- Verification of connectivity between sites and test results shall be made available to the district's technical staff.
- Industry standard security measures, including but not limited to MAC address filtering and encryption, shall be employed throughout the wireless wide area network.
- A turn key solution is what we are looking for. It is the bidders responsibility to obtain all necessary LAN and WAN equipment inventory information from the district to guarantee the solution they are providing will be able to provide the services at the cost quoted.

B. Connectivity Management

- All Wireless WAN data communications link must be engineered to 99.99% per link reliability. This equates to a total of not more than 48 minutes of downtime per link per year!
- The network must have the option to be monitored 24 hours per day, 7 days per week. This must include remote access to all devices.
- Must be a 24 hour SLA vendor capable of 4 hour response time in the event of a link failure.
- Must include environmental monitoring including but not limited to power control, temperature control, and access control.
- Network performance monitoring tools should be available to the technical staff.
- Vendor must carry an on-hand spares inventory for all equipment used in the installation.

C. Maintenance

- Customer help desk support should be available 24 hours per day, 7 days per week
- Complete onsite maintenance and support with a 4 hour response time in the event of a link failure
- Online Dial-up and/or broadband maintenance capability
- Annual Preventative Maintenance Plan which will include a minimum of 2 visits per year and will include but not be limited to 1)site survey, 2) SNR base lining, 3) alignment analysis, 4) structural integrity check, and 5) monitoring assessment.

D. Training

- Adequate and appropriate onsite training on equipment operation for the district technical staff shall be included in the proposal.

Proposal Requirements

The following is a list of requirements that must be met:

1. The successful bidder must be an expert in LAN and WAN wireless technologies and be able to provide evidence of appropriate licensing and insurance limits for their installing contractor.
2. Provider able to provide, maintain and troubleshoot LAN and WAN circuits.
3. Provider able to provide engineer/technician dispatch services for onsite repair.
4. Provider able to provide network monitoring and network performance monitoring.
5. Provider able to provide certified security consultants, hardware/software solutions, remote intrusion detection, notification and correction.
6. Provider must be able to show a proven E-rate track record and have the ability to provide E-rate eligible priority one Educational broadband connectivity and must be able to provide deployable examples.
7. Provider must have a proven track record of Educational broadband connectivity and must be able to provide deployable examples.
8. Provider must be able to provide Educational broadband connectivity throughout the state of Arizona as other district will be allowed to use this RFP to purchase broadband services.

Invitation

- RFP will be due: February XXX, 2005. Submissions received after this deadline will be disqualified. If possible, please submit responses 10 days prior to bid closing to allow for review by appropriate parties.
- There will be no vendor conference.
- Main Contact is Dan Hunt, Director of Technology, 520-682-4817.
- Please submit RFP to:
  Attn: Hazel Houston, Purchasing Director
  Marana Unified School District
  11279 West Grier Road
  Marana, AZ 85653

Vendor Questionnaire - Required

1. Describe what equipment will be installed at each location and diagram traffic flow between sites.
2. Detail all of the equipment that will be installed including cost, manufacture and model numbers.
3. Describe any and all other design options and features that you suggest Marana Unified School District consider as necessary.
4. Detail the specific monitoring and reporting capabilities of the wireless equipment.
5. Describe your service organization including hours of operation, escalation procedures and anticipated maximum response time associated with device failures.
6. With regard to installation, configuration and testing, describe what documentation the bidder will provide. At a minimum, network diagrams are required in printed and digital form.
7. Describe what ongoing support / consulting your company is willing to provide and those consulting rates for both phone and onsite support.
8. Provide your company profile including years in business, technicians available and familiarity with equipment bid and any applicable certifications.

Assurances

The following list of assurances must be completed, must be signed, and must be submitted as part of the submitted bid. By signing this list of assurances and by quoting the required proposed cost(s), the Vendor agrees to the bid requirements as stated in the bid specifications for all equipment bid and / or installed at Marana Unified School District.

Assurances	Yes	No
1. The Vendor agrees that all shipping costs will be borne by the Vendor.		
2. The Vendor agrees to list the requisite number and the requisite type of references.		
3. The Vendor adheres to standards and recommended installation requirements for all equipment.		
4. The Vendor agrees that any replacement part used in a warranty issue must have the same warranty agreement of the parts accepted for bid and it must remain under warranty until the life of the original warranty expires.		

5. The Vendor agrees to install only equipment specified in the bid. Furthermore, the Vendor agrees that all documentation supporting this equipment will be provided at the time of delivery / installation.		
6. The Vendor agrees that the deadline for the submission of this bid to Marana Unified School District is X:00 p.m., February X, 2005.		
7. The Vendor agrees to warranty all parts and labor (if provided) for all of the equipment provided.		
8. The Vendor agrees that for warranty requests the Vendor has within 24 hours of notification to respond to this warranty problem and either to repair or to replace the defective part(s).		
9. The Vendor agrees that Marana Unified School District has the right to reject any and all bids, to waive any and all technicalities, and to award all or any part of the bid in a manner that is in the best interest of the school system.		
10. The Vendor agrees to provide the Marana Unified School District with the terms listed in "General Conditions" item 1. in accordance to the laws that govern the Schools and Libraries Universal Service Program.		

Attachment 4
to the
Affidavit of Mitchell Eichenseer

Kansas City Kansas USD 500

RFP (REQUEST FOR PROPOSAL)

RFP NUMBER 30019

Wireless Broadband Wide Area Network Services

Unified School District 500
625 Minnesota Avenue
Kansas City, Kansas 66101

The Board of Education, Unified School Number 500, Kansas City, Kansas, will receive sealed bids on Wireless Broadband Wide Area Network Services for various schools in the Kansas City, Kansas School District to be received **no later than February 3, 2004, at 3:30 p.m.** in the Purchasing Department Office, 625 Minnesota Avenue, Kansas City, Kansas, 66101.

Bids should be marked on the outside of the envelope "RFP NO. 30019 – E-Rate Wireless Broadband WAN Services."

Mandatory specifications are enclosed. Please return quotations on the enclosed forms and placed in the attached envelope. Complete all information requested on these forms. It is imperative that the additional documentation requested in this bid solicitation be included so that your bid may be equitably evaluated.

All quotes offered on this bid solicitation should include delivery charges and should be quoted F.O.B. delivered to the schools as noted at the addresses indicated on the attachments. Please respond according to the quantities requested.

Please be sure to indicate any items that do not meet the written specifications and attach literature and specification sheets for the equipment that your firm is offering. Please be advised that sample equipment may be required for further examination or demonstration prior to the awarding of the bid. Quote all options called for in this bid quote as minimum requirements.

If there are any questions concerning the specifications on this bid, please contact Robert Young, 625 Minnesota Avenue, Kansas City, Kansas, telephone (913) 551-3200.

Unified School District No. 500 reserves the right to reject any and all bids without recourse from the vendor. If you cannot or chose not to quote on this bid and wish to remain on the bid list for this type of equipment please indicate "No Bid" on the enclosed quotation form along with your firm's name and return it to the above address.

Robert Young, CPPO
Director of Purchasing
Unified School District 500

STANDARD TERMS & CONDITIONS

UNIFIED SCHOOL DISTRICT NO. 500

1. SCOPE: The following terms and conditions shall prevail unless otherwise modified by U.S.D. 500 within this bid document. U.S.D. 500 reserves the right to reject any bid which takes exception to these terms and conditions.

2. DEFINITIONS AS USED HEREIN:

   The term "bid request" means a solicitation of a formal sealed bid.
   The term "bid" means the price offered by the bidder.
   The term "bidder" means the offerer or vendor.
   The term "U.S.D. 500" means Unified School District No. 500.
   The term "Board of Education" or "BOE" means the governing body of Unified School District No.500

3. COMPLETING BID: Bids must be submitted ONLY on the form provided in this bid document. All information must be legible. Any and all corrections and /or erasures must be initialed. Each bid sheet must be signed by the authorized bidder and required information must be provided.

4. CONFIDENTIALITY OF BID INFORMATION: Each bid must be sealed and submitted in or under cover of the enclosed envelope to provide confidentiality of the bid information prior to the bid opening. Supporting documents and/or descriptive literature may be submitted with the bid or in a separate envelope marked "Literature for Bid (Number). " Do NOT indicate bid prices on literature. All bids and supporting bid documents become public information after the bid opening and are available for inspection by the general public in accordance with the Kansas Open Records Act.

5. ACCURACY OF BID: Each bid is publicly opened and is made part of the public record of U.S.D. 500. Therefore, it is necessary that any and all information presented is accurate and/or will be that by which the bidder will complete the contract. If there is a discrepancy between the unit price and extended total, the unit price will prevail.

6. SUBMISSION OF BID: Bids are to be sealed and submitted to the Purchasing Office, Library, Building, 625 Minnesota Avenue, Kansas City, Kansas 66101, prior to the date and time indicated on the cover sheet.

7. ADDENDA: All changes in connection with this bid will be issued by the Purchasing Office in the form of a written addendum. Signed acknowledgement of receipt of each addendum must be submitted with the bid.

8. LATE BIDS AND MODIFICATION OR WITHDRAWALS: Bids received after the deadline designated in this bid document shall not be considered and shall be returned unopened.

9. BIDS BINDING: All bids submitted shall be binding upon the bidder if accepted by U.S.D. 500 within sixty (60) calendar days after the bid opening.

10. EQUIVALENT BIDS: When brand or trade names are used in the bid invitation, it is for the purpose of item identification and to establish standards for quality, style and features. Bids on equivalent items of substantially the same quality, style and features are invited unless items are marked "No Substitute." Equivalent bids must be accompanied by descriptive literature and/ or samples may be required and shall be supplied at no charge to the school district.

11. NEW MATERIALS, SUPPLIES AR EQUIPMENT: Unless otherwise specified, all materials, supplies or equipment offered by a bidder shall be new, unused, of recent manufacture, first class in every respect, and suitable for their intended purpose. All equipment shall be assembled and fully serviced, ready for operation when delivered.

12. WARRANTY: Supplies or services furnished as a result of this bid shall be covered by the most favorable commercial warranties, expressed or implied, that the bidder and/or manufacturer gives to any customer. The rights and remedies provided herein are in addition to and do not limit any rights afforded to U.S.D. 500 by any other clause of this bid reserves the right to request from bidders a separate manufacturer certification of all statements made in the proposal.

13. METHOD OF AWARD AND NOTIFICATION: Bids will be analyzed and the award made to the lowest and best, responsive and responsible bidder(s) whose bid conforms to the specifications and whose bid is considered to be the best value in the opinion of U.S.D. 500.

14. U.S.D. 500 reserves the right to reject any or all bids and any part of a bid: to waive informalities, technical defects, and minor irregularities in bids received: and to award the bid on an item by item basis by specified groups of items or to consider bids submitted on an "all or nothing " basis if the bid is clearly designed as such or when it is determined to be in the best interest of U.S.D. 500.

15. The signed bid shall be considered an offer on the part of the bidder: such offer shall be deemed accepted upon the issuance by U.S.D. 500 of a Purchase Order or other contractual document.

16. DELIVERY TERMS: All deliveries shall be F.O.B. Destination and all freight charges shall be included in the bid price.

17. DAMAGED AND/OR LATE SHIPMENTS: U.S.D 500 has no obligation to accept damaged shipments and reserves the right to return at the vendor's expense damaged merchandise even though the damage was not apparent or discovered until after receipt of the items. The Vendor is responsible to notify U.S.D. 500 Purchasing office of any late or delayed shipments. U.S.D. 500 reserves the right to cancel all or any part of an order if the shipment is not made as promised.

18. CREDIT TERMS: Bidder shall indicate all discounts for full and/or prompt payment. Discounts shall be considered as a cost factor in the determination of award, except discounts offered for payment within less than ten (10) calendar days. Discounts offered shall be computed from date of receipt of correct invoice or receipt and acceptance of products, whichever is later.

19. SELLER'S INVOICE: Invoices shall be prepared and submitted in duplicate to address shown on the Purchase Order. Invoices shall contain the following information: Purchase Order number, contract number, item number, description of supplies or services, sizes, unit of measure, quantity, unit price and extended totals.

20. TAX EXEMPT: U.S.D. 500 is exempt from Federal, State and local taxes by #A 157-758. Sites of all transactions under the order(s) that shall be derived form this bid request shall be deemed to have been accomplished within the State of Kansas.

21. SAFETY: All practices, materials, supplies and equipment shall comply with the federal Occupational Safety and Health Act, as well as any pertinent Federal, State and/or local safety or environmental codes.

22. DISCLAIMER OR LIABILITY: U.S.D. 500 will not hold harmless or indemnify any bidder for any liability whatsoever.

23. HOLD HARMLESS: The contractor agrees to protect, defend, indemnify and hold the Board of Education, its officers, employees and agents fee and harmless from and against any and all losses, penalties, damages, settlements, costs, charges, professional fees or other expenses or liabilities or every kind and character arising out of or relating to any and all claims, liens, demands, obligations, actions, proceedings or causes of action of every kind and character in connection with or arising directly or indirectly out of this agreement and/or the performance hereof. Without limiting the generality of the foregoing, any and all such claims, etc., relating to personal injury, infringement of any patent trademark, copyright (or application for any thereof) or of any other tangible or intangible personal or property right, or actual or alleged violation of any applicable statute, ordinance, administrative order, rule or regulation, or decree of any court, shall be included in the indemnity hereunder. The contractor further agrees to investigate, handle, respond to, provide defense for and defend any such claims, etc., at his/her sole expense and agrees to bear all other costs and expenses related thereto, even if such claim is groundless, false or fraudulent.

24. LAW GOVERNING: All contractual agreements shall be subject to, governed by, and construed according to the laws of the State of Kansas.

25. ANTI-DISCRIMINATION Clause: No bidder on this request shall in any way, directly or indirectly, discriminate against any person because of age, race, color handicap, sex, national origin, or religious creed.

SPECIAL TERMS AND CONDITIONS

1. Performance Bond

1.1 The successful bidder shall furnish a performance bond in an amount equal to one hundred percent (100%) of the awarded contract. This bond shall be for any one group of items or all groups of items, as awarded by the Board of Education. Bond shall be payable to the Board of Education, Unified School District No. 500, and shall be issued by a surety company authorized to do business in the State of Kansas. Successful bidders who fail to provide the performance bond shall be in default and shall forfeit to the Board of Education, Unified School District No. 500, the bid guarantee as compensation for expenses incurred. Performance Bonds are required for the protection of Unified School District No. 500 and it's taxpayers against failure of the contractor to complete a contract. In the event that a contractor fails to perform or abandons a contract, the Board of Education shall have the contract completed as expeditiously as necessary and possible and shall bring action against the bond for additional expenses incurred and administrative time expended. All bids shall be accompanied by an acceptable bid bond or certified cashier's check drawn on a local bank, payable to the Treasurer, Board of Education, for an amount not less than five percent of the total amount of the bid. This is a requirement to be considered in this bid award. The bid security shall become the property of the Board of Education as liquidated damages in the event the successful bidder fails to execute and deliver a contract within five days after he/she receives notice of acceptance of his/her bid by the Board of Education.

2. Preparation of Proposals

2.1 Unified School District Number 500 requires that deviations from these specifications shall be clearly noted. Adequate information must be provided to allow Unified School District No. 500 to evaluate any and all exceptions or alternates. However, deviations from these specifications may be grounds for the rejection of the bid.

2.2 Bidders, by submitting a signed bid or proposal, certify that the accompanying bid or proposal is not the result of, or affected by, any unlawful act of collusion with any other person or company engaged in the same line of business or commerce, or any other fraudulent act punishable under Kansas or United States law.

2.3 Bidders shall hold their price firm and subject to acceptance by Unified School District No. 500 for a period of ninety (90) working days from the date of the bid opening, unless otherwise indicated in their bid.

2.4 Unified School District No. 500 will not accept alternate bids (those not equal to specifications) unless authorized by the invitation to bid.

2.5 Unified School District No. 500's Purchasing Department will not accept telegraphic or electronically transmitted bids.

2.6 All submissions become the property of the District and will not be returned to the bidder.

2.7 In case of error in the extension of prices on the proposal, the unit price will govern. Unit prices shown must be net.

2.8 Signed qualifications/proposal sheets and all proposal price sheets on which you have offered pricing must be returned for your proposal to be considered.

3. Commercial Warranty/Manufacturer's Recommendations

3.1 The comprehensive parts and labor warranty on this equipment shall commence on the date of completed installation and initial start-up of said.

3.2 The bidder agrees that supplies, equipment or services furnished under the resultant purchase order and/or contract issued by Unified School District 500, shall be covered by the most favorable commercial warranties the propose gives to any customer for such supplies or services. All warranty information and certificates shall be furnished and become the property of the District upon delivery of said items and all rights and remedies stated in the warranties must be honored by the contractor or his manufacturer.

4. Tax Exempt Status

4.1 Public schools are exempted from state sales tax. Tax exemption certificates will be I issued upon request.

5. Insurance Coverage

5.1 The successful bidder, prior to commencing work on this project, shall provide the Clerk of the Board, copies of Certification that the Contractor is maintaining the following insurance coverages, which shall be with a financially responsible company, licensed in the state of Kansas and approved by the School District.

5.1.1 The bidder shall carry or require to be carried worker's compensation insurance for all of his/her employees and of the subcontractors engaged in work, in accordance with the Kansas Workmen Compensation laws.

5.1.2 The bidder shall carry and shall require any subcontractor to carry manufacturers and contractors public liability insurance or comprehensive general liability insurance, with limits of not less that $500,000.00 for single occurrence or accident, which shall protect the bidder, his/her subcontractors and the School District from all claims for damages to property or injury or death to persons by reason or an accident or occurrence arising out of operation pursuant to this bid. Such insurance shall cover the use of all equipment and vehicles engaged in the project or used in moving equipment or materials to or from the site.

5.1.3 The bidder shall carry and shall require any subcontractor to carry motor vehicle liability insurance in the amount of $250,000.00 per occurrence for personal injury and for property damage, for any and all motor vehicles utilized by the bidder to facilitate the performance of the bid.

5.2 The insurance certificates required by the successful bidder shall provide that they cannot be cancelled or modified without thirty (30) days written advanced notice to the School District by the insurance company. Such insurance shall be endorsed, both on the policy and on the certificate, to indicate that it shall apply to work performed pursuant to this bid, and shall name the School District as an additional insured party.

5.3 The successful vendor will be required to indemnify and hold the District harmless from suites or actions of any kind, including Worker's Compensation claims, brought against it for or on account of any damages or injuries received or sustained by any parties, by or from acts of the vendor or his/her agents. The successful vendor will furnish insurance for Worker's Compensation as required by law and shall likewise furnish certificates that it carries liability insurance with limits not less than $500,000.00 bodily injury and $500,000.00 property damage, unless greater amounts are specified.

6. Award and Purchase

6.1 The purchase order/contract will be awarded to the firm submitting the best responsible proposal complying with the requirements of the bid solicitation, provided the qualifications/bid is reasonable and in the best interest of the District to accept. The firm selected will be notified at the earliest practical date. Award of this proposal is contingent upon the approval of funding from the Schools and Libraries Universal Service Program. The decision regarding the acceptability of any firm's qualifications/bid shall remain entirely with the District. The criteria for making this judgment will include but is not limited to price, demonstrated capability and general responsiveness to the bid.

6.2 The District hereby notifies all prospers that it will affirmatively insure that in any contract entered into pursuant to this advertisement, minority business enterprises will be afforded full opportunity to submit proposals in response to this Request and will not be discriminated against on the grounds of race, color or national origin in consideration of an award. Proposer hereby agrees that should proposer be awarded this contract, proposer will not discriminate against any person who performs work there under because of race, religion, color, sex national origin or ancestry.

6.3 The District reserves the right to reject any or all proposals, to waive any informalities or technical defects in proposals, and unless otherwise specified by the District to accept any item or groups of items in the proposal, as may be in the best interest of the District.

6.4 Unified School District 500 will be the sole judge with respect to the evaluation of proposals. The firm that best meets the conditions of each of the individual criteria will be awarded the contract.

6.5 Demonstrated capability based on the required information as to the experience the individuals/firm that will be providing the service and your firm's past experience, as indicated by the reference submittals.

6.6 The Board of Education reserves the right to determine if bid products are equivalent to specified products.

7. Damages

7.1 Unified School district no. 500 reserves the right, in case of bidder default, to procure the articles or services from other sources, and hold the defaulting contractor responsible for any excess costs occasioned thereby.

8. U.S.D. 500 Representatives

8.1 Questions concerning the proposal process, acceptance and approval of proposals and purchase order information relative to this proposal package should be directed to:

Robert Young, Director of Purchasing
(913) 551-3200

8.2 Questions concerning the technical specifications relative to this proposal package should be directed to:

Joe Fives, Director of Technology & Information Services
(913) 551-3200

9. Contract Period

9.1 Contract will begin on July 1, 2004 thru June 30, 2005. Provide costs that can be held firm through these dates.

10. Vendor Representative

10.1 Successful proposers shall appoint, by name, a company representative who shall be responsible for servicing the contract resulting from the award of the invitation to bid. The appointed representative shall be responsible for functions as necessary to insure that the contract will be maintained in a professional manner.

11. Contractual Provisions

11.1 The contents of this request for quotation submissions, as appropriate, become part of the final contract.

12. Inspection and Cooperation

12.1 All work shall be done under the inspection of and to the satisfaction of Joe Fives, Director of Technology & Information Services, and/or his designee.

13. Subcontracting

13.1 Respondents must be recognized dealers with the ability to maintain and repair network equipment within their own facilities. Subcontracting will not be allowed without the express written consent and knowledge of the Unified School District 500. National manufacturers/distributors may bid using local authorized factory maintenance dealers to perform maintenance, installation and service.

13.2 The contract that will be derived from this bid request, shall not be sublet, except with the written consent of the Director of Purchasing. This is inclusive of the maintenance requirements of this contract. No such consent shall be construed as making the school district a party to such subcontractor. No subcontact shall under any circumstances relieve the Contractor of his/her liability and obligation under this contract, and all transactions with the school district acting through its Director of Purchasing must be through the bidding contractor.

14. Transfer of Ownership

14.1 The equipment delivered under this proposal shall remain the property of the seller.

15. Equipment Requirements

15.1 Any units that your firm would offer on this portion of the bid shall be subject to the configuration requirements and manufacturers listed as a part of these written specifications.

15.2 Where brand names are stated, no substitution is allowed without prior approval.

15.3 The comprehensive parts and labor warranty on this equipment shall commence on the date of completed installation and initial start-up of said.

15.4 Vendor shall provide a maximum twenty-four hour response time to maintenance calls on the equipment to be supplied. Failure to respond within the required timeline will empower USD 500 Technology & Information Services staff to respond to the call and make the necessary adjustments/repairs. These costs will then be billable by the District to the equipment provider for failure to comply with the terms and conditions of the contract.

15.4 All cartons which will be delivered as a result of this contract and all subsequent purchase orders issued against this contract shall bear the purchase order number issued by Unified School District No. 500 on the outside of the packaging. This number shall be clearly marked and large enough to be clearly recognizable.

15.5 While the initial shipment destinations will be identified in this bid document, any subsequent orders issued as a result of this contract beyond the original requirements of this bid document will require the successful vendor to ship directly to the requested destination on the purchase order. All shipments will be to destinations within the boundaries of Wyandotte County, in the State of Kansas. Any additional shipments will be at the contracted price. No additional charges will be assumed by the District for ship destinations not named in this document.

15.6 The contractor warrants fault-free performance in the processing of date and date-related data (including, but not limited to, calculating, comparing, and sequencing) by all hardware and software products delivered under this contract, individually and in combination, upon installation. This warranty includes all embedded microchips relating to calendar dates and events and to random numbers generated based on dates. Fault-free performance includes the manipulation of data with dates prior to, through, and beyond January 1, 2000, and shall be transparent to the user.

15.7 Hardware and software products, individually and in combination, shall successfully transition into and beyond the year 2000 with the correct system date, without human intervention, including leap year calculations. Hardware and software products, individually and in combination, shall also provide correct results when moving forward or backward from the year 2000.

15.8 Equipment ordered on the contract resulting from this invitation to bid may be ordered in quantities less than specified in this document and may be ordered at various times and in various quantities as required. Equipment may be ordered over the term of the contract.

16. Contractor Understandings and Obligations

16.1 Contractors should understand that the issuance of this invitation to bid does not create any obligation on the part of Kansas City, Kansas Public Schools to enter into any contract or undertake any financial obligations with respect to the project refereed to herein. There will be a public opening for the proposals received, and there will be not discussions with Contractors except for the purpose of clarifications of a proposal until the evaluation of the proposals has been completed.

16.2 Kansas City, Kansas Public School District reserves the right to purchase or not purchase individual sections of the Contractor proposals, and to purchase or not purchase sections of the bid document.

16.3 Contactor shall be obligated to exercise the highest standard of care in performing its obligations. Contractor shall demonstrate to Kansas City, Kansas Public School District's satisfaction that it is of sound financial condition.

16.4 Proposers are expected to examine any bid documents, specifications, or other requirements, schedules and instructions included in the proposal package. Failure to do so will be at the proposer's risk.

16.5 Contractor shall carry Professional Liability Insurance ($1,000,000.00 as a minimum).

16.7 All work shall be performed in a thorough manner according to the highest standards of care within the industry and shall be subject to inspection and acceptance by the Kansas City, Kansas Public School District.

16.7 The successful contractor shall give notices to authorities and shall comply with all federal, state, local laws, ordinances, rules, regulations, and orders of any public authority bearing on the performance of the work required. The contractor shall also obtain all permits and licenses required for the performance of work under this contract. The contractor shall perform all work in accordance with applicable permits and licenses.

16.8 Prior to starting the installation, the assigned installation supervisor or lead technician, shall participate in walk-through of the sites with the Kansas City, Kansas Public School district representatives to review and verify the installation locations and install methods

E-RATE WIRELESS WAN SPECIFICATIONS

Goals

The Kansas City Kansas School District is seeking a solution to provide broadband wireless wide area network services, to a select number of school sites. The building infrastructure today includes gigabit backbone in all schools with a gigabit uplink to the WAN. The WAN is 3 Mbps to each elementary, 4.5 Mbps to each middle school and 6 Mbps to every high school. The connections into the district office include 2-OC 3 provided by SBC and an OC 3 for our Internet connection provided by Verio. Our voice switches are a pair of Avaya Definity G3's. We would like to upgrade our bandwidth to allow for increased internet and video traffic, which could include distance learning, video lesson plans, and content refresher videos (video taping of master teachers to provide teaching to other teachers).

The following buildings should be included in the wireless broadband wide area network, (terrain, line of sight, and distances permitting):

1. Central Administration Office, 625 Minnesota Avenue, Kansas City, KS 66101
2. Indian Springs Administration/Preschool, 4601 State Ave, Kansas City, KS 66102
3. Eisenhower Middle School, 2901 N. 72nd St, Kansas City, KS 66109
4. Northwest Middle School, 2400 N. 18th St, Kansas City, KS 66104
5. Argentine Middle School, 2123 Ruby, Kansas City, KS 66106
6. J.C. Harmon High School, 2400 Steele Rd., Kansas City, KS 66106
7. McKinley Elementary School, 611 N. 14th St., Kansas City, KS 66102
8. Central Elementary School, 813 Barnett, Kansas City, KS 66102

The minimum bandwidth to each building should be at least 10 Mbps full duplex, with an option to increase up to 100 Mbps or greater in the future.

The District currently has:

Summary --

- Number of students — 21,000
- Number of buildings — 48
- Number of classrooms --1650
- Entity making the request--Kansas City Kansas School District (KCKSD)
- Number of PC's -- 7000
- Type of cabling to each building--Cat 5, Cat 5E, Cat 6 inside wiring

General Conditions

Conditions that will be necessary for a vendor to meet as part of the RFP process:

1. **Award of this proposal is contingent upon the approval of funding from the Schools and Libraries Universal Service Program. The successful bidder agrees to receive a portion of the payment for the provisions of goods and services described herein directly from the Universal Service Fund ("USF"), and/or its agents, the National Exchange Carrier Associations ("NECA"), and/or the Schools and Libraries Corporation ("SLC"). Kansas City Kansas School District and successful bidder will act in a reasonable manner and comply with any Schools and Libraries Universal Service Fund Program requirements as described under Section 254 of the Communications Act of 1934, as amended, 47 C.F.R. #254, and any competitive bidding requirements contained in 47 C.F.R. #54.504.**
2. **Contract will begin July 1, 2004 thru June 30, 2005.**

- Please provide a list of references and credentials that demonstrate your proven background and expertise in this area. Financials must be submitted in order to ascertain financial ability to adequately manage a project of this nature.
- The extent of this RFP is for wireless broadband wide area networking at selected school and administration buildings.
- Services that will also be required such as: staging, installation, monitoring, performance monitoring, and dispatch services should also be included.
- Not all equipment and/or services are E-Rate eligible. Vendors should indicate which products and/or services are E-Rate eligible.
- Vendors may respond to all or selected portions of this RFP. Kansas City USD 500 maintains the right to award either the entire RFP to a single vendor, or to award portions of the RFP to multiple vendors in order to ensure the best value for the school district.

Summary Description of Needs or Services

A. Major components needed as part of the request.

1. Wide Area Network engineering and design, including geographical surveys, designs, procurement, and configuration. All necessary permits must also be obtained by the proposer.
2. Fiber connection from antenna and transmitter/receiver unit to telecommunications closet.
3. All equipment necessary for wireless WAN data communications, including all endpoint electronics.
4. Verification of connectivity between sites and test results shall be made available to the district's technical staff.

5. Industry standard security measures, including but not limited to MAC address filtering and encryption, shall be employed throughout the wireless wide area network.

B. Connectivity Management

- The network must be monitored 24 hours per day, 7 days per week.
- Network performance monitoring tools should be available to the technical staff.

C. Maintenance

- Customer help desk support must be available 24 hours per day, 7 days per week.
- Complete onsite maintenance and support, 4 hour response time, 8 am – 5 pm Monday – Friday.

D. Training

- Adequate and appropriate onsite training on equipment operation for the district technical staff shall be included in the proposal.

Proposal Requirements

The following is a list of requirements that must be met:

1. Provider to be an expert in LAN and WAN wireless technologies.
2. Provider able to provide, maintain and troubleshoot LAN and WAN circuits.
3. Provider able to provide engineer/technician dispatch services for onsite repair.
4. Provider able to provide network monitoring and network performance monitoring.
5. Provider able to provide certified security consultants, hardware/software solutions, remote intrusion detection, notification and correction.

Invitation

- RFP will be due: February 3, 2004. Submissions received after this deadline will be disqualified. If possible, please submit responses 10 days prior to bid closing to allow for review by appropriate parties.
- There will be no vendor conference.
- Main Contact is Joe Fives, Director of Technology, 913-279-2286.
- Please submit RFP to: Attn: Robert Young, Purchasing Director
  Board of Education
  625 Minnesota Ave
  Kansas City, KS 66101-2805

Itemize below equipment and/or services which will be required to complete the scope of work outlined in this invitation to bid (be sure to itemize by the items which are E-Rate eligible and which are not):

Equipment/Service Description	E-Rate Eligible (Yes/No)	Cost
TOTAL		

WE HEREBY ACKNOWLEDGE RECEIPT AND UNDERSTANDING THE ADDENDUM AND INFORMATION CONTAINED HEREIN AND AGREE TO FURNISH THE ITEMS ON WHICH PRICES ARE QUOTED IN ACCORDANCE WITH ALL TERMS AND CONDITIONS PREVIOUSLY LISTED AND ANY ATTACHED SPECIFICATIONS.

BY: _____ DATE: _____

TITLE: _____ FIRM: _____

PHONE: _____

KALISPELL SCHOOL DISTRICT NO. 5

AND

FLATHEAD HIGH SCHOOL DISTRICT

Request for Proposals

Wireless Wide Area Network System

January 7, 2005

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Request for Proposals
Wireless WAN Network System

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1.0 Introduction

1.1 Summary

This document has been prepared to solicit proposals for equipment purchases and possible installation of a wireless Wide Area Network on behalf of Kalispell School District 5 (SD5). The proposed solution will replace an existing leased line WAN infrastructure operating at approximately 1.5 mbs. This document will provide bidders with detailed specifications on equipment desired to accomplish the migration. Based on the proposals the district may determine to install the equipment with in house personnel or ask the bidder to provide the equipment and installation. It is likely that the bidder will install the equipment.

Bidders should provide proposals on equipment only and equipment plus installation of equipment at each of the sites described within this proposal. Bidders should note that if they are providing equipment only, all of the equipment should be delivered to the district by no later than March 11, 2005. Bidders awarded equipment and installation need to be completed with the installation and have the WAN fully operational by April 15, 2005. The district enjoys Spring Break the entire week of March 21. During this time students will not be on campus This would be an excellent time for school site installation.

The RFP will be made available on the district docushare website: http://www.sd5.k12.mt.us/doc. In addition the RFP may be obtained from the district office:

Kalispell School District # 5
Attention: Albert Booky
233 1st Ave. East
Kalispell, MT 59901

1.2 Description of Organization

The locations impacted by this proposed WAN at Kalispell School District # 5 include: (1) centralized tower [Cenex grain elevator], (1) Administration building, (4) elementary schools, (1) middle school, (1) junior high school, (1) high school and (1) vocational center. The District consists of approximately 500 staff members that serve roughly 5200 students. Two additional locations: (1) new high school and (1) existing elementary will be added to the wireless WAN in 2007. These locations are not addressed in this proposal but the solution installed needs to have the capacity to allow for expansion to these sites in the future.

1.3 Project Goals / Objectives

- to increase WAN bandwidth per site from the present 1.5 Mbps to a minimum "real" data throughput of 20 Mbps per site.
- ability to monitor availability and performance remotely
- provide estimated reliability of 99.995% (uptime) of WAN
- provide a cost effective solution to leased lines
- allow for central placement of specific application servers to be accessed across the high speed WAN
- install the new WAN in parallel with the present WAN, test thoroughly for 30 – 60 days prior to complete cut over to the new WAN during the summer of 2005. The existing leased WAN circuits will be kept for redundancy where cost effective.

1.4 References

All bidders are required to provide at least three references from other clients who have had projects similar in size and scope to the SD5 project within the past 3 years. The following information for each reference must be included:

- Client/company name
- Contact name, title, telephone number and email address
- Project scope in dollars and duration
- Project description and how it is relevant to this RFP
- Equipment installed

1.5 Schedule of Events

Event	Date
RFP Issuance	January 7, 2005
SD5 Facilities Site Visit Opportunity	January 20, 2005 @ 10:00 am
Proposal Due	February 4, 2005 @ 2:00 pm
Evaluation Completed	February 8, 2005
Selection Announced @ Board Meeting	February 8, 2005 @ 9:00 pm
If equipment only bid - all equipment delivered by	March 11, 2005
If equipment + installation - project completion by	April 15, 2005

1.6 Budget Constraints

SD5 has not designated a set amount for this project. However, all entities submitting proposals should be aware that cost will be a significant factor during the selection process. All proposals should be priced competitively for consideration.

1.7 Questions about this RFP

All questions regarding contractual and legal requirements found in the "2.0 General Information" section should be directed to Mr. Todd Watkins. All other questions should be directed to Albert Booky – IT Network Administrator

Kalispell School District # 5
233 1st Ave. East
Kalispell, MT 59901

	Albert Booky	Todd Watkins
Email:	bookya@sd5.k12.mt.us	watkinst@sd5.k12.mt.us
Voice:	406-751-3407	406-751-3412
Fax:	406-751-3425	406-751-3425

2.0 General Information

2.1 Bidding Information

The Board reserves the right to accept or reject any or all proposals received in response to this RFP. Furthermore, the district reserves the right to select or reject any part of any of the proposals to develop the most effective configuration of equipment and to negotiate with any party for terms and conditions of the contract. The school district reserves the right to accept any proposals, with price not being the main emphasis of the selection process.

2.2 Proposal Submission

Please review this RFP carefully before responding to ensure that the bidder understands fully all procedural, system, and contractual requirements. During the optional site visit and / or via phone conversation is the appropriate forum for requesting clarification of any elements that remain unclear. To be considered for selection, vendors must submit a complete response to this RFP as detailed in this section and the remaining sections.

Vendors are requested to submit an original and three (3) copies of the proposal in response to this RFP. A set of tabs to identify each part of the proposal must be inserted to facilitate quick reference. Please number the pages in each section for easy reference over the telephone.

A review and selection committee has been formed to advise the Board on the proposal that best meets the needs of the district. The committee consists of:

David Beyer	Information Technology Facilitator
Albert Booky	Information Technology Facilitator
Murry Graham	Information Technology Facilitator

Please submit your proposals to Mr. Todd Watkins at the address shown below. Proposals must be sealed and clearly labeled "WIDE AREA NETWORK SYSTEM." Proposals must be received by February 4, 2005 @ 2:00 PM MDT. Late proposals will not be accepted. Faxed copies will not be accepted.

Kalispell School District # 5
Attn.: Mr. Todd Watkins
233 1st Avenue East,
Kalispell, Montana 59901

2.3 Vendor Site Visit

Vendors are invited and encouraged to tour the facilities on January 20, 2005 @ 10:00 am prior to the submission of a proposal. The tour will begin at the Administration building located at 233 1st Ave. East, Kalispell, MT. Please RSVP to Albert Booky [bookya@sd5.k12.mt.us or 406-751-3407] by January 18 so adequate transportation can be provided if you are planning to attend. The purpose of the site visit is to provide vendors an opportunity to ask questions arising from their review of the system specifications and a site inspection of the buildings. Discussions of changes to the RFP will only apply, if followed by a written amendment to the RFP.

2.4 Amendments to RFP

If amendments become necessary for this RFP, they will be posted on the web site. (http://ww.sd5.k12.mt.us/doc under the Wireless RFP link)

2.5 Cost to Prepare Proposals

The invitation to submit a proposal does not commit the school district to pay any costs incurred in the submission of the proposal, or in making any necessary studies or designs for its preparation.

2.6 Complaint of Requirements Process

Vendors may protest RFP requirements or specifications by filing a formal written complaint:

Kalispell School District # 5
Attn.: Mr. Todd Watkins
233 1st Avenue East,
Kalispell, MT 59901

Complaints may be filed within three (3) days after the Vendor site visit. Complaints must include specific reasons and proposed changes to specifications. Complaints will be responded to in writing within three business days. Vendors will be notified of any changes to the RFP via the Amendment Process.

2.7 Protest of Award

Vendors may protest the award of the contract by filing a formal written complaint with the Kalispell School District:

Kalispell School District # 5
Attn.: Mr. Todd Watkins
233 1st Avenue East,
Kalispell, MT 59901

Protests of award must be filed in writing within 24 hours of contract award at the administration building. The written protest shall specify the grounds upon which the protest is based. In order to be considered adversely affected or aggrieved, the vendor making the claim must be a bidder and be eligible for award. Award Protests will be reviewed. The school district officer or designee shall have the authority to settle or resolve a written protest. If the protest is not settled or resolved by mutual agreement a written decision on the protest shall be issued.

2.8 Proprietary Information

The school district agrees to hold confidential and not disclose to any outside parties any information included in proposals that is marked as proprietary or confidential, as allowed by law.

2.9 Access to Premises

Access to customer premise for installation will be allowed during normal business hours or as arranged in advanced.

2.10 Acceptance of Proposal Content

The Vendor will be expected to enter into a contract based on proposals made and the terms and conditions of the RFP and any subsequent amendments. Failure to complete negotiations will result in disqualification of the proposal.

The contents of the proposal of the Vendor, specifically including those parts that deal with contractual requirements, purchase prices, and official published specifications will become contractual obligations, and will be made part of the final contract. RFPs must be submitted with an authorized signature. If any discrepancy arises between the vendor's form contract and the proposal, the terms in the proposal shall prevail. Failure of the Vendor to accept these obligations in a purchase agreement, purchase order, delivery order, or similar acquisition instrument may result in cancellation of the award.

2.12 Price Increases and Taxes

Vendors must affirm that the purchase price of the system will be valid for a minimum of 120 days after the proposal is submitted. However, upon the award of a contract, the purchase price becomes firm and may not be changed thereafter.

Taxes, neither state nor federal, shall be included in bid prices.

2.13 Bid Security

If the bid meets or exceeds twenty five thousand dollars ($25,000) either in part or in total, bid security totaling 10% of the total basic bid shall be submitted with the bid package in the form of lawful moneys of the United States, a cashiers check or a bank draft payable to Kalispell School District, or a satisfactory bid bond executed by an acceptable surety.

2.14 Indemnity

Vendor shall agree to defend, indemnify and hold harmless Kalispell School District # 5 (including their officers, agents and employees) from all demands, loss, claims, damage, or liability including attorneys' fees and related legal expenses resulting from injury to or death sustained by any person (including but not limited to Vendors employees and subcontractors) or damage to property of any kind which injury, death, or damage arises out of the work to be performed by the Vendor, except such obligations shall not be applicable to injury, death or damage to property or persons resulting from the negligence or willful misconduct of the school district, their officers, agents or employees.

2.15 Insurance and Letter of Credit

The Vendor shall carry liability insurance or be self-insured to cover damage to person or property in limits of not less that $1,000,000 combined single limit and workers compensation, and employer's liability insurance with a limit of not less than $300,000. Certificates of insurance shall be filed with the Local Government and shall be subject to its approval as to the adequacy of the protection.

To be considered a valid proposal, the Vendor must submit letter(s) of credit from an appropriate financial institution authorizing that vendor possess sufficient credit to deliver and install equipment proposed.

2.16 Components of a Complete Response

- Proposal assurances signature page
- Detailed cost structure with component level pricing.
- Cost Structure for equipment only and equipment plus installation
- Breakout of <u>one-time costs</u> and <u>recurring costs</u>
- Diagrams of systems
- Maintenance plan
- Support / Warranty plan
- Letter of credit
- At least three (3) references of installed systems - similar size and scope
- Exceptions list
- Bid Bond
- Vendor Questionnaire

2.17 Physical location of sites

- Cenex Grain Elevator — 505 West Center Street
- Administration building — 233 1st Ave. East
- VoAg Center — 1259 Willow Glenn Road
- Hedges — 827 4th Av. East
- Linderman — 124 3rd Ave. East
- FHS — 644 4th Av East
- Elrod — 412 3rd Av. East
- Peterson — 1119 2nd St West
- Russell — 227 W. Nevada
- KJHS — 205 Northwest Lane

Sites to be installed during the summer of 2007 by SD5 staff

- Proposed New High School — Corner of Stillwater Road and West Reserve Road
- Edgerton — 1400 Whitefish Stage Road

3.0 Proposal Requirements

3.1 Summary

The wireless WAN project will consist of the deployment of 5 GHz unlicensed point-to-point circuits between each of 9 sites and a centralized grain elevator tower (owned by Cenex Corp.) in Kalispell, MT. Space on the facility has been leased for this purpose. A local cellular provider was using the tower but has abandoned the location for business reasons. SD5 will use the outside chain link enclosed cement pad with power to locate the enclosed network equipment on the ground. [see Appendix A figure 1 for diagram]. From this tower, point-to-point circuits will be installed at 9 separate sites across the district [see Appendix A - figure 2 for diagram]. All locations are within a 3 mile radius of the central tower [most less than 1 mile] and all but 1 have good line of sight. A second high school will be opened during the summer of 2007. The wireless WAN will be extended to this site at this time. The bidder should compose the bid such that SD5 has the ability to accept and equipment only bid or an equipment plus installation bid. If an equipment only bid is accepted, some level of consulting over the phone and possibly onsite consulting may be required during installation. Please specify these remote and local consulting rates in your bid.

3.2 Current Environment

Data: There are (13) sites connected to the present WAN with point-to-point ADSL and T1 leased lines. All sites connect back the Administration building which houses the district firewall, public www and email servers and 3 mbs wireless access to the internet [see Appendix A - figure 3 for diagram]. The wireless internet connection is a point-to-multipoint circuit leased from our ISP, Transaria. This leased circuit will stay in the Admin building. Transaria has a multipoint base station(s) at a tower located approximately 2 blocks NE of the proposed Cenex grain elevator tower that will serve as the hub for the SD5 wireless WAN. Transaria runs Aperto equipment in the 5 GHz spectrum and provides services to several customers in Kalispell. Frequency coordination with Transaria and other providers in the area will be required to minimize connectivity issues.

Voice: The district operates a voice network totally separate of its data network. This is a traditional channelized point-to-point digital T1 network [not voip] with NEC NEAX 2000 PBXs at each school location [installed in 1999]. The voice mail server resides in the Admin building [see Appendix A - figure 5 for diagram]. It is not within the scope of this RFP to modify the existing voice network. It would be helpful for the bidder to make possible recommendations on what equipment would be necessary to channelize T1s over the wireless WAN at a future date.

3.3 Suggested Environment

All data on the WAN will be TCP/IP traffic. We will install a router (like a Cisco 831) at each site that will only allow WAN based traffic (primarily Student Information System and Internet) out of each building LAN. This site router purchase and installation will be SD5's responsibility.

Individual Site information:

Site	Distance to Cenex	Detail
Admin Bld	.5 mi	This location has a limited number of users (20) but does house the district www, email and Business Office servers and provides the last hop to the district's 3 Mbps internet connection. Most bandwidth requirements are internal LAN based with the exception of some internet traffic. The VMS Business Office server has a limited number of users across the district that access budget and purchasing systems via Telnet and requires little WAN bandwidth. This location has good line-of-sight to the Cenex tower
VoAg Center	3 mi	This site has a small staff and 100 – 200 students that are bussed to this site for 2-3 periods / day from FHS and will be bused from the new high school as well. These students will require access to their respective building servers to save and retrieve data. All printing will be local. This location has good line-of-sight to the Cenex tower
Hedges	.7 mi	This K-6 elementary school has around 20 – 30 staff members and 300 students that will need limited access to the SIS at FHS and internet access. This will become a K-5 elementary during the summer of 2007 with student and staff numbers reduced accordingly. This location has poor line-of-sight to the Cenex tower because of trees. A 20 – 30' mast will probably be required to get above the trees at which time there will be good line-of-sight.
Linderman	. 5 mi	This 7th grade middle school has around 20 – 30 staff members and 330 students that will need limited access to the SIS at FHS and internet access. This site will be closed during the summer of 2007 and combined with KJHS. This location has good line-of-sight to the Cenex tower
FHS	.4 mi	This 10 – 12 grade high school currently has around 175 staff members and 1800 students. This site has a high need to access the SIS and highest internet access requirements in the district. This location will host the district SIS after the site based upgrade of SIS during the summer of 2005. This location will have the highest bandwidth requirements since users from all other sites will be accessing the SIS located here. There will also be some distance teaching between FHS and the new high school across the WAN. Staff and students numbers will decline after the summer of 2007 to around 1400 students. This location has good line-of-sight to the Cenex tower.
Elrod	.3 mi	This K-6 elementary school has around 20 – 30 staff members and 330 students that will need limited access to the SIS at FHS and internet access. This will become a K-5 elementary during the summer of 2007 with student and staff numbers reduced accordingly. This site is just one block north of FHS. There is not good line-of-site between the two sites due to heavy tree foliage. This location has good line-of-sight to the Cenex tower
Peterson	.4 mi	This K-6 elementary school has around 20 – 30 staff members and 330 students that will need limited access to the SIS at FHS and internet access. This will become a K-5 elementary during the summer of 2007 with student and staff numbers reduced accordingly. This location has good line-of-sight to the Cenex tower.
Russell	.6 mi	This K-6 elementary school has around 20 – 30 staff members and 330 students that will need limited access to the SIS at FHS and internet access. This will become a K-5 elementary during the summer of 2007 with student and staff numbers reduced accordingly. This location has good line-of-sight to the Cenex tower

KJHS	1.25 mi	This 8 – 9 grade school has around 75 staff members and 1000 students that will need moderate access to the SIS at FHS and internet access. This site will become a 6 – 8 middle school during the summer of 2007. Student and Staff numbers will stay about the same but SIS and internet requirements will decline some at that time. This site presently provides a link to an alternative high school, Bridge Academy (3 staff & < 150 students) that grants them internet access. It is unclear if Bridge will remain open after the summer of 2007. Bridge requires very little SIS and internet access. The KJHS location has good line-of-sight to the Cenex tower
New High School	3 mi	Opens 2007: This site will have the 2nd highest bandwidth requirement in the district. There will be about 1200 students at this location plus staff. This site will require a 100 – 125' tower to gain good line-of-site to the Cenex tower. Connectivity to this site is outside the scope of this RFP but should be considered during engineering of the WAN. A point-to-point circuit will be installed during the summer of 2007.
Edgerton	N/A	This K-6 elementary school has around 30 – 40 staff members and 530 students that will need limited access to the SIS at FHS and internet access. This will become a K-5 elementary during the summer of 2007 with student and staff numbers reduced accordingly. This location has no line-of-sight to the Cenex tower since it is behind a hill. It does have good line-of-sight to the new high school location and will be connected to the new high school with a point-to-point circuit during 2007 to allow connectivity to all WAN resources. Until 2007 Edgerton will continue to connect to the WAN via a point-to-point T1 to the Admin bldg.

Note: digital photos of each site taken from the top of the Cenex tower are available at: http://www.sd5.k12.mt.us/doc under the Wireless RFP link.

Two primary goals of the network bandwidth upgrade are:

1) Provide enough bandwidth between sites to allow for an upgrade to the existing Student Records Information System (SIS) from site based to District based. The Client/Server SIS currently operates on individual building servers in their LAN environment only. The district based upgrade will combine data from all locations to one central server. The district server will be located at the present Flathead High School (FHS) site since this has the highest concentration of SIS users. This will require the FHS-to-Cenex link to accommodate traffic from all other sites since all locations will access their SIS from the server located at FHS.

2) Provide adequate bandwidth when the new high school is brought onto the WAN during the summer of 2007. This location will have the second largest concentration of users. In addition to SIS access to FHS the WAN will need to accommodate some distance learning (including video) between the two high schools sites. The exact bandwidth requirement for this video / voice transmission is unclear at this point. However the use of VLANs over the WAN may be required to ensure proper packet arrival for video over TCP/IP.

Note: Each individual site will continue to use their local file and printer server(s) for LAN based activities at that site with the exception of the VoAg Center where a limited number of students will need access to their Student server located at FHS or new high school when it is constructed.

Site Detail Summary

All sites have good line of site from their roofs with the exception of Hedges. All roofs are flat with the exception of Hedges which is a gable roof. Hedges does have a chimney stack that could quite possibly support a mast. It is likely that a 5 - 6' tripod attached to a weighted platform will provide acceptable antenna mounting at all sites except Hedges. Hedges will require some type of 10 - 30 ' mast to get above the trees unless a near-line-of-sight solution is capable of shooting through tree foliage. The farthest location from the Cenex tower is the VoAg Center, around

3 miles. The new high school will also be close to 3 miles from the Cenex tower. Most sites are within 1 mile of the Cenex tower. The district has been looking at wireless options for almost a year including leased solutions. Our desire is to provide the highest degree of net total throughput, reliability, flexibility and security between sites that is possible given our budget. For this reason it has been decided that point-to-point circuits would be a better choice than point-to-multipoint. It has also been determine that high quality radios using RF bands in the 5 GHz spectrum should adequately meet SD5 technical and budgetary requirements. The current plan is to locate all central equipment (except antennas) in a chain-link enclosure at ground level in a climate controlled enclosure at the base of the 150' Cenex tower (Appendix A – Figure 1). Equipment at each site will be installed on rooftops. Temperatures can be extreme in Kalispell. It is not uncommon for temperatures to drop below zero degrees F for several days at a time. Listed below are minimal specifications that the RF equipment should meet to be considered adequate. Bidders should specify detailed specification on their equipment in the right most column.

3.4 Wireless Equipment Requirements

Minimum Specifications

Item	Minimum Requirement	Equipment Bid Spec
Radio Frequency	5 GHz unlicensed spectrum	
Non overlapping channels	5	
Data Rate	20 Mbps net total throughput – half duplex	
Channel size	20 MHz	
Modulation	OFDM – BPSK, QPSK, 16 QAM, 64 QAM	
Duplex	TDD (time division duplexing)	
Antenna	Multiple choices – high -gain external, connected to radio via at CAT5 @ 100m. Power over Ethernet	
Estimated reliability	99.995% uptime	
Line of Sight	LOS required (near line-of-sight not required)	
Ethernet Interface	10/100 Base-T auto negotiation (RJ45), Bridging	
VLAN support	Based on 802.1q	
Security	Advanced security capabilities including authentication, WEP and AES based Encrypted transmission and VLAN capabilities	
Traffic Prioritization	Based on 802.1P	
E1/T1 interface	Not required but specify if available	
Installation	Describe ease of setup, antennae alignment, included tools / utilities.	
Management Options	SNMP, remote over the air software upgrade and configuration. Specify mgmt and monitoring tools / utilities.	
Extended Warranty	1 year	
Service	24 / 7 with spare in the air within 24 hours	
Power requirements	Specify what is required at enclosure --------→	
Lightning protection	On all equipment	
Compliance	All applicable FCC and UL guidelines	
Non RF equipment provided by bidder		
Cenex – Enclosure	Internal 19" rack mount, climate control, located on ground ~150' below antennas	
Cenex – router / switch	Capable of layer 2 routing (if router then Cisco preferred, if switch then managed HP or Cisco preferred)	
Cenex UPS	APC – uptime on battery for all equip = 15 min	

Suggested Equipment

The equipment suggested below appears to offer acceptable bandwidth capability in a reliable and cost effective manner. The bidder would be responsible to determine the actual device, antennae, etc. needs for each individual site and provide the corresponding vendor part numbers, descriptions and prices. See *Technical Solution & Detailed Cost Breakdown* form in Appendix B.

The bid must include specifications / data sheets on all equipment bid.

Point-to-point Circuits

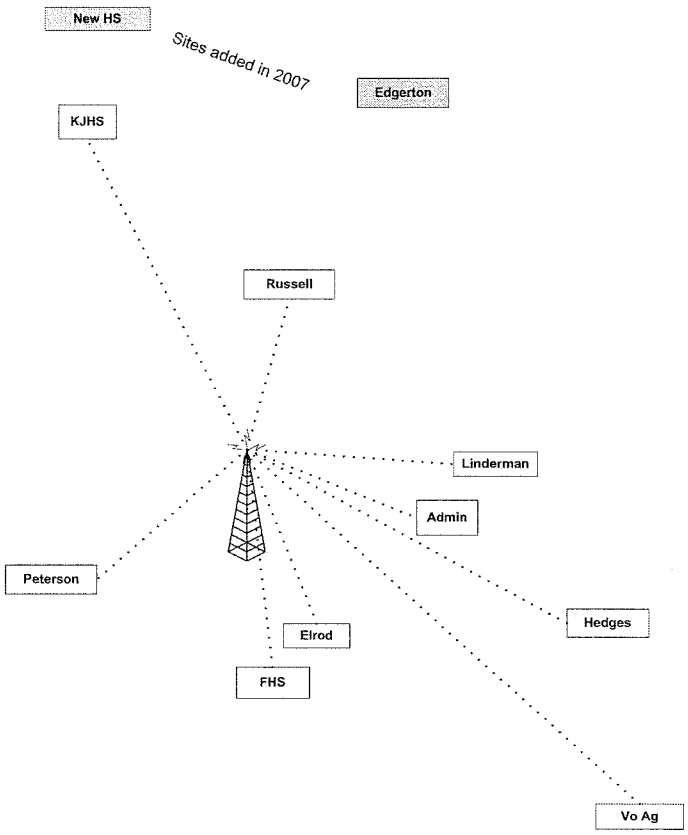
- Possible Radio(s):
  - RAD Data Airmux-200
  - Alvarion – BreezeNET B28
  - Redline AN-50 P2P

Other Equipment at Cenex Tower

- Appropriate managed Ethernet switch and / or Cisco router that will provide transparent layer 2 routing / switching
  - Note: SD5 uses HP2524 managed switches throughout most of it's networks
- Outdoor enclosure – with climate control [internal 19" rack mount] – located on the ground, not top of tower
- APC UPS

Suggested configuration for individual school site(s)

- Point-to-point radio, antenna, mounting & cabling
- Cisco 831 router (provided, configured and installed by SD5)
- APC UPS (provided, configured and installed by SD5)



3.5 Vendor Questionnaire - Required

1. Describe what equipment will be installed at each location and diagram traffic flow between sites.

2. Detail all of the equipment that will be installed including cost, manufacture and model numbers.

3. Describe any and all other design options and features that you suggest SD5 consider as necessary.

4. Detail the specific monitoring and reporting capabilities of the wireless equipment.

5. Describe your service organization including hours of operation, escalation procedures and anticipated maximum response time associated with device failures.

6. With regard to installation, configuration and testing, describe what documentation the bidder will provide. At a minimum, network diagrams are required in printed and digital form.

7. Describe what consulting services you are willing to provide to SD5 if an equipment only option is accepted as the bid. Please specify consulting rates for both phone and onsite consulting availability in Kalispell.

8. Describe what ongoing support / consulting your company is willing to provide and those consulting rates for both phone and onsite support.

9. Provide your company profile including years in business, technicians available and familiarity with equipment bid and any applicable certifications.

4. Assurances

The following list of assurances must be completed, must be signed, and must be submitted as part of the submitted bid. By signing this list of assurances and by quoting the required proposed cost(s), the Vendor agrees to the bid requirements as stated in the bid specifications for all equipment bid and / or installed at Kalispell School District # 5.

Assurances	Yes	No
1. The Vendor agrees that all shipping costs will be borne by the Vendor.		
2. The Vendor agrees to list the requisite number and the requisite type of references.		
3.The Vendor adheres to standards and recommended installation requirements for all equipment.		
4. The Vendor agrees that any replacement part used in a warranty issue must have the same warranty agreement of the parts accepted for bid and it must remain under warranty until the life of the original warranty expires.		
5. The Vendor agrees to install only equipment specified in the bid. Furthermore, the Vendor agrees that all documentation supporting this equipment will be provided at the time of delivery / installation.		
6. The Vendor agrees that the deadline for the submission of this bid to Kalispell School District # 5 is 4:00pm, February 4, 2005.		
7. The Vendor agrees to warranty all parts and labor (if provided) for all of the equipment provided.		
8. The Vendor agrees that for warranty requests the Vendor has within 24 hours of notification to respond to this warranty problem and either to repair or to replace the defective part(s).		
9. The Vendor agrees that Kalispell School District # 5 has the right to reject any and all bids, to waive any and all technicalities, and to award all or any part of the bid in a manner that is in the best interest of the school system.		
10. The Vendor agrees to provide the Kalispell School District # 5 with "Net 30" terms		

Printed Name

Name of Company

Signature

Position

CALL FOR BIDS

SCHOOL DISTRICT NO. 5 AND FLATHEAD HIGH SCHOOL DISTRICT
FLATHEAD COUNTY
KALISPELL, MONTANA
WIRELESS (WAN) SYSTEM

The Board of Trustees, School District No. 5 and Flathead High School, Flathead County, Kalispell, Montana is calling for sealed bids for a wireless (WAN) system to include equipment and/or installation.

Copies of specifications may be obtained from Albert Booky, IT Director, Administration Office, 233 First Avenue East, Kalispell, Montana 59901 (406) 751-3407. To be considered all bids must be directly submitted to the District Clerk's Office, C/O Todd Watkins, 233 First Avenue East, Kalispell, MT 59901 by February 4, 2005 at 2:00 p.m., (local time). All bids will be opened and read aloud on February 4, 2005 at 2:00 p.m., (local time) in the Office of the District Clerk, 233 First Avenue East, and taken under advisement. A recommendation to accept or reject the bids will be made to the Board of Trustees at a regular Board meeting scheduled February 8, 2005 at 7:00 p.m., located at the Kalispell Junior High School Library. All bids must be plainly marked "Wireless WAN System Bid".

The Board of Trustees of School District No. 5 and Flathead High School District, Flathead County, Kalispell, Montana reserves the right to reject any and all bids, to waive formalities, and to accept the bid deemed most advantageous to the School District.

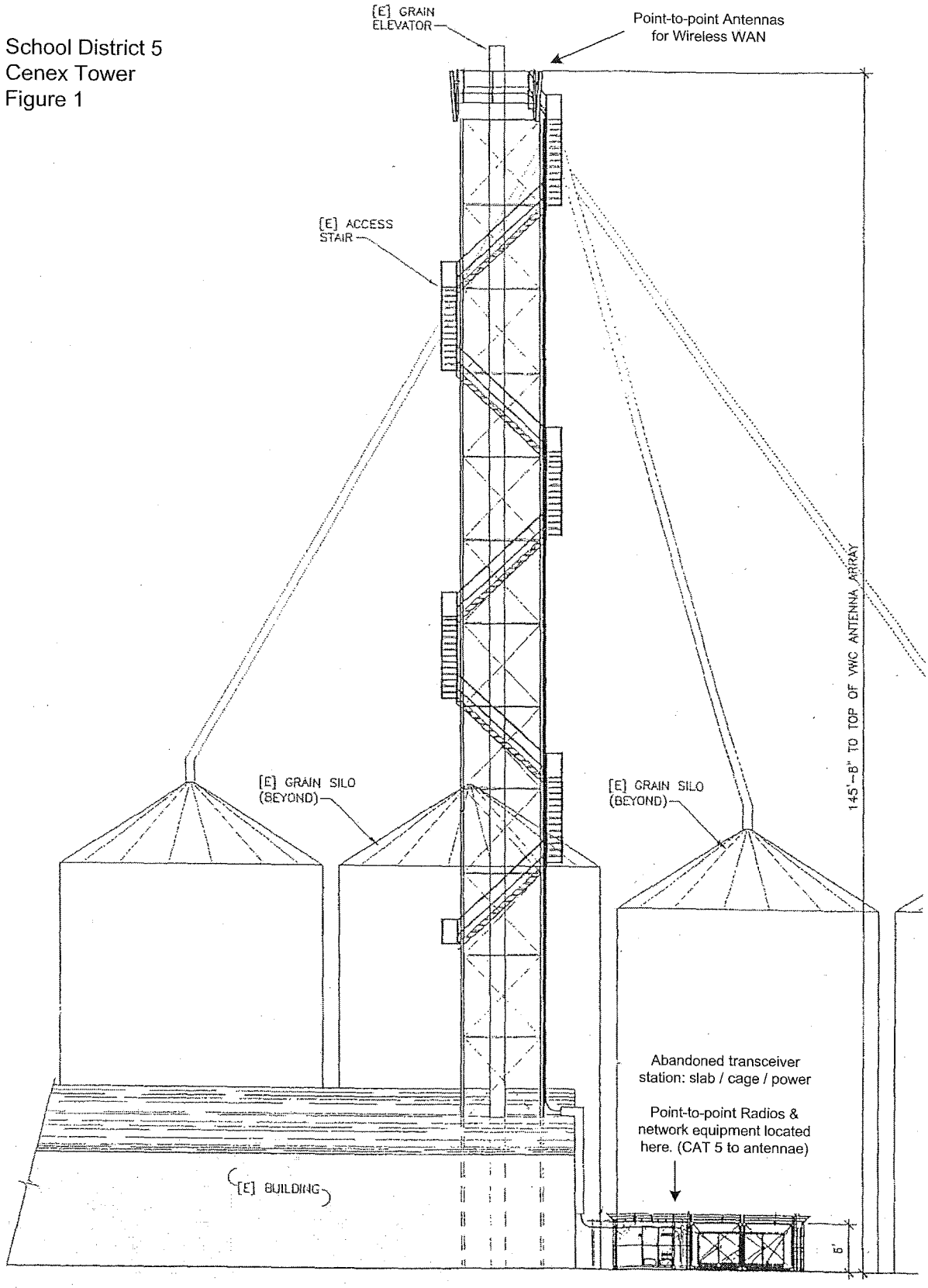
Todd Watkins, District Clerk
School District No. 5 and Flathead High School District
33 First Avenue East
Kalispell, MT 59901

PUBLICATION DATES:

Daily Interlake
January 7, 2005
January 20, 2005
January 27, 2005

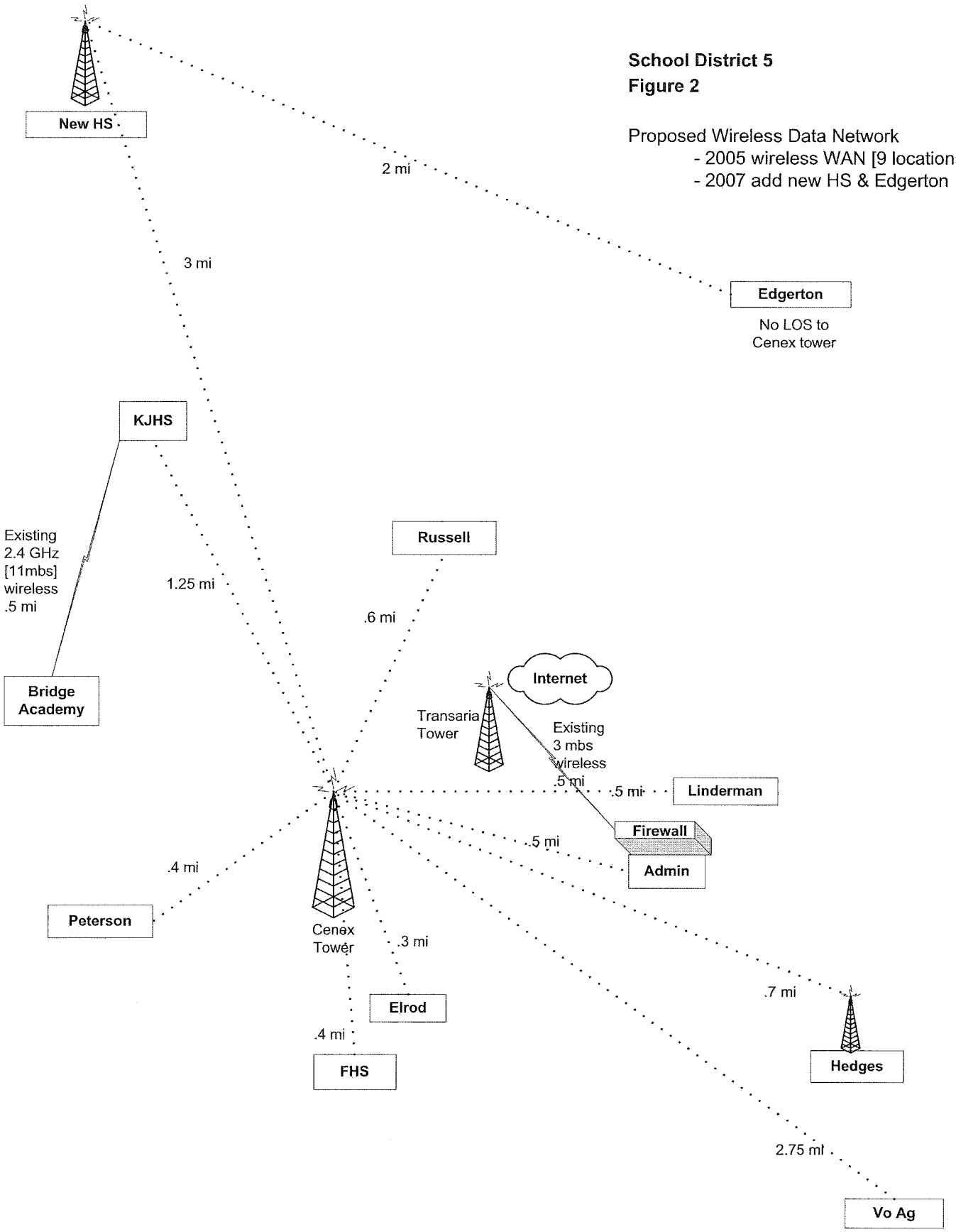
Appendix A.- Diagrams

School District 5
Cenex Tower
Figure 1



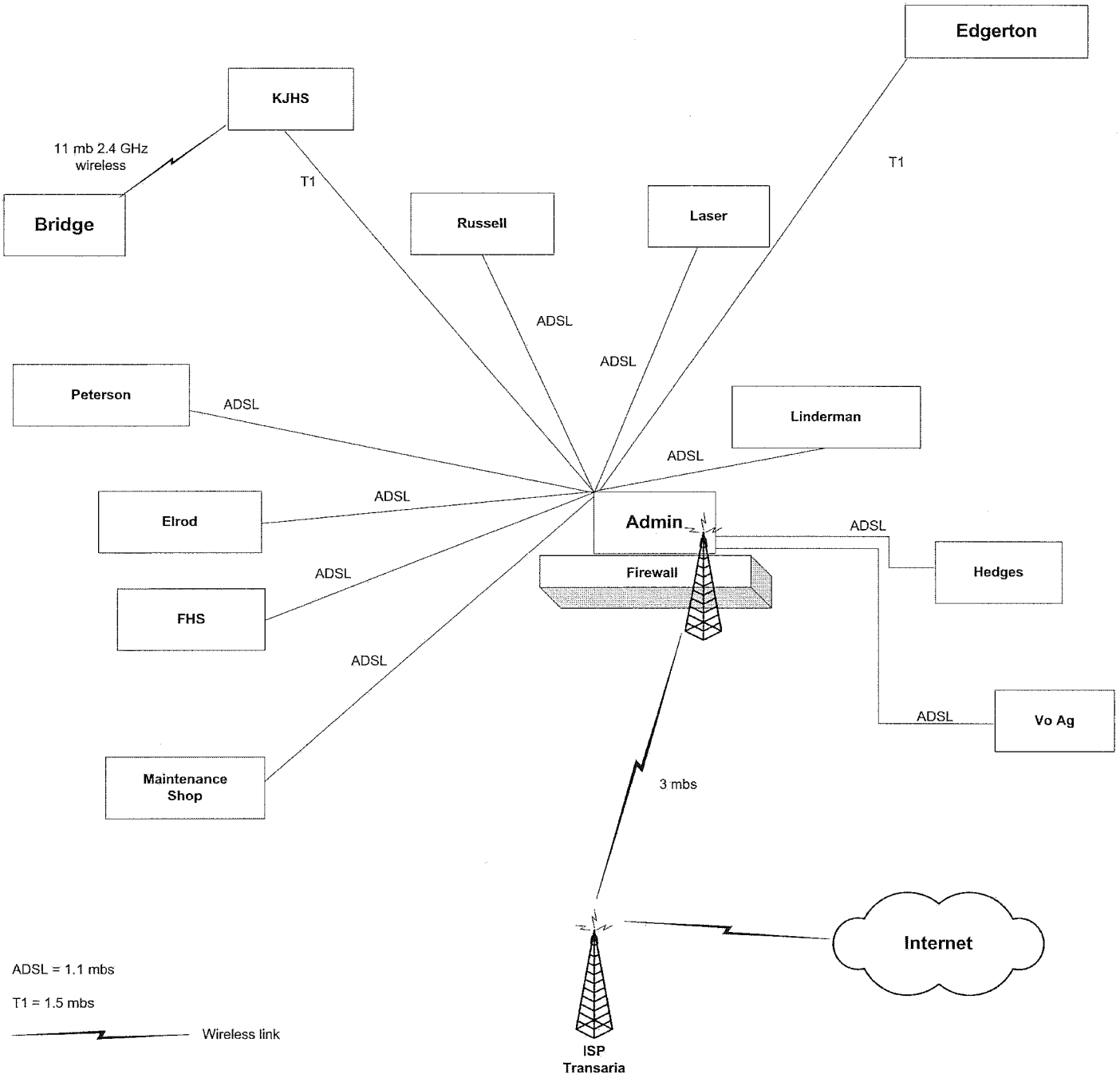
School District 5
Figure 2

Proposed Wireless Data Network
- 2005 wireless WAN [9 locations]
- 2007 add new HS & Edgerton

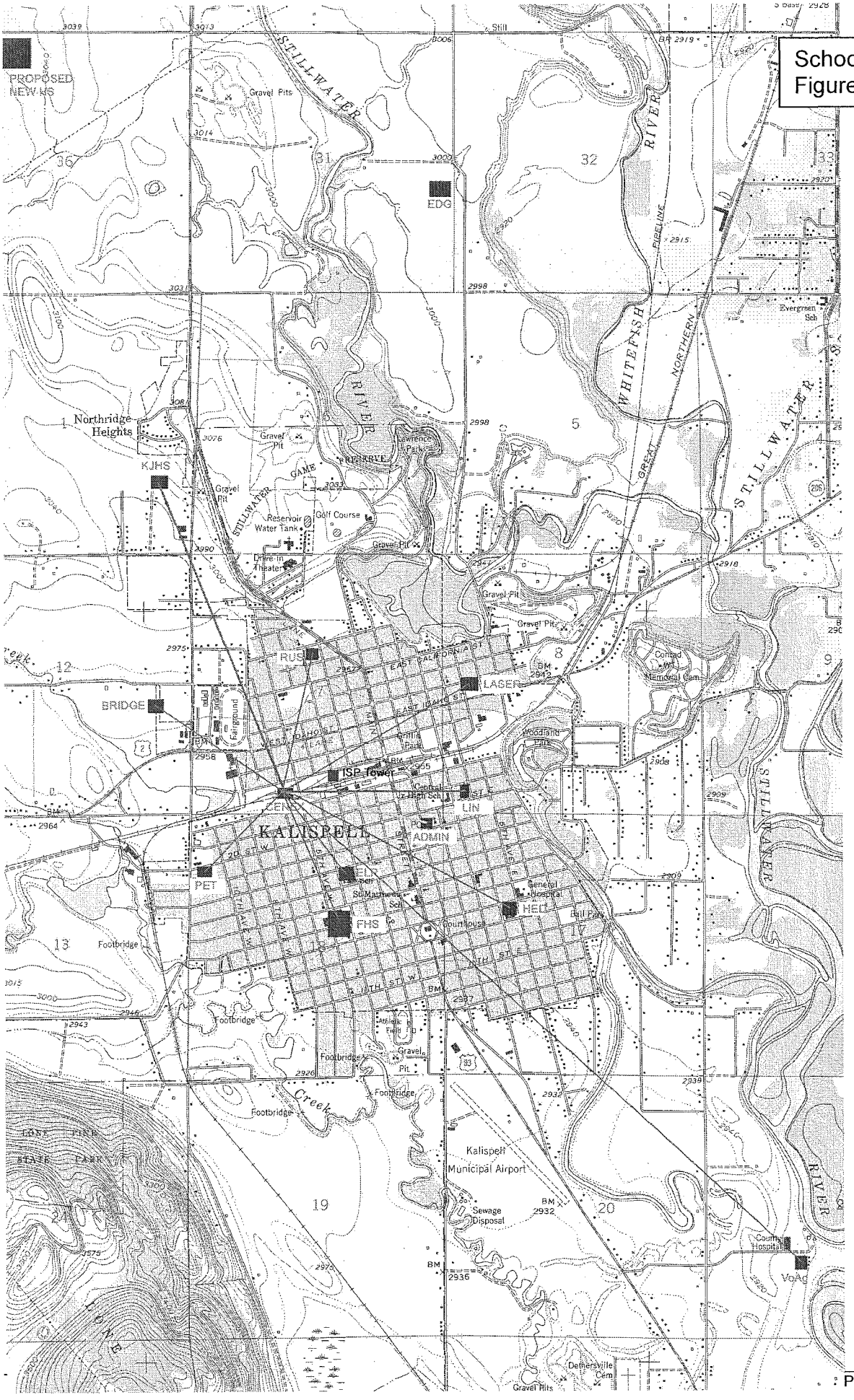


\\landocs\wireless WAN - new HS.vsd

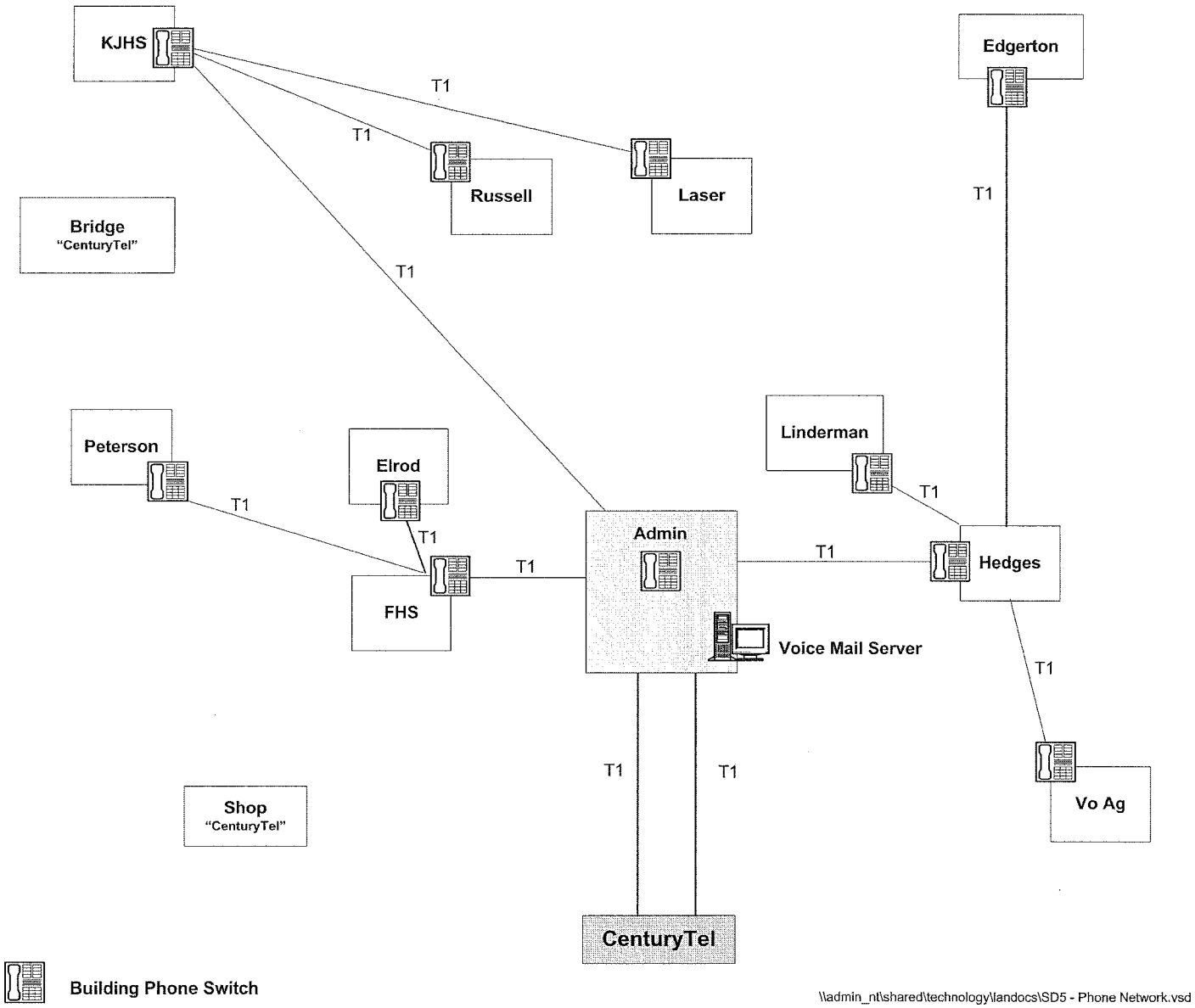
School District 5
Current Data Network
Figure 3



School District 5
Figure 4



School District 5
Voice Network
Figure 5



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Appendix B - Technical Solution and Detailed Cost Breakdown

Site Name:

Description	Model	Part #	Qty	Unit cost	Total Cost

Subtotal	
Shipping	
Labor	
Total	