. GIS Computer (if available)
 - v. Blu-Ray Player
 - vi. Video Conference Far End
- 3. Blu-Ray Player Transport Controls (as required by owner)

4. Audio Volume Up/Down

- a. Microphone Volume Up/Down
- b. Program Volume Up/Down
 - i. Program Audio Source must be Selectable
- c. Monitor Volume Up/Down (as required by Owner)

5. Microphone Selection

- a. User may choose Lavalier 1 or 2, Handheld or any combination as needed.
- b. Unless microphone(s) are being used in the EOCC

6. Video Conference Controls

- a. Camera Presets 1,2 or 3
- b. Dialing Pad
- c. Basic Function Control (as required by Owner)

7. Audio Conference Controls

- a. Dialing Pad
- b. Connect/Disconnect
- c. Privacy
- d. Hook Flash

E. **EOC**

1. Touch Panel Controls

- a. Projector On/Off
- b. LCD Television On/Off
 - i. Individual Display power selection required
- c. Digital Media System – source selection & designation (Selectable by display)

- i. Two Presentation Laptop inputs in room
- ii. Training Stations 1 through 4
 - a) Inter System control is required between the CP2E in the Server room and each MPC in the Training Room for source selection in the EOC and JIC
 - iii. WEB EOC Computer (if available)
 - iv. GIS Computer (if available)
 - v. Blu-Ray Player
 - vi. Video Conference Far End
 - vii. Live Camera feed from JIC
 - viii. Cable TV tuner in Server Room
- d. Blu-Ray Player Transport Controls (as required by Owner)
- e. Audio Volume Up/Down
 - i. Microphone Volume Up/Down
 - ii. Program Volume Up/Down
 - a) Program Audio Source must be Selectable
 - iii. Monitor Volume Up/Down (as required by Owner)
- f. Microphone Selection
 - i. User may choose Lavalier 1 or 2, Handheld or any combination as needed
- g. Audio Conference Controls
 - i. Dialing Pad
 - ii. Connect/Disconnect
 - iii. Privacy
 - iv. Hook Flash

2. Keypad

- a. Presentation On/Off
- b. Microphone Volume Up/Down
- c. Program Volume Up/Down

F. **TRAINING ROOM**

1. Display On/Off
2. Cable TV
3. Channel Up/Down
4. CAD 1
5. CAD 2
6. House PC 1
7. House PC 2
8. PIP (Picture In Picture)

G. **DISPATCH**

1. Display On/Off
2. Cable TV
3. Channel Up/Down
4. CAD 1
5. CAD 2
6. House PC 1
7. House PC 2
8. PIP (Picture in Picture)

3.04 TRAINING

- A. As described in sections 7 and 8.

PART FOUR – TESTING

4.01 TESTING

- A. Contractor shall ensure system program functionality and complete debugging prior to substantial completion inspection.
- B. All system control functions shall be demonstrated to Owner representative at time of substantial completion.

###

Appendix A – List of Drawings

AV 1.01 – Dispatch and Training

AV 1.02 – AV System

AV 1.03 – Equipment Locations

Appendix B – Price Summary

Description	Unit Price	TOTAL Price
Server Room A130		
EOC A109		
JIC A113		
Dispatch A136		
Training A114		
Offices		

Appendix C – Equipment Schedule

Room Server - A130						
Drawing Designation	Description	Manufacturer	Model	Qty	Unit Price	Ext. Price
MTX	DigitalMedia 16x16 Matrix Switcher Chassis	Crestron	DM-MD16x16	1		
CRD	DigitalMedia 8G STP input Card	Crestron	DMC-C	9		
CRD	DigitalMedia DVI/RGB input Card	Crestron	DMC-DVI	2		
CRD	DigitalMedia SDI Video input Card	Crestron	DMC-SDI	1		
CRD	DigitalMedia HDMI input Card with Down Mix	Crestron	DMC-HD	1		
CRD	DigitalMedia 4 DM 8G STP & 4 HDMI with Stereo Audio Output Cards	Crestron	DMCO-5533	1		
CRD	DigitalMedia 6 DM 8G STP Output Cards	Crestron	DMCO-5550	1		
CP	Compact Control System with Ethernet	Crestron	CP2E	1		
NET	24Port Managed PoE Switch	Crestron	CEN-SWPOE-24	1		
CON	Converge Pro 880TA 8 Channel AEC Microphone Mixer/Amplifier/Hybrid	ClearOne	910-151-881	1		
HYB	Converge Pro VH20 VoIP Interface	ClearOne	910-151-825	2		
WLM	300 Series Evolution Wireless Lavalieri Microphone Systems	Sennheiser	ew322G3	2		
WLM	300 Series Evolution Wireless Hand-held Microphone Systems	Sennheiser	ew335G3	1		
ATS	Remote Antenna Kit for Four Wireless receivers	Sennheiser	G3OMNIKIT4	1		
ATC	Active Antenna Combiner	Audio-Technica	ATW-49CB	1		
COD	HDX 8000-720 codec ONLY, NA&EUR pwr, DVI+2xRCA to 3xRCA component+2xRCA, 12' LAN. (Maintenance Contract Required)	Polycom	2200-29045-001	1		
	Total Coverage Premier, One Year, HDX 8000 Series, includes next day parts, 24x7 test sites, software upgrades and updates, unlimited training.	Scan Source	4870-00380-156	1		
	Miscellaneous Install Materials					
	Miscellaneous Cables and Connectors					
	Labor-Installation					

	Labor-Programming					
--	-------------------	--	--	--	--	--

Appendix C – Equipment Schedule (Continued)

Room EOC - A109						
Drawing Designation	Description	Manufacturer	Model	Qty	Unit Price	Ext. Price
LCT	60" AQUOS LCD Television	Sharp	LC60E88UN	4		
	Fusion Universal Flat Panel Tilt Wall Mount	Chief	LTAU	4		
TPR	DigitalMedia 8G STP Receiver and Room Controller	Crestron	DM-RMC-100-C	4		
PRJ	4000 Lumen DLP 1080p Projector	Mitsubishi	FD630U	1		
	Universal Ceiling Mount for Data Projector	Chief	RPAU	1		
TPR	DigitalMedia 8G STP Receiver and Room Controller	Crestron	DM-RMC-100-C	1		
GUI	10.4" Wall Mount Touchpanel	Crestron	TPS-4000L	1		
FP	Decorator 6 Button Keypad	Crestron	C2N-DB6B	1		
TPT	Crestron DigitalMedia 8G STP Transmitter 201	Crestron	DM-TX-201C	3		
ANT	Omni-Directional Antennas (2 Antennna)	Sennheiser	A1031-U	1		
SPK	CVS4 4" Ceiling Speakers	Tannoy	8001 4230	15		
	Miscellaneous Install Materials					
	Miscellaneous Cables and Connectors					
	Labor-Installation					
	Labor-Programming					

Room JIC - A113						
Drawing Designation	Description	Manufacturer	Model	Qty	Unit Price	Ext. Price
LCT	52" AQUOS LCD Television	Sharp	LC52LE700UN	3		
	Fusion Universal Flat Panel Tilt Wall Mount	Chief	LTAU	3		
TPR	DigitalMedia 8G STP Receiver and Room Controller	Crestron	DM-RMC-100-C	3		
PTZ	WallVIEW CCU HD-18 SDI High Definition PTZ Camera System	Vaddio	999-6908-000	1		
DA	MDA 4V SDI 1:4 SDI Video DA	Extron	60-448-01	1		
TPT	DigitalMedia 8G STP Transmitter 201	Crestron	DM-TX-201C	2		
FP	Media Presentation Wall Plate DigitalMedia	Crestron	MP-WP185	2		

CFP	Custom Double Gang Facility Panel for Media (Single XLRM & 4 BNC's)	Liberty	WQ207984	1		
GUI	10.4" Wall Mount Touchpanel	Crestron	TPS-4000L	1		
ANT	Omni-Directional Antennas (2 Antennas)	Sennheiser	A1031-U	1		
SPK	CVS4 4" Ceiling Speakers	Tannoy	8001 4230	6		
	Active Press Box	Whirlwind	PRESSMITE	1		
	Miscellaneous Install Materials					
	Miscellaneous Cables and Connectors					
	Labor-Installation					
	Labor-Programming					

Appendix C – Equipment Schedule (Continued)

Room						
Dispatch - A136						
Drawing Designation	Description	Manufacturer	Model	Qty	Unit Price	Ext. Price
LCD	32" Commercial LCD Display	Samsung	320MP-2	19		
TUN	Commercial TV Tuner	Samsung	SBB-DT	19		
DA	DVI DA2 DVI Distribution Amplifier 1:2	Extron	60-886-02	57		
	MBU 125 Under Desk Mount Kit	Extron	70-077-01	57		
SW	SW4 DVI Plus 4:1 DVI Switcher	Extron	60-965-01	19		
	129 Universal Rack Shelf for Switcher	Extron	60-190-01	19		
MLC	Media Presentation Controllers 10 Button with Volume	Crestron	MPC-M10-B-T	19		
	Miscellaneous Install Materials					
	Miscellaneous Cables and Connectors					
	Labor-Installation					

Room						
Training - A114						
Drawing Designation	Description	Manufacturer	Model	Qty	Unit Price	Ext. Price
LCD	32" Commercial LCD Display	Samsung	320MP-2	4		
TUN	Commercial TV Tuner	Samsung	SBB-DT	4		
DA	DVI DA2 DVI Distribution Amplifier 1:2	Extron	60-886-01	13		
	MBU 125 Under Desk Mount Kit	Extron	70-077-01	13		
SW	SW4 DVI Plus 4:1 DVI Switcher	Extron	60-965-01	4		
	RSU 129 Universal Rack Shelf for Switcher	Extron	60-190-01	4		
MLC	Media Presentation Controllers 10 Button with Volume	Crestron	MPC-M10-B-T	4		
TPT	DigitalMedia 8G STP Transmitter 201	Crestron	DM-TX-201C	4		
	Miscellaneous Install Materials					
	Miscellaneous Cables and Connectors					
	Labor-Installation					
	Labor-Programming					

Room Offices - TBD						
Drawing Designation	Description	Manufacturer	Model	Qty	Unit Price	Ext. Price
	32" AQUOS LCD Television	Sharp	LC32SB28UT	3		
	Fusion Universal Flat Panel Tilt Wall Mount	Chief	LTAU	3		
	Miscellaneous Install Materials					
	Miscellaneous Cables and Connectors					
	Labor-Installation					

Appendix C – Equipment Schedule (Continued)

Alternate 1						
Drawing Designation	Description	Manufacturer	Model	Qty	Unit Price	Ext. Price
	32" LED Television (Specs must be equal or better than planned LCD televisions)	Sharp or Equal				
	52" LED Television (Specs must be equal or better planned LCD Televisions)	Sharp or Equal				
	60" LED Television (Specs must be equal or better than planned LCD Television)	Sharp or Equal				
	32" Commercial LCD Display (Specs must be equal or better than planned LCD Display)	Samsung or Equal				

End of List

Appendix D – BID FORM

Emergency Management Agency
SCOTT COUNTY IOWA

Scott Emergency Communications Center
Davenport, IA

BID TO:

Scott County FSS
600 West 4th St.
Davenport, IA 52801
563-326-8793

BID FROM:

<Name of Bidder>
<Address>
<City> <State> <Zip Code>
<Telephone Number>
<Date Bid Submitted>

Note: All portions of this Bid Form must be completed and the Bid Form must be signed before the Bid is submitted. Failure to do so will result in the Bid being rejected as non-responsive.

Project Name: { } Project No.: { } December 15th, 2010

1.0 BIDDER'S REPRESENTATIONS

Bidder, represents that a) Bidder and all Subcontractors, regardless of tier, has the appropriate current and active Contractor's licenses required by the State of Iowa and the Bidding Documents; b) it has carefully read and examined the Bidding Documents for the proposed Work on this Project; c) it has examined the site of the proposed Work and all Information Available to Bidders; d) it has become

familiar with all the conditions related to the proposed Work, including the availability of labor, materials, and equipment. Bidder hereby offers to furnish all labor, materials, equipment, tools, transportation, and services necessary to complete the proposed Work on this Project in accordance with the Contract Documents for the sums quoted. Bidder further agrees that it will not withdraw its Bid within {60} days after the Bid Deadline, and that, if it is selected as the apparent lowest responsive and responsible Bidder, that it will, within 10 days after receipt of notice of selection, sign and deliver to Scott County the Agreement in triplicate and furnish to Scott County all items required by the Bidding Documents. If awarded the Contract, Bidder agrees to complete the proposed Work within {NUMBER} days after the date of commencement specified in the Notice to Proceed.

2.0 ADDENDA

Bidder acknowledges that it is Bidder's responsibility to ascertain whether any Addenda have been issued and if so, to obtain copies of such Addenda from the Scott County Facility Support Services at the appropriate address stated on Page 1 of this Bid Form. Bidder therefore agrees to be bound by all Addenda that have been issued for this Bid.

3.0 UNIT PRICES

The quantities set forth in the Unit Prices are estimates. Scott County does not represent that the actual quantity of any Unit Price item will equal the Estimated Quantity stated below. Scott County will perform the extension of the Unit Price times the respective Estimated Quantity.

In order for a Bid to be responsive, Bidder must submit an additive bid, a deductive bid, or a "no change" bid, for each Alternate listed below. The failure to do so shall result in the Bid being rejected as non-responsive. The failure to quote an amount, unless the bidder marks the "no change" box, will result in the bid being rejected as non-responsive.

Alternate No. 1

Description: {INSERT DESCRIPTION} _____

Bid for Alternate No. 1

If "Add" or "Deduct" is intended, indicate by placing figures

4.0 LIST OF SUBCONTRACTORS

Bidder will use Subcontractors for the Work: **Yes** or **No**

If "yes", provide in the spaces below (a) the name and the location of the place of business of each subcontractor who will perform work or labor or render service to the prime contractor in or about the construction of the work or improvement, or a subcontractor licensed by the state of Iowa who, under subcontract to the prime contractor, specifically fabricates and installs a portion of the work or improvement according to detailed drawings contained in the plans and specifications, in an amount in excess of 1/2 of 1 percent of the prime contractor's total bid, (b) the portion of the work which will be

done by each subcontractor. The prime contractor shall list only one subcontractor for each such portion as is defined by the prime contractor in its bid.

a) _____

b) _____

5.0 BIDDER INFORMATION

TYPE OF ORGANIZATION: <Corporation, Partnership, Individual, Joint Venture, etc.>

IF A CORPORATION, THE CORPORATION IS ORGANIZED UNDER THE LAWS OF:
THE STATE OF <State>.

NAME OF PRESIDENT OF THE CORPORATION:
<Insert Name>

NAME OF SECRETARY OF THE CORPORATION:
<Insert Name>

IF A PARTNERSHIP, NAMES OF ALL GENERAL PARTNERS:
<Insert Names>

IOWA CONTRACTORS LICENSE(S):

<Classification> <License Number> <Expiration Date>

(For Joint Venture, list Joint Venture's license and licenses for all Joint Venture partners.)

6.0 REQUIRED COMPLETED ATTACHMENTS

The following documents are submitted with and made a condition of this Bid:

1. Bid Security in the form of a Bid Bond
2. Performance Bond
3. Certificate(s) of Insurance

7.0 DECLARATION

I, _____ hereby declare that I am the _____ of
(Printed Name) (Title)
_____ submitting this Bid Form; that I am duly authorized to
(Name of Bidder)

execute this Bid Form on behalf of Bidder; and that all information set forth in this Bid Form and all attachments hereto is, to the best of my knowledge, true, accurate, and complete as of its submission date.

I declare, under penalty of perjury, that the foregoing is true and correct and that this declaration was executed at: <Name of City if within a City, otherwise Name of County>, in the State of <State>, on <date>.

(Signature)

Appendix E – Signature Form

BID/PROPOSAL SIGNATURE PAGE

The below signed hereby agrees to furnish software and/or services at the price(s) and terms subject to all instructions, conditions, specifications addenda, and conditions contained in this RFP.

I have read the entire RFP and all attachments including the specifications and fully understand what is required to submit a bid for this proposal. By submitting this signed proposal I declare that I am a duly authorized representative to enter into a binding agreement with Scott Emergency Communication Center, and will accept a contract if approved by Scott Emergency Communication Center and Scott County and such acceptance covers all terms, conditions, and specifications of this bid/proposal.

Submitted by (print name): _____

Signed: _____ Date: _____

Company: _____

Title: _____

Appendix F – Vendor Exceptions to the RFP

Scott County RFP for SECC Audio-Visual Media System

It is the intent of SECC to contract with a private Vendor. All Vendor representations, whether verbal or written, will be relied on by SECC and the Scott County offices of the Register of Deed's, the County Clerk/Comptroller, the County Assessor, and County Treasurer in its evaluation of the responses to this Request for Proposal. SECC's reliance on the Vendor's represented expertise is to be considered as incorporated into any, and all, formal Agreements between the parties.

**PRINT THE WORDS "NO EXCEPTIONS" HERE _____
IF THERE ARE NO EXCEPTIONS TAKEN TO ANY OF THE TERMS, CONDITIONS,
OR SPECIFICATIONS OF THESE REQUEST FOR PROPOSAL DOCUMENTS.
IF THERE ARE EXCEPTIONS TAKEN TO ANY OF THESE TERMS, CONDITIONS,
OR SPECIFICATIONS OF THESE REQUEST FOR PROPOSAL DOCUMENTS, THEY
MUST BE CLEARLY STATED ON THE "EXCEPTIONS TO SECC'S RFP FOR
SCOTT COUNTY AUDIO-VISUAL MEDIA SYSTEM RFP" TABLE BELOW AND RETURNED
WITH YOUR PROPOSAL.**

**IF YOU PROVIDED A SAMPLE COPY OF YOUR CONTRACT YOU STILL NEED TO
IDENTIFY IN THIS DOCUMENT ("VENDOR EXCEPTIONS TO THE RFP") ANY AND
ALL EXCEPTIONS YOU HAVE TO THE TERMS AND CONDITIONS.**

Appendix F – Vendor Exceptions to the RFP

Scott County RFP for SECC Audio-Visual Media System

Add any additional line items for exceptions as necessary and reference any explanatory attachments within the line item to which it refers.

RFP Section #:

Page #:

Exception:

Describe the nature of the Exception:

Explanation of why exception is taken:

Proposed Alternative to Meet SECC's Needs:

Appendix G – Addendum Receipt

Addendum # _____

Scott County Emergency Management Agency
Audio-Visual System

**ADDENDUM RECEIPT FORM
for**

SCOTT EMERGENCY COMMUNUCATION CENTER

CONTRACTOR'S NAME: _____

ADDRESS: _____

PHONE NUMBER: _____

FAX NUMBER: _____

CONTACT NAME: _____

SIGNATURE: _____

BID NUMBER: _____

BID NAME: _____

THE BIDDER ACKNOWLEDGES RECEIPT OF THE FOLLOWING ADDENDUM BY SIGNING AND DATING BELOW: (COPY OF THIS FORM MUST BE COMPLETED AND SUBMITTED TO SCOTT COUNTY FACILITY AND SUPPORT SERVICES BY FAX @ 563-328-3245, OR BY EMAILING TO FSS@SCOTTCOUNTYIOWA.COM)

ADDENDUM

SIGNATURE

DATE

This addendum receipt record must also be included with the bid submission.