

**ADAMS COUNTY**  
**CONSTRUCTION CONTRACT**

THIS CONSTRUCTION AGREEMENT ("Agreement") is made as of this 5<sup>th</sup> day of January, 2016, by and between the Board of County Commissioners of Adams County, Colorado, located at 4430 South Adams County Parkway, Brighton, Colorado 80601, hereinafter referred to as the "County," and, Centerline Solutions, LLC, located at 16360 Table Mountain Parkway, Golden, CO 80403, hereinafter referred to as the "Contractor."

The County and the Contractor, for the consideration herein set forth, agree as follows:

**1. RESPONSIBILITIES/SERVICES OF THE CONTRACTOR**

- 1.1. The Contractor shall furnish all of the labor, machinery, equipment, materials, and supplies necessary to perform all of the work shown on the plans and described in the specifications, and in all other documents incorporated herein by reference, entitled:

**Request for Proposal: 2015.519 Neutral Host Active Distributed Antenna System**

- 1.2. The Contractor shall perform in accordance with the project scope and provisions of the Request for Proposal, and, in addition to the terms set forth in this Agreement, the Contractor agrees to be bound by and to perform in accordance with the following specified documents attached hereto and incorporated herein as if fully written into this Agreement:
- 1.2.1. All terms set forth in the RFP DOCUMENTS attached hereto and identified as: REQUEST FOR PROPOSAL, BID PROPOSAL, BID SCHEDULE, BID BOND, CONSTRUCTION AGREEMENT, PERFORMANCE & PAYMENT BONDS, INSURANCE, BIDDER'S CLIENT LIST, BIDDER'S CREDIT LIST, NOTICE OF AWARD, ACCEPTANCE OF NOTICE OF AWARD, NOTICE TO PROCEED, LETTER OF ACCEPTANCE, APPLICATION FOR EXEMPTION CERTIFICATE, FIELD ORDER, CHANGE ORDER, APPLICATION FOR PAYMENT, PARTIAL WAIVER OF LIEN, FINAL WAIVER OF LIEN, CERTIFICATE OF FINAL COMPLETION, PROJECT DRAWINGS AND ANY SPECIAL DETAILS.
- 1.3. The Contractor agrees that it has satisfied itself as to the nature and location of the work, the character, quality, and quantity of the materials to be encountered, including subsurface conditions, the equipment and facilities needed to complete the work, the local conditions, and all other matters which can affect the work under this Agreement and Contractor assumes the risk should the conditions enumerated in this section differ from what Contractor anticipated.
- 1.4. When required by any document incorporated into this Agreement, certain specified materials shall not be incorporated in the work until tests have been made and the material found to be in accordance with the requirements of the specifications. All costs of initial testing shall be included in the price bid. The Contractor will pay for repeated tests due to failure of initial tests.

- 1.5. This Agreement does not guarantee to the Contractor any work except as authorized in accordance with this Section I, nor does it create an exclusive agreement for services.
- 1.6. The Contractor understands that close cooperation and coordination of this project with all or other contractors or subcontractors is required.
- 1.7. Emergency Services: In the event the Adams County Board of County Commissioners declares an emergency, the County may request additional services (of the type described in this Agreement or otherwise within the expertise of Contractor) to be performed by Contractor. If County requests such additional services, Contractor shall provide such services in a timely fashion given the nature of the emergency, pursuant to the terms of this Agreement. Unless otherwise agreed to in writing by the parties, Contractor shall bill for such services at the rates provided for in this Agreement.

## **2. COMPLIANCE WITH C.R.S. § 8-17.5-101, ET. SEQ. AS AMENDED 5/13/08**

- 2.1. Pursuant to Colorado Revised Statute (C.R.S.), § 8-17.5-101, *et. seq.*, as amended 5/13/08, the Contractor shall meet the following requirements prior to signing this Agreement (public contract for service) and for the duration thereof:
- 2.2. The Contractor shall certify participation in the E-Verify Program (the electronic employment verification program that is authorized in 8 U.S.C. § 1324a and jointly administered by the United States Department of Homeland Security and the Social Security Administration, or its successor program) or the Department Program (the employment verification program established by the Colorado Department of Labor and Employment pursuant to C.R.S. § 8-17.5-102(5)) on the attached certification.
- 2.3. The Contractor shall not knowingly employ or contract with an illegal alien to perform work under this public contract for services.
- 2.4. The Contractor shall not enter into a contract with a subcontractor that fails to certify to the Contractor that the subcontractor shall not knowingly employ or contract with an illegal alien to perform work under this public contract for services.
- 2.5. At the time of signing this public contract for services, the Contractor has confirmed the employment eligibility of all employees who are newly hired for employment to perform work under this public contract for services through participation in either the E-Verify Program or the Department Program.
- 2.6. The Contractor shall not use either the E-Verify Program or the Department Program procedures to undertake pre-employment screening of job applicants while this public contract for services is being performed.
- 2.7. If Contractor obtains actual knowledge that a subcontractor performing work under this public contract for services knowingly employs or contracts with an illegal alien, the Contractor shall: notify the subcontractor and the County within three days that the Contractor has actual

knowledge that the subcontractor is employing or contracting with an illegal alien; and terminate the subcontract with the subcontractor if within three days of receiving the notice required pursuant to the previous paragraph, the subcontractor does not stop employing or contracting with the illegal alien; except that the contractor shall not terminate the contract with the subcontractor if during such three days the subcontractor provides information to establish that the subcontractor has not knowingly employed or contracted with an illegal alien.

2.8. Contractor shall comply with any reasonable requests by the Department of Labor and Employment (the Department) made in the course of an investigation that the Department is undertaking pursuant to the authority established in C.R.S. § 8-17.5-102(5).

2.9. If Contractor violates this Section II of this Agreement, the County may terminate this Agreement for breach of contract. If the Agreement is so terminated, the Contractor shall be liable for actual and consequential damages to the County.

### **3. RESPONSIBILITIES OF THE COUNTY**

The County shall:

3.1. Provide information as to its requirements for the project.

3.2. Give prompt notice to the Contractor whenever the County observes or otherwise becomes aware of any defect in the project.

3.3. Provide reasonable assistance to the Contractor in obtaining approval from all governmental authorities having jurisdiction over the project, and such approvals and consents from such other individuals or bodies as may be necessary for completion of the project.

3.4. Furnish, or direct the Contractor to provide, at the County's expense, necessary additional services.

### **4. TERM**

4.1. The work to be performed under this Agreement shall be ninety (90) days for installation and one year after installation for maintenance and operation.

### **5. PAYMENT AND FEE SCHEDULE**

5.1. The County shall pay the Contractor for services furnished under this Agreement, and the Contractor shall accept as full payment for those services, the sum of two hundred thirty-one thousand, three hundred ninety-six dollars (\$231,396.00).

5.2. The Contractor shall maintain hourly records of time worked by its personnel to support any audits the County may require, and shall bill the County monthly for costs accrued during the preceding month. Payments on these billings will be subject to estimates prepared by the Project Manager of the value of work performed and materials delivered and materials placed

in accordance with the specifications. Upon submission of such billings to the County and approval by the Project Manager, payment shall be issued. It is understood and agreed that the County may require a maximum of thirty-one (31) days to process payment after receiving billing in the proper form.

5.3. The County may deduct money from the partial payments in an amount necessary to protect the interests of the County, and is dependent upon the following:

5.3.1. If the Agreement is for one hundred fifty thousand dollars (\$150,000) or more, the County shall withhold five percent (5%) of monthly partial payments until the contract is completed satisfactorily and finally accepted by the County. For Agreements less than one hundred fifty thousand dollars (\$150,000), the County may withhold more than five percent (5%).

5.3.2. All money withheld pursuant to this section shall be retained by the County no more than thirty (30) days after the project has been completed to satisfaction and has been finally accepted by the County. If the County finds that satisfactory progress is being made in all phases of the Agreement, the County may, upon written request of the Contractor, authorize payment from the withheld percentage. Before such payment is made, the County shall determine that satisfactory and substantial reasons exist for the payment, and shall require written approval from any surety furnishing bonds for the work performed under the terms of this Agreement.

5.4. Fund Availability: The County has appropriated sufficient funds for this Agreement for the current fiscal year. Payment pursuant to this Agreement, whether in full or in part, is subject to and contingent upon the continuing availability of County funds for the purposes hereof. In the event funds become unavailable, as determined by the County, the County may immediately terminate this Agreement or amend it accordingly. To the extent allowed by the Colorado Taxpayer Bill of Rights and Title 29 of the Colorado Revised Statutes, the County represents that it has appropriated an amount of money for this Agreement that is at least equal to the contract price.

## **6. LIQUIDATED DAMAGES**

6.1. The Contractor agrees that time is of the essence in the performance of this Agreement. If the Contractor is delayed for any reason beyond its control, the Contractor shall submit the reason for the delay in writing to the Project Manager who shall decide whether it sufficiently justifies an extension of the completion date.

6.2. All decisions of the Project Manager are at his/her complete discretion and will be final.

6.3. Time is of the essence in the performance of this Agreement. In the event the Contractor shall fail to complete all the work to be performed by the completion time aforementioned, the Contractor shall pay to the County as and for liquidated damages, not as a penalty, the applicable sum set forth in the schedule below, for each and every calendar day that the Contractor shall be in default. From more than to and including:

Original Amount		Daily Charge Amount
From More Than	Up To and Including	
0	150,000	500
150,000	250,000	600
250,000	500,000	800
500,000	1,000,000	1,400
1,000,000	2,000,000	2,000
2,000,000	4,000,000	3,300
4,000,000	10,000,000	3,900
10,000,000	and up	3,900*
* plus 300 per each additional \$1,000,000 contract amount or part thereof over \$10,000,000		

- 6.4. Any deduction assessed as liquidated damages under this section shall not relieve the Contractor from liability for any damages or costs resulting from delays to other contractors on the job or to other projects caused by a failure of the Contractor to complete the work according to the agreed time.
- 6.5. Any extension(s) of the completion date authorized by the Project Manager pursuant to this section shall not relieve the Contractor from liability for any damages or costs resulting from delays to other contractors on the job. The Contractor agrees to indemnify and hold the County harmless from any claim against the County resulting from the Project Manager authorizing an extension of the completion date or from the Contractor's failure to complete this Agreement by the completion date aforementioned.
- 6.6. Permitting the Contractor to continue and finish the work, or any part thereof, after elapse of the agreed time will not operate as a waiver on the part of the County of any of its rights under this Agreement.

## **7. DAMAGES ARISING FROM BREACH OF PERFORMANCE OBLIGATIONS**

- 7.1. Notwithstanding anything else set forth in this Agreement, if Contractor fails to comply with all terms of this contract, including but not limited to, its obligation to perform its work in a workmanlike manner in accordance with all codes, plans, specifications and industry standards, Contractor shall be liable to County for all damages arising from the breach, including but not limited to, all attorney fees, costs and other damages.

## **8. WARRANTY**

- 8.1. The Contractor warrants and guarantees to the County that all work, equipment, and materials furnished under the Agreement are free from defects in workmanship and materials for a period of one year after final acceptance by the County. The Contractor further warrants and guarantees that the plans and specifications incorporated herein are free of fault and defect sufficient for Contractor to warrant the finished product after completion date. Should the Contractor fail to proceed promptly in accordance with this guarantee, the County may

have such work performed at the expense of the Contractor. This section does not relieve the Contractor from liability for defects that become known after one year.

## **9. SUBCONTRACTING**

- 9.1. The Contractor may utilize the services of subcontractors on those parts of the work that would normally be performed by subcontractors. But the Contractor shall not subcontract any portion of the work until the written approval of such action has been obtained from the Project Manager. The Contractor shall be fully responsible to the County for the acts and omissions of its subcontractors and their employees.

## **10. CHANGE ORDERS OR EXTENSIONS**

- 10.1. The County may, from time to time, require changes in the scope of the services of the Contractor to be performed herein including but not limited to additional instructions, additional work, and the omission of work previously ordered. The Contractor shall be compensated for all authorized changes in services, pursuant to the applicable provision in the Invitation to Bid, or, if no provision exists, pursuant to the terms of a Change Order. No Change Order shall be issued unless the County has appropriated sufficient funds to pay for the Change Order in the event the amount due pursuant to the Agreement as altered by the Change Order would result in the total contract price exceeding the amount originally appropriated by the County for the Agreement.
- 10.2. The County may, upon mutual written agreement by the parties, extend the time of completion of services to be performed by the Contractor.

## **11. INSPECTIONS, REVIEWS AND AUDITS**

- 11.1. When the work is completed, the Contractor shall file a written notice with the Project Manager that the work, in the opinion of the Contractor, has been finished. Within ten (10) days after the Contractor files the written notice, the Project Manager and the Contractor shall make a final inspection of the project to determine whether all of the work has been completed in accordance with this Agreement and with all documents incorporated herein. A final list shall be made by the County, in sufficient detail to fully outline to the Contractor the following items:
- 11.1.1. Work to be completed, if any; and,
  - 11.1.2. Work not in compliance with the Agreement, if any; and,
  - 11.1.3. Unsatisfactory work for any reason, if any.
- 11.2. The County shall not authorize final payment until all items on the list, if any, have been completed to the satisfaction of the Project Manager.

## **12. CLEAN-UP**

- 12.1. The Contractor shall frequently clean up all refuse or scrap materials resulting from the progress of the work. Upon completion of the work and prior to final inspection, the Contractor shall remove from the construction site and occupied adjoining property all refuse, unused materials, forming lumber, sanitary facilities, and any other materials belonging to the

Contractor or subcontractors. Failure of the Contractor to clean up and restore the site satisfactorily will result in the County doing so. The cost will be charged to the account of the Contractor or his/her surety.

### **13. PROJECT ADMINISTRATION**

- 13.1. The Project Manager for this Agreement shall be Larry Like, who can be reached by phone at 720-523-6334. The Project Manager does not have the authority to alter or modify the terms of this Agreement.
- 13.2. The Project Manager is designated by the County to exercise authority on its behalf under this Agreement, and to see that it is performed according to its terms. The Project Manager shall furnish all explanations or directions and inspections necessary to carry out and complete satisfactorily the services contemplated and provided for under this Agreement. The Project Manager shall also approve all report formats and related procedures, and shall be responsible for final acceptance of all work performed. Any conflict between the plans or specifications, and any other document incorporated herein, shall be submitted in writing to the Project Manager for review and determination.
- 13.3. If the Contractor considers any work demanded to be outside the Agreement requirements, or considers any determination of the Project Manager to be unfair, the Contractor shall immediately ask for a written instruction or decision from the Project Manager and shall proceed to perform the services to conform to the Project Manager's determination. If the Contractor considers such instructions or decision to be unsatisfactory, it shall, within five (5) days after their receipt, file a written protest with the Adams County Purchasing Office stating the objections and the reasons therefore. Unless protests or objections are made in the manner specified and within the time limit stated herein, the Contractor hereby waives all grounds for protests.
- 13.4. All claims, disputes, and other matters in question arising out of or relating to the Agreement documents or breach thereof between the Project Manager and the Contractor shall be submitted to the Adams County Purchasing Office.

### **14. NONDISCRIMINATION**

- 14.1. The Contractor shall not discriminate against any employee or qualified applicant for employment because of age, race, color, religion, marital status, disability, sex, or national origin. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices provided by the local public agency setting forth the provisions of this nondiscrimination clause.
  - 14.1.1. The Contractor will cause the foregoing provisions to be inserted in all subcontracts for any work covered by this Agreement so that such provisions will be binding upon each subcontractor, provided that the foregoing provisions shall not apply to contracts or subcontracts for standard commercial supplies or raw materials.

## 15. INDEPENDENT CONTRACTOR

15.1. In providing services under this Agreement, the Contractor acts as an independent contractor and not as an employee of the County. The Contractor shall be solely and entirely responsible for his /her acts and the acts of his /her employees, agents, servants, and subcontractors during the term and performance of this Agreement. No employee, agent, servant, or subcontractor of the Contractor shall be deemed to be an employee, agent, or servant of the County because of the performance of any services or work under this Agreement. The Contractor, at its expense, shall procure and maintain workers' compensation insurance as required by State law and personal injury and property damage insurance in the coverage amounts as described in Section XIV. **Pursuant to the Workers' Compensation Act § 8-40-202(2)(b)(IV), C.R.S., as amended, the Contractor understands that it and its employees and servants are not entitled to workers' compensation benefits from the County. The Contractor further understands that it is solely obligated for the payment of federal and state income tax on any moneys earned pursuant to this Agreement.**

## 16. INDEMNIFICATION

16.1. The Contractor agrees to indemnify and to hold the County and its agents harmless for, from, and against any and all claims, suits, expenses, damages or other liabilities, including reasonable attorney fees and court costs, arising out of damage or injury to persons or property caused or sustained by any person, persons, or entities as a result of the performance or failure of the Contractor, its agents or employees, or any subcontractor to provide services pursuant to the terms of this Agreement.

## 17. INSURANCE

17.1. The Contractor shall furnish a certificate of insurance for commercial general liability, comprehensive automobile liability, workers' compensation, and professional liability upon notification of award and prior to performance. Work shall not commence under this Agreement until the Contractor has submitted to the County, and received approval thereof, the certificate of insurance showing compliance with the following types and coverage of insurance.

17.1.1. Commercial General Liability Insurance: to include products liability, completed operations, contractual, broad form property damage, and personal injury.

Each Occurrence \$1,000,000

General Aggregate \$2,000,000

17.1.2. Comprehensive Automobile Liability Insurance: to include all motor vehicles owned, hired, leased, or borrowed.

Bodily Injury/Property Damage \$1,000,000 (each accident)

Personal Injury Protection Per Colorado Statutes

17.1.3. Workers' Compensation Insurance: Per Colorado Statutes

17.1.4. Professional Liability Insurance\*: to include coverage for damages or claims for damages arising out of the rendering, or failure to render, any professional services.



Each Occurrence

\$1,000,000

\*This insurance requirement applies only to Contractors who are performing services under this Agreement as professionals licensed under the laws of the State of Colorado, such as physicians, lawyers, engineers, nurses, mental health providers, and any other licensed professionals.

- 17.2. The Contractor's commercial general liability, comprehensive automobile liability, workers' compensation, and professional liability insurance policies and/or certificates of insurance shall be issued to include Adams County and the Colorado Department of Transportation (CDOT) as an "additional insured" and shall include the following provisions:
  - 17.2.1. Underwriters shall have no right of recovery or subrogation against the County, it being the intent of the parties that the insurance policies so affected shall protect both parties and be primary coverage for any and all losses resulting from the actions or negligence of the Contractor.
  - 17.2.2. The insurance companies issuing the policy or policies shall have no response against the County for payment of any premiums due or for any assessments under any form of any policy.
  - 17.2.3. Any and all deductibles contained in any insurance policy shall be assumed by and at the sole risk of the Contractor.
- 17.3. If any of the said policies shall be or at any time become unsatisfactory to the County as to form or substance, or if a company issuing any such policy shall be or at any time becomes unsatisfactory to the County, the Contractor shall promptly obtain a new policy, submit the same to the Purchasing Agent of Adams County for approval, and thereafter submit a certificate of insurance as herein provided. Upon failure of the Contractor to furnish, deliver, and maintain such insurance as provided herein, this Agreement, at the election of the County, may be immediately declared suspended, discontinued, or terminated. Failure of the Contractor to obtain and/or maintain any required insurance shall not relieve the Contractor from any liability under the Agreement, nor shall the insurance requirements be construed to conflict with the obligations of the Contractor concerning indemnification.
- 17.4. If the Contractor is a Joint Venture, then the respective parties thereto are each individually held fully responsible for completion of the project according to the terms of this Agreement. The parties thereto also have joint and several liabilities to the County for any liquidated damages assessed or for performance bond claims against the Joint Venture. The performance bond and all insurance required by this Agreement shall set forth the identity of each party to the Joint Venture.

## **18. TERMINATION**

- 18.1. Termination of Agreement for the Convenience of the County: The County, at its sole option and discretion, may terminate this Agreement at any time by giving written notice to the Contractor of such termination and specifying the effective date thereof, at least fifteen days before the effective date of termination. If the Agreement is terminated by the County, the Contractor will be paid an amount which bears the same ratio to the total compensation as the services actually performed bear to the total services of the Contractor covered by this Agreement, less payments of compensation previously made.

- 18.2. Termination of Agreement for Cause: If, through any cause, the Contractor shall fail to fulfill its obligations under this Agreement in a timely and proper manner, or if the Contractor shall violate any of the covenants, agreements, or stipulations of this Agreement, the County shall thereupon have the right to immediately terminate this Agreement upon giving written notice to the Contractor of such termination and specifying the effective date thereof.
- 18.3. Ownership of Partially Completed Work: All work accomplished by the Contractor prior to the date of such termination shall be recorded and tangible work documents shall be transferred to and become the sole property of the County prior to payment for services rendered.
- 18.4. Notwithstanding the above, the Contractor shall not be relieved of liability to the County for damages sustained by the County by virtue of any breach of the Agreement by the Contractor and for the purposes of setoff until such time as the exact amount of damages due the County from the Contractor is determined.

**19. BONDING:**

- 19.1. The Contractor shall secure a Performance Bond and a Payment Bond each in the amount of one hundred percent (100%) of the Agreement price with a corporate surety approved by the County and licensed to do business in the State of Colorado, said bonds to be released at the sole discretion of the County.

**20. MUTUAL UNDERSTANDINGS**

- 20.1. Jurisdiction and Venue: The laws of the State of Colorado shall govern as to the interpretation, validity, and effect of this Agreement. The parties agree that venue and jurisdiction for disputes regarding performance of this Agreement are with the District Court of Adams County, Colorado.
- 20.2. Compliance with Laws: The Contractor, at all times during the performance of this Agreement, agrees to strictly adhere to all applicable federal, state, and local laws, rules, and regulations that affect or govern the work as contemplated under this Agreement. If applicable, the Contractor and subcontractors shall abide by all applicable provisions of the Davis-Bacon Act for payment of wages to employees and the Contract Work Hours and Safety Standards Act. The parties hereto aver that they are familiar with §§ 18-3-301, et seq., C.R.S. (Bribery and Corrupt Influences), as amended, and §§ 18-8-401, et seq., C.R.S. (Abuse of Public Office), as amended, the Clean Air Act (42 U.S.C. 7401-7671q), and the Federal Water Pollution Control Act (33 U.S.C. 1251-1387), as amended, and that no violation of such provisions are present. Contractor warrants that it is in compliance with the residency requirements in §§ 8-17-101, et seq., C.R.S.
- 20.3. Record Retention: The Contractor shall maintain records and documentation of the services provided under this Agreement, including fiscal records, and shall retain the records for a period of three (3) years from the date this Agreement is terminated. Said records and documents shall be subject at all reasonable times to inspection, review, or audit by authorized federal, state, or county personnel.

- 20.4. Assignability: Neither this Agreement, nor any rights hereunder, in whole or in part, shall be assignable or otherwise transferable by the Contractor without the prior written consent of the County.
- 20.5. Waiver: Waiver of strict performance or the breach of any provision of this Agreement shall not be deemed a waiver, nor shall it prejudice the waiving party's right to require strict performance of the same provision, or any other provision in the future, unless such waiver has rendered future performance commercially impossible.
- 20.6. Force Majeure: Neither party shall be liable for any delay or failure to perform its obligations hereunder to the extent that such delay or failure is caused by a force or event beyond the control of such party including, without limitation, war, embargoes, strikes, governmental restrictions, riots, fires, floods, earthquakes, or other acts of God.
- 20.7. Notice: Any notices given under this Agreement are deemed to have been received and to be effective:
- 20.7.1. Three (3) days after the same shall have been mailed by certified mail, return receipt requested; and,
  - 20.7.2. Immediately upon hand delivery; or,
  - 20.7.3. Immediately upon receipt of confirmation that an E-mail was received.
  - 20.7.4. For the purposes of this Agreement, any and all notices should be addressed to the contacts listed below:

Department: Adams County Information Technology  
Contact: Larry Like  
Address: 4430 S. Adams County Parkway  
City, State, Zip: Brighton, CO 80601  
Phone: 720-523-6334  
E-mail: [llike@adcogov.org](mailto:llike@adcogov.org)

Department: Adams County Purchasing  
Contact: Anna Forristall  
Address: 4430 South Adams County Parkway  
City, State, Zip: Brighton, Colorado 80601  
Phone: 720-523-6297  
E-mail: [aforristall@adcogov.org](mailto:aforristall@adcogov.org)

Department: Adams County Attorney's Office  
Address: 4430 South Adams County Parkway  
City, State, Zip: Brighton, Colorado 80601  
Phone: 720.523.6116

Contractor: Centerline Solutions, LLC  
Contact: Vince Varga  
Address: 16360 Table Mountain Parkway  
City, State, Zip: Golden, CO 80403  
Phone: 303-993-3293, x468  
E-mail: [vvarga@centerlinesolutions.com](mailto:vvarga@centerlinesolutions.com)

- 20.8. Integration of Understanding: This Agreement contains the entire understanding of the parties hereto and neither it, nor the rights and obligations hereunder, may be changed, modified, or waived except by an instrument in writing that is signed by the parties hereto.
- 20.9. Severability: If any provision of this Agreement is determined to be unenforceable or invalid for any reason, the remainder of this Agreement shall remain in effect, unless otherwise terminated in accordance with the terms contained herein.
- 20.10. Authorization: Each party represents and warrants that it has the power and ability to enter into this Agreement, to grant the rights granted herein, and to perform the duties and obligations herein described.
- 20.11. Confidentiality: All documentation related to this Agreement will become the property of Adams County. All documentation maintained or kept by Adams County shall be subject to the Colorado Open Records Act, C.R.S. 24-72-201 *et seq.* ("CORA"). The County does not guarantee the confidentiality of any records.

The remainder of this page is left blank intentionally.

IN WITNESS WHEREOF, the Parties have caused their names to be affixed hereto:

**Board of County Commissioners**

[Signature]

Chairman

01.05.16

Date

**Centerline Solutions, LLC**

[Signature]

Signature

Dec 29, 2015

Date

RACHELLE BARANDA CROW

Printed Name

VP-BUSINESS OPERATIONS

Title

**Attest:**

Stan Martin, Clerk and Recorder

[Signature]

Deputy Clerk

Approved as to Form:

[Signature]

Adams County Attorney's Office

**NOTARIZATION OF CONTRACTOR'S SIGNATURE:**

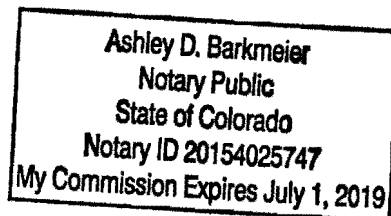
COUNTY OF Jefferson )

STATE OF Colorado )SS.

Signed and sworn to before me this 29 day of December, 2015,

by Rachelle Baranda Crow

Ashley Barkmeier  
Notary Public



My commission expires on: 7-1-19

## CONTRACTOR'S CERTIFICATION OF COMPLIANCE

Pursuant to Colorado Revised Statute, § 8-17.5-101, *et. seq.*, as amended 5/13/08, as a prerequisite to entering into a contract for services with Adams County, Colorado, the undersigned Contractor hereby certifies that at the time of this certification, Contractor does not knowingly employ or contract with an illegal alien who will perform work under the attached contract for services and that the Contractor will participate in the E-Verify Program or Department program, as those terms are defined in C.R.S. § 8-17.5-101, *et. seq.* in order to confirm the employment eligibility of all employees who are newly hired for employment to perform work under the attached contract for services.

### CONTRACTOR:

CENTERLINE SOLUTIONS, LLC  
Company Name

Dec 29, 2015  
Date

RACHELLE BARANDA-CROW  
Name (Print or Type)

  
Signature

VP- BUSINESS OPERATIONS  
Title

Note: Registration for the E-Verify Program can be completed at: <https://www.vis-dhs.com/employerregistration>. It is recommended that employers review the sample "memorandum of understanding" available at the website prior to registering

**ADAMS COUNTY FORMAL REQUEST FOR PROPOSAL  
2015.519**

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**NEUTRAL HOST ACTIVE  
DISTRIBUTED ANTENNA SYSTEM (DAS)**

**All documents and Addendum related to this RFP  
will be posted on the Rocky Mountain Bid System at:  
<http://www.rockymountainbidsystem.com/Bids/ViewOpenSolicitations.asp>**

**Proposal Issuance: October 9, 2015**

**PRE-PROPOSAL CONFERENCE: October 19, 2015 at 10:00 am  
Located at 4430 S. Adams County Parkway, Brighton, CO 80601-8212**

**Written questions regarding this RFP will be accepted through  
October 22, 2015**

**An Addendum to answer submitted questions will be  
issued no later than October 26, 2015**

**Proposal Opening Date: October 30, 2015  
Time: 2:00 pm**

**Location: Adams County Government Center  
4430 South Adams County Parkway  
4<sup>th</sup> Floor, C4000A  
Brighton, CO 80601**



## GENERAL INSTRUCTIONS

1. The Adams County Board of Commissioners by and through its Purchasing Division of the Finance Department is accepting proposals for a NEUTRAL HOST ACTIVE DISTRIBUTED ANTENNA SYSTEM (DAS) for the Government Center.
2. **All documents related to this RFP will be posted on the Rocky Mountain Bid System at: <http://www.rockymountainbidsystem.com/Bids/ViewOpenSolicitations.asp>**
  - 2.1. Interested parties must register with this service to receive these documents.
  - 2.2. This service is offered free or with an annual fee for automatic notification services.
3. Written questions may be submitted through October 22, 2015. All questions are to be submitted to Anna Forristall, Purchasing Agent, by email at [aforristall@adcogov.org](mailto:aforristall@adcogov.org).
4. An Addendum to answer all questions will be issued no later than October 26, 2015.
5. **Existing Conditions:**  
**There will be a MANDATORY pre-proposal conference on October 19, 2015 at 10:00 a.m. at 4430 South Adams County Parkway, Brighton, Colorado 80601. The meeting will commence in the main lobby.**
  - 5.1 Examination of the site:
    - 5.1.1 Before submitting a proposal, each bidder must inspect the site of the proposed work to arrive at a clear understanding of the actual conditions under which the work is to be done. Firms will be held to have compared the premises with the documents, drawings and specifications, and to have satisfied themselves as to all conditions affecting the execution of the work.
    - 5.1.2 No allowance or extra compensation concerning any matter or thing about which the bidder might have reasonably been informed through such examination will be allowed.
6. Proposals
  - 6.1 Sealed proposals for consideration will be received at the office of the Purchasing Division of the Finance Department at the Adams County Government Center, 4430 South Adams County Parkway, Fourth Floor, C4000A Brighton Colorado 80601, up to 2:00 p.m. on October 30, 2015.
  - 6.2 The proposal opening time shall be according to our clock.
  - 6.3 Proposals will be publicly opened and the names of the companies submitting proposals will be read aloud.



- 6.4 Proposals may be mailed or delivered in person and **must be** in a sealed envelope clearly labeled with Company Name, Proposal Number and Project Title.
- 6.5 No proposals will be accepted after the time and date established above except by written addenda.
- 6.6 The proposal must be submitted on a CD or flash drive in a single PDF file not to exceed 20 pages. One set of brochures or other supportive documents may be included with the proposal narrative.
- 6.7 The two proposal signature pages "**CONTRACTOR'S CERTIFICATION OF COMPLIANCE**" pursuant to Colorado Revised Statute (C.R.S.), §8-17.5-101, *et. seq.*, as amended 5/13/08, and the "**PROPOSAL FORM**" acknowledging the receipt of addendum(s) must be signed and included as hard copy along with the CD. These are the **last two pages of the RFP**.
- 6.8 Proposals may not be withdrawn after date and hour set for closing. Failure to enter contract or honor the purchase order will be cause for removal of supplier's name from the Vendor's List for a period of twelve (12) months from the date of this opening.
- 6.9 In submitting the proposal, the vendor agrees that acceptance of any or all proposals by the Purchasing Manager within a reasonable time or period constitutes a contract. No delivery shall become due or be accepted unless a purchase order shall first have been issued by the Purchasing Division.
- 6.10 The County assumes no responsibility for late deliveries of mail on behalf of the United States Post Office or any other delivery system.
- 6.11 The County assumes no responsibility for a proposal being either opened early or improperly routed if the envelope is not clearly marked on the outside:

**NEUTRAL HOST ACTIVE  
DISTRIBUTED ANTENNA SYSTEM (DAS)  
RFP 2015.519**

- 6.12 In the event of a situation severe enough to cause the Adams County Board of Commissioners to close the County offices for any reason, the Purchasing Manager has the prerogative of rescheduling the proposal opening time and date. No proposal will be considered above all other proposals by having met the proposal opening time and date requirements to the exclusion of those who were unable to present their proposal due to a situation severe enough to cause the Board of Commissioners to close the County offices.
- 6.13 Proposal must be submitted in the format supplied and/or described by the County. Failure to submit in the format provided may be cause for rejection of the proposal. Proposals must be furnished exclusive of taxes.

- 6.14 No award will be made to any person, firm, or corporation, which is in arrears upon any obligation to the County.
  - 6.15 If submitting a joint venture proposal or a proposal involving a partnership arrangement, articles of partnership stating each partner's responsibilities shall be furnished and submitted with the proposal.
  - 6.16 The County reserves the right to waive any irregularities or informalities, and the right to accept or reject any and all proposals, including but not limited to:
    - 6.16.1 Any Proposal which does not meet bonding requirements, or,
    - 6.16.2 Proposals which do not furnish the quality, or,
    - 6.16.3 Offer the availability of materials, equipment or services as required by the specifications, description or scope of services, or,
    - 6.16.4 Proposals from offerors who lack experience or financial responsibility, or,
    - 6.16.5 Proposals which are not made to form.
  - 6.17 The Board of County Commissioners may rescind the award of any proposal within one week thereof or at its next regularly scheduled meeting; whichever is later, when the public interest will be served thereby.
  - 6.18 Issuance of this solicitation does not commit the County to award any Agreement or to procure or Agreement for any equipment, materials or services.
  - 6.19 If a formal Agreement is required, the Contractor agrees and understands that a Notice of Award does not constitute an Agreement or create a property interest of any nature until an Agreement is signed by the Awardee and the Board of County Commissioners and/or their authorized designee.
  - 6.20 Only sealed proposals received by the Purchasing Division of the Finance Department will be accepted; proposals submitted telephone, email, or facsimile machines are not acceptable.
  - 6.21 All documentation submitted in response to this solicitation will become the property of Adams County. All documentation maintained or kept by Adams County shall be subject to the Colorado Open Records Act. C.R.S. 24-72-201 *et. seq.* ("CORA"). Accordingly, respondents are discouraged from providing information that they consider confidential, privileged, and/or trade secrets as part of a response to this solicitation. Any portions of submissions that are reasonably considered confidential should be clearly marked. The County does not guarantee the confidentiality of any records.
7. Adams County is an equal opportunity employer.

8. The County ensures that disadvantaged business enterprises will be afforded full opportunity to submit bids in response to all invitations and will not be discriminated against on the grounds of race, color, national origin, age, gender, or disability in consideration for an award.
9. **COOPERATIVE PURCHASING:** Adams County encourages cooperative purchasing in an effort to assist other agencies to reduce their cost of bidding and to make better use of taxpayer dollars through volume purchasing. Contractor(s) may, at their discretion, agree to extend the prices and/or terms of the resulting award to other state or local government agencies, school districts, or political subdivisions in the event they would have a need for the same product/service. Usage by any entity shall not have a negative impact on Adams County in the current term or in any future terms.

The Contractor(s) must deal directly with any governmental agency concerning the placement of purchase orders/agreements, freight/delivery charges, contractual disputes, invoices, and payments. Adams County shall not be liable for any costs or damages incurred by any other entity.

10. **INSURANCE:** The Contractor agrees to maintain insurance of the following types and amounts:

10.1. Commercial General Liability Insurance: to include products liability, completed operations, contractual, broad form property damage and personal injury.

10.1.1. Each Occurrence	\$1,000,000
10.1.2. General Aggregate	\$2,000,000

10.2. Comprehensive Automobile Liability Insurance: to include all motor vehicles owned, hired, leased, or borrowed.

10.2.1. Bodily Injury/Property Damage	\$1,000,000 (each accident)
10.2.2. Personal Injury Protection	Per Colorado Statutes

10.3 Workers' Compensation Insurance: Per Colorado Statutes

10.4. Professional Liability Insurance: to include coverage for damages or claims for damages arising out of the rendering, or failure to render, any professional services.

- |                         |             |
|-------------------------|-------------|
| 10.2.3. Each Occurrence | \$1,000,000 |
|-------------------------|-------------|
- 10.2.4. This insurance requirement applies only to Contractors who are performing services under this Agreement as professionals licensed under the laws of the State of Colorado, such as physicians, lawyers, engineers, nurses, mental health providers, and any other licensed professionals.

10.5. The Contractor's commercial general liability, and comprehensive automobile liability insurance policies and/or certificates of insurance shall be issued to include Adams County as an "additional insured," and shall include the following provisions:

- 10.5.1. Underwriters shall have no right of recovery or subrogation against the County, it being the intent of the parties that the insurance policies so affected shall protect

- both parties and be primary coverage for any and all losses resulting from the actions or negligence of the Contractor.
- 10.5.2. The insurance companies issuing the policy or policies shall have no response against the County for payment of any premiums due or for any assessments under any form of any policy.
- 10.5.3. Any and all deductibles contained in any insurance policy shall be assumed by and at the sole risk of the Contractor.
- 10.6. All insurers of the Contractor must be licensed or approved to do business in the State of Colorado. Upon failure of the Contractor to furnish, deliver and/or maintain such insurance as provided herein, this Agreement, at the election of the County, may be immediately declared suspended, discontinued, or terminated. Failure of the Contractor in obtaining and/or maintaining any required insurance shall not relieve the Contractor from any liability under this Agreement, nor shall the insurance requirements be construed to conflict with the obligations of the Contractor concerning indemnification.
- 10.7. Each insurance policy herein required shall be endorsed to state that coverage shall not be suspended, voided, or canceled without thirty (30) days prior written notice by certified mail, return receipt requested, to the County.
- 10.8. At any time during the term of this Agreement, the County may require the Contractor to provide proof of the insurance coverage's or policies required under this Agreement.
- 10.9. The Contractor shall not commence work under this contract until they have submitted to the County and received approval thereof, certificates of insurance showing that they have complied with the foregoing insurance.
- 10.10. All referenced insurance policies and/or certificates of insurance shall be issued to include Adams County as an "additional insured." The name of the proposal or project must appear on the certificate of insurance.
- 10.11. Underwriters shall have no right of recovery or subrogation against the County; it being the intent of the parties that the insurance policies so affected shall protect both parties and be primary coverage for any and all losses covered by the described insurance.
- 10.12. The clause entitled "Other Insurance Provisions" contained in any policy including the County as an additional insured shall not apply to The County.
- 10.13. If any of the said policies shall be or at any time become unsatisfactory to the County as to form or substance, or if a company issuing any such policy shall be or at any time become unsatisfactory to the County, the Contractor shall promptly obtain a new policy, submit the same to the Purchasing Manager of Adams County for approval and thereafter submit a certificate of insurance as herein above provided. Upon failure of the Contractor to furnish, deliver and maintain such insurance as provided herein, this contract, at the election of the County, may be immediately declared suspended, discontinued or terminated.

11. Contractor shall comply with the requirements of the Occupational Safety and Health Act (OSHA) and shall review and comply with the County's safety regulations while on any County property. Failure to comply with any applicable federal, state or local law, rule, or regulation shall give the County the right to terminate this agreement for cause.
12. **COMPLIANCE WITH C.R.S. § 8-17.5-101, ET. SEQ. AS AMENDED 5/13/08:**

Pursuant to Colorado Revised Statute (C.R.S.), § 8-17.5-101, *et. seq.*, as amended 5/13/08, the Contractor shall meet the following requirements prior to signing this Agreement (public contract for service) and for the duration thereof:

  - 12.1. The Contractor shall certify participation in the E-Verify Program (the electronic employment verification program that is authorized in 8 U.S.C. § 1324a and jointly administered by the United States Department of Homeland Security and the Social Security Administration, or its successor program) or the Department Program (the employment verification program established by the Colorado Department of Labor and Employment pursuant to C.R.S. § 8-17.5-102(5)) on the attached certification.
  - 12.2. The Contractor shall not knowingly employ or contract with an illegal alien to perform work under this public contract for services.
  - 12.3. The Contractor shall not enter into a contract with a subcontractor that fails to certify to the Contractor that the subcontractor shall not knowingly employ or contract with an illegal alien to perform work under this public contract for services.
  - 12.4. At the time of signing this public contract for services, the Contractor has confirmed the employment eligibility of all employees who are newly hired for employment to perform work under this public contract for services through participation in either the E-Verify Program or the Department Program.
  - 12.5. The Contractor shall not use either the E-Verify Program or the Department Program procedures to undertake pre-employment screening of job applicants while this public contract for services is being performed.
  - 12.6. If Contractor obtains actual knowledge that a subcontractor performing work under this public contract for services knowingly employs or contracts with an illegal alien, the Contractor shall: notify the subcontractor and the County within three days that the Contractor has actual knowledge that the subcontractor is employing or contracting with an illegal alien; and terminate the subcontract with the subcontractor if within three days of receiving the notice required pursuant to the previous paragraph, the subcontractor does not stop employing or contracting with the illegal alien; except that the Contractor shall not terminate the contract with the subcontractor if during such three days the subcontractor provides information to establish that the subcontractor has not knowingly employed or contracted with an illegal alien.
  - 12.7. Contractor shall comply with any reasonable requests by the Department of Labor and Employment (the Department) made in the course of an investigation that the

Department is undertaking pursuant to the authority established in C.R.S. § 8-17.5-102(5).

- 12.8. If Contractor violates this Section, of this Agreement, the County may terminate this Agreement for breach of contract. If the Agreement is so terminated, the Contractor shall be liable for actual and consequential damages to the County.

**End of General Instructions**

The remainder of this page is left blank intentionally.

## **SCOPE OF WORK**

The qualified firm's professional scope of work will include:

Designing, constructing, installing, operating and maintaining a multi-carrier neutral host cellular solution to support RF-based cellular carrier applications to a multi-tenant distributed antenna system connected throughout to the Government Center (GC). Provide wireless cellular voice and data coverage from multiple cellular providers through the DAS for receiving and transmitting cellular signals to portable wireless devices used by the employees and customers at the GC. Adams County prefers the following carriers, at a minimum, be included: AT&T, Verizon, T-Mobile and Sprint. The firm will need to establish an initial cellular signal baseline from the above listed carriers throughout all areas of the GC to verify internal coverage areas exceed existing outside cellular coverage by at least 6db. The firm will be responsible for all DAS operations including: All spectrums that cellular carriers are currently authorized by the FCC to implement, as well as spectrum that will likely be implemented for cellular service in the near future; the negotiation of multiple carrier agreements, carrier installation and access supervision; DAS monitoring and maintenance and radio frequency interference management.

## **TECHNICAL REQUIREMENTS**

- The DAS system shall provide total coverage for the GC including all 5 floors of the main tower and both of the entire 1<sup>st</sup> floor wings.
- The DAS system shall be carrier format neutral and support every cellular carrier, independent of wireless frequencies and format used.
- The DAS system and all its subsystems shall be designed to operate twenty-four (24) hours a day and 365 days a year.
- The DAS system must be compatible with current (EVDO/EVDV and UMTS) and new technologies, (for example 4G and LTE) as well as current re-banding efforts.
- The DAS system must be compliant with the Adams County local life safety (Police and Fire) frequencies - (800 MHz and 700MHz).
- The DAS system must be maintained as technologies evolve and be able to expand the DAS system to accommodate additional interested carriers at later intervals.
- The DAS system design must use modular architecture, and contain all wiring into existing above ceiling wiring trays. Prior to any installation, all antenna mounting locations are to be approved by Adams County.
- Signal Coverage and Reliability:
  - (a) Active Signal Handling: The DAS system will have active (powered) elements that filter and amplify signals to consistently deliver wireless services at the appropriate power levels. The solution will support all six (6) requested services to insure that each service (or carrier) has the ability to adjust and control power levels without disturbing other services.
  - (b) RF Signal Coverage: At a minimum, for cellular and PCS coverage, the DAS system must deliver signal strength of - 85 dBm to -89 dBm (3 Bars) to 100% of the facility.

(c) Fiber Optic and COAX Transport: The DAS system may utilize fiber optics to distribute signals within the vertical risers. The existing fiber optic network between data rooms will be available for use by the DAS, to the extent that excess fiber is available as determined by Adams County.

(d) Broadband Distribution: The DAS system may use fiber optics or coax cable in the horizontal runs to remote antenna units or directly to passive broadband antennas in the distribution area.

(e) Coverage Selectability: The DAS system will use a point-to-multipoint distribution architecture to provide different services and power levels across the facility.

- Manageability:

(a) SNMP Integration: The DAS system shall be at least SNMP compliant (v3 preferred).

(b) Centralized Management System: In the absence of an SNMP-based NMS system, the DAS system must provide a centralized management system that provides a system-wide view of the in-building deployment.

(c) End-to-End Visibility: The DAS system will provide end-to-end status information from the BDA/BTS to the remote-end including the antennas.

## **CONSTRUCTION REQUIREMENTS:**

### **Construction Standards and GC Facility Information:**

All Adams County construction standards shall be followed as stated in Attachments #2 and #3. An approval process is required prior to any installations. The selected successful contractor is responsible for all permits, licenses, certificates, and authorizations for construction activities. In addition, the companies bidding on this project will need to carry an allowance for damaged tile, grid and fire caulk for all penetrations. The County will inspect and sign-off all cable runs before ceiling tile is put back in place. The County shall also inspect for any damage at that time.

### **Mandatory Minimum Code Compliance:**

(a) National Electric Safety Code (National Bureau of Standards);

(b) National Electrical Code (National Bureau of Fire Underwriters); and

(c) Applicable FCC and other applicable federal, state and local regulations and ordinances.

The installation, operation or maintenance of the system shall not endanger or interfere with the safety of persons or property located at the Government Center. A good design will minimize the equipment that would be placed or mounted internally on building structures and in any publicly visible location.

**Aesthetics:** Use of stealth antennas and antennas that blend into GC building architecture.

Indoor antennas shall be low profile, flush-mount types suitable for suspended ceilings or walls and shall be of a multi-band configuration. It is acceptable to surface mount antennas in an open ceiling environment and to install surface mount antennas to walls, near ceiling height. Prior to any installation, all antenna mounting locations are to be approved by Adams County.



Demarcation: Adams County will establish a clearly labeled point of demarcation. The successful contractor is responsible for getting service into the designated room and extending from DEMARC to head-end equipment room.

#### **IMPLEMENTATION AND PROJECT PLAN:**

Contractor will coordinate all activity and hardware installation that affects the use of fiber, conduit, and cable tray with Adams County.

Implementation & Project plans must include:

- (a) Timeline to include: Planning, installation, testing and other major milestones associated with the project; and milestones at which Adams County must be engaged to provide support, the type of support required, and the length of time estimated will be required of Adams County resources.
- (b) Project plan to include: Design drawings; and additional surveys to develop the design must be obtained at Contractor's expense.
- (c) Contractor will provide a map of a layout of the network design.
- (d) Should such final design, in Authority's judgment, deviate from the bid in a manner that constitutes any hardship for the Authority, the Authority reserves the right to terminate without cost or cause any contract resulting from this procurement.
- (e) Installation acceptance: The DAS system will be tested and accepted by Adams County within one week of Contractor's notification for completion. Final 'as-built' drawings are to be submitted to Adams County within one (1) month of completion and acceptance.
- (f) Project Team: Contact information for Project Manager and/or Account Manager to include: Office Phone, Cell Phone, Fax Number, email address, street address for hard copy correspondence. Project Manager will serve as a single point of contact for communication with Adams County. Project Manager will act as liaison between Adams County and Contractor's employees and subcontractors. Attend on-site meetings, both scheduled and unanticipated. Be on-site to oversee sub-contractor work and keep project on schedule. Update the project status and report same to Adams County Project Manager. Contractor will promptly notify Adams County of all delays known or anticipated in the construction, rebuild, or extension of the system. The parties may extend the construction timetable in the event the Contractor, acting in good faith, experiences delays by reason of circumstances beyond its control.

#### **ACCEPTANCE AND TEST PLAN:**

The Contractor and Adams County are responsible for the mutually agreed development of acceptance test specifications for the installed active DAS system. The exact scope, methodologies, procedures, and acceptance criteria for executing the acceptance tests require Adams County approval. Said test plans must incorporate, at minimum, the following:

Test equipment to verify that all components of the system are functioning per specified criteria; Test and acceptance plan must clearly demonstrate system functionality and compliance with the specified criteria and design requirements of wireless carriers; Upon completing the installation of the system, all integrated subsystems will be aligned, adjusted and balanced as part of the

pretest plan. Any deficiencies observed in pre-testing will be corrected within 10 (ten) days. Any malfunctioning or damaged items will be replaced with new and tested until satisfactory performance and conditions are achieved;

Upon completion of pre-tests, Adams County will be notified a minimum of three (3) days in advance of acceptance test performance. Upon the satisfactory completion of system pre-tests, operational system testing will commence to ensure system conformance to requirements and specifications. The operational tests will include demonstration of system features and functionality, and coverage performance; Adams County will inspect the system to verify that subsystems, units and controls are properly labeled and interconnecting wires and terminals are identified; Any observed deficiencies indicated by tests or by Adams County inspection will be rectified and completely retested within 10 (ten) days. Work and materials required to correct deficiencies will be made at no expense to Adams County; and Contractor will provide copies of all zone tests and their results to Adams County, including a detailed diagram of the proposed in-building distribution system superimposed on the building floor plans.

Selection by Adams County of a solution provider shall be facilitated through a process direct from this RFP.

#### **PROPOSAL EVALUATION:**

The successful proposal shall be evaluated based on a series of criteria/categories, which may include, but not be limited to:

- Technical Requirements as outlined in the Scope of Work
- Construction Requirements and Code Compliance
- Implementation and Project Plan
- Acceptance and Test Plan
- Fee Proposal
- Interview / Oral Presentation (if required)

#### **ATTACHMENTS:**

- Adams County Government Center plans (3 pages). The build-outs for the third floor and fifth floor of the GC tower are not shown in the plans; however, they are comparable to the other floors in the building.
- Facility Operations – Safety Program
- Facility Operations – Contractor Rules
- Vendor Information Form

#### **End of Scope of Work**

The remainder of this page is left blank intentionally.

**Submittal Checklist**

- ☐ Response to RFP
- ☐ Vendor's Information Form (attachment #4)
- ☐ W-9
- ☐ Contractor's Certification of Compliance
- ☐ Proposal Form Contractor's Statement
- ☐ Three References for projects of a similar size and scope
- ☐ One original proposal and five (5) paper copies of the original proposal
- ☐ One CD or Flash Drive of submitted proposal in a single PDF document

## CONTRACTOR'S CERTIFICATION OF COMPLIANCE

Pursuant to Colorado Revised Statute, § 8-17.5-101, *et seq.*, as amended 5/13/08, as a prerequisite to entering into a contract for services with Adams County, Colorado, the undersigned Contractor hereby certifies that at the time of this certification, Contractor does not knowingly employ or contract with an illegal alien who will perform work under the attached contract for services and that the Contractor will participate in the E-Verify Program or Department program, as those terms are defined in C.R.S. § 8-17.5-101, *et seq.* in order to confirm the employment eligibility of all employees who are newly hired for employment to perform work under the attached contract for services.

CONTRACTOR:

\_\_\_\_\_  
Company Name

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name (Print or Type)

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

Note: Registration for the E-Verify Program can be completed at: <https://www.vis-dhs.com/employerregistration>. It is recommended that employers review the sample "memorandum of understanding" available at the website prior to registering



# PROPOSAL FORM

## 2015.519 NEUTRAL HOST ACTIVE DISTRIBUTED ANTENNA SYSTEM (DAS)

## CONTRACTOR'S STATEMENT

I have read and fully understand all the special conditions herein set forth in the foregoing paragraphs, and by my signature set forth hereunder, I hereby agree to comply with all said special conditions as stated or implied. In consideration of the above statement, the following proposal is hereby submitted.

Written Amount for Installation	\$ Amount
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Written Amount for Operation & Maintenance for one year	\$ Amount
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WE, THE UNDERSIGNED, HEREBY ACKNOWLEDGE RECEIPT OF

Addendum # \_\_\_\_\_ Addendum # \_\_\_\_\_  
If None, Please write NONE.

Company Name	Date
Address	Signature
City, State, Zip Code	Printed Name
County	Title
Telephone	Fax
Email Address	

## **ADDENDUM #1**

**The purpose of this addendum is to provide information about an optional meeting at the Government Center to take readings/measurements and to clarify the Scope of Work and to supply additional provisions in the RFP:**

**OPTIONAL PRE-PROPOSAL WALK-THROUGH to take readings and measurements within the building:** Saturday, October 24, 2015 at 9:00 a.m. at the Adams County Government Center located at 4430 S. Adams County Parkway, Brighton, CO 80601.

### **Clarifications in the Scope of Work:**

Under Technical Requirements:

- Adams County will require a project design with coverage propagation of cellular signals.
- The DAS system will need to have all components PIM rated to be compliant with the multiple cellular carriers.

Under Signal Coverage and Reliability:

(b) RF Signal Coverage: At a minimum, for cellular and PCS coverage, the DAS system must deliver signal strength of - 85 dBm to -89 dBm (3 Bars) for 3G, and a minimum strength of -75 dBm to -79 dBm for 4G to 100% of the facility. The DAS system must be able to overcome the existing macro signal by 8dBm as to not conflict.

Under Implementation and Project Plan:

(d) Should such final design, in Adams County judgment, deviate from the bid in a manner that constitutes any hardship for Adams County, Adams County reserves the right to terminate without cost or cause any contract resulting from this procurement.

Please incorporate these changes into the Request For Proposal's Scope of Work.

### **Additional Requirements of the RFP:**

- In a prominent place in your proposal response, please provide the number of days required to complete the work described in the Scope of Work.
- A Colorado and National background check will be required for all persons prior to being granted access to County facilities. The cost of the background checks will be the Contractor's responsibility.

- A minimum of three (3) references must be provided of similar projects (as stated on the Submittal Checklist form). Adams County Facility Operations may visit those references to check the quality of work.
- A Performance Bond and Surety Bond, each in a penal sum equal to the nearest integral One Hundred Dollars in excess of the estimated Contract Price with corporate surety approved by the County, will be requested for faithful performance of the Contract.
- The Agreement shall be signed by the successful proposer and returned together with the Performance Bond and Surety Bond within ten (10) days after the date of the award.

Please incorporate these changes into the Request For Proposal response.

**End of Addendum #1**

## **ADDENDUM #2**

### **The purpose of this addendum is to provide answers to vendor submitted questions for RFP 2015.519 NEUTRAL HOST ACTIVE DISTRIBUTED ANTENNA SYSTEM:**

- 1) One question that is unrelated to the bid/proposal, but is related to the project is whether the project administration (section 13) was outsourced or done in house? Vertex Innovations provides construction oversight project managers for hundreds of similar projects all around the country and could provide the services should you be able to support internally. I did not see reference to this process in the documents other than there would be someone designated by Adams County.  
A) Project management will be handled in house here at Adams County for this project.
- 2) The DAS system must be compliant with the Adams County local life safety frequencies – We assume this means the Neutral Host DAS must not interfere with the existing Public Safety System. Is this assumption correct?  
A) That is correct.
- 3) We must pull our own single mode fiber from the Data Center to each IDF. Does Adams County have any issues with using armored fiber in the existing cable tray?  
A) Armored fiber is acceptable.
- 4) Will a staging area be provided for our gear? Approximate space needed – 10'X10'  
A) Yes.
- 5) Will we need to supply our own racks in the data center?  
A) Adams County will provide the racks.
- 6) Will facilities do core drilling inside of the facility?  
A) No. A separate vendor will be required to x-ray the penetration point prior to performing the penetration. Vendor will work directly with Adams County Facilities.
- 7) Will facilities seal new rooftop penetrations?  
A) We would prefer to exit the penthouse room via a side wall.
- 8) Is a Bond required to work in the facility?  
A) Please see Addendum #1. A Performance Bond and Surety Bond, each in a penal sum equal to the nearest integral One Hundred Dollars in excess of the estimated Contract Price with a corporate surety approved by the County, will be requested for faithful performance of the Contract. An agreement shall be signed by the successful proposer and returned together with the Performance Bond and Surety Bond within ten (10) days after the date of the award.
- 9) Indoor antennas – must they be painted to match? Can they be mounted below the ceiling tiles (like the public safety antennas)?  
A) By default they are white or off-white, but are paintable.



10) Carrier Coordination – are any of the carriers a priority?

A) No

11) Under 'Technical Requirements' the RFP states "The DAS system must be compliant with the Adams County local life safety (Police and Fire) frequencies - (800 MHz and 700MHz)".

a) What is your definition of 'compliant with'?

A) That the RF cellular signal will not disrupt standard frequencies used by fire and police.

b) Will the new DAS be required to carry the signals from the existing public safety BDA? If so, will Adams County provide the existing BDA for the new system? If so, shall we include the move of that BDA in our services?

A) No. Only carrier cellular signals.

c) What are the frequencies and number of channels for the existing public safety DAS?

A) Please refer to question 33.

12) Can Adams County provide AutoCAD files for the facility?

A) Auto CAD files are not available.

13) Can Adams County provide as-built drawings (noting types and quantities) for the existing fiber optics, fiber distribution, raceways, chases, roof penetrations, and other existing cable paths?

A) Please refer to question 31.

14) Under "Technical Requirements" section, can you enumerate and provide other details on what the "six services" are?

A) AT&T, Sprint, T-Mobile, Verizon (4 carriers at a minimum), 3G and 4G.

15) What is the estimated occupancy and Wireless Service Provider profile at this facility? (eg, 130 users on Verizon, 89 users on AT&T, up to 120 visitors, etc.)

A) Occupancy averages 400, no idea on the specific carriers.

16) Is the DAS required to run in MIMO mode for LTE?

A) No.

17) Under 'Scope of Work' main paragraph, what is meant by:

a. "...responsible for...the negotiation of multiple carrier agreements"?

A) Notify the carriers of the external antenna and repeater system, and obtain an agreement that the new DAS system is not interfering with their existing tower signals.

b. "...responsible for...spectrums that will likely be implemented for cellular service in the near future..."?

A) Making sure that the solution presented is not at an end of life cycle at 4G, and be potentially migratable to future 5G technologies.

c. "...responsible for...radio frequency interference management"?

A) That an interface management exists to adjust signals if they step on each other and degrade cellular coverage.

18) Under 'Technical Requirements', does the phrase "...DAS system must be maintained as technologies evolve..." imply the DAS must be scalable for future expansion -OR- that the bidder is to allocate monies/pricing for future upgrades?

A) Just to possess the ability to increase the capabilities for future expansion without purchasing new hardware besides additional interior antennas and wiring.

19) Under 'Technical Requirements/Manageability', what status information is required for the antennas?

A) To remotely verify that they are functioning properly.

20) Under 'Construction Requirements', what "certificates" are the successful contractor responsible for?

A) If the Facilities Department determines any permitting needs to be obtained.

21) Please confirm there is no requirement for prevailing wage or union labor.

A) Federal funds will NOT be used for this project; therefore, there are no requirements to abide by the provisions of the Davis-Bacon Act. There are no prevailing wage restrictions.

22) Per the site walk, shall we assume that no commercial wireless carrier has agreed to nor will be providing BTS equipment for the new DAS (that is, all signal sources will be from over-the-air donor signals on the roof and BDAs)?

A) That is correct at this time, but the solution will need to possess the ability to accommodate for potential future agreements.

23) Can we assume that all new fiber is required for the new DAS, except for Adams County fiber we can utilize between the vertically-stacked IDF's?

A) All new fiber will need to be installed even between IDF's.

24) On the walk, you stated a need for PIM-compliance. Please confirm the requirement for low-PIM-rated passive RF components across the whole DAS.

A) Low PIM rated passive RF components across the whole DAS is required in order for the signals to operate properly in the indoor DAS environment.

25) Shall we exclude any required roof repairs, as implied on the walk?

A) Any roof damaged caused during the install will require the vendor to pay for repairs performed by our roofing vendor.

26) Can we assume there is ample space in vertical and horizontal chases and raceways?

A) Yes.

27) Please confirm the need for, or no need for, performance bond.

A) Please refer to Question #8 above.

28) Are we going to receive signal readings from the carriers inside the building? Or is this from the walkthrough on Saturday?

A) You will obtain this information from your walk-through on Saturday morning.

29) Does the public safety equipment need to be NEMA rated?

A) NA, already installed, this RFP is not asking for public safety.

30) Does battery back-up need to be included?

A) Yes, to ensure proper functionality when there is a slight interruption between AC power and generated power due to an outage.

31) It looks like the floor prints we received are cut off slightly. Are we missing any? I recall one other vendor was asking for FTP higher resolution image files.

A) The file(s) are uploaded to the site (<ftp://www.adamsgis.net>)

User account - FTP\_User4

pwd – 4adco\_CBLrfp\*.

32) Will staging areas be available to securely store materials and tools?

A) Yes.

33) What are the Public Safety frequencies currently being transmitted throughout the building?

A) The LMR simulcast frequencies are:

Base Tx	Base Rx
772.99375	802.99375
772.98125	802.98125
772.74375	802.74375
772.73125	802.73125
772.49375	802.49375
772.48125	802.48125
772.15625	802.15625
771.73125	801.73125
771.48125	801.48125
771.10625	801.10625
770.60625	800.60625
770.35625	800.35625

- 34) What frequencies are being received/transmitted by the rooftop 911 antennas?  
A) FCC designated LTE range for FirstNet
- 35) We will require 3 x 4" OD roof penetrations. Who would be responsible for those?  
A) Winning bidder will be responsible.
- 36) Will the county provide 15' lift or should we account for one in the bid?  
A) Winning vendor must bring in a lift.
- 37) Any restrictions on the rooftop donor antenna mount locations? We will be weight the 4 antenna sleds with at least 32 cinder blocks. Are there locations on the rooftop that this weight would be an issue?  
A) Yes, vendor needs to provide mounting hardware to attach to existing mechanical screening wall which contains heaving construction beams.
- 38) Can we install 2 x 19" racks inside the electrical room on the 5<sup>th</sup> floor to accommodate the repeaters and DAS head-end? The IDF closet on the 5<sup>th</sup> floor is too small to use for the DAS.  
A) If cooling is not required, it can go in the electrical room on the roof. If cooling is needed, we need to to the MDF on the first floor, across from the server room.
- 39) There is existing multimode fiber but since the DAS primarily use single mode fiber, we would like confirmation that the winning bidder is responsible to provide and install any single mode fiber required for the project.  
A) The winning bidder is responsible for all fiber optic cable installation.
- 40) Will this project require prevailing wages? If so, can you provide the wage determination rates.  
A) Please refer to question #21 above.
- 41) What are your payment terms? Can we invoice for equipment upon delivery?  
A) Adams County's payment term is net 30 days. Our delivery is FOB Destination. Yes, you can invoice for equipment upon delivery.
- 42) Is a Baseline required to bid?  
A) A cellular signal baseline is not required, but is recommended to obtain correct signal coverage as requested from the RFP.
- 43) Coax into Head End under the floors or above?  
A) The head end unit has been determined to either be placed in the electrical room on the roof or in the mdf on the first floor, and both locations do not have a raised floor access. Please refer to question 38.
- 44) Are directional antennas allowed between ceiling/wall?  
A) Yes, as long as they are not visually obtrusive if located below gridline.

45) Existing Conduit /Fiber Maps or as-built?

A) Please refer to question 31.

46) Staging area?

A) Please refer to question 32.

**Please incorporate this information into your Request For Proposal response.**

**The proposal opening due date and time shall remain October 30, 2015 at 2:00 p.m. at the Adams County Government Center, 4430 South Adams County Parkway, 4<sup>th</sup> Floor, C4000A, Brighton, Colorado 80601.**

**End of Addendum #2**

### **ADDENDUM #3**

**The purpose of this addendum is to change the due date of the proposal and to clarify the Scope of Work for RFP Neutral Host Active Distributed Antenna System 2015.519:**

In Addendum #2, Question #9, the answer has been updated as follows:

9) Indoor antennas – must they be painted to match? Can they be mounted below the ceiling tiles (like the public safety antennas)?

A) The indoor antennas will need to be painted to match, if Adams County personnel request. Indoor antenna can be mounted below the gridline if it can be shown that coverage is improved by doing so.

The following clarifications to the Scope of Work are to be incorporated into the RFP as follows:

- The entire Hearing Room and the Hearing Room Foyer will need to be included with the 100% cellular coverage area of the building.
- In the Warehouse area, there is a need to have cellular coverage in the Dock and Mailroom sections. The rest of the Warehouse area (concrete floor walkways) does not need coverage.

**The proposal due date and time shall change to:**

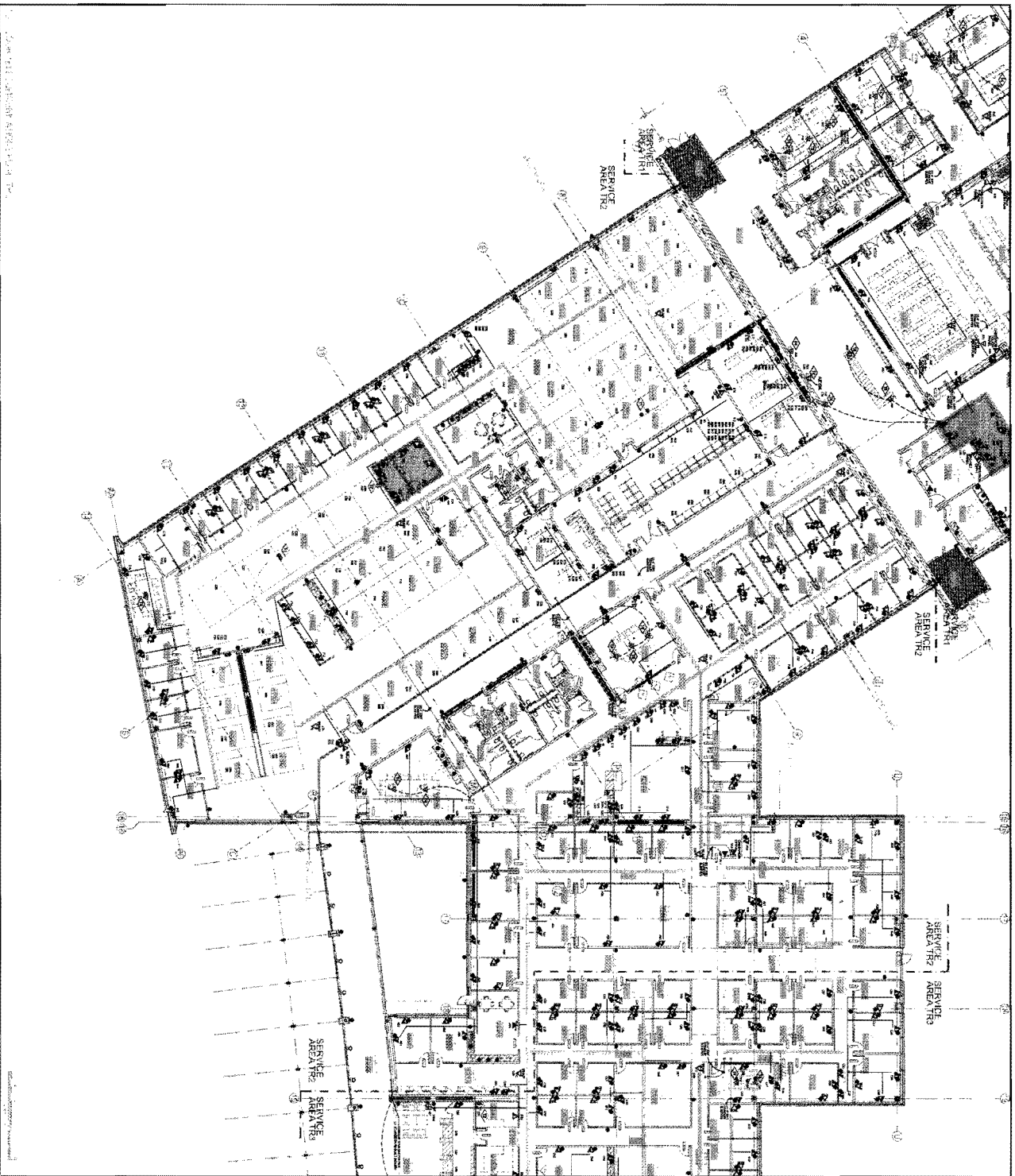
**MONDAY, NOVEMBER 2, 2015 AT 2:00 PM** at the Adams County Government Center, 4430 South Adams County Parkway, 4<sup>th</sup> Floor, C4000A, Brighton, Colorado 80601.

**Please incorporate this information into your Request For Proposal response.**

**Please note the receipt of the three (3) Addenda in your Proposal Form Contractor's Statement where indicated.**

**End of Addendum #3**

02/17/2011	Product No.	70-10635	Serial No.	T1.1
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## KEY PLAN



ADAMS COUNTY  
GOVERNMENT CENTER  
4430 SOUTH ADAMS COUNTY PARKWAY  
BRIGHTON, CO 80601

TELECOM CABLING PLAN TR2 SERVICE AREA

PIPER  
COMMUNICATION  
SERVICES, INC.  
BUILDING HIGH PERFORMANCE NETWORKS

3600 JAY STREET  
APARITE, CO 80601

TEL: (303) 444-1000  
FAX: (303) 444-1001

RECORD DRAWING - 01072009

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T1.2











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958 / *Journal of Interpersonal Violence* 28(5)

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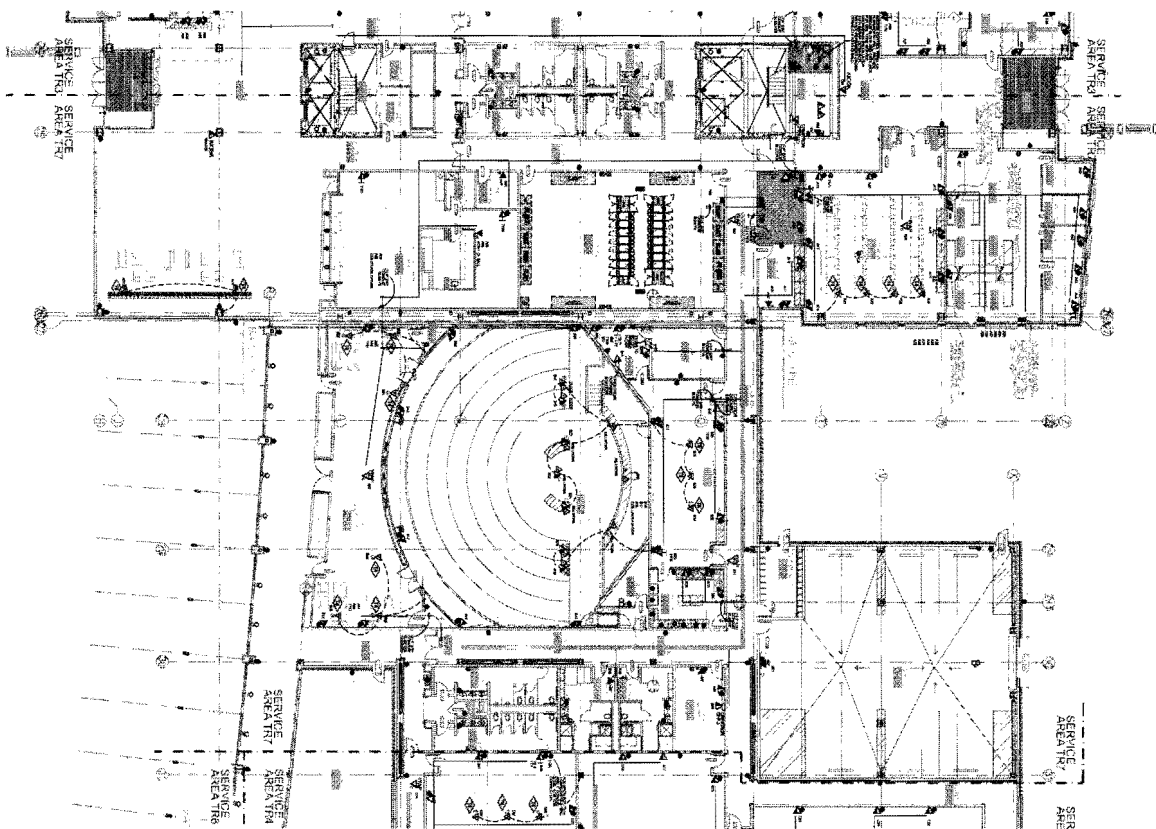
ON THE SUBJECT OF "COGNITIVE" AND "EMOTIONAL" BETWEEN THE TWO, I WOULD SAY THAT THE "EMOTIONAL" IS THE "COGNITIVE" AND THE "COGNITIVE" IS THE "EMOTIONAL".

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ADAMS COUNTY  
GOVERNMENT CENTER  
4430 SOUTH ADAMS COUNTY PARKWAY  
BRIGHTON, CO 80601  
TELECOM CABLING PLAN TR6 SERVICE AREA

PIPER  
COMMUNICATION  
SERVICES, INC.  
BUILDING HIGH PERFORMANCE NETWORKS

RECORD NUMBER - 0167086



### T1.7



## RECORD CRYSTAL - 21A7C000

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ADAMS COUNTY  
GOVERNMENT CENTER  
4430 SOUTH ADAMS COUNTY PARKWAY  
BRIGHTON, CO 80601  
3RD FLOOR TELECOMMUNICATIONS PLAN

**PIPER  
COMMUNICATION  
SERVICES, INC.**  
BUILDING HIGH PERFORMANCE NETWORK

8880 JAY STREET      FAX: (303) 458-1080  
ARVADA, CO 80003      FAX: (303) 408-1873

RECEIVED: 25 AUGUST 1993

### T3.1





4 (1) CATEGORY 8 DATA, JACK AND FACEPLATE (U.N.O. AS QUANTUM), STANDARD HEIGHT: +15" O.C., A.T.F.

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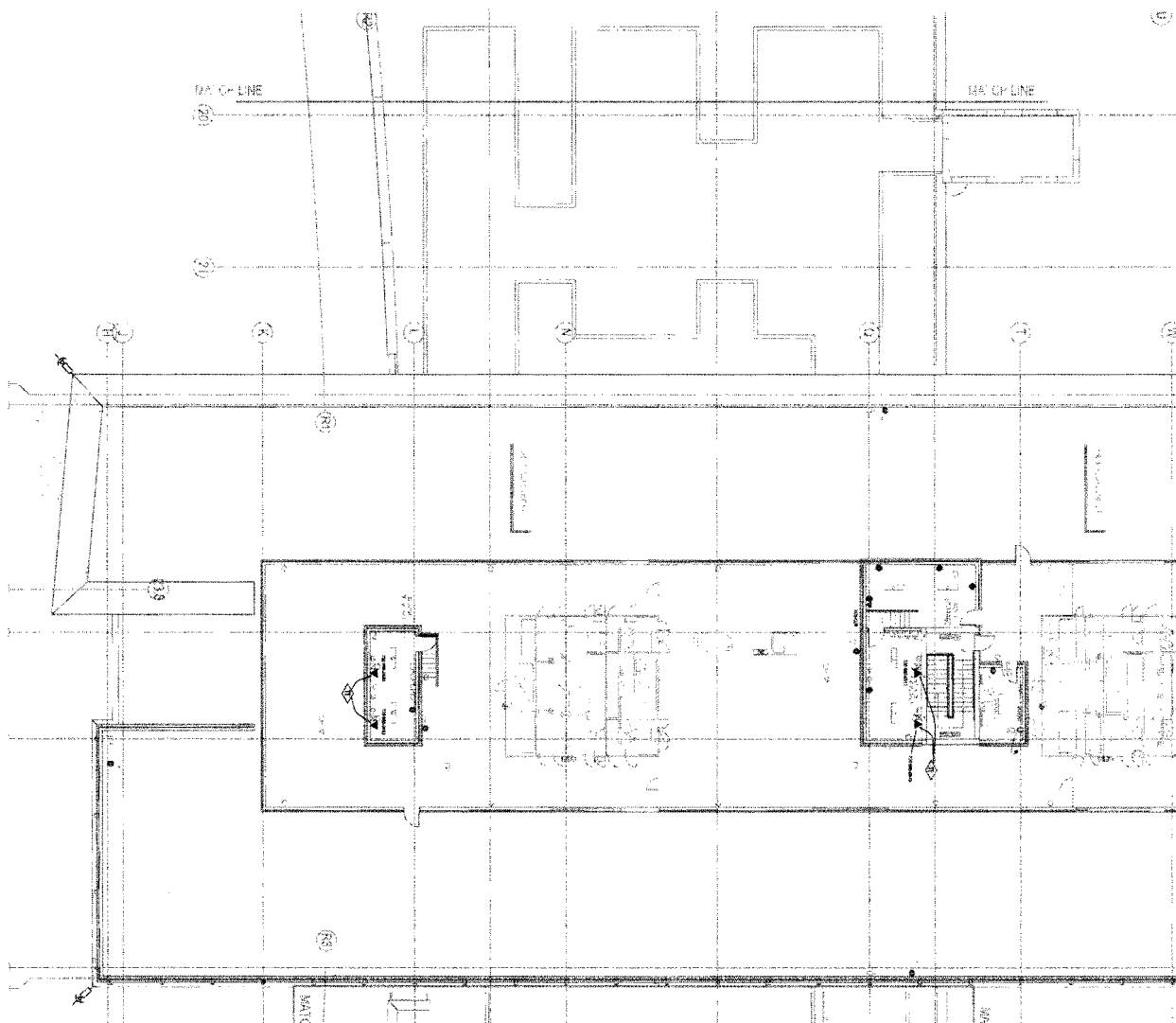
ADAMS COUNTY  
GOVERNMENT CENTER  
4430 SOUTH ADAMS COUNTY PARKWAY  
BRIGHTON, CO 80601

5TH FLOOR TELECOMMUNICATIONS PLAN


PIPER  
COMMUNICATION  
SERVICES, INC.  
BUILDING HIGH PERFORMANCE NETWORKS

5400 JAY STREET                      PH: (303) 434-1080  
ARVADA, CO 80001                    FAX: (303) 438-1872

RECORD DATES - 04/01/2000



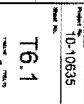
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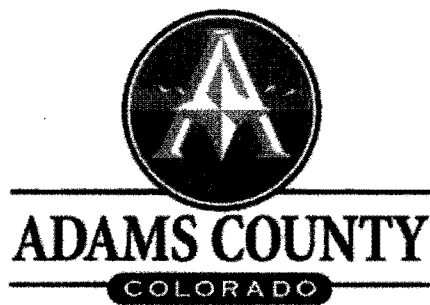
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**PIPER**  
 COMMUNICATION  
 SERVICES, INC.  
 BUILDING HIGH PERFORMANCE NETWORKS

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## **FACILITY OPERATIONS**

## **POLICY & PROCEDURE**

**POLICY NO: FO – 005**

**TITLE/SUBJECT: Facility Operations – Safety Program**

**EFFECTIVE DATE: 11/2012**

**Dates Revised: 11/2012 03/2013 01/2014 \_\_\_\_\_**

### **POLICY:**

The purpose of this policy is to promote excellent safety practices within the Facility Operations department. All staff and contractors working within Facility Operations will follow the safety program at all times. Safety is everyone's responsibility. Unsafe working conditions are not acceptable!

### **PROCEDURE:**

#### **SAFETY GUIDELINES**

The following is intended to be a guideline for the safe use of equipment and materials in Facility Operations. These guidelines are not to be considered complete or limiting in scope. Employees are responsible for assessing the need for and the use of personal protective equipment (PPE). Facility Operations will provide PPE to the employees.

#### **FACILITY OPERATIONS RESPONSIBILITIES**

Facility Operations will work to provide a safe and healthy work environment for all employees. All safety equipment necessary to perform the job in the safest possible manner will be supplied through your immediate supervisor. Facility Operations will correct, to the best of its ability, any hazardous situation that has the potential to endanger the lives or well-being of any employee or customer.

#### **SUPERVISOR RESPONSIBILITIES**

Supervisors are responsible for maintaining and allocating a portion of their budget for safety. Supervisors are responsible for complete, accurate, and timely reporting of all employee personal injuries and/or accidents. Supervisors will ensure that employees receive proper training regarding the correct and safe way to operate all equipment. They will inform the employees of any new or special job-related training offered by the Facility Operations Department or the County. Supervisors will identify and report all hazards immediately.

## **EMPLOYEE RESPONSIBILITIES**

In order to make the Facility Operations safety program a success, it is the employee's responsibility to understand the safety rules and procedures set forth in this document. If a condition is unsafe or destructive to any person or property, correct the situation, report the incident to your supervisor, or report it to the appropriate responsible person. It is the employee's responsibility to use protective equipment required or suggested in this procedure. Proper care and treatment of such protective equipment is required in order to keep it in good working order.

## **CONDUCT**

Make it habit to work safely every day. Practical jokes, horseplay, fighting, or any other activity jeopardizing your safety or any other employee's safety will not be tolerated. Be sure to acquire all of the proper safety gear for the job. Safety devices and guards installed on machines and equipment are there to protect employees and must not be removed or made inoperative.

## **INTOXICANTS**

The use of intoxicating beverages and/or drugs during working hours is strictly prohibited and is cause for disciplinary action up to and including termination. Any employee under the influence of intoxicating beverages and/or drugs will not be allowed on the job. Physician-prescribed medication will be allowed provided it does not impair job performance. The supervisor must be notified of any new prescription or change in prescription, which affects the employee's ability to perform their assigned job duties.

## **HOUSEKEEPING**

We all need to practice good housekeeping. The work we perform can produce dust and debris, sawdust, and scrap metal filings and chips. It is imperative that we clean up after every job. Time to clean up your work area should be incorporated into your work schedule. This habit will help promote a clean and efficient work environment.

## **CLOTHING**

Facility Operations employees are required to dress appropriately for their particular job and use the proper safety equipment as required. When working near equipment or with chemicals, wear full length pants, coveralls and closed-toe shoes. Loose clothing, a dangling watch, key chains, or any other unnecessary dangling items are prohibited when working with, on, or around any machinery with moving parts. Rubber gloves and aprons are to be worn when the work requires them. If ever in doubt, put them on. Many positions are required to work in extreme, inclement weather. Proper attire is required to avoid adverse exposure to high and low temperatures, rain, snow, high winds, etc. When performing any job related duty outside of the building, an approved reflective safety vest will be worn at all times.

## **EYE PROTECTION**

Eye protection is to be worn whenever work is being performed in ceilings, in or around potentially hazardous situations. Non-prescriptive safety glasses or goggles can be obtained from your supervisor. All personnel involved in work where flying particles are a hazard should have access to, and wear, safety glasses or goggles.

## **HEARING PROTECTION**

Ear plugs will be provided to all employees. Ear plugs are to be worn in all areas where loud noise or continuous noise is a problem. They are available through your supervisor.

### **MATERIAL SAFETY DATA SHEETS**

All employees should be familiar with Material Safety Data Sheets (MSDS). The MSDS provide specific safety information pertaining to various products and their use. If an employee needs MSDS sheets, he/she should contact their immediate supervisor.

### **WORK ENVIRONMENT**

#### **1. AREA PROTECTION**

Work area protection involves warning staff and the general public that they are approaching worksites that pose possible safety hazards. Wet or slick floors, areas being stripped and waxed, and electrical cords which pose possible trip hazards are a few examples. This protection can be accomplished by placing barricades, cones, caution tape, and/or signs in the vicinity that warn of an approaching hazard.

#### **2. LIGHTING**

Always use adequate lighting to illuminate the work area and to ensure safe completion of the work. For temporary lighting use extension cords or other electrical sources that are properly insulated and grounded. Cords that run across a walkway must be taped down and marked as tripping hazards.

#### **3. VENTILATION**

Exhaust ventilation systems, where provided, must be used whenever work is in progress. Never begin a job that requires special exhaust procedures until adequate ventilation is ensured.

### **WORK AREA GUIDELINES**

Fire doors shall not be propped open. Doors that you unlock must be relocked during breaks, whenever you are out of the area, or at the completion of the work in these rooms. Minimize the number of doors left unlocked while working. Friends, relatives, or other visitors, who are not employed by Facility Operations are generally restricted. Friends, relatives, or other visitors are not to provide assistance to employees in their work, nor are they to provide companionship during work hours.

### **CONFINED WORK SPACES**

A confined work spaces is defined as;

1. Dangerous or potentially dangerous work area, with only restricted openings for entry and exit that would make an emergency escape difficult. Contributory factors that make a confined space more dangerous include:
  - lack of ventilation,
  - contents that are known or potential hazards
  - underground location,
  - location inside a tank or container, and location in a space not intended for prolonged human occupancy.

Typical safety hazards of confined spaces are insufficient oxygen, chemical fumes or vapors, and the possibility of being trapped due to insufficient means of exit. No persons shall work in a confined space without the appropriate proper professional training.

### **Lockout / Tag Out**

The purpose of this policy is to provide a safe working environment for Facility Operations employees and Outside Contractors while they are performing maintenance or repairs on mechanical equipment or electrical circuits.

This procedure establishes specific requirements for the lockout and/or tag out of any energy isolating devices (e.g. disconnect switches, circuit breakers, natural gas, valves). It will be used to ensure that machines or equipment are isolated from all potentially hazardous energy sources and locked out and/or tagged out before any employee performs any service or maintenance work, where the unexpected energizing, start up or release of stored energy could cause injury (e.g. electricity, hot water, burns and other injuries).

**Supervisors will instruct each new employee within the Facility Operations department in the purpose and use of the lockout/tag out procedure.**

**All maintenance personnel in Facility Operations will be instructed in the safety significance of the lock out and tag out procedure.**

### **PROCEDURE:**

Located in the Maintenance Shops are Lock Out/Tag out Boxes. These boxes contain padlocks with one key attached to the lock. These locks all have different keys, and only one key exists per lock. Also provided in the boxes are multiple lock devices. These devices provide the option to use several locks to lock out one piece of equipment. Tags are also provided with space for users name, date and time. Chains are also available in these boxes to be used when it is necessary to provide extra protection while working on equipment that can inadvertently turn or move during maintenance procedures.

1. Any person that will be working on electrically powered equipment shall get a lock and a tag from the Lock Out/Tag Out box and go to the motor control center where the equipment is powered. They shall then turn the disconnect switch to the Off position. Each switch in a motor control center is provided with a Lock Out hole that will accommodate a padlock. Insert your padlock in this hole and lock in the Off position. Keep the key in your possession.
2. Put your name, and the date and time that the switch was locked out on the Tag Out card, then tie the card onto your lock or switch.
3. If more than one person will be working on the equipment that is shut down, use a multiple lock device in the hole provided in the disconnect switch. This will allow several locks to lock out the same switch. Each person using a lock on the multiple lock devices must tag his or her lock. All locks must be removed before the switch can be energized.

4. All Multiphase Electrical Feeders that serve facility equipment shall by code have a disconnecting means within sight, or within 50 feet of the equipment they serve. This disconnect shall be shut off anytime during maintenance of equipment. If for some reason a motor control center or switchgear is not providing the primary feed to equipment. This disconnect will be Locked and Tagged Out following the above steps.
5. If an employee is going to work on a single-phase circuit that might be serving a lighting receptacle or single phase equipment load, they must locate the panel that this load is being served from. They will then find what breaker in this panel will disconnect the power from the load. After the employee has tested this circuit and is satisfied that this breaker does turn off the circuit in question, they should place a Lock out Tag on the panel cover stating his name, the date, and time and breaker number.
6. Chains provided in the Lock out Boxes can be used on equipment / valves in any fashion that will prevent any moving part from moving during any procedure being performed on the equipment.
7. After an employee is done working on equipment, they shall remove locks, chains, multiple lock devices and tags from disconnects, panels and equipment. This equipment, upon removal, shall be placed back in their proper Lock Out/Tag Out box.

## **GENERAL HANDLING PROCEDURES**

All objects to be handled should be inspected for slivers, jagged edges, burrs, and rough or slippery surfaces. Care should be taken to prevent fingers, toes, or other body parts from being pinched or smashed while handling a heavy or awkward load (including wearing gloves and safety shoes).

## **LIFTING, CARRYING, AND HANDLING SAFETY PROCEDURES**

Many injuries result from sprains and strains of the back and joints. It is important that everyone uses proper lifting and handling procedures in an effort to reduce these injuries.

### **1. LIFTING**

Before lifting any object, the size, weight, and shape of the object need to be considered to determine if it can be safely handled. Whenever possible use power or mechanical lifting equipment to avoid the hazards of manual lifting.

a. Lifting is subject to the following:

- Individual's capacity
- type of load
- frequency with which the load is lifted
- position in which the load must be lifted

The maximum lifting capability of each person is stated in his or her job description. Irregularly shaped or unevenly weighted objects are significantly more difficult to handle and may require two people to carry. Never attempt to lift more than you can carry comfortably. Get help when there is any question as to whether the object can be safely lifted by one person.

b. Whenever possible, use the following steps to assure a proper lifting stance:

- Secure good footing with feet parted, one alongside, one behind the object.
- Take a firm grip with both hands.
- Tuck elbows and arms in.
- Keep back straight - nearly vertical.
- Tuck chin in so neck and head keep a straight line.
- Keep body weight directly over feet.

Once in this stance, lift with your leg muscles - slowly, smoothly and without jerking. When setting down a load follow the six steps in the opposite order, remembering to use your leg muscles rather than those of the back.

Avoid twisting while lifting, handling, or carrying a load. When carrying a load, turn yourself by pointing the forward foot in the direction of the eventual movement. When raising an object to or above shoulder height, bend knees and shift hand position so that the object can be boosted above shoulder level.



When carrying a load, you must be able to see ahead of yourself. If this is not possible, get help. Whenever possible, clear the path of travel before initially lifting the object. Planning a route to allow a place to set the load down if fatigue becomes too great is the best way to avoid accidents and/or injuries. If a heavy load is carried a great distance, your grip may lessen due to fatigue. If the object is slippery, awkward, or too heavy, it may be dropped causing foot injuries.

### **GENERAL EQUIPMENT SAFETY PROCEDURES**

All tools and machinery must be clean and in proper working order. Do not work with or operate defective equipment. Report defects to your supervisor immediately! Tag defective tools to prevent their use and remove them from the job site, then report defect to your supervisor. Always follow the manufacturer's suggested safety precautions when using tools or machinery. Tools, rags, scrap, or any other object that could fall into or get caught in a machine should never be placed on, above, or around machinery.

### **HAND TOOLS**

Improper use of hand tools causes disabling injuries. These disabilities result from misuse of tools or using tools that are damaged. Disabilities include loss of vision and eyes; puncture wounds from flying chips; severed fingers, tendons, and arteries; broken bones; contusions; infections from puncture wounds; and many other injuries.

1. Some safe practices to follow, which can prevent injuries:
  - Always wear safety glasses or goggles to protect eyes. In operations requiring the use of hand or portable power tools, particles may fly. Therefore, it is essential that safety glasses/goggles, or equivalent eye protection, be worn by the operator and anyone in the immediate vicinity.
2. Select the right tool for the job. Examples of unsafe practices are:

Striking hardened striking faces of hand tools together (such as using any hammer to strike another hammer or hatchet);

  - using a claw hammer to strike a steel chisel
  - using a file or a screwdriver as a pry
  - using a wrench as a hammer
  - using pliers instead of the proper wrench.
3. Keep tools in good condition. Unsafe tools include:
  - Wrenches with cracked or worn jaws, screwdrivers with broken tips, split or broken handles; hammers with chipped, mushroomed, or loose heads, split or broken handles; mushroomed heads on chisels; dull saws; and extension cords or electric tools with broken plugs, improper or removed grounding system, or visible damage.

4. Use tools correctly. Some common causes of accidents are:
  - screwdrivers applied to objects held in the hand
  - knives pulled toward the body
  - failure to ground electrical equipment
5. Keep tools in a safe place. Many accidents have been caused by tools falling from overhead storage and by knives, chisels, and other sharp tools carried in pockets or left in tool boxes with cutting edges exposed.

### **KNIVES AND OTHER CUTTING TOOLS**

Knives are essential for doing many jobs correctly, but they can be dangerous when not treated with proper care and caution. Likewise, they are a hazard when used improperly or used on a job that should be performed with another tool. Here are a few simple safety guidelines when using a knife:

- Keep cutting tools sharp and in good condition. A dull knife facilitates injury because of the extra work required to do the same job.
- Store the cutting tools in a rack or tool box when not in use. This protects you and prevents damage to the blade.
- If you must carry a knife on the job, carry it in a sheath or holder. When using a utility knife, remember to close it.
- Cut away from your body. The most common accident when using a knife is cutting the hand or fingers of the guide hand. Be aware of your guide hand when cutting long sections.
- Wipe blade clean on a towel or cloth, not on your clothes. Working with a dirty or wet knife is working with a tool that is not in proper working condition.

### **LONG-HANDLED TOOLS**

- Inspect wooden handles before use. Replace those that are loose, cracked, or splintered. Don't tape or wire a defective handle. This does not eliminate the hazard.
- Inspect the head of the tool. Check to see that it is securely attached to the handle and is in good condition to do the work it is designed for.
- Carry long-handled tools upright with the handle vertical so as not to poke anyone in front of or behind you.
- Never leave long-handled tools lying on the floor where they pose a tripping hazard. Don't leave them leaning against a wall or door where they could fall over and present the same problem.

- When using a long-handled tool, keep work out in front of you so as not to trip on the working head.
- Be aware of what is directly behind you when using long-handled tools. It has been a common occurrence for employees to injure themselves by backing into desks, chairs, counter tops, etc.

### **LADDER SAFETY**

Ladders are a vital tool used when performing work within the facilities that we maintain. Annually, all Facility Operations personnel are responsible for reviewing the "Ladder Safety" training video and completing the assigned quiz.

#### 1. Proper use of a ladder is described below;

- Properly set-up and use the ladder in accordance with safety instructions and warnings. Wear shoes with non-slip soles.
- Center body on the ladder and keep belt buckle between the rails while maintaining a firm grip.
- Haul materials with a line rather than carry them up an extension ladder. Use extra caution when carrying anything on a ladder.
- Have another person help with a heavy ladder. Have another person hold the ladder while you are working on it.
- Move materials with extreme caution so as not to lose balance or tip the ladder.
- DON'T climb a closed stepladder.
- DON'T climb on the back of a stepladder.
- DON'T stand or sit on a stepladder top or pail shelf.
- DON'T place the base of an extension ladder too close to or too far away from the building.
- DON'T over-reach, lean to one side or try to move a ladder while on it. Climb down and then reposition the ladder closer to your work.
- DON'T exceed the maximum load capacity or duty rating of a ladder. DON'T permit more than one person on a single-sided stepladder or an extension ladder.
- DON'T climb a ladder if you are not physically and mentally up to the task.

## **SHOVELS**

Part of keeping a snow shovel in good condition is trimming off curled edges. Trimming should be done as the curled edges present a work impediment or a safety hazard.

Lift a shovel load as you would any other load, keeping the back as straight as possible and using your legs to do the lifting rather than your back. Use the ball of the foot to press a shovel into stiff ground or material. This helps avoid damage to the arch of the foot or other injury resulting from the foot slipping off the shovel. When digging with a shovel, proper footwear is essential in preventing injuries.

## **MACHINERY**

Because of the many moving parts and constant current of electricity associated with machinery, it is important to exercise extra care.

Operate only the machinery that you have been trained to use properly. When servicing or inspecting any machinery, be sure it is unplugged or the breaker is turned off. Lock Out/ Tag Out the power source as needed. Disconnect the switch.

- Do not operate any machine if it is not functioning properly. Make sure the machine is in good working order before starting use. Discontinue use of a machine if anything is unusual about its performance.
- Don't leave portable machinery plugged in and unattended! Unplug the machine when not in use and never leave it unattended in a place where anyone who is not authorized to use it might have access to it.
- Before using any electrical machine, inspect the cord for bare or frayed wires and the plug for bent or broken prongs. Ask your supervisor to get defects repaired before using the machine.
- Keep all safety guards in place and operating properly at all times. If missing or partially detached, they will hinder your work process and could pose a threat of injury. They are there for your protection.
- Keep track of where the cord is and avoid using machinery in a location where the cord presents a tripping hazard.
- Mark any cord that crosses a walking path. When using extension cords, keep enough slack so that the cord remains on the ground to avoid getting pulled from the outlet. This can cause bent or broken prongs or can pull the wire or insulation from the plug, which may present a shock hazard. For the same reasons, unwind the cord before plugging it in and unplug the cord before winding it back up.
- When checking batteries or wiring, make sure the power is turned off.

### WAYS TO AVOID TOOL ACCIDENTS IN THE SHOP

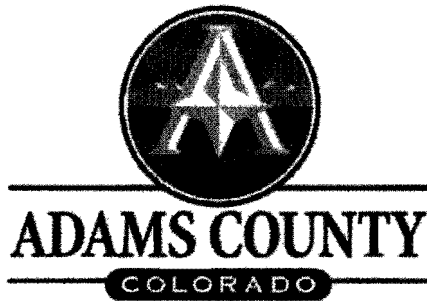
Supervisors should incorporate a program to control tool accidents by following these points:

- Train employees to select the right tools for each job and ensure they are available.
- Establish regular tool inspection procedures to make sure tools are maintained in safe condition.
- Train and supervise employees in the correct use of tools for each job.
- Enforce use of proper personal protective equipment.
- Plan each job in advance in order to use the proper tool (not makeshift or substitute tools).
- Do not use conductive tools on or near electrical wiring or equipment.
- Never leave unsecured tools on elevated places. For example; when working near an open grating, use a screen or other suitable covering to secure tools, thus preventing them from falling and injuring person below.
- Don't attempt to correct defective handles of tools by taping or wiring them. Wooden handles that become loose, cracked, or splintered must be replaced.

APPROVED BY:



Mike Goins, Director of Facility Operations, Adams County



## **FACILITY OPERATIONS**

## **POLICY & PROCEDURE**

**POLICY NO: FO – 006**

**TITLE/SUBJECT: Facility Operations – Contractor Rules**

**EFFECTIVE DATE: 01/2014**

**Dates Revised: 01/2014 \_\_\_\_\_**

### **POLICY:**

Adams County Facility Operations expects and will accept nothing less than first class quality regarding materials and workmanship provided under your contracts or working agreements. Coordination and cooperation between contractors and the Adams County Facility Operations staff is of the utmost importance.

### **PROCEDURE:**

The Adams County Facility Operations Department Director, Facility Operations Director and Building Supervisors are responsible for contract administration and management of all aspects of construction, maintenance and operations of Adams County facilities. The following points are provided as general guidelines for all contractors and persons in their employ working at Adams County facilities:

1. Contractor shall sign/check in at the Facility Operations office at the facility that they will be working, prior to beginning the job. Contractor will receive a copy of the Facility Operations Contractor Regulations at that time. Each contractor will be required to sign the Contractor Regulations acceptance sheet that states that they have read and will adhere to the Contractor Regulations.
2. Contractors will follow the Adams County Facility Operations Safety Program FOD-005
3. The Contractor shall notify Adams County Facility Operations Department of suspected hazardous materials and request that Adams County Facility Operations supplies a qualified testing and/or abatement contractor. Work shall stop immediately upon suspicion of the presence of any hazardous materials.
4. The Contractor shall be in compliance with O.S.H.A. Regulation 29C. F.R. 1926.59 Hazard Communications. The purpose of this regulation is to ensure that all persons on the job site are aware of

potential hazards of the materials with which they are working or may be exposed too, in the course of their employment on each project. The Contractor is responsible for training all construction personnel in the handling, use and disposal of all hazardous materials used and for documenting this training. Contractor will be required to keep MSDS on site.

5. Contractors are responsible for their employee's Personal Protective Equipment (PPE), safety training and documentation.
6. Contractor shall notify the Director or Manager of Facility Operations for disposal of any items removed for construction. Salvage of any removed material must be identified and approved by the Director or Manager of Facility Operations.
7. Contractor shall notify the Building Supervisor 72 hours prior to any shutdown on utilities, fire alarm, and communications, etc. or blocking of any egress or stairway. All work performed must be coordinated with the appropriate trade. Facility Operations Building Supervisors will schedule and coordinate all shutdowns. The complexity of our physical plant and our diverse operations require lengthy advance notices so proper preparation may be made. Absolutely no systems will be shutdown or interrupted by any contractor without direct authorization and assistance from Facility Operations Building Supervisors. Facility Operations and all Contractors will be responsible for all lockout/tagout procedures.
8. Radios or tape players will not be allowed in Adams County Facilities, as they are a distraction and a possible safety hazard.
9. Contractor shall not change any electrical circuits at any location without prior approval of the Facility Operations Building Supervisors.
10. Contractor shall run all piping (electrical and mechanical) and duct work runs above suspended ceiling with a minimum of six inches above suspended ceiling in order to allow adequate access. Access to valves and other devices will be maintained.
11. Circuit breaker panel covers, which were removed in order to perform any work, shall be reinstalled by quitting time or secured so no electrical hazard exists.
12. Do not remove any controls or sensors without first contacting the Facility Operations Building Supervisors.
13. Facility Operations Building Supervisors will, with notice of need, remove any existing thermostats prior to demolition for remodel. Facility Operations Building Supervisors will also reinstall t-stats when given prior notice.
14. Confer with the Facility Operations Building Supervisors before installing any lockset to check for compliance.
- 15. Smoking is allowed in designated areas only.**
16. Adams County's staff and general public have the right of way. The highest priority shall be given to maintaining quality services at all times.

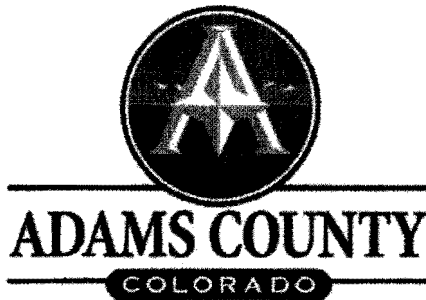
17. Facility Operations will authorize parking spaces for construction and service personnel. Violators will be issued Police tickets and vehicle may be towed away.
18. Penetrations in firewalls shall be repaired immediately following the installation of work.
19. Where possible, ceiling tile removed in occupied areas shall be replaced at the end of each day. Damaged ceiling components shall be reported to Facility Operations Building Supervisors as soon as damage occurs.
20. Where the performance of work may bring with it the possibility of dirt or damage to existing finishes, furniture or equipment, proper protection shall be provided; i.e.: plastic partitions, drop cloths, temporary walls, etc.
21. Contractor is responsible for reasonable clean up of their mess and removal of their trash daily.
22. Contractor needing to store tools and materials in any Adams County facilities will be given a designated storage area by the Facility Operations Building Supervisors. These areas must be kept clean and free of hazardous materials.
23. All work will be done in compliance with the local Building Department and all other regulatory agencies which govern construction and remodel work being done in Adams County Facilities. No work requiring a permit will proceed prior to permit being conspicuously posted in the work area.
24. Any conflict between trades and Adams County Facility Operations employees shall be immediately reported to the Facility Operations Manager so that corrective action may be taken.
25. Contractor shall be responsible for the delivery of record drawings and CAD files to Adams County Facility Operations upon the completion of every project, regardless of size. It is imperative that we maintain accurate building documents.
26. **The use or distribution of drugs or alcohol on Adams County premises is strictly prohibited. Anyone found to have in their possession, to be under the influence, or impaired by the presence of either of the above shall immediately and permanently be removed from Adams County properties.**
27. **Inappropriate wording on clothing or vulgar speech will not be tolerated.**
28. **Contractor must have a Certificate of Compliance stating contractor does not knowingly employ or contract with an illegal alien on file with Adams County.**
29. **Contractors and Sub-contractors will provide Adams County with current background checks.**

APPROVED BY:



Mike Goins, Director of Facility Operations, Adams County





## **FACILITY OPERATIONS**

### **Cabling Standards**

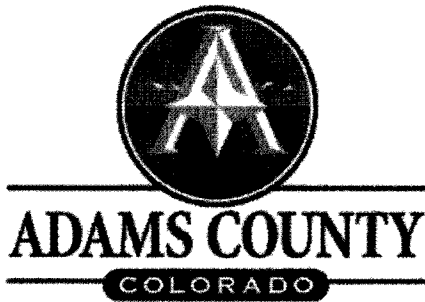
Adams County expects and will accept nothing less than first class quality regarding materials and workmanship provided under your contracts or working agreements. Coordination and cooperation between yourselves and Adams County staff is of the utmost importance.

The Facility Operations Department is responsible for all aspects of construction, maintenance and operations of Adams County facilities. The following points are provided as general guidelines for all cabling contractors and persons in their employ working at Adams County facilities:

- Facility Operations Building Supervisors are responsible for several facilities. Their names, contact numbers and the facilities they are responsible for will be given to the contractors upon awarding of the project. Contractors will contact the appropriate Facility Operations Building Supervisor prior to beginning work at any Adams County facilities. Contractors will be required to sign in and out daily.
- Adams County requires all contractors to have a background check completed prior to the start of any work. Contractors will be required to submit a completed Background Form of each employee that will work in Adams County facilities.
- All contractors must wear a company name badge or uniform with company logo. The badge or logo must be visible and worn at all times while in any Adams County facility. Contractors must wear presentable clothing while performing work at Adams County facilities. If these requirements are not adhered to the contractor will be asked to vacate the premises until they are in compliance.
- Contractor will receive and sign a copy of the Facility Operations Contractor Regulations and a copy of the Facility Operations Safety Program. Contractors are responsible for being familiar with the Facility Operations Safety Policy applicable for the areas they are working in.
- It is the Contractors responsibility to bring their own tools, ladders, etc, to complete the job. These tools must be in good working condition and meet the Facility Operations Safety program. Facility Operations will not loan out any tools to contractors.
- Contractor will not store or consume food or beverages in a Telephone or Electrical closet. All Telephone or Electrical closets will be clean by the end of the working day. Electrical panels / disconnects will be kept clear by 24 inches in front of panels.
- All cabling runs, cable supports, fire wall penetrations, sleeves, cabling connections and telecom rooms will be inspected by the Telecommunications department or Facility Operations prior to replacing any ceiling tile. All deficiencies must be corrected before job is considered completed. When job is completed the Telecommunications department or Facility Operations will issue the contractor a signed inspection form.

- All work will be done in compliance with the local Building Department and all other regulatory agencies which govern construction and remodel work being done in Adams County facilities (i.e., OSHA, National Electrical Code, National Fire Protection Association, etc.). By no means will work requiring a permit proceed prior to permit being conspicuously posted in the work area.
- Adams County Telecommunications Department will provide or require the following for voice/data wiring:
  - Telecom will provide the jack numbers for the new voice/data jacks and these numbers will be noted on the jack and the 110 block in the MDF/IDF.
  - The jacks will be RJ45 8-position unless otherwise specified.
  - Jack color will be specified by Telecom.
  - 4-pr Cat 5E for voice and 4-pair Cat 6 for Data cabling unless otherwise specified.
- Contractor shall notify Facility Operations 12 hours prior to any shutdown of utilities, fire alarm, and communications or blocking of any egress or stairway. All work performed must be coordinated with the appropriate trade. Facility Operations will schedule and coordinate all shutdowns. Absolutely no systems will be shutdown or interrupted by any contractor without direct authorization and assistance from Facility Operations.
- Radios or tape players will not be allowed in Adams County facilities as they are a distraction and a possible safety hazard.
- Contractors shall run all cables in a uniform manner and be supported in compliance with the National Electrical Code and Institute of Electrical and Electronics Engineers. Contractor shall run all cables above the suspended ceiling in order to allow adequate access to electrical boxes, valves, controls and other devices so they can be maintained.
- The support wires and plenum tie wraps will be installed during the cable installation.
- When penetrating fire walls four (4) inch conduit sleeves with bushings will be required. All sleeves and wall penetrations will be fire caulked when cable installation of that area is completed.
- **Orange safety cones will be used during cable installation in occupied facilities and will not interfere with the exit egress or operation of doors.** Staff and general public have the right of way. The highest priority shall be given to maintaining quality customer service and safety at all times.
- Ceiling tile removed in occupied areas shall be replaced at the end of each day. Contractors are responsible for replacing ceiling tile they dirty or damage.
- No ladders are to be left unattended in a working position. All ladders are to be folded and stored safely when not in use.

- Where the performance of work may bring with it the possibility of dirt or damage to existing finishes, furniture or equipment, proper protection shall be provided; i.e.: plastic partitions, drop cloths, temporary walls, etc.
- Contractor is responsible for reasonable clean up of the mess and removal of their trash. This includes ceiling tile debris, cable debris, etc on the floors.
- Contractors are responsible for removing any old or abandon cabling that is in their scope of work.
- Contractors needing to store tools and materials in Adams County facilities may be given a designated storage area by the Facility Operations Department. It is the Contractors responsibility to secure all tools and materials. These areas must be kept clean and free of hazardous materials.
- Any conflict between trades and Adams County employees shall be immediately reported to the Facility Operations office (303-654-6006) so corrective action may be taken.
- Contractor shall be responsible for the delivery of record drawings to Adams County upon the completion of new construction or remodel projects.
- **The use or distribution of illegal drugs or alcohol on Adams County premises is strictly prohibited. Anyone found to have in their possession, to be under the influence, or impaired by the presence of either of the above shall immediately and permanently be removed from Adams County facilities.**
- **Inappropriate wording or images on clothing or vulgar speech will be cause for worker to be asked to leave the premises.**
- Contractor's failure to comply with these requirements will weigh heavily in consideration of future work for Adams County. **"Problem" or non-cooperative employees of the contractor will be removed from the premises at the Facility Operations request.**
- If a contractor is having material delivered to an Adams County facility, it is the responsibility of the contractor to sign for their materials and deliver it to the area that the work is taking place.



## Cabling Inspection Form

Contractor: \_\_\_\_\_ Date: \_\_\_\_\_

Facility: \_\_\_\_\_ Department: \_\_\_\_\_

Floor: \_\_\_\_\_ Inspection by: \_\_\_\_\_

1. Was cable installed in a uniform manner: \_\_\_\_\_

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2. Is cable supported correctly: \_\_\_\_\_

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

3. Are firewall penetrations / sleeves fire caulked properly: \_\_\_\_\_

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

4. Were jacks and 110 block labeled: \_\_\_\_\_

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

5. Was project area and telephone rooms cleaned: \_\_\_\_\_

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

6. Is re-inspection required? \_\_\_\_\_

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

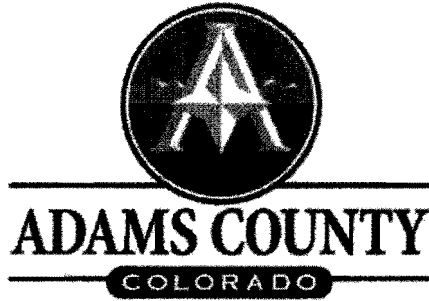
**FINAL INSPECTION BY:**

Adams County Representative: \_\_\_\_\_

Date: \_\_\_\_\_

Contractor Representative: \_\_\_\_\_

Date: \_\_\_\_\_



## **FACILITY OPERATIONS**

### **CONTRACTOR REGULATIONS ACKNOWLEDGMENT**

---

I/We have received and read the Adams County Facility Operations Contractor Regulations and the Adams County Safety Program FOD-001. I/We agree to adhere to these regulations and safety policies while performing any and all work in Adams County facilities.

Contractor owner/representative that signs below is responsible for in-servicing Contractor employees and any sub-contractors on these Contractor Regulations and Safety program.

I also understand that if I/We violate these regulations and safety policies I/We may be asked to leave the facility if the deficiency is not corrected immediately.

If a contractor has any questions or concerns during the project the Contractor/representative should contact the Facility Supervisor or the Facility Operations Manager immediately.

Name:  
(Please print)

Signature:

Date:

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Company Name:  
(Please print)

Emergency Contact Number:

_____	_____
-------	-------



**Proposal for RFP-AF-2015-519  
Adams County Government Center  
Neutral Host Active DAS**

November 2, 2015



**Prepared for:**

Adams County Government  
Ms. Anna Forristall  
Purchasing Agent II  
4430 S. Adams County Parkway  
Brighton, CO 80601-2812  
Email: [aforristall@adcogov.org](mailto:aforristall@adcogov.org)

**Submitted by:**

Centerline Solutions  
Vince Varga  
Manager-Broadband Solutions  
16360 Table Mountain Parkway  
Golden, CO 80403  
Phone: (303) 993-3293 x468  
Cell: (303) 808-6783  
Email: [vvarga@centerlinesolutions.com](mailto:vvarga@centerlinesolutions.com)

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## 1 About Centerline

Thank you for the opportunity to bid on this neutral DAS project at Adams County Government Center.

With over 15 years of experience in wireless technologies, Centerline Solutions LLC (hereinafter "Centerline") is a full turn-key provider of services needed in the wireless telecommunications sector. We are local, with headquarters in Golden, Colorado. We also have offices in Honolulu, Seattle, Portland, upstate New York, and Phoenix.

As part of our commitment to safety and quality, we continue to self-perform our services. We conduct design, installation, commissioning, optimization, testing, and maintenance services for in-building active and passive DAS (commercial wireless and public safety), small cell, and Wireless LAN. We are heavily engaged with all major US commercial wireless carriers as well as wireless industry third-party operators such as American Tower Corporation, Extenet, Zayo, and Crown Castle.

Below are advantages you will experience when choosing Centerline:

- Fifteen years of experience in commercial wireless technologies
- Multiple certified engineers/technicians; staff experience with:
  - Multiple DAS OEM hardware platforms
  - iBwave: carrier-preferred in-building design software
  - Fiber optics including splicing and testing tools
  - Coaxial cable RF testing including analysis and sweep/PIM testing tools
  - DAS installation, commissioning, optimization
  - Site acquisition and construction management
  - Architecture and Engineering (A&E)
- Twenty (20) electricians on staff; we maintain state and jurisdictional licensure
- Relationships with regional wireless service providers' network and construction personnel
- Multiple Professional Engineers (PE) on staff
- Multiple A&E engineers on staff utilizing AutoCAD

See *Reference* section below for detailed experience examples.

## 2 Project Understanding

We are pleased to provide you this proposal in response to RFP-AF-2015-519 issued by Adams County, Colorado government (hereinafter "Adams County").

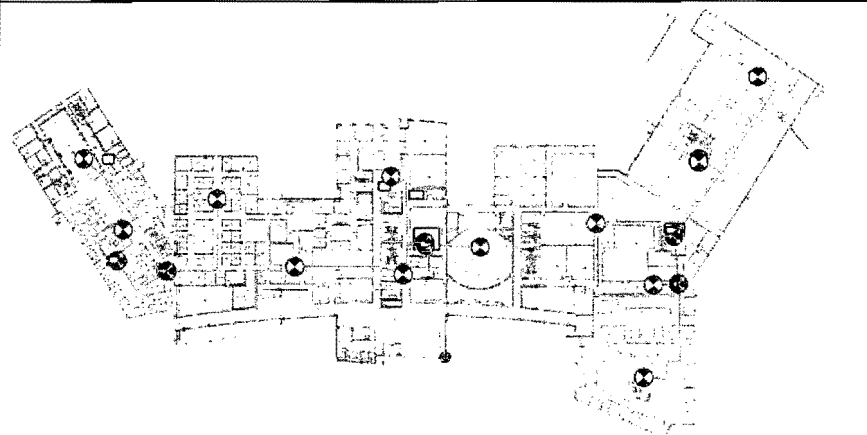
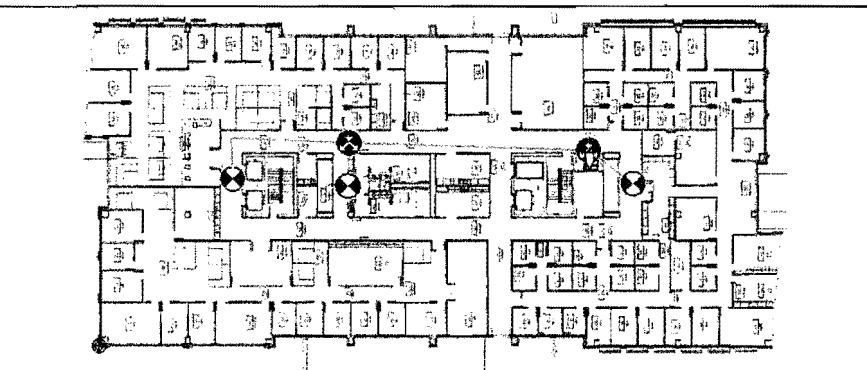
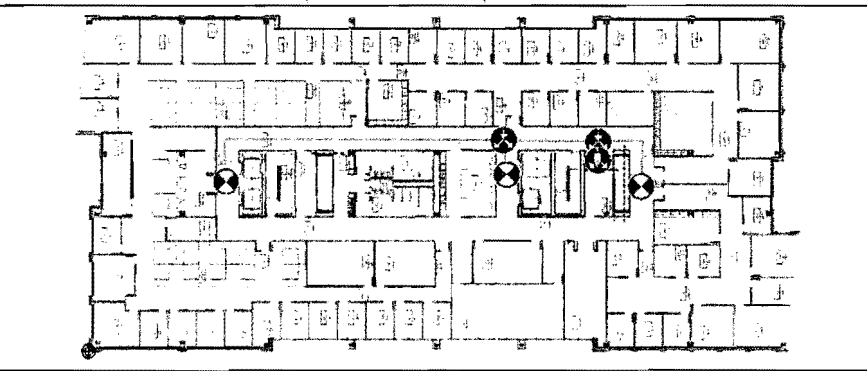
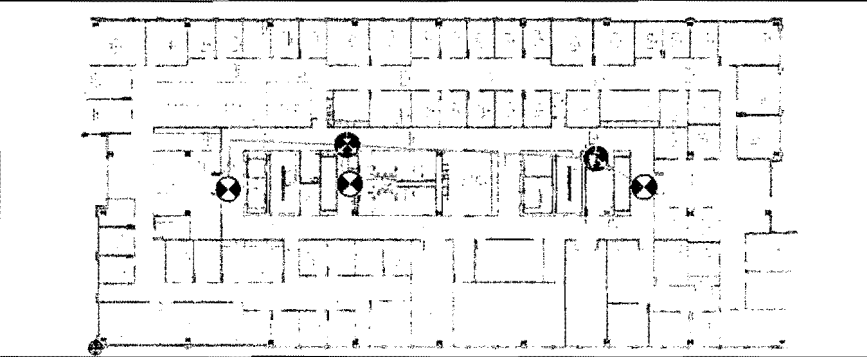
Adams County plans to create an in-building active neutral-host Distributed Antenna System (hereinafter "System" or "DAS") to provide commercial wireless coverage throughout the Government Center (hereinafter "Facility") located at 4430 S. Adams County Parkway, Brighton, Colorado.

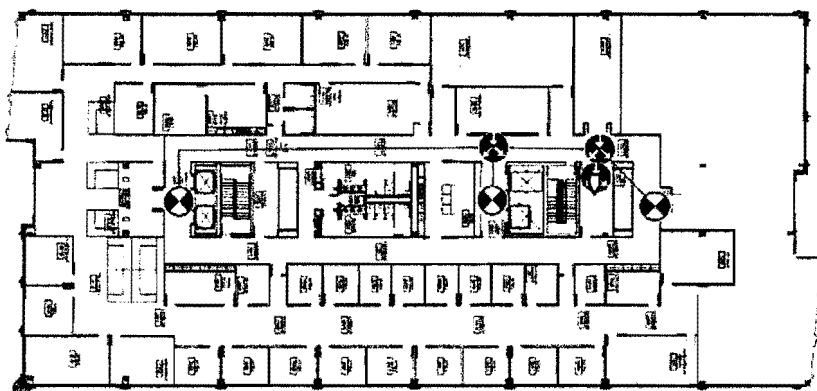
This proposal includes information about the proposed System and related professional services (hereinafter "Services"): design, construction, configuration, carrier-coordination for retransmission, testing, project management, documentation, and maintenance.

As an act of good faith but with no intention or representation of acting as Adams County's contracted agent, Centerline has already reached out to several commercial wireless carriers to evaluate their stance on attaching to this DAS.

### 2.1 Site Descriptions

The table below list the areas where the System will provide coverage. Area calculations were based on Client-provided floorplans. Overlaid on the floor plans are the System equipment locations per the preliminary design.

Floor	Image (not to scale)	Size (est sf)
1		162,700
2		29,000
3		29,000
4		30,500

Floor	Image (not to scale)	Size (est sf)
5		30,500
<b>Total Area</b>		<b>281,700</b>
<b>Inclusions</b>	<ul style="list-style-type: none"> <li>• All office areas and hallways</li> <li>• Conference &amp; Hearing rooms</li> <li>• Common public areas such as Hearing Room and adjacent foyer, meeting rooms, cafeterias, lobbies, business centers, etc.</li> <li>• Warehouse area mail room and receiving docks</li> <li>• Stairwells</li> <li>• Elevators</li> </ul>	
<b>Exclusions</b>	<ul style="list-style-type: none"> <li>• Warehouse mechanical/utility/storage areas other than mail room and receiving docks</li> <li>• Any parking garages</li> <li>• Any outdoor areas</li> <li>• Rooftop penthouses</li> </ul>	

### 3 Technical Requirements

#### 3.1 Approach

Centerline approach is to:

- Utilize multiple new roof-mounted donor antennas and multiple Class A bi-directional amplifiers (aka "BDAs" or Repeaters) to provide signal source for the active DAS:
  - BDAs will be located in the Floor 1 MDF to save the costs of potential need for modification to cooling and power if BDAs placed in IDFs or other smaller rooms;
  - BDA chassis with repeater modules allowing for the addition of one more repeater module for future scalability;
- Utilize modular carrier format-neutral headend equipment with fiber optic distribution to multiple modular remote radio units across the Facility;
  - Head end equipment will be located in the Floor 1 MDF;
  - Head end equipment will connect to remote radio units via new fiber optic cabling and fiber patch panels to all Remote Units utilizing existing cable trays and raceways;
  - Modular Optical Distribution Unit allowing for two additional ODU modules.
- Utilize a central network monitoring system (NMS) located at the headend and BDA chassis.
- Extend remote radio signaling via coaxial cabling, splitters/couplers, and antennas throughout the specified areas of the Facility;
  - Low-PIM passive equipment will be used throughout the DAS;
  - Low-profile Galtronics wide-band antennas will be used for great aesthetics.
- Provide a full turn-key solution for design, installation, testing, certification, project management, carrier coordination, documentation, and maintenance on the System.
- Centerline performed an iBwave (de facto standard in-building wireless system design software) design in cooperation with ADRF technical staff as the basis of our hardware and related Services pricing. That effort included both system-level and plan-level design for equipment placement and predicted wireless coverage.

### 3.2 Carriers, Technologies, Bands

The table below list the wireless carriers, technologies, and radio bands that the proposed System will support. The proposed System is intended to be scalable so that future carriers, technologies, and bands can be added at a minimal cost.

Carrier / Source	Technology	Band	Comment
AT&T	UMTS LTE	850, 1900MHz 700, 1900, 2100MHz	3G: -85 to -89dBm signal level 4G: -75 to -79dBm signal level 100% of the Facility <sup>(2)</sup> >8dB dominance over macro signal
Sprint	CDMA <sup>(1)</sup> LTE	1900MHz 1900MHz	
T-Mobile	UMTS LTE	1900, 2100MHz 2100MHz	
Verizon	CDMA <sup>(1)</sup> Ev-DO LTE	850MHz 1900MHz 700, 2100MHz	
Exclusions	<ul style="list-style-type: none"><li>• UHF, VHF</li><li>• Wi-Fi</li><li>• Broadband Radio Service at 2500-2690MHz</li><li>• T-Mobile 700MHz LTE based on Centerline's prior experience with T-Mobile local-market network personnel (will not allow 700MHz LTE)</li><li>• Sprint 800MHz and 2500MHz due to lack of support from major DAS OEMs and undue cost burden for incremental benefit</li></ul>		

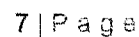
Note:

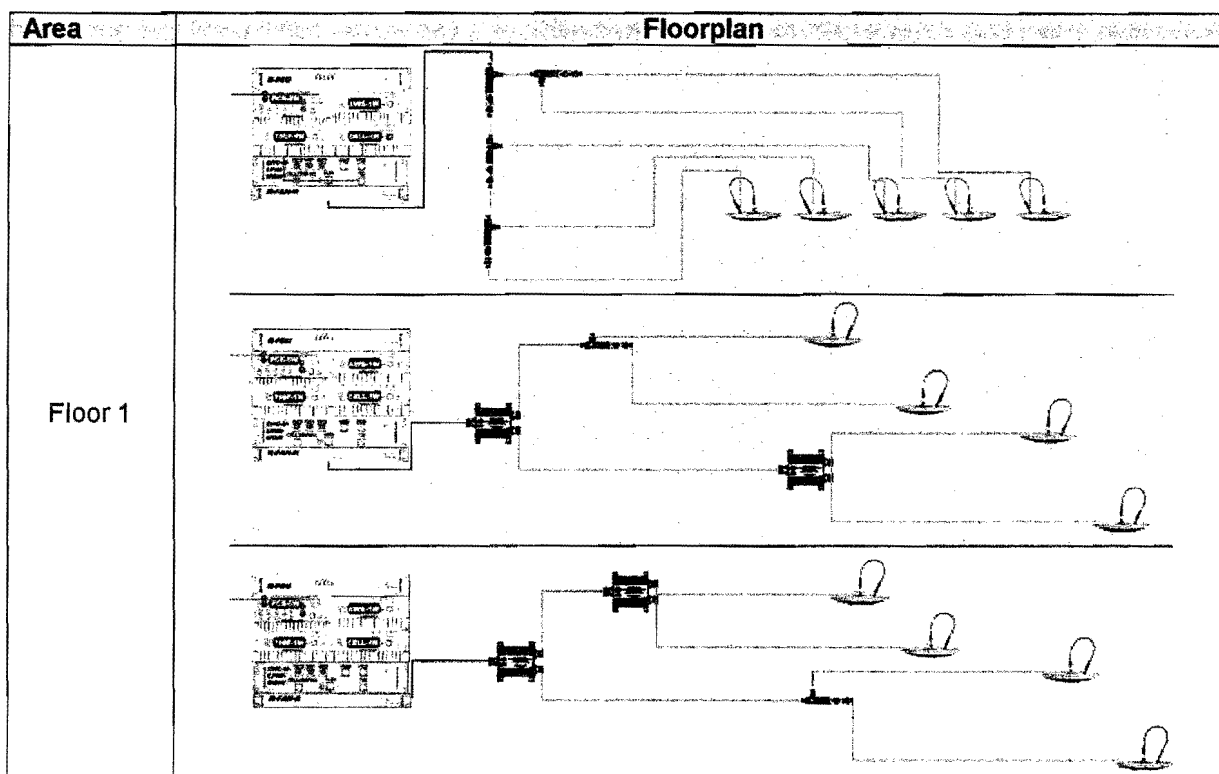
- (1): Technically, CDMA is a 1x technology, not 3G; however, it is the primary voice technology for Sprint and Verizon.
- (2): See section 2.1 for coverage area description; Adams County issued RFP Appendix 3 that modified the original 100% coverage requirement.

### 3.3 DAS Design

Centerline performed a preliminary DAS design in order to provide accurate hardware and services pricing and timelines. Centerline considered empirical multi-carrier signal levels and quality data captured during the site visit. The results of that design are shown below. Upon award, Centerline will perform a detailed design to refine the results.

Below is the architectural design of the proposed active neutral host DAS. Equipment and predicted coverage details will be provided and cooperatively reviewed upon award, along with iBwave design files.





### 3.4 Meeting Other Technical Requirements

The proposed system will meet all the technical requirements outlined in the RFP. Listed below are responses to technical requirement not already addressed in other sections of this proposal.

24x7x365 operation	Yes
Compatible with EV-DO, UMTS, 4G, LTE	Yes
Compliant with Adams County Life Safety Frequencies	Yes
Expandable to accommodate additional interested carriers at later interval	Yes
Modular architecture, use existing above-ceiling trays, obtain pre-approval for antenna mounting locations	Yes
Active elements (remote radios) that filter/amplify at appropriate power levels for six services and allowing each service/carrier independent power level control	Yes
Fiber or coaxial cable for horizontal runs	Yes
Use a point-to-multipoint distribution architecture	Yes
SNMP integration or centrally managed NMS	Yes

## 4 Hardware and Services

The tables below outline the hardware and professional services. We evaluated several DAS OEMs' product lines for this System; and closely analyzed two OEMs' solutions. The BDAs, headend, remote radio units, low-PIM splitters/couplers, and low-PIM combiners are based on ADRF products. Fiber optics are from OEM Corning. Coaxial cabling and connectors are from OEMs Andrew and JMA (Verizon- and AT&T-approved products). DAS antennas are from Galtronics and are low-profile.

Hardware	Description	Quantity
Donor Antennas	Signal sites (rooftop), includes mounting hardware (each)	6
BDAs chassis	FCC Class A bi-directional amplifier for multiple 700, 850, 1900, and 2100 AWS services; includes management system (each)	3
Head-end equipment	Chassis, radio input module(s), chassis, RF combiner, optical distribution unit, filters, management system, power supply (each)	1
Remote Radio Units	Connected to headend via fiber-optics; includes RF combiner, radio units, power supply (each)	5
Fiber Distribution Patch Panel	Provided by Adams County	5
Antennas-DAS	Galtronics S5606i; Distributed across Facility (each)	25
Splitters / Couplers	Distributed across Facility, low-PIM (each)	25
Coaxial cabling	Plenum-rated, as required; non-plenum-rated as needed (feet)	3300
Fiber-optic cabling	Armored, strand, between remote units and head end (feet)	1000
UPS	At headend and remote radio locations, to provide clean power transition between cutover from mins to generator power	5
Cable chases	As required	Provided by Adams County
Racks	In Data Center, IDF's, and/or MDF	Provided by Adams County

Services	Description	Quantity
Design	Site survey, iBwave-based RF modelling, final BOM development, design review.	Approx 700 man-hours
System Staging	Receive, kit, and prepare equipment prior to installation	
Construction	Installation of all active and passive components, including cabinets/racks; excluding raceways and conduit	
Carrier/Wireless Services Coordination	Working with commercial carriers personnel to allow retransmission of their signal within the Facility	
Integration	Configuration and integration of RF signal sources into headend; continuity testing on System	
Testing	Test procedure document and review; cable sweeps and PIM testing, RF coverage and quality testing	
As-built documentation	Record actual locations of all antennas, all cable runs, all RF equipment, and any building infrastructure required to support the DAS such as specific branch circuits	
Project Management	Project Management for all Centerline Services	
Maintenance	For period of one year	

## 5 Construction Requirements

The proposed system will meet all the construction requirements outlined in the RFP. Listed below are responses to construction requirement not already addressed in other sections of this proposal.

Use of stealth antennas	Yes
Getting WSP service(s) into designated room with extension to headend	Yes

### 5.1 Implementation Plan and Timeline

Listed below is a high-level outline of the proposed implementation plan. A more detailed plan will be created and communicated to Adams County upon award. It is anticipated that Centerline will require Adams County engagement throughout the project.

Coordination with Adams County on use of existing chases, fiber optics, and cable trays	Week 1
Hardware procurement	Week 1
Begin carrier coordination for signal source availability	Week 1
Planning, site survey and final design at Centerlines expense; includes design review with Adams County; begin any required permitting process	Week 2-3
Installation, dependent on receipt of permits and notice to proceed from Adams County	Weeks 4-8
Configuration & Optimization	Week 9-10
Testing and Acceptance	Week 11-12
As-built drawings and documentation; includes documentation review	Week 10-12

The project team consists of:

- Vince Varga                      Account Manager
- Jacob Doyle                     Design Lead and Field Engineering Manager
- Dru Elliott                        Project Manager – Electrical and DAS
- Stephen Lester                 A&E Lead for Documentation

### 5.2 Test and Acceptance Plan

Listed below is a high-level outline of the proposed test and acceptance plan. A more detailed plan will be created, communicated, and maintained to Adams County upon award.

Cooperating with Adams County, develop test plan; obtain acceptance	Week 6
Define test procedures and required test equipment	Week 6
Define carrier-accepted test metrics	Week 7
Perform testing	Weeks 11-12
Test results documentation	Week 10-12



## 6 Pricing

As standard and fair practice we put in great effort up front to provide pricing commensurate with the project value. Adams County should not expect weighty change orders from Centerline as they might from some of our competitors that may bid propose much lower prices to win the project.

Item	Price
System Hardware and Installation Services	\$214,811
1 <sup>st</sup> Year Maintenance	\$6,400
<b>Total</b>	<b>\$221,211</b>

Price above includes permitting, performance bond, and shipping but excludes any applicable taxes per RFP instructions.

Annual maintenance includes periodic preventative maintenance, fault mitigation, equipment repair and response time. Upon award, Centerline will require a separate maintenance agreement to be signed that details the terms and conditions of maintenance services. Annual maintenance excludes costs of any out-of-warranty equipment.

## 7 Timeline

Centerline expects time to completed project is estimated at 12 weeks upon receipt of purchase order and notice to proceed and construction start, assuming no construction delays outside of Centerline's control.

## 8 Assumptions

This proposal is based on several assumptions. We are providing the reasoning behind these assumption where not obvious.

Assumption	Reasoning
Pricing provided herein for signal sources include only those from BDAs and donor roof-top antennas. If any or all carriers require BTS and terrestrial circuit as signal source at a later date, the project (outside of Centerline-provided equipment and Services) will incur added costs, depending on prices negotiated between carrier(s) and Adams County.	Negotiations are outside of Centerline's control.
Adams County above-ceiling raceways have ample space and load budget available for the proposed System.	
Any required Inter-floor core drilling by others.	Per Appendix 2, Q&A #6 "A separate vendor will be required to x-ray the penetration point prior to performing the penetration. Vendor will work directly with Adams County Facilities."
Conduit is not required for any fiber optic or coaxial cabling.	

Assumption	Reasoning
There is ample room, rack/wall space, cooling, and power to support the new System.	Upon award and completion of design phase, Centerline can provide drawings of equipment locations and System specifications to be used by Adams County for any needed space, cooling, and power modifications.
Our proposal includes UPS's providing approximately twenty minutes of battery backup power are required to support the active wireless services headend and remote units in the event of mains power failure and prior to generator-supplied power.	
System will utilize Adams County existing AC power within the Facility	
Man lifts or scissor lifts will be supplied by Centerline, if needed	
Cable testing to include sweep and PIM testing	
Centerline cannot guarantee that any commercial Wireless Service Provider (WSPs) will be willing to attach to and/or provide source signals to the proposed System	Only each WSP can make the decision, based on technical, economic, and timeframe aspects.
Shipping costs are based on non-expedited method	Not specified in requirements; lowest cost option
Client will assist with physical building access to reach all areas where Services will be required.	

## 9 Insurance and Bonding

As standard business practice, Centerline maintains insurance at or above the requested levels; Centerline will provide proof of all required insurance upon award. In addition, we have allocated costs for the performance bond in our proposed price.

## 10 References

Below are several Centerline projects of similar scope as the proposed solution.

Site Name	Description	Contact
Adams County Government Center  Brighton, CO	<ul style="list-style-type: none"> <li>Passive DAS for 700MHz Public Safety throughout this Facility;</li> <li>Centerline is familiar with the Facility, operations, working conditions, codes, personnel, and the existing in-building public safety wireless system;</li> <li>Performed as subcontractor to Systems Group.</li> </ul>	Chad Cahill Systems Group (fire safety systems integrator) (303) 931-7480 chad@systemsgroup.net
Adams County Justice Center  Brighton, CO	<ul style="list-style-type: none"> <li>Passive DAS for existing building renovation covering approximately 100,000 square feet.</li> <li>Performed as subcontractor to Systems Group.</li> </ul>	
Brighton Waste Water Treatment Plant  Brighton, CO	<ul style="list-style-type: none"> <li>Active DAS design and implementation across 23 campus buildings</li> <li>Coordination with Verizon</li> <li>Performed as subcontractor to McDade-Woodcock</li> </ul>	Brian Cole McDade-Woodcock (electrical contractor) (720) 354-6889
Coors Field  Denver, CO	<ul style="list-style-type: none"> <li>High-performance, neutral-host active DAS for sporting venue supporting all four major carriers</li> <li>Reference from AT&amp;T</li> </ul>	Andy Trinkaus AT&T ASG Sr Real Estate Manager (720)-883-5364 at508p@att.com
Denver International Airport  Denver, CO	<ul style="list-style-type: none"> <li>New construction for AT&amp;T iDAS headend supporting entire airport.</li> <li>1200 square foot headend, 12 sectors of UMTS/LTE in 700, 850, 1900, 2100MHz</li> </ul>	J.J. Henrickson AT&T ASG Senior Real Estate Manager (720) 431-0274 th284j@att.com
Millennium Bridge Building  Denver, CO	<ul style="list-style-type: none"> <li>Public Safety DAS for 850,000 square foot mixed-use retail and commercial with underground- and five-story parking;</li> <li>DAS modifications as tenant improvements changed facility; also performing required annual public safety re-certifications;</li> <li>Performed as subcontractor to Systems Group.</li> </ul>	Chad Cahill Systems Group (303) 931-7480 chad@systemsgroup.net
Adams County  Brighton, CO	<ul style="list-style-type: none"> <li>FirstNet public safety 4G LTE radio access network</li> <li>RF carrier-wave testing and measurement; propagation model tuning; coverage and interference analysis; RF coverage shaping</li> <li>Architectural engineering</li> <li>Site acquisition, permitting, construction</li> </ul>	Mike Brunswig Assistant Director Adcom 911 (303) 227-7117 mbrunswig@adcomm911.org



**PROPOSAL FORM**  
**2015.519 NEUTRAL HOST ACTIVE DISTRIBUTED ANTENNA SYSTEM (DAS)**

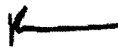
**CONTRACTOR'S STATEMENT**

I have read and fully understand all the special conditions herein set forth in the foregoing paragraphs, and by my signature set forth hereunder, I hereby agree to comply with all said special conditions as stated or implied. In consideration of the above statement, the following proposal is hereby submitted.

Two-hundred fourteen thousand eight-hundred eleven dollars	\$ 214,811.00
Written Amount for Installation	Amount
Six-thousand four-hundred dollars	\$ 6,400.00
Written Amount for Operation & Maintenance for one year	Amount

WE, THE UNDERSIGNED, HEREBY ACKNOWLEDGE RECEIPT OF

Addendum # 1, 2, and 3 Addendum # \_\_\_\_\_  
 If None, Please write NONE.

Centerline Solutions, LLC	October 30, 2015
Company Name	Date
16360 Table Mountain Parkway	
Address	Signature
Golden, CO 80403	Rachelle Baranda-Crow
City, State, Zip Code	Printed Name
Jefferson	VP-Business Operations
County	Title
(303) 993-3293	(303) 993-3019
Telephone	Fax
rbarandacrow@centerlinesolutions.com	
Email Address	

Digitally signed by Rachelle Baranda-Crow  
 DN: cn=Rachelle Baranda-Crow, o=Centerline Solutions  
 LLC, ou=Business Operations,  
 email=rbarandacrow@centerlinesolutions.com, c=US

## CONTRACTOR'S CERTIFICATION OF COMPLIANCE

Pursuant to Colorado Revised Statute, § 8-17.5-101, *et seq.*, as amended 5/13/08, as a prerequisite to entering into a contract for services with Adams County, Colorado, the undersigned Contractor hereby certifies that at the time of this certification, Contractor does not knowingly employ or contract with an illegal alien who will perform work under the attached contract for services and that the Contractor will participate in the E-Verify Program or Department program, as those terms are defined in C.R.S. § 8-17.5-101, *et seq.* in order to confirm the employment eligibility of all employees who are newly hired for employment to perform work under the attached contract for services.

CONTRACTOR:

Centerline Solutions, LLC

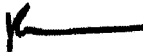
October 30, 2015

Company Name

Date

Rachelle Baranda-Crow

Name (Print or Type)



Digitally signed by Rachelle Baranda-Crow  
DN: cn=Rachelle Baranda-Crow, o=Centerline  
Solutions, LLC, ou=Business Operations,  
email=rbarandacrow@centerlinesolutions.com,  
c=US

Signature

VP-Business Operations

Title

Note: Registration for the E-Verify Program can be completed at: <https://www.vis-dhs.com/employerregistration>. It is recommended that employers review the sample "memorandum of understanding" available at the website prior to registering

## Anna Forristall

---

**From:** Vince Varga [VVarga@centerlinesolutions.com]  
**Sent:** Tuesday, November 17, 2015 2:48 PM  
**To:** Anna Forristall; Larry Like  
**Cc:** Jacob Doyle; Dru Elliott  
**Subject:** RE: Clarification to RFP

Anna and Larry:

Thank you for the opportunity to work with Adams County on the Government Center DAS project! Per your request yesterday afternoon after our bidder's interview, please find below the requested pricing.

A few notes:

- Due to limited allotted time, an iBwave redesign was not performed to verify RF power splitting or coverage review/verification.
- Centerline respectfully requests a discussion with the decision committee or representative to review our solution approach.
  - o The Adams County-requested pricing (60 antennas) reflects a solution with antennas every 3000 square feet (approx.). Based on our prior experience and work with major commercial wireless carriers, we believe this is a severe over-design. Centerline stands behind our design per the bid and, if awarded this project, will discuss the final solution with Adams County.
  - o Our original design was vetted with the DAS equipment manufacturer, ADRF, that also has years of experience with in-building active DAS systems. It is also their opinion that our original design is right-sized.
  - o Our original design was informed with signal level requirements from major commercial wireless carriers and industry best-practices.
  - o Prior to installation of this solution, Centerline will perform RF CW (radio frequency constant wave) testing on site to tune the final design and right-size antenna counts.
  - o If the solution is to include a substantial increase in DAS antennas with medium-power remote radios on every floor (not the Centerline approach), Adams County should evaluate the EME/RFE (electro-magnetic emissions/radio frequency emissions) implications of that solution.
- To satisfy your request, the solution pricing herein includes:
  - o The same headend equipment as our original bid, including donor antennas, BDAs and ancillary equipment, fiber optic distribution, and five (5) remote radio units;
  - o Increased antenna quantities:
    - 20 total antennas distributed across Floors 2-5 (5 per floor)
    - 20 total antennas distributed across Floor 1


Pricing:

Hardware and Services:	\$ 224,996
Annual Maintenance (Year 1):	\$6,400
Total:	\$231,396

- Price includes:
  - o DAS antennas of same make/model as in our original bid.
  - o Addition of associated antenna/coaxial cabling and related installation, termination, and testing services.
  - o Addition of related passive RF components (splitters/couplers), and related installation and testing services.
  - o Additional time for Project Management and A&E (drawings) services.
  - o Additional costs due to man-lifts, performance bond, and shipping.
- Price excludes:
  - o An increase in remote radio units hardware/labor and associated fiber-optic cabling/labor.

- Price increase due to increased antenna count has no effect on annual maintenance charge; annual maintenance charge is shown above for your convenience.

Please let us know if any other clarification is needed.

Best,  
Vince Varga  
Manager of Broadband Solutions  
 **CENTERLINE SOLUTIONS**

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