CONTRACT COVERSHEET

Res 311 Significant

NOTE: Shaded areas are for County Executive review.

DEPARTMENT	GONTRACT/ADDENDUM#
Dane County Clerk of Courts	Contract Addendum
1. This contract, grant or addendum: AWARDS ACCEPTS ACCEPTS	If Addendum, please include original contract number
2. This contract is discretionary YES NO	Pos 🗖
3. Term of Contract or Addendum: From: 11/1/14 To: 10/31/15	Co Lesse
4. Amount of Contract or Addendum \$1,166,880.60	intergovernmental
5. Purpose:	Purchase of Property
This contract is to upgrade the audio/visual equipment in the Dane County Courthouse.	Property Sale Other:
8. Vendor or Funding Source: Fearing's Audio-Video-Secur	ity
7. MUNIS Vendor Code: 13677	
'8. Bid/REP Number: 114081	And the second s
9. If grant: Funds Positions?	gor matching funds?
10. Are funds included in the budget?	
11. Account No. & Amount, Org. & Obj. COCCAP 57238	Amount \$ 1,166,880.60
Account No. & Amount, Org. & Obj	Amount 5
is a recognist of the seal of the contract of the seal	
12 is a resolution needed: ☐ YES ☐ NO If "YES," please attach a If Resolution has already been approved by the County Board, Resolution	copy of the Resolution. No. & date of adoption RES-311.
	⊒ NO
14. Director's Approval	
CONTRACT REVIEW/APPROVALS	VENDOR
Initials Fint Date In Date Out	Vendor Name & Address Fearing's Audio-Video-Security
M Received	· · · · · · · · · · · · ·
Corporation Counsel 1019/14 1019/14	Madison WI 53714
Risk Management 10/6/14	Contact Person Jeff Corcoran
ADA Coordinator	Phone No.
Purchasing Agent 10/8/19	
County Executive	E-mail Address corky@fearings.com
Footnotes:	
1	
2	
	ept.: Clerk of Courts
Phone: 266-4288 Mail Addre	ess: 215 S. Hamilton Street, Room 1000
E-mail: kerry.widish@wicourts.gov	Madison WI 53703

	RTIFICATION e attached contract: (Check as many as apply)
Ø	conforms to Dane County's standard Purchase of Services Agreement form in all respects
	conforms to Dane County's standard Purchase of Services Agreement form with modifications and is accompanied by a revision copy¹
	is a non-standard contract which has been reviewed or developed by corporation counsel which has not been changed since that review/development
	is a non-standard contract previously reviewed or developed by corporation counsel which has been changed since that review/development; it is accompanied by a revision copy¹
	is a non-standard contract not previously reviewed by corporation counsel; it is accompanied by a revision copy
	contains non-standard/indemnification language which has been reviewed or developed by risk management and which has not been changed since that review/development
	contains non-standard insurance/indemnification language which has been changed since review/development or which has not been previously seen by risk management; it is accompanied by a revision copy
	contains non-standard affirmative action/equal opportunity language which has been reviewed or developed by contract compliance and which has not been changed since that review/development
	contains non-standard affirmative action/equal opportunity language which has been changed since the earlier review/development by contract compliance or which has not been-previously seen by contract compliance; it is accompanied by a revision copy¹
Dat	e: 10-7-2014 Signed: (All Egrel
Tele	e: 10-7-2014 Signed: (July Cyprimal Print Name: Carlo Esqueda Print Name: Carlo Esqueda
M #	JOR CONTRACTS REVIEW (DCO Sect. 25.20) This review applies only to contracts which both exceed 10,000 in disbursements or receipts and which require county board review and approval.
MA \$10	JOR CONTRACTS REVIEW (DCO Sect. 25.20) This review applies only to contracts which both exceed 10,000 in disbursements or receipts and which require county board review and approval. ECUTIVE SUMMARY (Attach additional pages, if needed).
MA \$10	JOR CONTRACTS REVIEW (DCO Sect. 25.20) This review applies only to contracts which both exceed 10,000 in disbursements or receipts and which require county board review and approval.
MA \$10	AJOR CONTRACTS REVIEW (DCO Sect. 25.20) This review applies only to contracts which both exceed 10,000 in disbursements or receipts and which require county board review and approval. ECUTIVE SUMMARY (Attach additional pages, if needed). Department Head Contract is in the best interest of the County. Describe any deviations from the standard contracting process and any changes to the standard Purchase of Services Form Agreement.
MA \$10 EX	AJOR CONTRACTS REVIEW (DCO Sect. 25.20) This review applies only to contracts which both exceed 10,000 in disbursements or receipts and which require county board review and approval. ECUTIVE SUMMARY (Attach additional pages, if needed). Department Head Contract is in the best interest of the County. Describe any deviations from the standard contracting process and any changes to the standard Purchase of
MA \$10 EX	JOR CONTRACTS REVIEW (DCO Sect. 25.20) This review applies only to contracts which both exceed 0,000 in disbursements or receipts and which require county board review and approval. ECUTIVE SUMMARY (Attach additional pages, if needed). Department Head
MA \$10 EX	JOR CONTRACTS REVIEW (DCO Sect. 25.20) This review applies only to contracts which both exceed 0,000 in disbursements or receipts and which require county board review and approval. ECUTIVE SUMMARY (Attach additional pages, if needed). Department Head
MA \$10 EXI 1.	JOR CONTRACTS REVIEW (DCO Sect. 25.20) This review applies only to contracts which both exceed 0,000 in disbursements or receipts and which require county board review and approval. ECUTIVE SUMMARY (Attach additional pages, if needed). Department Head

¹A revision copy is a copy of the contract which shows the changes from the standard contract or previously revised/developed contract my means of overstrikes (indicating deletions from the standard language) and underlining (showing additions to the standard language).

COUNTY OF DANE

Purchase of Services Agreement

Number of Pages, including schedules:
Agreement No. 207
Expiration Date: October 31, 2015
Authority: 2014 RES-311
Department: Dane County Clerk of Court
Maximum Cost: \$1,166,880.60
Registered Agent: Lois Fearing, CFO
722 Walsh Road, Madison WI 53714

THIS AGREEMENT, made and entered into, by and between the County of Dane (hereafter referred to as "COUNTY") and Fearing's Audio-Video-Security (hereafter, "PROVIDER"),

WITNESSETH:

WHEREAS COUNTY, whose address is 215 S. Hamilton Street, Madison WI 53703, desires to purchase services from PROVIDER for the purpose of Audio Visual Equipment Upgrade in the Dane County Courthouse; and

WHEREAS PROVIDER, whose address is 722 Walsh Road, Madison WI 53714 is able and willing to provide such services;

NOW, THEREFORE, in consideration of the above premises and the mutual covenants of the parties hereinafter set forth, the receipt and sufficiency of which is acknowledged by each party for itself, COUNTY and PROVIDER do agree as follows:

I. <u>TERM</u>. The term of this Agreement shall commence as of the date by which all parties have executed this Agreement and shall end as of the EXPIRATION DATE set forth on page 1 hereof, unless sooner agreed to in writing by the parties. PROVIDER shall complete its obligations under this Agreement not later than the EXPIRATION DATE. Upon failure of PROVIDER to complete its obligation set forth herein by the EXPIRATION DATE, COUNTY may invoke the penalties, if any, set forth in this document and its attachments.

II. SERVICES.

- A. PROVIDER agrees to provide the services detailed in the bid specifications, if any; the request for proposals (RFP) and PROVIDER's response thereto, if any; and on the attached Schedule A, which is fully incorporated herein by reference. In the event of a conflict between or among the bid specifications, the RFP or responses thereto, or the terms of Schedule A or any of them, it is agreed that the terms of Schedule A, to the extent of any conflict, are controlling.
- B. PROVIDER shall commence, carry on and complete its obligations under this Agreement with all deliberate speed and in a sound, economical and efficient manner, in accordance with this Agreement and all applicable laws. In providing services under this Agreement, PROVIDER agrees to cooperate with the various departments, agencies, employees and officers of COUNTY.

- C. PROVIDER agrees to secure at PROVIDER's own expense all personnel necessary to carry out PROVIDER's obligations under this Agreement. Such personnel shall not be deemed to be employees of COUNTY nor shall they or any of them have or be deemed to have any direct contractual relationship with COUNTY.
- ASSIGNMENT/TRANSFER: PROVIDER shall neither assign nor transfer any interest or obligation in this Agreement, without the prior written consent of COUNTY unless otherwise provided herein, provided that claims for money due or to become due PROVIDER from COUNTY under this Agreement may be assigned to a bank, trust company or other financial institution without such approval if and only if the instrument of assignment contains a provision substantially to the effect that it is agreed that the right of the assignee in and to any moneys due or to become due to PROVIDER shall be subject to prior claims of all persons, firms and corporations for services rendered or materials supplied for the performance of the work called for in this Agreement. PROVIDER shall promptly provide notice of any such assignment or transfer to COUNTY.

IV. <u>TERMINATION</u>.

- A. Failure of PROVIDER to fulfill any of its obligations under this Agreement in a timely manner, or violation by PROVIDER of any of the covenants or stipulations of this Agreement, shall constitute grounds for COUNTY to terminate this Agreement by giving a thirty (30) day written notice to PROVIDER.
- B. The following shall constitute grounds for immediate termination:
 - 1. violation by PROVIDER of any State, Federal or local law, or failure by PROVIDER to comply with any applicable States and Federal service standards, as expressed by applicable statutes, rules and regulations.
 - failure by PROVIDER to carry applicable licenses or certifications as required by law.
 - 3. failure of PROVIDER to comply with reporting requirements contained herein.
 - 4. inability of PROVIDER to perform the work provided for herein.
- C. Failure of the Dane County Board of Supervisors or the State or Federal Governments to appropriate sufficient funds to carry out COUNTY's obligations hereunder, shall result in automatic termination of this Agreement as of the date funds are no longer available, without notice.
- D. In the event COUNTY terminates this Agreement as provided herein, all finished and unfinished documents, services, papers, data, products, and the like prepared, produced or made by PROVIDER under this Agreement shall at the option of COUNTY become the property of COUNTY, and PROVIDER shall be entitled to receive just and equitable compensation, subject to any penalty, for any satisfactory work completed on such documents, services, papers, data, products or the like. Notwithstanding the above, PROVIDER shall not be relieved of liability to COUNTY for damages sustained by COUNTY by virtue of any breach of this Agreement by PROVIDER, and COUNTY may withhold any payments to PROVIDER for the purpose of offset.
- V. <u>PAYMENT</u>. COUNTY agrees to make such payments for services rendered under this Agreement as and in the manner specified herein and in the attached Schedule B, which is fully incorporated herein by reference. Notwithstanding any language to the contrary in this Agreement or its attachments, COUNTY shall never be required to pay more than the sum set forth on page 1 of this Agreement under the heading MAXIMUM COST, for all services rendered by PROVIDER under this Agreement.

- VI. <u>REPORTS.</u> PROVIDER agrees to make such reports as are required in the attached Schedule C, which is fully incorporated herein by reference. With respect to such reports it is expressly understood that time is of the essence and that the failure of PROVIDER to comply with the time limits set forth in said Schedule C shall result in the penalties set forth herein.
- VII. <u>DELIVERY OF NOTICE</u>. Notices, bills, invoices and reports required by this Agreement shall be deemed delivered as of the date of postmark if deposited in a United States mailbox, first class postage attached, addressed to a party's address as set forth above. It shall be the duty of a party changing its address to notify the other party in writing within a reasonable time.

VIII. INSURANCE.

- A. PROVIDER shall indemnify, hold harmless and defend COUNTY, its boards, commissions, agencies, officers, employees and representatives against any and all liability, loss (including, but not limited to, property damage, bodily injury and loss of life), damages, costs or expenses which COUNTY, its officers, employees, agencies, boards, commissions and representatives may sustain, incur or be required to pay by reason of PROVIDER's furnishing the services or goods required to be provided under this Agreement, provided, however, that the provisions of this paragraph shall not apply to liabilities, losses, charges, costs, or expenses caused by or resulting from the acts or omissions of COUNTY, its agencies, boards, commissions, officers, employees or representatives. The obligations of PROVIDER under this paragraph shall survive the expiration or termination of this Agreement.
- B. In order to protect itself and COUNTY, its officers, boards, commissions, agencies, agents, volunteers, employees and representatives under the indemnity provisions of the subparagraph above, PROVIDER shall, at PROVIDER's own expense, obtain and at all times during the term of this Agreement keep in full force and effect the insurance coverages, limits, and endorsements listed below. When obtaining required insurance under this Agreement and otherwise, PROVIDER agrees to preserve COUNTY's subrogation rights in all such matters that may arise that are covered by PROVIDER's insurance. Neither these requirements nor the COUNTY's review or acceptance of PROVIDER's certificates of insurance is intended to limit or qualify the liabilities or obligations assumed by the PROVIDER under this Agreement. The County expressly reserves the right to require higher or lower insurance limits where County deems necessary.

Commercial General Liability.

PROVIDER agrees to maintain Commercial General Liability insurance at a limit of not less than \$1,000,000 per occurrence. Coverage shall include, but not be limited to, Bodily Injury and Property Damage to Third Parties, Contractual Liability, Personal Injury and Advertising Injury Liability, Premises-Operations, Independent PROVIDERs and Subcontractors, and Fire Legal Liability. The policy shall not exclude Explosion, Collapse, and Underground Property Damage Liability Coverage. The policy shall list DANE COUNTY as an Additional Insured.

Commercial/Business Automobile Liability.

PROVIDER agrees to maintain Commercial/Business Automobile Liability insurance at a limit of not less than \$1,000,000 Each Occurrence. PROVIDER further agrees coverage shall include liability for Owned, Non-Owned & Hired automobiles. In the event PROVIDER does not own automobiles, PROVIDER agrees to maintain coverage for Hired & Non-Owned Auto Liability, which may be satisfied by way of endorsement to the Commercial General Liability policy or separate Business Auto Liability policy.

Environmental-Impairment (Pollution) Liability

PROVIDER agrees to maintain Environmental Impairment (Pollution) Liability insurance at a limit of not less than \$1,000,000 per occurrence for bodily injury, property damage, and environmental cleanup costs caused by pollution conditions, both sudden and non-sudden. This requirement can be satisfied by either a separate environmental liability

policy or through a modification to the Commercial General Liability policy. Evidence of either must be provided.

Workers' Compensation.

PROVIDER agrees to maintain Workers Compensation insurance at Wisconsin statutory limits.

Umbrella or Excess Liability.

PROVIDER may satisfy the minimum liability limits required above for Commercial General Liability and Business Auto Liability under an Umbrella or Excess Liability policy. There is no minimum Per Occurrence limit of liability under the Umbrella or Excess Liability; however, the Annual Aggregate limit shall not be less than the highest "Each Occurrence" limit for the Commercial General Liability and Business Auto Liability. PROVIDER agrees to list DANE COUNTY as an "Additional Insured" on its Umbrella or Excess Liability policy.

- C. Upon execution of this Agreement, PROVIDER shall furnish COUNTY with a Certificate of Insurance listing COUNTY as an additional insured and, upon request, certified copies of the required insurance policies. If PROVIDER's insurance is underwritten on a Claims-Made basis, the Retroactive Date shall be prior to or coincide with the date of this Agreement, the Certificate of Insurance shall state that professional malpractice or errors and omissions coverage, if the services being provided are professional services coverage is Claims-Made and indicate the Retroactive Date, PROVIDER shall maintain coverage for the duration of this Agreement and for six (6) years following the completion of this Agreement. PROVIDER shall furnish COUNTY, annually on the policy renewal date, a Certificate of Insurance as evidence of coverage. It is further agreed that PROVIDER shall furnish the COUNTY with a 30-day notice of aggregate erosion, in advance of the Retroactive Date, cancellation, or renewal. It is also agreed that on Claims-Made policies, either PROVIDER or COUNTY may invoke the tail option on behalf of the other party and that the Extended Reporting Period premium shall be paid by PROVIDER. In the event any action, suit or other proceeding is brought against COUNTY upon any matter herein indemnified against, COUNTY shall give reasonable notice thereof to PROVIDER and shall cooperate with PROVIDER's attorneys in the defense of the action, suit or other proceeding. PROVIDER shall furnish evidence of adequate Worker's Compensation Insurance. In case of any sublet of work under this Agreement, PROVIDER shall furnish evidence that each and every subcontractor has in force and effect insurance policies providing coverage identical to that required of PROVIDER. In case of any sublet of work under this Agreement, PROVIDER shall furnish evidence that each and every subcontractor has in force and effect insurance policies providing coverage identical to that required of PROVIDER.
- D. The parties do hereby expressly agree that COUNTY, acting at its sole option and through its Risk Manager, may waive any and all requirements contained in this Agreement, such waiver to be in writing only. Such waiver may include or be limited to a reduction in the amount of coverage required above. The extent of waiver shall be determined solely by COUNTY's Risk Manager taking into account the nature of the work and other factors relevant to COUNTY's exposure, if any, under this Agreement.
- IX. NO WAIVER BY PAYMENT OR ACCEPTANCE. In no event shall the making of any payment or acceptance of any service or product required by this Agreement constitute or be construed as a waiver by COUNTY of any breach of the covenants of this Agreement or a waiver of any default of PROVIDER and the making of any such payment or acceptance of any such service or product by COUNTY while any such default or breach shall exist shall in no way impair or prejudice the right of COUNTY with respect to recovery of damages or other remedy as a result of such breach or default.
- X. <u>NON-DISCRIMINATION</u>. During the term of this Agreement, PROVIDER agrees not to discriminate on the basis of age, race, ethnicity, religion, color, gender, disability, marital status, sexual orientation, national origin, cultural differences, ancestry, physical appearance, arrest record or conviction record, military participation or membership in the national guard, state

defense force or any other reserve component of the military forces of the United States, or political beliefs against any person, whether a recipient of services (actual or potential) or an employee or applicant for employment. Such equal opportunity shall include but not be limited to the following: employment, upgrading, demotion, transfer, recruitment, advertising, layoff, termination, training, rates of pay, and any other form of compensation or level of service(s). PROVIDER agrees to post in conspicuous places, available to all employees, service recipients and applicants for employment and services, notices setting forth the provisions of this paragraph. The listing of prohibited bases for discrimination shall not be construed to amend in any fashion state or federal law setting forth additional bases, and exceptions shall be permitted only to the extent allowable in state or federal law.

XI. CIVIL RIGHTS COMPLIANCE.

- A. If PROVIDER has 20 or more employees and receives \$20,000 in annual contracts with COUNTY, the PROVIDER shall submit to COUNTY a current Civil Rights Compliance Plan (CRC) for Meeting Equal Opportunity Requirements under Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, Title VI and XVI of the Public Service Health Act, the Age Discrimination Act of 1975, the Omnibus Budget Reconciliation Act of 1981 and Americans with Disabilities Act (ADA) of 1990. PROVIDER shall also file an Affirmative Action (AA) Plan with COUNTY in accordance with the requirements of chapter 19 of the Dane County Code of Ordinances. PROVIDER shall submit a copy of its discrimination complaint form with its CRC/AA Plan. The CRC/AA Plan must be submitted prior to the effective date of this Agreement and failure to do so by said date shall constitute grounds for immediate termination of this Agreement by COUNTY. If an approved plan has been received during the previous CALENDAR year, a plan update is acceptable. The plan may cover a two-year period. Providers who have less than twenty employees, but who receive more than \$20,000 from the COUNTY in annual contracts, may be required to submit a CRC Action Plan to correct any problems discovered as the result of a complaint investigation or other Civil Rights Compliance monitoring efforts set forth herein below. If PROVIDER submits a CRC/AA Plan to a Department of Workforce Development Division or to a Department of Health and Family Services Division that covers the services purchased by COUNTY, a verification of acceptance by the State of PROVIDER's Plan is sufficient.
- B. PROVIDER agrees to comply with the COUNTY's civil rights compliance policies and procedures. PROVIDER agrees to comply with civil rights monitoring reviews performed by the COUNTY, including the examination of records and relevant files maintained by the PROVIDER. PROVIDER agrees to furnish all information and reports required by the COUNTY as they relate to affirmative action and non-discrimination. PROVIDER further agrees to cooperate with COUNTY in developing, implementing, and monitoring corrective action plans that result from any reviews.
- C. PROVIDER shall post the Equal Opportunity Policy, the name of PROVIDER's designated Equal Opportunity Coordinator and the discrimination complaint process in conspicuous places available to applicants and clients of services, applicants for employment and employees. The complaint process will be according to COUNTY's policies and procedures and made available in languages and formats understandable to applicants, clients and employees. PROVIDER shall supply to COUNTY's Contract Compliance Officer upon request a summary document of all client complaints related to perceived discrimination in service delivery. These documents shall include names of the involved persons, nature of the complaints, and a description of any attempts made to achieve complaint resolution.
- D. PROVIDER shall provide copies of all announcements of new employment opportunities to COUNTY's Contract Compliance Officer when such announcements are issued.
- E. If PROVIDER is a government entity having its own compliance plan, PROVIDER'S plan shall govern PROVIDER's activities.

XII. LIVING WAGE.

- A. PROVIDER agrees to pay all workers employed by PROVIDER in the performance of this Agreement, whether on a full-time or part-time basis, the prevailing living wage as defined in section 25.015(1)(f), Dane County Ordinances. PROVIDER agrees to make available for COUNTY inspection PROVIDER's payroll records relating to employees providing services on or under this Agreement or subcontract.
- B. If any payroll records of PROVIDER contain any false, misleading or fraudulent information, or if PROVIDER fails to comply with the provisions of section 25.015 of the Dane County Code of Ordinances, COUNTY may withhold payments on the Agreement, terminate, cancel or suspend the Agreement in whole or in part, or, after a due process hearing, deny PROVIDER the right to participate in bidding on future county contracts for a period of one year after the first violation is found and for a period of 3 years after a second violation is found.
- C. PROVIDER agrees to submit to COUNTY a certification as required in section 25.015(7) of the Dane County Code of Ordinances.
- D. PROVIDER agrees to display COUNTY's current living wage poster in a prominent place where it can be easily seen and read by persons employed by PROVIDER.
- E. PROVIDER shall ensure that any subcontractors comply with the provisions of this section.
- F. The following are exemptions from the requirements of this section:
 - 1. When the Maximum Cost of the Agreement is less than \$5,000;
 - 2. When the provider is a school district, a municipality, or other unit of government;
 - When the County is purchasing residential services at an established per bed rate;
 - 4. When employees are persons with disabilities working in employment programs and the provider holds a current sub-minimum wage certificate issued by the U.S. Department of Labor or where such a certificate could be issued but for the fact that the employer is paying a wage higher than the minimum wage;
 - When an individual receives compensation for providing services to a family member;
 - 6. When employees are student interns:
 - 7. When the provider meets any other criteria for exemption outlined in section 25.015(1)(d) of the Dane County Code of Ordinances; and
 - 8. Where the contract is funded or co-funded by a government agency requiring a different living wage, the higher wage requirement shall prevail.
- XIII. DOMESTIC PARTNER EQUAL BENEFITS. The PROVIDER agrees to provide the same economic benefits to all of its employees with domestic partners as it does to employees with spouses, or the cash equivalent if such a benefit cannot reasonably be provided. The PROVIDER agrees to make available for County inspection the PROVIDER's payroll records relating to employees providing services on or under this contract or subcontract. If any payroll records of a PROVIDER contain any false, misleading or fraudulent information, or if a PROVIDER fails to comply with the provisions of s. 25.016, D. C. Ords., the contract compliance officer may withhold payments on the contract; terminate, cancel or suspend the contract in whole or in part; or, after a due process hearing, deny the contractor the right to participate in bidding on future County contracts for a period of one year after the first violation is found and for a period of three years after a second or subsequent violation is found.

XIV. COMPLIANCE WITH FAIR LABOR STANDARDS.

- A. Reporting of Adverse Findings. During the term of this Agreement, PROVIDER shall report to the County Contract Compliance Officer, within ten (10) days, any allegations to, or findings by the National Labor Relations Board (NLRB) or Wisconsin Employment Relations commission (WERC) that PROVIDER has violated a statute or regulation regarding labor standards or relations. If an investigation by the Contract Compliance Officer results in a final determination that the matter adversely affects PROVIDER'S responsibilities under this Agreement, and which recommends termination, suspension or cancellation of this agreement, the County may take such action.
- B. <u>Appeal Process.</u> PROVIDER may appeal any adverse finding by the Contract Compliance Officer as set forth in sec. 25.015(11)(c) through (e).
- C. <u>Notice Requirement</u>. PROVIDER shall post the following statement in a prominent place visible to employees: "As a condition of receiving and maintaining a contract with Dane County, this employer shall comply with federal, state and all other applicable laws prohibiting retaliation for union organizing."

XV. MISCELLANEOUS.

- A. Registered Agent. PROVIDER warrants that it has complied with all necessary requirements to do business in the State of Wisconsin, that the persons executing this Agreement on its behalf are authorized to do so, and, if a corporation, that the name and address of PROVIDER's registered agent is as set forth opposite the heading REGISTERED AGENT on page 1 of this Agreement. PROVIDER shall notify COUNTY immediately, in writing, of any change in its registered agent, his or her address, and PROVIDER's legal status. For a partnership, the term 'registered agent' shall mean a general partner.
- B. <u>Controlling Law and Venue</u>. It is expressly understood and agreed to by the parties hereto that in the event of any disagreement or controversy between the parties, Wisconsin law shall be controlling. Venue for any legal proceedings shall be in the Dane County Circuit Court.
- C. <u>Limitation Of Agreement</u>. This Agreement is intended to be an agreement solely between the parties hereto and for their benefit only. No part of this Agreement shall be construed to add to, supplement, amend, abridge or repeal existing duties, rights, benefits or privileges of any third party or parties, including but not limited to employees of either of the parties.
- D. <u>Entire Agreement</u>. The entire agreement of the parties is contained herein and this Agreement supersedes any and all oral agreements and negotiations between the parties relating to the subject matter hereof. The parties expressly agree that this Agreement shall not be amended in any fashion except in writing, executed by both parties.
- E. <u>Counterparts</u>. The parties may evidence their agreement to the foregoing upon one or several counterparts of this instrument, which together shall constitute a single instrument.

IN WITNESS WHEREOF, COUNTY and PROVIDER, by their respective authorized agents, have caused this Agreement and its Schedules to be executed, effective as of the date by which all parties hereto have affixed their respective signatures, as indicated below.

	FOR PROVIDER:	
Date Signed:	LOIS FEARING, CFO	
Date Signed:		
	* * *	
	FOR COUNTY:	
Date Signed:	JOSEPH PARISI, County Executive	-
Date Signed:	SCOTT MCDONELL, County Clerk	-
ferint name and title, below signature lin	ne of any person signing this document]	
rev. 10/14		

SCHEDULE A

- I. The PROVIDER shall provide the following services:
 - a. Provide state-of-the-art digital AV systems for 17 courtrooms, 9 hearing rooms and one jury assembly room. The project will be performed in two phases, the first phase being completed no later than January 31, 2015 and the second phase commencing in 2015 and being completed no later than October 31, 2015.
 - b. Current operations using analog will need to continue uninterrupted during the AV system upgrade. PROVIDER will coordinate access to rooms with the Clerk of Courts. PROVIDER may need to alter work schedules on occasion, working after hours or partial days to accommodate the working courtrooms.
- II. In accomplishing the objectives of I. above, the PROVIDER is to adhere to the concepts and provisions of the itemized bill of materials and line drawing attached hereto and incorporated herein by reference.
- III. COUNTY personnel shall cooperate with the PROVIDER and its agents in the performance of the PROVIDER'S obligations hereunder.
- IV. Contractor will provide a completed copy of the checklist attached for each room upon completion of work in that room or with the final invoices. Final payment will be retained pending receipt of the checklists and acceptance of the installed equipment. COUNTY retains the right to determine final acceptance. Acceptance will not be unreasonably withheld.

SCHEDULE B

- I. PROVIDER shall bill monthly at the end of each month on the basis of work completed, not to exceed the following amounts for each phase:
 - a. For the completion of Schedule "A", Phase I, the sum of \$179,824.82.
 - b. For the completion of Schedule "A", Phase II, the sum of \$987,055.78.
 - c. PROVIDER may bill for \$60,000 for upfront costs for Phase I, upon receipt of the signed contract from COUNTY.
 - d. PROVIDER may bill for \$200,000 for upfront costs for Phase II, if approved by the Dane County Board, on February 1, 2015.
 - c. PROVIDER to submit a bill itemizing hours spent and equipment installed in performance of said duties, as well as percentage of work completed with each invoice.
- II. If PROVIDER is timely with respect to all its obligations under this AGREEMENT, the COUNTY shall make payments due within 30 days of the dates of completion of PROVIDER'S obligations or of billing, as appropriate. If PROVIDER fails to meet time limits, COUNTY'S payments will be delayed an additional 30 days.
- III. Phase two of this project is contingent upon approval of funding by the Dane County Board in the 2015 budget. If funding for phase two is not approved by the Dane County Board, then the phase two portion of this contract is cancelled.
- IV. In no event shall the PROVIDER be paid more than the sum of \$1,166,880.60 for its obligations under para. I above.

SCHEDULE C

- I. PROVIDER and COUNTY to hold weekly meetings at the beginning of each phase and bi-weekly meetings once schedules, access and installations are standardized for project updates and to ensure courtrooms are vacant as needed for receiving the upgrades.
- II. PROVIDER will conduct equipment tests upon installation prior to use by the courts and provide results to the COUNTY.
- III. PROVIDER'S employees will receive background screenings by the Dane County Sheriff's office prior to the commencement of the AV upgrade to be allowed in the secured areas of the courthouse. PROVIDER is to provide COUNTY with completed background check forms for each staff person to be assigned to the project no later than one week following the receipt of the signed contract. PROVIDER may only assign staff to the project that has passed the required background checks. If additional PROVIDER staff needs to be assigned to the contract during the contract term, PROVIDER must provide COUNTY with completed background check forms 2 weeks prior to the date the new staff

person is to begin working. Additional PROVIDER staff may only work on the project once the background checks have been successfully passed.



Project Number 13322A

08/21/2014 Page: 1

* * Proposal * *

Fearing's Audio-Video-Security

722 Walsh Road Madison, WI 53714

608-443-2595/Fax 443-2597

Dane County Clerk of Courts 215 S Hamilton Street Rm 1000 Madison, WI 53703

608-266-4386

Project Title..:

AV Bid - PHASE 1 ALTERNATE

Mfg-Item No.	Qty Description	Unit Price	Extended
	~PHASE 1- ALTERNATE~		·
	**ALTERNATE DESCRIPTION- With this cost savings of	option, we would	not re-
	program the current Crestron system for adding control of	of the new projec	tor and added
	input. The projector would be turned on/off and the new	input/existing inc	outs would be
	selected all from the OEM remote. This option makes a	lot of sense beca	ause it would
	be a large task and a ton of wasted programming time th	at all have to be	re-done once
	the new Crestron system is installed in order to gain project	ector control for t	the short few
	months before replacing the Crestron system.		
Sony	17 3-LCD Laser Proj,WUXGA, 8000:1, 4000Lm	3,306.89	56,217.13
	17 Sony VPLL-Z1032- Long Throw Lens	1,980.00	33,660.00
Chief Mfg.	17 Universal Projector Mount	116.17	1,974.89
Dalite	17 Contour Electrol 16:10, 113"d, 60"x96" Wall Mount HCMW	753.33	12,806.61
Crestron	17 DigitalMedia 8G+™ Transmitter 401	1,000.00	17,000.00
Crestron	17 DigitalMedia 8G+™ Receiver & Room Controller 100	450.00	7,650.00
	15 Global Industries- 34409, Model 250766GY Mobile Cart	93.42	1,401.30
	1 Shipping	337.37	337.37
	15 Deil Desktop PC Optiplex 3020	577.89	8,668.35
	Use Link Below		•
	http://www.newegg.com/Product/Product.aspx?Item=N82 83-156-074Product	E16883156074&	cm_re=OptiF
	15 ViewSonic Black 22" USB Optical Multi-Touch Full HD LED	294.73	4,420.95
Elmo	15 Compact Document Camera with VGA and HDMI Output	338.66	5,079.90
'anco	17 HDMI High Speed A/V Cable	11.25	191.25
Comprehensive	17 10' VGA Cable a/Audio	29.40	499.80
anco	34 HDMI High Speed A/V Cable 3'	5.88	199.92
ulk	5000 Cat 6 Shielded Cable - White	230.00 M	1,150.00
	-		•
	Equipment and Installation		174,131.47
	~Commissioner FTR- 1A~		
	1 FTR System with Touch Screen	4,239.13	4,239.13



722 Walsh Road Madison, WI 53714

Project Number 13322A

08/21/2014 Page: 2

* * Proposal * *

Mfg-Item No.	Qty Description	Unit Price	Extended
	1 Shipping	70.00	70.00
	1 Cables, Connectors, Hardware	222.22	222.22
	1 Shipping	500.00	500.00
	Equipment and Installation		5,693.35
	~PHASE 1 ALTERNATE TOTAL~		179,824.82
	~PHASE 2~		
	~10 Courtrooms w Video Conferencing~		
TV1	10 CORIOview 4-Window HD-SDI Multiviewer. Max Res 1080p/60 (3G)	3,170.59	31,705.90
TVOne	10 HDMI to 3G SDI Converter	255.59	2,555.90
Polycom	10 RealPresence Group 500 - 1080p: Group 500 HD codec, EagleEye Aco	6,887.78	68,877.80
Polycom	10 Total Coverage, One Year, RealPresence Group 500- 1080p:	1,098.89	10,988.90
Vaddio	30 High Definition PTZ Camera With CCU and Cat5 Cabling System ****VERIFY IF BELOW IS NEEDED???	4,428.06	132,841.80
Vaddio	30 IN-Ceiling Half-Recessed Enclosure for HD-30, 22, 20, 19, 18	522.50	15,675.00
Gefen	10 DVI To DVI & RGBHV Adapter	30.67	306.70
Comprehensive	50 6 ft HD 3G-SDI BNC to BNC Cable	13.00	650.00
	~Video Matrix and WPs		
Crestron	10 8x8 DigitalMedia Switcher; Requires DMC Series Input Cards	2,150.00	21,500.00
Crestron	30 DigitalMedia 8G+™ Input Card w/Down-mixing for DM Switchers	650.00	19,500.00
Crestron	10 HDMI® Input Card w/Down-mixing for DigitalMedia™ Switchers	484.54	4,845.40
Crestron	10 SDI Input Card for Digital Media Switchers	600.00	6,000.00
Crestron	10 2 DM 8G+ w/1 HDMI & 2 HDMI with 2 Stereo Analog Audio Output Card for DM-MD8X8 & DM-MD32X32	1,000.00	10,000.00
Crestron	10 1 Streaming Output Card for DM-MD8X8 & DM-MD32X32	1,500.00	15,000.00
Crestron	20 DigitalMedia 8G+ Transmitter 201	650.00	13,000.00
Crestron	10 4K HDMI® over HDBaseT® Receiver, Black	250.00	2,500.00
Crestron	10 3-Series Control System	900.00	9,000.00



722 Walsh Road Madison, WI 53714

Project Number 13322A

08/21/2014 Page: 3

* * Proposal * *

608-443-2595/Fax 443-2597

Mfg-Item No.	Qty Description	Unit Price	Extended
Crestron	10 10.1" Touch Screen, Black Smooth	1,200.00	12,000.00
Crestron	10 TableTop Kit for TSW-1050, Black Smooth	125.00	1,250.00
	~Audio DSP		
Biamp	10 Fixed I/O DSP w/12 AEC Mic/Line Inputs, 8 Outputs, USB, VOIP	2,180.73	21,807.30
Biamp	10 Fixed I/O DSP w/12 AEC Mic/Line Inputs, 8 Outputs and USB	2,017.10	20,171.00
Biamp	10 Netgear 24 Port AVB Switch Rack Mountable	776.67	7,766.70
Crown	10 4 Channel 70V, 260W Audio Amplifier	1,119.93	11,199.30
Shure	40 Digital Wireless System with ULXD2/SM58 Transmitter, PS41US Powe	1,153.22	46,128.80
Shure	10 Digital Wireless System with WL185 Lapel Mic	1,215.73	12,157.30
Shure	20 4-Way Active Antenna Splitter for SLX and ULX Systems	387.78	7,755.60
Shure	20 50' UHF Mic Antenna Extension Cable	76.67	1,533.40
Shure	10 18" Gooseneck Cardioid Condenser w/Mute Switch and LED Indicator	164.33	1,643.30
Shure	30 Desktop Gooseneck Microphone (18")	198.33	5,949.90
isten	40 Intelligent DSP RF Receiver (72MHz)	133.53	5,341.20
isten	40 Universal Ear Speaker	11.30	452.00
isten	40 Intelligent Earphone/Neck Loop Lanyard	41.68	1,667.20
isten	10 4-Port USB Charger	20.49	204.90
XTRON	20 Cable Cubby 300S	315.79	6,315.80
	10 Cables, Connectors, Hardware	555.56	5,555.60
	1 Shipping	3,000.00	3,000.00
eutrik	50 XLR Female Solder Type Connector	3.31	165.50
/attBox	10 Sequencing Power Conditioner with Safe Voltage, 12 Outlets	199.94	1,999.40
	10 Snap 12v Power supply	10.00	100.00
anco	30 HDMI High Speed AV Cable	10.00	300.00
omprehensive	20 10' VGA Cable a/Audio	26.13	522.60
anco	10 HDMI High Speed A/V Cable 3'	5.22	52.20
EST PENN	5000 22 Ga 2 Conductor Shielded Cable	68.75 M	343.75
ılk	17000 Cat 6 Shielded Cable - White	230.00 M	3,910.00
ılk	2500 Category 5e Data Cable-Blue	84.99 M	212.48

Equipment and Installation

639,788.43

^{~5} Courtrooms w/OUT Video Conferencing~



722 Walsh Road Madison, WI 53714

Project Number 13322A

08/21/2014 Page: 4

* * Proposal * *

Mfg-Item No.	Qty Description	Unit Price	Extended
	~Video Matrix and WPs		
Crestron	5 8x8 DigitalMedia Switcher; Requires DMC Series Input Cards	2,150.00	10,750.00
Crestron	15 DigitalMedia 8G+™ Input Card w/Down-mixing for DM Switchers	650.00	9,750.00
Crestron	5 HDMI® Input Card w/Down-mixing for DigitalMedia™ Switchers	500.00	2,500.00
Crestron	5 2 DM 8G+ w/1 HDMI & 2 HDMI with	1,000.00	5,000.00
Crestron	5 1 Streaming Output Card for DM-MD8X8 & DM-MD32X32	1,500.00	7,500.00
Crestron	10 DigitalMedia 8G+ Transmitter 201	650.00	6,500.00
Crestron	5 4K HDMI® over HDBaseT® Receiver, Black	250.00	1,250.00
Crestron	5 3-Series Control System	900.00	4,500.00
Crestron	5 10.1" Touch Screen, Black Smooth	1,200.00	6,000.00
Crestron	5 TableTop Kit for TSW-1050, Black Smooth	125.00	625.00
	~Audio DSP		
Biamp	5 Fixed I/O DSP w/12 AEC Mic/Line Inputs, 8 Outputs, USB, VOIP	2,180.73	10,903.65
Biamp	5 Fixed I/O DSP w/12 AEC Mic/Line Inputs, 8 Outputs and USB	2,017.09	10,085.45
Biamp	5 Netgear 24 Port AVB Switch Rack Mountable	776.67	3,883.35
Crown	5 4 Channel 70V, 260W Audio Amplifier	1,119.93	5,599.65
Shure	20 Digital Wireless System with ULXD2/SM58 Transmitter, PS41US Powe	1,153.22	23,064.40
Shure	5 Digital Wireless System with WL185 Lapel Mic	1,253.33	6,266.65
Shure	10 4-Way Active Antenna Splitter for SLX and ULX Systems	387.78	3,877.80
Shure	10 50' UHF Mic Antenna Extension Cable	76.67	766.70
Shure	5 18" Gooseneck Cardioid Condenser w/Mute Switch and LED Indicator	160.76	803.80
Shure	15 Desktop Gooseneck Microphone (18")	194.02	2,910.30
isten	20 Intelligent DSP RF Receiver (72MHz)	133.53	2,670.60
isten	20 Universal Ear Speaker	11.30	226.00
isten	20 Intelligent Earphone/Neck Loop Lanyard	41.68	833.60
isten	5 4-Port USB Charger	20.49	102.45
XTRON	10 Cable Cubby 300S	315.79	3,157.90
	5 Cables, Connectors, Hardware	568.18	2,840.90
eutrik	25 XLR Female Solder Type Connector	3.31	82.75
/attBox	5 Sequencing Power Conditioner with Safe Voltage, 12	199.94	999.70



722 Walsh Road Madison, WI 53714

Project Number 13322A

08/21/2014 Page: 5

* * Proposal * *

Mfg-Item No.	Qty Description	Unit Price	Extended
	Outlets		
	5 Snap 12v Power supply	10.00	50.00
Vanco	15 HDMl High Speed A/V Cable	10.00	150.00
Comprehensive	10 10' VGA Cable a/Audio	26.13	261.30
Vanco	5 HDMI High Speed A/V Cable 3'	5.22	26.10
WEST PENN	2500 22 Ga 2 Conductor Shielded Cable	68.75 M	171.88
Bulk	2500 Cat 6 Shielded Cable - White	230.00 M	575.00
Bulk	1250 Category 5e Data Cable-Blue	84.99 M	106.24
	Equipment and Installation		168,246.57
	~2 Courtrooms w/OUT Video Conferencing OR Jurry Box~		
	Video Matrix and WPs		
Crestron	2 8x8 DigitalMedia Switcher; Requires DMC Series Input Cards	2,150.00	4,300.00
Crestron	6 DigitalMedia 8G+™ Input Card w/Down-mixing for DM Switchers	650.00	3,900.00
Crestron	2 HDMI® Input Card w/Down-mixing for DigitalMedia™ Switchers	500.00	1,000.00
Crestron	2 2 DM 8G+ w/1 HDMI & 2 HDMI with	1,000.00	2,000.00
Crestron	2 1 Streaming Output Card for DM-MD8X8 & DM-MD32X32	1,500.00	3,000.00
Crestron	4 DigitalMedia 8G+ Transmitter 201	650.00	2,600.00
Crestron	2 4K HDMI® over HDBaseT® Receiver, Black	250.00	500.00
Crestron	2 3-Series Control System	900.00	1,800.00
Crestron	2 10.1" Touch Screen, Black Smooth	1,200.00	2,400.00
Crestron	2 TableTop Kit for TSW-1050, Black Smooth	125.00	250.00
	~Audio DSP		
Biamp	2 Fixed I/O DSP w/12 AEC Mic/Line Inputs, 8 Outputs, USB, VOIP	2,180.73	4,361.46
liamp	2 Fixed I/O DSP w/12 AEC Mic/Line Inputs, 8 Outputs and USB	2,017.09	4,034.18
liamp	2 Netgear 24 Port AVB Switch Rack Mountable	794.32	1,588.64
Prown	2 4 Channel 70V, 260W Audio Amplifier	1,119.93	2,239.86
hure	2 18" Gooseneck Cardioid Condenser w/Mute Switch and LED Indicator	160.76	321.52
hure	6 Desktop Gooseneck Microphone (18")	194.02	1,164.12
isten	8 Intelligent DSP RF Receiver (72MHz)	133.53	1,068.24
isten	8 Universal Ear Speaker	11.30	90.40
isten	8 Intelligent Earphone/Neck Loop Lanyard	41.68	333.44



722 Walsh Road Madison, WI 53714

Project Number 13322A

08/21/2014 Page: 6

* * Proposal * *

Mfg-Item No.	Qty Description	Unit Price	Extended
Listen	2 4-Port USB Charger	20.49	40.98
EXTRON	4 Cable Cubby 300S	315.79	1,263.16
	2 Global Industries- 34409, Model 250766GY Mobile Cart	93.42	186.84
	2 Dell Desktop PC Optiplex 3020 Use Link Below	577.89	1,155.78
	http://www.newegg.com/Product/Product.aspx?Item=N82	E168831560748	cm_re=OptiP
	2 ViewSonic Black 22" USB Optical Multi-Touch Full HD LED	294.73	589.46
Elmo	2 Compact Document Camera with VGA and HDMI Output	338.66	677.32
	-2 Document Camera Discount if Purchased by 9/30/14	50.00	-100.00
	2 Cables, Connectors, Hardware	625.00	1,250.00
WattBox	Sequencing Power Conditioner with Safe Voltage, 12 Outlets	199.94	399.88
	2 Snap 12v Power supply	10.00	20.00
Vanco	6 HDMI High Speed A/V Cable	10.00	60.00
Comprehensive	4 10' VGA Cable a/Audio	26.13	104.52
Vanco	2 HDMI High Speed A/V Cable 3'	5.22	10.44
WEST PENN	800 22 Ga 2 Conductor Shielded Cable	68.75 M	55.00
Bulk	1500 Cat 6 Shielded Cable - White	230.00 M	345.00
Bulk	500 Category 5e Data Cable-Blue	84.99 M	42.50
	Equipment and Installation		56,063.24
	~Jury Assembly~		
Sony	2 3-LCD Laser Proj,WUXGA, 8000:1, 4000Lm	3,306.89	6,613.78
	2 Sony VPLL-Z1032- Long Throw Lens	1,980.00	3,960.00
Chief Mfg.	2 Universal Projector Mount	116.17	232.34
Dalite	2 Contour Electrol 16:10, 113"d, 60"x96" Wall Mount HCMW	886.67	1,773.34
	Video Matrix and WPs		
Crestron	1 8x8 DigitalMedia Switcher; Requires DMC Series Input Cards	2,150.00	2,150.00
Crestron	2 DigitalMedia 8G+™ Input Card w/Down-mixing for DM Switchers	650.00	1,300.00
Crestron	2 DVI/RGB Input Card for DM Switchers	400.00	800.00
Crestron	2 BNC Analog Video Input Card for DM Switchers	400.00	800.00
Crestron	2 2 DM 8G+ w/1 HDMI & 2 HDMI with	1,000.00	2,000.00



722 Walsh Road Madison, WI 53714

Project Number 13322A

08/21/2014 Page: 7

* * Proposal * *

Mfg-Item No.	Qty Description	Unit Price	Extended
Crestron	2 Wall Plate DigitalMedia 8G+™ Transmitter 200- White	700.00	1,400.00
Crestron	2 DigitalMedia 8G+™ Receiver & Room Controller 100	450.00	900.00
Crestron	2 7" Wall, Lectern or Tabletop Touch Screen, Black	700.00	1,400.00
	1 Cables, Connectors, Hardware	625.00	625.00
Vanco	2 HDMl High Speed A/V Cable	10.00	20.00
Vanco	2 HDMI High Speed A/V Cable 3'	5.22	10.44
Bulk	500 Cat 6 Shielded Cable - White	230.00 M	115.00
Bulk	100 Category 5e Data Cable-Blue	84.99 M	8.50
	Equipment and Installation		30,932.40
	~Commissioner Center-Rooms 2A, 2E, 2F, 2J and 2H~		
_G	5 55" EzSign Commercial TV	982.11	4,910.55
Chief Mfg.	5 FUSION Universal Flat Panel Tilt Wall Mount (37-63" Displays)	116.17	580.85
Chief	5 FUSION Above Video Conferencing Camera Shelf - 12"	60.07	300.35
Polycom	5 RealPresence Group 500-720p: HD codec, EagleEye III, Mic Array	7,576.67	37,883.35
Polycom	5 Group Series 1080p HD License - 1080 encode/decode	2,298.89	11,494.45
Polycom	5 Total Coverage, One Year, RealPresence Group 500 - 720p: Group 5	1,208.89	6,044.45
olycom	5 HDX Ceiling Microphone - White "Primary" w/ Wall-plate	1,101.11	5,505.55
Prestron	5 5" Touch Screen, Black Smooth	650.00	3,250.00
restron	5 TableTop Kit for TSW-550, Black Smooth	75.00	375.00
	5 Cables, Connectors, Hardware	187.50	937.50
anco	5 HDMl High Speed A/V Cable 3'	5.22	26.10
ulk	500 Cat 6 Shielded Cable - White	230.00 M	115.00
	Equipment and Installation		79,783.15
	~Commissioner FTR- 2C~		
	1 FTR System with Touch Screen	4,239.13	4,239.13
	1 Shipping	70.00	70.00
	1 Cables, Connectors, Hardware	250.00	250.00
	Equipment and Installation		5,221.13
	-Commissioner Center FTR w Mics ~	4.000.40	4.000.40
	1 FTR System with Touch Screen	4,239.13	4,239.13
nure	1 Shipping 3 Migro-Flow Socion Dockton Migro-though w/switch in house	70.00	70.00
ddle Atlantic	3 MicroFlex Series Desktop Microphone w/switch in base	198.64	595.92
dale Aliantic irman	1 12 RU (21") Black Laminate Rack	98.59	98.59
iiiidii	1 Power Conditioner, 9 Outlets (8 rear, 1 front), 15A	51.65	51.65



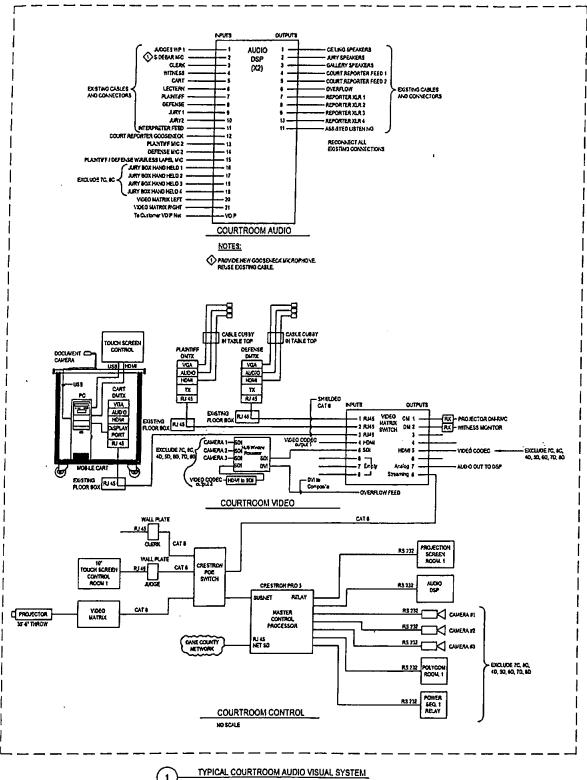
722 Walsh Road Madison, WI 53714

Project Number 13322A

08/21/2014 Page: 8

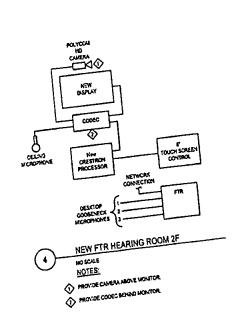
* * Proposal * *

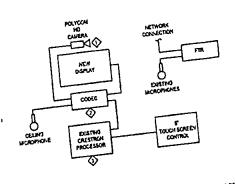
fg-Item No.	Qty Description	Unit Price	Extended
	1 Cables, Connectors, Hardware	312.50	312.50
EST PENN	150 22 Ga 2 Conductor Shielded Cable	68.75	M 10.31
	2 Cables, Connectors, Hardware	380.43	760.86
	Equipment and Installation		7,020.86
			=======
	~PHASE 2 TOTAL~		987,055.78
			#=======
This * * Propos	al * * is Valid for 30 Days.	:	\$1,166,880.60
			Jeff Cororan
I Accept This C	uote	Date:	
	at 80% completion, 10% upon completion. Conten		



NOTES:

- 1. Courtrooms with yideo conferencing cameras and polycom systems (A_i,B_k) sa, sa, sa, 7a, 78, sa, sa
- 2. COURTROOMS WITHOUT VIDEO CONFERENCING EQUIPMENT; 40, 50, 60, 70, 60
- 3. COURTROOMS WITHOUT YOUG CONFERENCING EQUIPMENT OR JURY BOX: 7C. 8C





2 COMMISIONER CENTER HEARING ROOM

NO SCULE

NOTES:

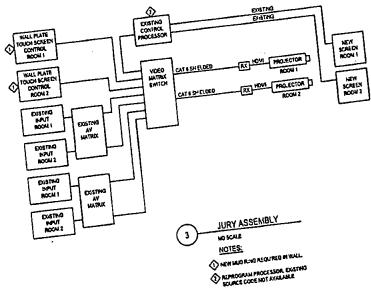
PROVIDE CAMERA ABOVE INCRITOR

PROVIDE COMERA ABOVE INCRITOR

PROVIDE COMERA ABOVE INCRITOR

PROMODE CODEC BEHNO INCRITOR

PROPROCEMAN PROCESSOR EXISTING SOURCE CODE & NOT ANALISE.



Dane County Courts AV Upgrade Checklist

Refer to Exhibits 1-7	Room:
Contractor: Fearings AV	Forman:
n Description	Provide Date (use NA if not required)

iter	n Description	Prov	Provide Date (use NA if not required)		
	Phase 1	Installed	Adjust/Test	Completed	
1	Projector				
2	Screen				
3	AV cart				
4	PC and Touch Screen for AV cart				
5	Crestron Transmitter and Receiver				
6	Document Camera- AV Cart				
7	AV control, touch screen, programming				
	Customer Signature/	Date			
	Fearing's Signature/I	Date			
	Phase 2	Installed	Adjust/Test	Completed	
11	Cables, connectors, faceplates				
12	Cables, connectors, faceplates - Labeled				
13	Cable Cubby				
14	Audio Digital Signal Processor (DSP)				
15	Amplifier				
16	Table microphone				
17	Assisted Listening System (ALS) microphone				
18	ALS transmitter/receiver				
19	Video conference camera				
20	Video conference codec				
21	Video conference mic/speaker/amp				
22	Video matrix switch				
23	Multi-window processor				
24	AV rack (Hearing room)				
25	For-the-Record (FTR) device				
26	As-builts completed				
27	As-builts delivered to County				
28	AV programing code delivered to County			<u> </u>	
	Customer Signature/D	ate	- 1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1		
	Fearing's Signature/D	ate	<u> </u>		

Exhibit 1: Submittal Drawing Checklist - Audio Video Systems and Equipment

A. SAMPLE SUBMITTAL DRAWING CHECKLIST

B. FORM (ALL SHEETS)

- 1. Submittal copy quantity requirements satisfied
- 2. Submittal content satisfied
- 3. Adequate sheet size for drawing
- 4. All notes and other text legible throughout the drawing set
- 5. Contact info for each responsible party (architect, Using Agency, Integrator, etc...) clearly printed on the drawings
- 6. Table of contents with necessary fields present (Sheet Title, Sheet Number, Description, etc...)
- 7. Drawing titles and sheet names match the Table of Contents
- 8. Sheet titles make sense
- 9. Drawing order makes sense
- 10. Spelling checked and corrected

C. FIT (EQUIPMENT LAYOUT PLAN, RCP, ELEVATION, DETAILS)

- 1. All of the equipment shown on plan view in the correct position
- 2. All equipment uniquely identified
- 3. Equipment clearances throw distances, and elevations clearly marked, dimensioned and noted
- 4. If in scope, detail drawings for the hanging/installation/mounting of projectors, screens, cameras, surface mounted loudspeakers, ceiling suspended loud speakers, wall or floor mounted racks, displays, microphones, antennas and sensors, and camera/speaker housings
- 5. Equipment mounting details for equipment (composite weight including hardware) over 40 lbs. include the stamp of the Approved Licensed Structural Engineer.
- 6. Details contain manufacturer and model numbers for each part, detail key referenced back to Equipment layout, weight, and clearance requirements
- 7. Detail reference keys for every piece of equipment permanently installed overhead

D. FIT (CABLE FILL FORM, OR PLAN AND RCP)

- Conduits uniquely identified
- 2. Cable types identified by make and model number
- 3. Cables leaving rooms uniquely identified
- 4. Cable quantities/types correct
- 5. Cables segregated by type/signal level when possible

E. FIT (RACK, FURNITURE RACK LAYOUTS AND ELEVATIONS)

- 1. Racks have a unique ID
- 2. All equipment uniquely identified within each rack layout
- 3. Blanks, vents, and fans positioned properly with respect to the actual heat generating equipment

- 4. Layout functional for daily use
- 5. Mounting of any external equipment such as monitors, speakers, and desk shelves detailed
- 6. Detail covering grounding, bonding, and the pass through of conduits to and from the racks

F. FIT (CUSTOM FURNITURE DRAWINGS)

- 1. Furniture drawings accurately show the form fit and function of the original design intent
- 2. Cable pass-troughs and equipment access panels appropriate for daily use
- 3. Finish samples provided unless finishes are pre-approved by Using Agency/architect
- 4. Furniture uniquely identified and keyed to Equipment Layout Plans, Rack elevations, and System Line Diagrams
- 5. Furniture drawings contain enough detail for custom fabrication by furniture vendor

G. FIT (CUSTOM PANELS AND PLATES)

- 1. Plate drawings include the following manufacturing details: material type and thickness; plate finish; engraving/screening size, color, and font style; bevel and mounting hole details; connectors and switches identified by make and model number; and connector mounting method (pressure fitting, nuts and bolts, etc...)
- 2. All plates uniquely identified and keyed to match line diagrams and equipment layouts

H. FUNCTION (SYSTEM LINE DIAGRAMS)

- 1. Signal flow from input to output, left to right
- 2. Wiring notes make sense
- 3. System line diagrams accurately reflect the original system design intent
- 4. Equipment shown identified by manufacturer, model number, and a product description
- 5. All of the equipment shown has a unique ID matching the plate drawings, rack elevations, and equipment layout plans and RCP's
- 6. All field and rack wires uniquely identified by number
- 7. All terminal strips identified by locations and numbered
- 8. All rack power circuits and power control sequencing circuits identified
- 9. All pre-made cables indicated by manufacturer, make, and model number
- 10. Calculated measurements for RF level for taps, drops, splitters, and amps
- 11. All wires identified by signal type (MIC, Line, RGB, Serial, Etc...)
- 12. Details for DIP switch settings, IP Addresses, Baud Rates or equipment modifications
- 13. Detailed pin outs for all Integrator manufactured cables
- 14. System line diagrams contain detail markers of where to find pin out details
- 15. System line diagrams indicate the impedance at amplifier outputs for all speaker lines
- I. MISC (MISC CONSTRUCTION DETAILS)

1. Details and elevations for any custom built equipment, architectural oddities, or any other Integrator work not covered elsewhere

J. EQUIPMENT LIST

- 1. Variances from the original basis of design clearly marked
- 2. All of the necessary equipment accessories included
- 3. Equipment identifiers match those on the drawings
- 4. Equipment quantities match those of the drawings

Exhibit 2: Audio Video Room Condition Checklist and Report

- A. SAMPLE AV ROOM CONDITION CHECKLIST and REPORT
- B. Before installing field cable in spaces:
 - 1. Verify that empty conduit and pathways are provided as required in infrastructure drawings.
 - 2. Empty Conduit sizing and end points
 - 3. Back box sizes and locations
 - 4. Floor box sizes and locations
- C. Before installing any AV equipment, verify that the following conditions have been met. If conditions have not been met, do not install equipment in the room until conditions have been met.
 - All spaces in which Technology equipment, materials, racks and tools will be utilized or installed have been secured from theft/damage & keys provided to AV integrator.
 - 2. Coordinate with the General Contractor for access to the facility and spaces as appropriate.
 - 3. Adequate structural support has been installed for all wall and ceiling mounted equipment.
 - 4. Verify support structure is per technology requirements and will accommodate technology mounting systems.
 - 5. Coordinate with technology integrator prior to closing the ceiling or wall.
 - 6. HVAC system is operational (with filters installed).
 - 7. Air systems are complete and flushed so as to reduce possibilities of excessive dust being ingested into electronic equipment.
 - 8. All AV-related power outlets have been tested and are operational.
 - 9. Locations verified against technology requirements
 - 10. Test results should be provided to the consultant
 - 11. Plumbing and mechanical systems installations are complete.
 - 12. All construction activities likely to generate dust/dirt, metal shavings, or sparks have been completed.
 - 13. Installation of all window, wall, ceiling, and flooring finishes has been completed.
 - 14. Finished ceilings are completed, Drywall/Ceiling tile
 - 15. Carpeting/Tile & floor finishes are completed
 - 16. Walls are painted
 - 17. Doors and locks are complete

- 18. Woodwork and trim are complete
- 19. Lighting systems are installed, working
- 20. In locations in which equipment is to be installed, no chemical or other activities will be taking place that could potentially spill/drip on the equipment.
- D. Before installing any AV equipment, verify that the following conditions have been met. If conditions have not been met, document and submit report to general contractor, consultant, and Using Agency's technical representative.
 - 1. Projection screens are installed and operational.
 - 2. Screens are level
 - 3. Tab Tension screens are properly adjusted
 - 4. Screen limit switches have been properly set
 - 5. Low voltage interfaces for electronic screen controls are in place and properly installed for technology integration to other control systems as necessary.
 - 6. Screen locations are such that they are not impeded by white-board or chalk-board rails. Screens should be located such that they drop freely in front of chalk-rails.
- E. The AV field cable installation is complete.
 - Coordinate any other low voltage cable installation related to AV outside of the AV integrator contract.
 - 2. All low voltage wiring provided should be fully tested, certified and test results should be provided to the consultant for final approval and project records.
- F. Field cable installed by others, (such as data, telecommunications, cable TV, and fiber) has been installed and tested by others.
 - 1. Cable installation should be coordinated with remaining technology trades to make certain all needs are accommodated.
- G. Network jacks configured and operational.
 - 1. All connections to be fully labeled as per campus standards
 - 2. All connections and cables to be fully tested with test reports validating procedures and bandwidth as well as continuity, etc. are to be provided to the Using Agency upon certification by the installer.
- H. All AV-related furniture, casework, shelving has been installed as specified with review and approval by the client.
 - 1. Any related items requiring technology integration such as cabinets, millwork, lecterns, etc, will require coordination with the technology integrator and review/approval by the client prior to fabrication.
- I. All building systems that are to be interfaced with the AV systems are operational.
 - 1. Verify integration/interfaces with lighting and controls
 - 2. Verify integration/interfaces with room darkening/shades

- 3. Each building system requiring interface with AV systems will require coordination during design prior to construction.
- 4. Each building system requiring interface with AV systems will require coordination and approval by the Using Agency prior to construction.
- J. The HVAC system should be balanced so as not to produce excessive vibration or noise/air turbulence.
 - 1. HVAC system test results should be reviewed by an acoustician for conformity to acoustical requirements within each space and must be readjusted as necessary based on acoustical review and recommendations

Exhibit 3: Audio Video Demarcation List

A. General

1. This describes demarcation points in the Work to determine where the Integrator's responsibilities end in the specific instances noted below.

B. Electrical System Connections

1. The Integrator shall coordinate with the General Contractor to extend the AV AC power circuits and insulated ground wires into each equipment rack.

C. Raceway (conduit and back boxes)

 The Integrator shall provide blank plates or panels for all AV floor, wall and ceiling boxes that are indicated on the AV plate location drawings, but do not have AV devices and/or connectors at this time. Colors and types shall be coordinated with the Architect. Devices and plates for other trades (HV power, voice/data, security) within the AV floor boxes are by others.

D. Cabling

1. All audio, video and control cabling shall be provided, installed and terminated by the Integrator as noted on the Integrator's Construction documents. Voice/data cabling, unless specifically noted otherwise, are the responsibility of others.

E. Cable Termination

1. Where cable installation is required, this will include wall and/or floor jacks, plates and terminations at room devices, and service loops at patch bay locations.

F. Projector and Monitor Mounts

- 1. The Integrator shall install all projectors and monitor mounts as indicated on the approved shop drawings. Integrator shall verify location and structural suitability before attaching projectors, monitors and mounts.
- G. Low-Voltage Connections to Base-building Devices

- Low voltage control interfaces for lighting dimmers and electric projection screens will be installed by others as a part of the base building. Integrator shall verify proper operation of these control systems before any interconnection to the AV control system.
- 2. Integrator shall investigate all hardware and software control conflicts between the base building control systems and the AV control system before interconnecting the systems. Report any conflicts, potential or existing, to the Using Agency, in writing, before interconnecting the systems. Damage caused to the base building control systems due to the improper connection of AV control systems shall be the sole responsibility of the Integrator.
- 3. Where indicated, Integrator shall select and install the appropriate cable type from the AV control system to the base building control systems interface locations.
- 4. Integrator shall verify proper operation of both the base building control systems and the AV control system after interconnecting the systems, and verify proper operation of both.
- H. AV Control System Connections and Devices
 - Integrator shall set up control system equipment with IP Addresses and proprietary control network addresses, install all necessary hardware cards, and adjust all appropriate DIP switch settings, and any other equipment settings such as baud rate and protocol settings. Integrator shall include all of this information in Project Record Document.

Exhibit 4: Audio Video Weekly Status Report

- A. SAMPLE AV WEEKLY STATUS REPORT.
- B. The following form is the Consultant's "AV Weekly Status Report". The Integrator shall provide weekly status reports on this form or an equivalent for approved by the Consultant

Consultant.	uivalent for approved by the
WEEK OF:	
AV INTEGRATOR:	BY:
CLIENT / PROJECT NAME:	
ROOM NAMES / NUMBERS:	

	Prov	vide a s	ummary for each of the following areas. Use additional sheets as needed.
	Gen	eral:	
	Purchases:		
	Assembly:		
	Field Conditions:		
	Issue	es of Co	oncern:
Exhibi	it 5: A	udio V	ideo Submittal Checklist
A.	Afte	r Awar	d
	1.	Proje	ect Plan
		a. b.	Narrative how the Integrator is going to execute AV project. Identify Integrator's final AV Project Team
	2.	Full F	Project Submittal
		a. b. c. d. e.	Fully engineered drawings Engineering Worksheet Equipment " cut" sheets Complete Bill of Materials with individual pricing Control system flow diagrams, panel layouts, and a button by button description of system operation
	3. 4.		ify equipment with long lead times Product Using Agency Ship Documents
B.	Pre-	orderin	g ·
	1.	Frequ	ency Coordination Submittal
C.	Pre-install – On-site Wiring		On-site Wiring
	1.	AV R	oom Condition
D.	Stagi	ing Che	eckout (Prototype Shop Checkout)
	1.	Stagir	ng/Prototype Checkout Readiness Submittal
E.	On-S	ite Pro	totype Checkout
	1.	Protot	ype Checkout Readiness Submittal

F. Full System Checkout

- 1. Full System Checkout Readiness Submittal
- 2. Inventory status by system and location

G. Training

- 1. **Training Materials**
 - a.
 - Operational Training Manual Preventative Maintenance Timeline and Checklist b.
 - 1) All equipment manuals

H. **Final Checkout**

- 1. Final Checkout Readiness Submittal
- Complete inventory by system and location 2.
- Complete "As-Built" Drawings 3.

Exhibit 6: AV Staging Checklist

AV Staging / Proto	typical Testing & Checklist	
Project #:		Project Name:
Space Location:		Space Type:
Date of Testing:		Other Notes:
Any Follow Up:		

Test	Staging Test Description	Results & Supplementary Notes
6.1	All the equipment can be pulled for repairs or replacement without hindrance, equipment without IEC removable power cords are not tie-wrapped to the cabinet, and there are no obstructions to the item being pulled from the front of the rack. Further, terminations are such that it is relatively easy to find their proper terminating points when the item is re-installed.	
6.2	If there are obstructions prohibiting the disconnection of terminations on the back of the unit, there must be sufficient cabling to permit the equipment to be pulled from the front, and disconnected there.	
6.3	All cables are identified in a consistent, permanent, non-slipping manner, and all cable identification tags are visible (not hidden in forms). All cables have clearly legible, unamblguous identifying labels, and labels are oriented and positioned consistently.	
6.4	Tie wraps are not too tight as to deform the cable. UTP cables are formed with Velcro ties.	
6.5	Terminations are free from stress due to gravity acting on the form.	

6.6	Torminations have sufficient courses lean alleving and	–
0.0	Terminations have sufficient service loop, allowing a retermination or two without having to open a form to lay in a new cable.	
6.7	Cable supports are used when unsupported cable lengths exceed 12 inches (depending on size and stiffness of cables).	
6.8	Screw terminals have spade or ring lugs on wires.	
6.9	Cables have "signal separation"; that is, cables carrying voltages varying by 20 dB or more are in different forms separated by at least 4 inches to prevent cross talk.	
6.10	RJ terminations are solid in their connectors.	
6.11	Coax cables respect a bend radius of at least 5x the cable's radii, or as recommend by the manufacturer.	
6.12	All unbalanced and balanced terminations are in agreement with the equipment manufacturer's recommendations.	·
6.13	There is perfect agreement between the "paper model" documentation (drawings), the control system user interface (i.e., touch panel screens, push button labels, panel engravings, etc.), the device labels, any patch panels/designation strips, the physical wiring and labeling, and any label associated with the system.	
6.14	All inputs and outputs of switchers are labeled (wherever possible), so that users can easily make manual routes quickly, without having to refer to the system drawings.	
6.15	All channels on amplifiers, especially on multi-channel amplifiers are properly labeled, so users can make quick adjustments without having to refer to the system drawings.	
6.16	All equipment in the rack is labeled, and the labels match those on the drawings (equipment symbols and/or description). This will allow for easy serviceability, as well as prevent confusion in systems with multiples of similar equipment.	·
6.17	All connectors on input and output plates are identified in a discernible, consistent manner (i.e., there is only one "MIC 1" in the system), and in agreement with all other labels in the system.	
6.18	In short, equipment must be able to be serviced indefinitely; designed with the maintenance technician in mind (he or she will "own it" longer than the person who fabricated the system initially). Follow Glddings and Davis for specific details.	
6.19	List all equipment in the system NOT present, and why.	
6.20	Racks have temporary labels indicating the building and room where they are being installed.	
6.21	I/O Panels are easily accessible.	1

1 400		_
6.22	All equipment installed. All mounts for all rack and field	
	equipment (rack mounts, ceiling mounts, wall mounts,	
	loudspeaker mounts, etc.) have been verified and tested.	
6.23	Racks are "clean" - grease markings removed, etc.	
6.24	All blanks installed.	
6.25	All engravings fastened.	
6.26	ALL Peripheral equipment hooked up as per flow diagram:	
	microphones, loudspeakers, video monitors, projectors, PC's,	
6.27	USB switchers, etc.	
	Audio Tested (all lines marked).	
6.28	Video tested (all lines marked).	
6.29	The display is able to switch between different color spaces and	
	resolutions. Show a Blu-ray or TV (YUV) signal, then show a	
	laptop (RGB) signal, and then switch back to the Blu-ray/TV	
	(YUV) signal. The source should always display properly.	
6.30	Automatic CEC controls do not negatively affect the displays.	
	With the displays powered on, power off each source in the	
	system. The displays should remain on (no Power Off command	
	sent from a source).	
6.31	All sources can be routed to all expected destinations. Disregard	
ĺ	any routes that are not permitted by design, as described in the	
	narrative, such as HDCP sources routed to a codec.	
6.32	All HDCP sources can be routed to all expected destinations at	
	the same time. There are some devices with a limited capability	
	to display on multiple displays. The system requires that each	
	source can display on the required number of displays in the	
	system at the same time.	
6.33	For HDMI signals, test using the entire cabling to be installed in	
	the field, to the extent it is possible. Using an HDMI generator,	
	display pixel on/pixel off, with HDCP enabled, for the following	j
	resolutions: 1920x1200@60, 1920x1080@60, 1600x1200@60, 1280x720@60, 1280x768@60, 1280x800@60, 1024x768@60,	İ
	800x600@60, 640x480@60 (base default, in case the PC has	
	issues and boots up in default mode). Inspect each, leaving the	
	signal on for several seconds (no "sparklies") – HDMI Generator	
	required.	
6.34	Perform "Repeater Test" with HDMI tester. Requires connecting	
	the tester at a source and sink location. Use the expected	
	lengths of cable and any transmitters and receivers in the signal	
	chain. Test will check that the repeater can pass signals up to 1080P. QD 780 Analyzer required.	
6.35	Perform all "Source Tests" with HDMI tester on each source,	· · · · · · · · · · · · · · · · · · ·
	especially Format Analyzer, Video Display, Audio Analyzer, and	İ
	HDCP Tests immediately before all the sinks (displays) in the	ĺ
	system. Test will verify source integrity and EDID information.	
	QD 780 Analyzer required.	

6.36	Perform "Sink Test" with HDMI tester on each display. Test will verify display can handle various resolutions, and spot check EDID to make sure they work with all sources. QD 780 Analyzer	
6.37	required. If the switcher makes available a system status report with information regarding each source and destination signal integrity, EDID and CEC status information, etc., then obtain a report. If a printed or pdf report is not included, take a screen print showing the status of the system (including source and destination communications with the switcher) and include it in the Report.	·
6.38	When testing Blu-ray, confirm that the movie plays. Sometimes HDCP is not enabled during the menus and previews, but only during the movie.	
6.39	Confirm typical client laptops have been successfully used with the system, inclusive of default resolution (works with switcher EDID), any adapters, etc. Client laptop(s) required.	
6.40	Control tested (all lines marked - emulate closures for screens, motors, etc.)	
6.41	IP information provided by client and loaded into system, including IP address, network ID's, subnet masks, default gateway, timeserver, Gatekeeper, alias, hostnames, etc. These settings are listed in a report that will remain with the system.	
6.42	Any web-based system control or monitoring features, and other IP functionality of system (time servers, system-generated e-mail, etc.) thoroughly tested.	
6.43	All serial controlled equipment properly configured and communications established.	
6.44	All programming installed (control system, DSP devices), and properly communicating with the equipment intended. If a control specification is present, it has been thoroughly tested.	
6.45	When system is powered down, system "up" sequence presents the system in a desirable state with no objectionable anomalies.	
6.46	Thermal gradient inspected; all equipment operating within manufacturers' guidelines.	
6.47	THD <(0.5)%? Record results for all sources.	
6.48	S/N >(60) dB? Record results for all sources.	
6.49	Video levels 1 v P-P +/- 10%? (or 700 mV for computer video) for all sources.	
6.50	Inspect camera(s) image quality.	

6.51	Verify that there are no lost or stuck "on" pixels when Full White Test signal is displayed (7 pixels maximum per quadrant, or follow manufacturer's spec). Note number and location of lost pixels, if any.	
6.52	Small racks installed into credenzas have carpet tiles or sliders on bottom to avoid scratching credenzas.	
6.53	Confirm control system functions not obvious from the control flow diagrams (i.e., lighting presets that are activated when the control system enters a videoconferencing mode).	
6.54	Video – record or photograph any non-conformances, anomalies, etc.	
6.55	Sanity Check: Is there any reason why this system should NOT be released for installation? Is everything plumb and square, clean and blemish-free?	
6.56	Does the system under test satisfy ALL of the system requirements laid out in the client-approved functional narrative/signed proposal?	
6.57	Prepare document report, certifying the product, performance, and practices are in compliance, and noting any exceptions below. Distribute accordingly.	

Calibrated Test Instrumentation Required

This list constitutes the minimum instrumentation required to perform the tests in the checklists, and does in no way imply a comprehensive list for engineered AV. In fact, in many cases additional instrumentation is required to verify performance on an item of equipment, or to quantify environmental and other issues so as to expedite corrective actions by others.

Test Instruments

	rest instruments
1	Sensitive AC voltmeter, -80 dBu sensitivity, 20-30 kHz response, able to measure signal to noise ratio, THD, electrical audio levels within the system. Note that some systems require measurements up to 100 volts and may require an external pad.
2	Sound Pressure Level Meter, ANSI Type II, with A and C weighting filters, fast or time-averaged.
3	Audio Signal generator, 20-30 kHz, sine wave, pink noise.
4	Amplified loudspeaker 100 mm producing 60 dBA at one meter, and 70 dBA at one meter, pink noise, sine wave, speech files.
5	200MHz oscilloscope, with TV sync.
6	Analog Video Signal Generator NTSC/PAL, plus computer patterns at all required resolutions and refresh rates required for the systems under test. For systems with composite video, include PLUGE pattern.

7	Digital Video Signal Generator for computer patterns for all resolutions and refresh rates required for the systems under test, HDMI/DVI.
8	Quantumdata 780 Video Test Instrument, with HDMI Cable, ACA Passive Monitoring, Network Analyzer options installed, and applicable HDMI cables and adapters as required
9	The ability to measure STI-PA (source and analyzer).
10	Colorimeter/luminance meter, 10% accuracy.
11	Infrared Thermometer.
12	Test Media with known levels (audio, video, etc): CD's, VHS, DVD's, etc.
13	AC/DC MultiMeter.
14	Light meter, lux/footcandles.
15	Outlet tester (to test power outlet wiring).
16	Cable sets, cable assemblies, adapters as required to sample and measure in-or out of circuit as req'd.

This form is based on original form courtesy of AQAV
Organization

Exhibit 7: AV Commissioning Checklist

AV Commissioning Testing & Checklist	
Project #:	Project Name:
Space Location:	Space Type:
Date of Testing:	Other Notes:
Any Follow Up:	

Test	Commissioning Test Description	Results & Supplementary Notes
7.1	Inspect and verify that all exceptions from the "Staging" checklist have been successfully completed.	
7.2	Record all equipment not present, and why.	
7.3	Have no stray AC voltages on any equipment accessible to a user relative to ground.	
7.4	Have no sharp or jagged surfaces accessible to a user.	
7.5	Thermal gradient inspected; all equipment operating within manufacturers' guidelines.	

7.6	Cable inspection: labeling, cable dress, signal separation, cable stress, serviceability, tie wraps too tight (none on Category cable, only Velcro ties). Cable labeling is positioned and oriented in a consistent manner, are legible and unambiguous.	
7.7	Be complete. Demonstrate the full inventory to be all new equipment, in full compliance with the specification, or as modified by approved submission. Record test results as pass/fail, and list exceptions.	
7.8	Confirm rack elevation and flow drawings, cable and other labels and engravings are an accurate paper model of the furnished system, and in compliance with latest revised specifications. Record test results as pass/fail.	
7.9	All inputs and outputs of switchers are labeled (wherever possible), so that users can easily make manual routes quickly, without having to refer to the system drawings.	
7.10	All channels on amplifiers, especially on multi-channel amplifiers are properly labeled, so users can make quick adjustments without having to refer to the system drawings.	
7.11	All equipment in the rack is labeled, and the labels match those on the drawings (equipment symbols and/or description), control system, field plates, patch panels, and any labels associated with the system. This will allow for easy serviceability, as well as prevent confusion in systems with multiples of similar equipment.	
7.12	RJ terminations are solid in their connectors.	
7.13	Coax cables respect a bend radius of at least 5x the cable's radii, or as recommended by the manufacturer.	
7.14	Record ambient noise, A-weighted, slow.	
7.15	No power amplifier shall have its rated load exceeded. Record the impedance (and at what frequency) of each loudspeaker line on each power amplifier. 63, 250, and 1,000 Hz are recommended if available. ("Loudspeaker Impedance Test").	
7.16	Produce a nominal operating level of(65) dB SPL (Sound Pressure Level) for conference speech,(60) dB SPL for program material, "A" weighted at all listeners' ears +/(2) dB ("Uniformity of Coverage") (or at least(15) dB above the ambient noise, A-weighted, whichever is greater), with the control system volume control indicating "normal" or default setting. Record results for each channel and source.	
7.17	Be capable of producing an additional(15) dB above this level ((80) dB SPL) for each audio source, with less than 0.5% THD (Total Harmonic Distortion) plus noise. Measure THD plus noise when source is at(15) dB above nominal operating level at each "destination", for all sources selected.	
		

7.18	Develop a noise level that is electrically(55) dB below the normal operating level for all audio sources. "Noise" refers to hum, electrostatic noise, RF interference, etc. Measure and record Signal to Noise ("signal" measured electrically at nominal operating level at each destination, for all sources selected.)	
7.19	Program loudspeakers shall be connected in the same polarity, and speech reinforcement systems shall be polarized such that a positive acoustic pressure on a microphone results in a positive acoustic pressure at the loudspeaker ("Polarity Test").	
7.20	Produce no more than a(1) dB variance in program source levels, when each program source is playing a calibrated media (CD, video tape, setup test tone, etc.).	
7.21	There shall be no audible vibration caused by improper mechanical installation. Use continuous sweep signal at headroom level (from generator or test CD) pass/ fail result or which device at what frequencies. ("Buzzes and Rattles Test").	
7.22	The speech reinforcement system shall be stable (no feedback).	
7.23	For audio conference systems, adjust microphone input gain so as to demonstrate that "standard talker" (60 dB SPL at 1 m), positioned at each talker position in the room, produces a "0 dB" level at the input of the mixer bus of the audio conference DSP device. If there is local reinforcement ("mix-minus"), AGC and ALC may need to be restricted. Record test results as pass/fail. Record level across analog telephone line. Inspect DSP mixer telephone line levels, both transmit and receive, when normal speech is encountered in the room.	
7.24	For conferencing mode, at the(65) dB SPL listening level, be able to demonstrate full duplex operation, with no reports of echo or "speech trails" (as detected from the far end).	
7.25	Equalizers shall be adjusted for best intelligibility, and in accordance with the preferred acoustic level response curves. (For installations with equalizers) Record the "house curve" before equalization, as well as after the equalizers have been tuned, with and without microphone input filters. If requested by the Consultant, produce this documentation for systems without equalizers, as this test may apply to the preamp filter settings in cases where intelligibility can be improved.	
7.26	Be intelligible, with a RSTI (Rapid Speech Transmission Index) greater than 0.85. (If requested only) RSTI, using TEF, Smaart® Tools, or STI-PA. For systems where early reflections may cause intelligibility problems, or when multiple drivers are used, an ETC (Energy Time Curve) may be requested.	

7.27	For wireless microphone systems, with all wireless microphones turned on, confirm that throughout the specified operating area for the transmitter, there are no dropouts, intermodulation interaction between wireless systems, or RF caused artifacts. Also confirm that there is little or no RF activity on a receiver's "S" meter when the designated microphone transmitter is off.	
	i de la companya del companya de la companya del companya de la co	
7.28	Confirm RF immunity at areas where users are expected to operate cell phones and messaging PDA's, smartphones, etc.	
7.29	For NTSC sources, placing a test generator at each source shall produce 1 volt peak-to-peak to each destination +/- 10% (or 1dB). (If requested only) record results at each destination using NTSC bars, peak white, and 5-step multiburst (0.5, 1.0, 2.0, 3.0, 3.58, and 4.2 MHz).	
7.30	Also for NTSC sources, confirm optimum brightness, contrast, and color in displays using SMPTE source with PLUGE (Picture Line Up Generation Equipment) display.	
7.31	When several displays are visible in the same space, demonstrate consistencies in colors across all of them. For composite video signals use NTSC bars with PLUGE signal to all. For RGB and digital video signals use a colorimeter and test color signal software to confirm consistent images.	
,	For RGB sources, demonstrate 700 mV +/- 10% (or 1 dB) from each source to each destination. (If requested only) record results using a flat-field pattern signal at the highest resolution specified, or at least 1024 by 768 resolution (VESA 8). For RGB sources measure and record peak-to-peak voltage for peak white signal, and record "peak" and "Level" control settings on any interface at the positions whereby the 700 mV voltages were attained.	
	Displays are focused, centered, and evenly illuminated. If requested, confirm using the calibrated light meter that the brightest measurement locations shall be no more than +10% above average, and the dimmest locations no less than -5% below average measurement. Also if requested, document that geometric distortion is within 2% tolerance. Take actual measurements if necessary (top, bottom, left, right dimensions of white portion of screen) and photograph if necessary.	
	Display stable images, with no scaling-related visual artifacts when switching between, at a minimum,(1024 x 768), (1280 x 1024), (1920 x 1080) and (1280 x 720) sources, and/or all those specified in the performance criteria for this system. Record test results.	
a	The display is able to switch between different color spaces and resolutions. Show a Blu-ray or TV (YUV) signal, then show a laptop (RGB) signal, and then switch back to the Blu-ray/TV (YUV) signal. The source should always display properly.	

7.36	Automatic CEC controls do not affect the displays. With the displays powered on, power off each source in the system. The displays should remain on (no Power Off command sent from a source).	
7.37	All sources can be routed to all expected destinations. Disregard any routes that are not permitted by design, as described in the narrative, such as HDCP sources routed to a codec.	
7.38	All HDCP sources can be routed to all expected destinations at the same time. There are some devices with a limited capability to display on multiple displays. The system requires that each source can display on the required number of displays in the system.	
7.39	For HDMI signals, test using the entire cabling to be installed in the field, to the extent it is possible. Using an HDMI generator, display pixel on/pixel off, with HDCP enabled, for the following resolutions: 1920x1200@60, 1920x1080@60, 1600x1200@60, 1280x720@60, 1280x768@60, 1280x800@60, 1024x768@60, 800x600@60, 640x480@60 (base default, in case the PC has issues and boots up in default mode). Inspect each, leaving the signal on for several seconds (no "sparklies"). HDMI Generator required	
7.40	Perform all "Source Tests" with HDMI tester on each source, especially Format Analyzer, Video Display, Audio Analyzer, and HDCP Tests immediately before all the sinks (displays) in the system. Test will verify source integrity and EDID information. QD 780 Analyzer required.	
7.41	Perform "Sink Test" with HDMI tester on each display. Test will verify display can handle various resolutions, and spot check EDID to make sure they work with all sources. QD 780 Analyzer required.	
7.42	Using a static video source, perform a pixel by pixel comparison through entire signal chain from each source location. Test will compare ten frames. Set generator to the highest resolution supported by the system, route to each display, and compare frames at each display. Repeat for every source location. QD 780 Analyzer and separate HDMI generator required.	
7.43	If the switcher makes available a system status report with information regarding each source and destination signal integrity, EDID and CEC status information, etc., then obtain a report. If a printed or 'pdf' report is not included, take a screen print showing the status of the system (including source and destination communications with the switcher) and include it in the Report.	
7.44	When testing Blu-ray, confirm that the movie plays. Sometimes HDCP is not enabled during the menus and previews, but only during the movie. Blu-ray disc required.	
7.45	Confirm typical client laptops have been successfully used with the system, inclusive of default resolution (works with switcher EDID), any adapters, etc. Client laptop required.	

7.46		 3
7.40	For laptops with digital outputs: if the audio is not embedded in an HDMI connection, or if the user connects to his audio out, is the analog audio satisfactorily distributed? Client laptop required.	
7.47	The Control System performs all the functions as indicated on the function list ("control system specification") provided, with stability, and in sync with the equipment being controlled without the need to reset any item of equipment.	
7.48	When system is powered down, system "up" sequence presents the system in a desirable state with no objectionable anomalies.	
7.49	Be serviceable. This includes accessibility to equipment to be easily pulled for repair by one person, neatly dressed cables, bundled in forms (refer to Giddings, Davis and Davis), having no excessive pressure on cables at termination points and connectors, utilize service loops, and have each cable number in agreement with the as-built drawings. This includes the equipment rack itself. All switches and receptacles shall be logically and permanently labeled.	
7.50	Image size relative to furthest viewer ratio:(1:6) Record each, compare to recommended ratio.	
7.51	Confirm all nomenclature for consistency: drawings, touch screen, wall plates, floor boxes, patch panels, equipment, etc.	
7.52	Patch cables have cable numbers.	
7.53	Inspect camera image quality.	
7.54	Camera presets are programmed as specified by the user.	
7.55	Confirm acceptable TV levels, and any channel presets are accurate.	
7.56	Confirm that all codec options specified by the customer have been installed.	
7.57	IP information provided by client and loaded into system, including IP address, network ID's, subnet masks, default gateway, timeserver, Gatekeeper, alias, hostnames, etc. All network functions specified by the customer are shown to function properly on customer's LAN. These settings are listed in a report that will remain with the system.	
7.58	Any web-based system control or monitoring features, and other IP functionality of system (time servers, system-generated e-mail, etc.) thoroughly tested.	
7.59	Displays have On-Screen Displays/Menus Are Disabled, or as specified by the user.	
7.60	Video projector, if any, must have 'blue screen' or 'no Image screen' disabled, or as directed by the user.	
7.61	Log all test conference calls (audio and video). Log should include time, line used, number called, success of connection, who we spoke with, success of full duplex, success of auto disconnect, level in the room, note static or Jitter/packet loss, etc. Note if auto disconnect functions as specified.	

7.62	Confirm there are no lost or stuck "on" pixels when Full White Test signal is displayed (follow manufacturer's specification). Note number and location of lost pixels, if any.	
7.63	Check for excessive vibration on VC camera(s) at full telephoto position.	
7.64	Video record non-conformances and anomalies as required, facilitating corrective actions.	
7.65	Sanity check: would the user object to anything about this system? Is everything plumb and square, clean and blemish-free? Are displays and equipment free of fingerprints and dust?	
7.66	Does the system under test satisfy ALL of the system requirements as laid out by the client-approved narrative/signed proposal?	
7.67	Prepare document report, certifying the product, performance, and practices are in compliance, and noting any exceptions. Distribute accordingly.	

Calibrated Test Instrumentation Required

This list constitutes the minimum instrumentation required to perform the tests in the checklists, and does in no way imply a comprehensive list for engineered AV. In fact, in many cases additional instrumentation is required to verify performance on an item of equipment, or to quantify environmental and other issues so as to expedite corrective actions by others.

Test Instruments

	1 est tristi unients
1	Sensitive AC voltmeter, -80 dBu sensitivity, 20-30 kHz response, able to measure signal to noise ratio, THD, electrical audio levels within the system. Note that some systems require measurements up to 100 volts and may require an external pad.
2	Sound Pressure Level Meter, ANSI Type II, with A and C weighting filters, fast or time-averaged.
3	Audio Signal generator, 20-30 kHz, sine wave, pink noise.
4	Amplified loudspeaker 100 mm producing 60 dBA at one meter, and 70 dBA at one meter, pink noise, sine wave, speech files.
5	200MHz oscilloscope, with TV sync.
6	Analog Video Signal Generator NTSC/PAL, plus computer patterns at all required resolutions and refresh rates required for the systems under test. For systems with composite video, include PLUGE pattern.
7	Digital Video Signal Generator for computer patterns for all resolutions and refresh rates required for the systems under test, HDMI/DVI.
8	Quantumdata 780 Video Test Instrument, with HDMI Cable, ACA Passive Monitoring, Network Analyzer options installed, and applicable HDMI cables and adapters as required
9	The ability to measure STI-PA (source and analyzer).

10	Colorimeter/luminance meter, 10% accuracy.
11	Infrared Thermometer.
12	Test Media with known levels (audio, video, etc): CD's, VHS, DVD's, etc.
13	AC/DC MultiMeter.
14	Light meter, lux/footcandles.
15	Outlet tester (to test power outlet wiring).
16	Cable sets, cable assemblies, adapters as required to sample and measure in-or out of circuit as req'd.

This form is based on original form courtesy of AQAV Organization



722 Walsh Road Madison, WI 53714

NSI 8401 Greenway Blvd Madison, WI 53562

410-3253

Project Number 13587

9/26/2014 Page: 1

* * Proposal * *

608-443-2595/Fax 443-2597

Project Title..:

Polycom Service Agreement

Mfg-Item No.

Qty Description

Fearing's Audio-Video-Security proposes to provide NSI's Polycom VSX 7000 (serial # 82052905A22BB9) a one year Total Coverage Premier plan.

Polycom VSX 7000 (serial # 82052905A22BB9) a one year Total Coverage Premier plan. Support ends 4-17-15

End of service life on all VSX series is 4-30-16

Polycom VSX 7000 (serial #881126114253CP) a one year Total Coverage Premier plan. Support ends 2-1-15

The Total Coverage Premier covers the following items:

- 1. Next Day Delivery of Parts
- 2. 24x7 Test Sites
- 3. Software Upgrades and Updates
- 4. Unlimited Training
- Microphone and Camera are also covered in the Total Coverage Premier package as well.

Polycom

1 Total Coverage Premier - One Year VSX 7000 Seies

Polycom

1 Total Coverage Premier, One Year, HDX 6000 Series

Equipment and Installation

1,466.00

WI Sales Tax

80.63

This * * Proposal * * is Valid for 30 Days.

\$1,546.63

Jeff Cororan

I Accept This Quote

Drine histan

Date: 10/2/2014

50% Deposit, 40% at 80% completion, 10% upon completion. Contents of this proposal are effective for 30 days.