Kalkaska Public Schools: District Wide Intercom and Clock System - Request for Proposal

A. GENERAL REQUIREMENTS

1. All Bids shall be based on the equipment as specified herein. The DUKANE CH1000 Life Safety Communication solution. The specifying authority must approve any alternate system. Kalkaska Public Schools desires Dukane School Intercom Systems to coincide and be capable of future networking with existing systems within the district for district wide messaging alerts.

2. Contractors that wish to submit alternate equipment may do so. The submitted documentation must provide a feature by feature comparison identifying how the proposed equipment meets the operation and functionality of the system described in this specification. The Contractor shall provide adequate and complete submittal information, which shall include but not limited to specification sheets, working drawings, shop drawings, and a demonstration of the system. Alternate supplier-contractor must also provide a list to include six installations identical to the system proposed.

3. Final approval of the alternate system shall be determined at the time of job completion. Failure to provide the "precise functional equivalent" shall result in the removal of the alternate system at the contractor's expense.

4. **VISIT TO SITE:**

   Mandatory Walkthrough by appointment to occur between February 4 and February 8. Contractors must contact Gabe Lucas, Network Administrator, by email to schedule the walkthrough appointment.

   Location: Kalkaska High School - 109 N. Birch Street, Kalkaska, MI 49646

   Date/Time: As scheduled

   Contact: Gabe Lucas, Network Administrator
   Email: glucas@kpschools.com
   Phone: (231) 258-9109, extension 2150

5. **BID SECURITY**

   A five percent (5%) Bid Security for the total amount of Base Bid PLUS Alternate(s), if any, is required.

6. **PERFORMANCE BOND**

   A one hundred percent (100%) Performance Bond for the total amount of the Base Bid & Add Alternate(s) is required.

7. **BID DEADLINE/PROJECT DUE DATE:**

   - Bid Opening at Central Office: 315 S. Coral Street – **at 1:30 p.m., Thursday, February 14, 2019.**
   - Contractor must complete the project by **May 30, 2019**

   Kalkaska Public Schools shall enforce a liquidated damages penalty if the Contractor does not complete the project by the Project Due Date Thursday, May 30, 2019. The penalty shall be in the amount of 0.20% (two tenths of one percent) per day of the cost of the original award.

8. **INTERCOM SYSTEMS -** The Intercom Systems at each location must include call-in stations in each room, a telco interface, and AC Power Protection/Battery Back-Up allowing for a minimum of (10) minutes. Mandatory equipment and details for each school shown below.

AT ALL LOCATIONS:

- Reuse existing speakers, wiring/cabling, and call-in stations (aka call-in buttons, call buttons, call switches) where possible.
- Reuse existing horns and/or speakers, and associated wiring/cabling in Gymnasiums at all locations.
- If any speakers, horns, and/or wiring/cabling are not reusable, or if call-in stations are not present or not reusable then the addition of, or replacement of speakers, horns, wiring/cabling, and call-in stations, will be completed on a time and materials basis with prior approval from Kalkaska Public Schools.
- Horns in gymnasium locations must have security cages, if not already in place.
- The Intercom Systems at each school shall include a telco interface.
- The locations of intercom/paging horns are indicated on the included diagrams
- The Digital Voice Dialer (details shown below for each school) will require connectivity to an analog station port on the phone system at each school. The owner will provide this connectivity.

Requirements and equipment details for each school are shown below and locations of Intercom/Paging Horns are shown on diagrams (included):

Kalkaska High School: 64 Call Points

- There are **NO Call-In Stations** in any part of the High School. Each classroom / call point will require a **NEW** call-in station and appropriate wiring/cabling.
- There is **Existing Home Run Cabling** to each class room / call point in the **older section** of the High School that can probably be reused.
- The **newer section** of the High School, as shown on the diagram, **requires home run cabling to each classroom / call point within that section.**
- Include cost of surface mounted boxes, conduit, and/or wire mold, where required, for new Call-In Station locations.
- A **Panic Button** (surface mount rocker switch) will be installed in the office which, when pressed, will activate a **Digital Voice Dialer** to:
    - Dial 911 and play a pre-recorded message
    - Initiate an all-call page to broadcast a pre-recorded message
    - Dial an additional phone number and play a pre-recorded message

Qty	Manufacturer	Model	Description
(1)	Carehawk	D-CH1000LT	Central Head End
(2)	Carehawk	D-SS32	32 Port Switch Card
(1)	Carehawk	D-TC2	Telephone Interface Card
(2)	Carehawk	D-AP1	Administrative Phone
(9)	Atlas	APX40TN	Wall-Mount Horn – 40W
(1)		675 VA UPS - AC Power Protection/Battery Back Up - (10) Minutes Minimum	
Lot	West Penn	4245EZWH1000	CAT5E Cable for Intercom Speakers/Horns
(1)	RCI	909S	Surface Mount Rocker Switch
(1)	RCI	9SURBOX	Surface Mount Box
(1)	Viking	K-202-DVA	Digital Voice Alarm Dialer and associated Wiring/Cabling
(1)		S/L Phone	Allows Changing of messages for Digital Voice Dialer

Kalkaska Middle School: 48 Call Points

- There is **existing Home Run Cabling** to each class room / call point that can probably be reused.
- There are **existing Call-In Stations** in each class room / call point that can probably be reused.
- Integrate into the **existing Panic Button** additional functionality that, when pressed, will activate a **Digital Voice Dialer** to:
    - Dial 911 and play a pre-recorded message
    - Initiate an all-call page to broadcast a pre-recorded message
    - Dial an additional phone number and play a pre-recorded message

Qty	Manufacturer	Model	Description
(1)	Carehawk	D-CH1000LT	Central Head End
(1)	Carehawk	D-SS32	32 Port Switch Card

(1)	Carehawk	D-SS16	16 Port Switch Card
(1)	Carehawk	D-TC2	Telephone Interface Card
(3)	Carehawk	D-AP1	Administrative Phone
(6)	Atlas	APX40TN	New Wall-Mount Horns – 40W
(1)		675 VA UPS - AC Power Protection/Battery Back Up - (10) Minutes Minimum	
Lot	West Penn	4245EZWH1000	CAT5E Cable for Intercom Speakers/Horns
(1)	Viking	K-202-DVA	Digital Voice Alarm Dialer and associated Wiring/Cabling
(1)		S/L Phone	Allows Changing of messages for Digital Voice Dialer

Cherry Street Intermediate: 32 Call Points

- There is **Existing Home Run Cabling** to each class room / call point that can probably be reused.
- **There are existing Call-In Stations** in each class room / call point that can probably be reused.
- **Reuse existing speakers**. If not reusable, speakers will be replaced on a time and materials basis with prior approval from Kalkaska Public Schools.
- **Reuse the (1) Existing Outdoor Horn that points toward the playground area.**
- A **Panic Button** (surface mount rocker switch) will be installed in the office which, when pressed, will activate a **Digital Voice Dialer** to:
  - Dial 911 and play a pre-recorded message
  - Initiate an all-call page to broadcast a pre-recorded message
  - Dial an additional phone number and play a pre-recorded message

Qty	Manufacturer	Model	Description
(1)	Carehawk	D-CH1000LT	Central Head End
(1)	Carehawk	D-SS32	32 Port Switch Card
(1)	Carehawk	D-TC2	Telephone Interface Card
(3)	Carehawk	D-AP1	Administrative Phone
(2)	Atlas	APX40TN	New Wall-Mount Horns – 40W
(1)		675 VA UPS - AC Power Protection/Battery Back Up - (10) Minutes Minimum	
Lot	West Penn	4245EZWH1000	CAT5E Cable for Intercom Speakers/Horns
(1)	RCI	909S	Surface Mount Rocker Switch
(1)	RCI	9SURBOX	Surface Mount Box
(1)	Viking	K-202-DVA	Digital Voice Alarm Dialer and associated Wiring/Cabling
(1)		S/L Phone	Allows Changing of messages for Digital Voice Dialer

Birch Street Elementary: 64 Call Points

- There is **Existing Home Run Cabling** to each class room / call point that can probably be reused.
- **There are existing Call-In Stations** in each class room / call point that can probably be reused.
- **Reuse existing speakers**. If not reusable, speakers will be replaced on a time and materials basis with prior approval from Kalkaska Public Schools.
- Integrate into the **existing Panic Button** additional functionality that, when pressed, will activate a **Digital Voice Dialer** to:
  - Dial 911 and play a pre-recorded message
  - Initiate an all-call page to broadcast a pre-recorded message
  - Dial an additional phone number and play a pre-recorded message

Qty	Manufacturer	Model	Description
(1)	Carehawk	D-CH1000LT	Central Head End
(2)	Carehawk	D-SS32	32 Port Switch Card
(1)	Carehawk	D-TC2	Telephone Interface Card
(2)	Carehawk	D-AP1	Administrative Phone
(9)	Atlas	APX40TN	New Wall-Mount Horns – 40W
(1)		675 VA UPS - AC Power Protection/Battery Back Up - (10) Minutes Minimum	
Lot	West Penn	4245EZWH1000	CAT5E Cable for Intercom Speakers/Horns
(1)	Viking	K-202-DVA	Digital Voice Alarm Dialer and associated Wiring/Cabling
(1)		S/L Phone	Allows Changing of messages for Digital Voice Dialer

Rapid City Elementary: 32 Call Points

- There is **Existing Home Run Cabling** to each class room / call point that can probably be reused.
- **There are existing Call-In Stations** in each class room / call point that can probably be reused.
- **Reuse existing speakers**. If not reusable, speakers will be replaced on a time and materials basis with prior approval from Kalkaska Public Schools.
- Integrate into the **existing Panic Button** additional functionality that, when pressed, will activate a **Digital Voice Dialer** to:
  - Dial 911 and play a pre-recorded message
  - Initiate an all-call page to broadcast a pre-recorded message
  - Dial an additional phone number and play a pre-recorded message

Qty	Manufacturer	Model	Description
(1)	Carehawk	D-CH1000LT	Central Head End
(1)	Carehawk	D-SS32	32 Port Switch Card
(1)	Carehawk	D-TC2	Telephone Interface Card
(2)	Carehawk	D-AP1	Administrative Phone
(4)	Atlas	APX40TN	New Wall-Mount Horns – 40W
(1)		675 VA UPS - AC Power Protection/Battery Back Up - (10) Minutes Minimum	
Lot	West Penn	4245EZWH1000	CAT5E Cable for Intercom Speakers/Horns
(1)	Viking	K-202-DVA	Digital Voice Alarm Dialer and associated Wiring/Cabling
(1)		S/L Phone	Allows Changing of messages for Digital Voice Dialer

Kalkaska High School & Middle School Football Field Press Box – Paging Solution

Vendors **MUST** also include **AS AN OPTION** a paging solution for the **Kalkaska High School & Middle School Football Field Press Box that provides paging coverage for the Football Field and Track areas.** Equipment is shown below.

- There shall be a Mixer/Amp and Paging Horns at the Football Field Press Box.
- The Press Box Amplified Paging System **MUST** be integrated into **BOTH** the Kalkaska High School Intercom System **and** the Kalkaska Middle School Intercom System.
- Specifically, the Paging System at the Football Field Press Box must be able to be **independently paged** from the High School and Middle School Intercom Systems.
- The (8) Paging Horns shall be mounted onto a pole. The pole shall be mounted or attached to the press box. **The horns shall be attached at an optimum height and arranged in a way that provides the best 360 degree coverage of the area**.

Qty	Manufacturer	Model	Description
(1)	Ascomnorth		Speaker Mounting Pole
(8)	Atlas Sound	APX40TN	Wall (pole) Mount Horns
(1)	Bosh	PLE-1ME240-US	Mixer / Amp - 240W
(2)	EVI	AB-ZE	Speaker Mounting Bracket
(4)	Valcom	VIP-801A	Network Audio Port
(1)	ETA	PD-8A	Rack Mount Power Protection
Lot	West Penn	AQ225	Outdoor Rated Speaker Cable

9. **District Wide Communication Integration & Synchronization**

   Vendors **MUST** also include as an option for a District Wide Integrated and synchronized Intercom Solution. The District Wide Integrated Intercom System would consist of an Intercom Server Controller with GUI interface and memory expansion for (5) Dukane Carehawk CH1000LT intercom systems.

   Vendor proposals that do not include an option for a District Wide Integrated and Synchronized Intercom Solution will **NOT** be considered.

This Integrated District Wide Communication Integration & Synchronization System would allow for synchronized and customizable alerts across all Kalkaska Public Schools simultaneously – or to individual schools, and would include the following equipment:

Qty	Manufacturer	Model	Description
1	Carehawk	D-DMS	District-Wide Server with Microcontroller
1	Carehawk	D-Alerts	PC GUI Based User Interface for DWN
5	Carehawk	D-CF8M	Memory Expansion for CH1000LT – 8 MN
1	Carehawk	D-Symbiont	Symbiont – Interface for Third Party Systems

10. **Clock System**
Kalkaska Public Schools desires to have the **same manufacturer** for the Intercom and Integrated Clock System.

AT ALL LOCATIONS:
- The Clock Systems at each school must be integrated into the Master Clock at each school.
- Each clock shall be new and new wiring is required at each clock location.

Mandatory equipment and counts are shown below and locations of Double Faced Digital Hallway Clocks are indicated on diagrams (included):

Kalkaska High School

Qty	Description
(70)	Digital Clock, Single Faced, 24V
(19)	Digital Clock, Double Faced, 24V

Kalkaska Middle School

Qty	Description
(37)	Digital Clock, Single Faced, 24V
(9)	Digital Clock, Double Faced, 24V

Cherry Street Intermediate

Qty	Description
(27)	Digital Clock, Single Faced, 24V
(7)	Digital Clock, Double Faced, 24V

Birch Street Elementary

Qty	Description
(56)	Digital Clock, Single Faced, 24V
(11)	Digital Clock, Double Faced, 24V

Rapid City Elementary

Qty	Description
(24)	Digital Clock, Single Faced, 24V
(6)	Digital Clock, Double Faced, 24V

B. SUBMITTALS

1. The vendor shall provide the following documentation and service:

    a) Shop drawings: 3 sets. These drawings shall include the manufacturers' specification sheets, including all component parts.

    B) As-built drawings: 3 sets. They should include up-to-date drawings including any changes made to the system during installation. Circuit diagrams and other information necessary for the proper operation and maintenance of the system shall be included.

2. All material and/or equipment necessary for the proper operation of the system, even though not specifically mentioned in the contract documents, shall be deemed part of this contract.

C. OPERATION AND MAINTENANCE DATA

1. Submit operation and maintenance data.

2. Include operator instructions for each required mode of operation, routine troubleshooting procedures, manufacturer's operation and maintenance manual for each item of equipment and accessory, and routine cleaning methods and materials.

D. QUALIFICATIONS

1. To establish continuity in manufacturer, system components shall be the standard product of one manufacturer. Further, an effort shall be made to establish common sources for equipment of all systems.

2. The work to be provided under this Section consists of furnishing and installing all equipment, cabling, and labor required for complete, operable, new life safety communication system **(District-wide Intercom/Clock System)** for the **Kalkaska Public Schools.** These systems shall be referred to as the LIFE SAFETY SYSTEM and their supplier as the LIFE SAFETY CONTRACTOR.

3. The LIFE SAFETY CONTRACTOR must be a factory-authorized representative or distributor of all equipment used in the low voltage systems. Further, this contractor must have a minimum of five years of experience in the specific application of the equipment proposed for these systems. Provide a letter signed by an officer of the manufacturer attesting to the contractor's direct affiliation with the manufacturer.

E. REGULATORY REQUIREMENTS

1. The entire installation shall comply with all applicable electrical and safety codes. The LIFE SAFETY SYSTEM and additional applicable equipment shall be tested and certified to UL/CSA 60065. Certifications shall be completed by a Nationally Recognized Testing Laboratory, (UL, CSA, TUV, ect.).

2. All equipment with digital apparatus (microprocessors) that generate and use timing signals at a rate in excess of 9,000 pulses per second to compute and operate must meet FCC, Industry Canada regulations, and DOC CSA standards C108.8 (Electromagnetic Emissions). Any non-compliant equipment supplied or installed shall not be accepted and shall nullify the contract.

F. WARRANTY

1. The manufacturer shall provide a **five year warranty** against defects in material and workmanship. All materials shall be provided at no expense to the owner during normal working hours. The warranty period shall begin on the date of acceptance by the owner/engineer. Any warranty less than five years shall not be considered.

2. The contractor shall provide a **one year warranty** on installation labor from date of completion.

3. Software service packs released from time to time shall be available to the user for the life of the product at no additional cost.

4. The LIFE SAFETY CONTRACTOR supplying the equipment shall show satisfactory evidence, upon request, that they maintain a fully equipped service organization capable of furnishing adequate inspection and service to the system, including replacement parts. The vendor shall

be prepared to offer a service contract for the maintenance of the system after the guarantee period. The bidder shall produce evidence that they have a fully experienced and established service organization for at least five years and proven satisfactory installations during that time.

G. USER TRAINING & SUPPORT

1. The contractor shall supply up to **10 hours** of on-site user training. User training shall consist of operation of all system functions and scheduling software.

2. The user shall have access to telephone support from the manufacturer at no additional cost for the life of the product.

H. CABLING PLANT

1. The LIFE SAFETY SYSTEM shall be capable of using CAT-5(e), CAT-6, and CAT-3 unshielded cabling. LIFE SAFETY SYSTEMS not capable of using all of the above wire types shall not be considered.
2. The LIFE SAFETY SYSTEM shall be capable of using two wire conductors for a speaker and call button referred from herein as a 2-wire circuit. It shall be possible to mix 2-wire and standard 4-wire circuits on the same switching/line card. LIFE SAFETY SYSTEMS that cannot mix 2-wire and 4-wire circuits on the same switching/line card shall not be considered. LIFE SAFETY SYSTEMS that require more than two conductors or require shielded cable shall not be considered.

3. It shall be possible to distribute the switching/line cards of the LIFE SAFETY SYSTEM up to 2700 feet using a single home run eight conductor cable. LIFE SAFETY SYSTEMS that require networking of multiple central systems to be distributed shall not be considered. LIFE SAFETY SYSTEMS that require the use of Ethernet components to bridge the 2700 foot distance shall not be considered.

4. It shall be possible to network the LIFE SAFETY SYSTEM with additional systems using copper wire, single mode fiber optic and multimode fiber optic cables. LIFE SAFETY SYSTEMS that do not allow for the use of fiber optic cable shall not be considered.

I. LIFE SAFETY SYSTEM DESIGN

1. Only systems designed primarily as a LIFE SAFETY SYSTEM shall be considered. Life safety features shall include but not be limited to; priority based access to voice functions, emergency paging, emergency call-in, covert PC based call-in, pre-recorded emergency announcements, external and internal telephone access, integrated video surveillance, and optional district wide communication functions. Paging systems, traditional school intercom systems, or any system that does not include the above minimum features shall not be considered.

2. The LIFE SAFETY SYSTEM shall be of a core design vintage dating from the year 2000 or later. LIFE SAFETY SYSTEMS that use designs dating from before the year 2000 shall not be considered.

3. The LIFE SAFETY SYSTEM shall be an event driven design. LIFE SAFETY SYSTEMS using a polling method design shall not be considered.

Microcontroller

4. The LIFE SAFETY SYSTEM shall contain a central microcontroller capable of a minimum of 500 MHz processing speed to allow for the addition of future features. LIFE SAFETY SYSTEMS with microcontrollers that run less than 500 MHz shall not be considered.

5. The LIFE SAFETY SYSTEM shall have flash based removable storage media of a size no smaller than 1 gigabyte. It shall be possible to remove the storage media from one system to another like system with no need to adjust the configuration files. LIFE SAFETY SYSTEMS that do not use removable flash based media or do not have at least 1 gigabyte of storage shall not be considered.

6. The LIFE SAFETY SYSTEM shall have at least 512 Megabytes of system ram. Said RAM shall be removable and upgradable. LIFE SAFETY SYSTEMS that do not use removable RAM or cannot be upgraded not be considered.

Central Cabinet

7. The LIFE SAFETY SYSTEM shall contain natively RS232, RS485, USB, and Ethernet ports for communication to any third party system. LIFE SAFETY SYSTEMS that do not contain all of the above communication ports or require additional equipment shall not be considered.

8. The LIFE SAFETY SYSTEM shall contain five open collectors, three dry contacts, and six general purpose inputs for third party system integration or for general panic buttons. It shall be possible to expand inputs or outputs to any number needed. LIFE SAFETY SYSTEMS not supporting the minimum inputs and outputs or able to expand to any number shall not be considered.

9. The LIFE SAFETY SYSTEM central cabinet shall be a wall mounted. Total weight of the central cabinet shall not exceed 35 lbs. LIFE SAFETY SYSTEMS requiring floor racks or that weigh more than 35 lbs. shall not be considered.

10. The LIFE SAFETY SYSTEM shall contain no moving parts that suffer from wear or that require maintenance. LIFE SAFETY SYSTEMS that contain moving parts shall not be considered.

11. The LIFE SAFETY SYSTEM shall draw no more than 3.5A of current at full load including all system accessories. LIFE SAFETY SYSTEMS that draw more than 3.5A of current at full load shall not be considered.

12. The LIFE SAFETY SYSTEM shall have integrated surge protection for all audio ports and switching/line card ports. Said surge protection shall be replaceable in the field with no need to return parts for repair. LIFE SAFETY SYSTEMS that require external surge protection shall not be considered

Amplifiers

13. The LIFE SAFETY SYSTEM shall use Class D digital amplifier with at least 250 Watts RMS and 300 Watts peak output. Amplifier distortion shall not exceed 0.2% at 90% load. LIFE SAFETY SYSTEMS using Class B amplifiers or amplifiers not capable of 0.2% maximum distortion shall not be considered.

14. The Class D amplifier shall be direct drive 25V constant voltage type. LIFE SAFETY SYSTEMS using transformer based amplifiers shall not be considered.

15. The LIFE SAFETY SYSTEM shall filter all voice signals through a Digital Signal Processor (DSP) to maximize voice intelligibility. LIFE SAFETY SYSTEMS not using a DSP shall not be considered.

16. The LIFE SAFETY SYSTEM shall have 45 Ohm conversion modules available on a switching/line cards basis to convert the 25V audio signal to 45 Ohm for use with 45 Ohm speakers. LIFE SAFETY SYSTEMS not capable of conversion to 45 Ohm audio on a switching/line card basis shall not be considered.

17. The LIFE SAFETY SYSTEM amplifiers shall go to sleep thus reducing their current draw when not in use. LIFE SAFETY SYSTEMS that use amplifiers that do not reduce their current draw when not in use shall not be considered.

18. The LIFE SAFETY SYSTEM amplifiers shall have a built in pink noise generator for testing speaker quality and audio levels. LIFE SAFETY SYSTEMS that do not contain a pink noise generator shall not be considered.

Tones

19. The LIFE SAFETY SYSTEM shall have at least 25 tones available for bells, reminders, and other events. LIFE SAFETY SYSTEMS with less than 25 tones shall not be considered.

20. The LIFE SAFETY SYSTEM shall support WAV type audio files. The user shall be able to add 25+ custom WAV files for use as pre-recorded announcements, bells, reminders, pre-announce tones, or any other system tone. LIFE SAFETY SYSTEMS not allowing users to add WAV files or do not allow for the use of WAV files for any system tone shall not be considered.

Switching/Line Cards

21. The LIFE SAFETY SYSTEM shall support remote switching/line cards with 16 and 32 audio ports sizes available. A single central cabinet shall support up to eight 32 port cards. The switching/line card shall be powered from the central cabinet out to 2700 feet away from the central cabinet. LIFE SAFETY SYSTEMS that do not use remote switching/line cards or require additional power supplies shall not be considered.

Telephone Integration

22. The contractor does not need to work on or program the existing phone system.

23. The LIFE SAFETY SYSTEM shall support up to eight FXS Caller-ID enabled telephone ports. FXS ports shall be added as needed in single port configurations. FXS ports shall be used to interface with system Administrative phones, standard telephones, and PBX/KSU/iPBX/VoIP telephone systems. LIFE SAFETY SYSTEMS that use proprietary telephone ports for Administrative phones or cannot provided eight FXS ports for PBX/KSU/iPBX/VoIP telephone system integration shall not be considered.

Master Clock

24. The LIFE SAFETY SYSTEM shall contain an integral master clock. LIFE SAFETY SYSTEMS that do not have an integral master clock shall not be considered.

25. The LIFE SAFETY SYSTEM master clock shall correct Sapling, Dukane, Rauland, National time & Signal, American Time & Signal, Simplex, and Latham secondary clocks, analog or digital or both. LIFE SAFETY SYSTEM that do not correct all of the above clock systems shall not be considered.

26. The LIFE SAFETY SYSTEM master clock shall be capable of being synchronized by a Network Time Sever (NTP). LIFE SAFETY SYSTEMS that do not synchronize to a NTP server shall not be considered.

27. The LIFE SAFETY SYSTEM master clock shall provide for automatic daylight saving time adjustment with leap year programming. LIFE SAFETY SYSTEMS that require user intervention for daylight savings events shall not be considered.

28. The LIFE SAFETY SYSTEM master clock shall support unlimited schedules with unlimited events on said schedules. LIFE SAFETY SYSTEMS that do not support unlimited schedules and events shall not be considered.

29. The LIFE SAFETY SYSTEM master clock shall be calendar based capable of future event programming at least 30 years in the future. LIFE SAFETY SYSTEMS not using a calendar shall not be considered.

30. The LIFE SAFETY SYSTEM master clock shall allow for scheduling tone events, output events, program source events, and video camera events. LIFE SAFETY SYSTEMS not capable of scheduling all of the above event types shall not be considered.

Administrative Telephones

31. The LIFE SAFETY SYSTEM shall not require an Administrative console to operate. All system functions shall be accessible via telephone codes from any internal or external telephone. LIFE SAFETY SYSTEMS requiring the use of Administrative telephones shall not be considered.

32. The LIFE SAFETY SYSTEM optional Administrative telephone shall have the following features. LIFE SAFETY SYSTEM Administrative telephones not containing the features below shall not be considered.

    a. Desk & wall mountable
    b. Minimum 8 line by 20 character back lit display
    c. Wizard driven menu system for ease of use
    d. 200 speed dials
    e. Head set compatible
    f. Integrated speaker phone for hands free use

Call-In Stations (also known as Call-In Buttons, Call Buttons, Call Switches)

33. The LIFE SAFETY SYSTEM shall allow for the use of normally open, normally closed, wireless, and virtual call buttons. LIFE SAFETY SYSTEMS not capable of using all of the above call button types shall not be considered.

34. The LIFE SAFETY SYSTEM shall allow for the use of virtual call buttons installed on local PC computers. LIFE SAFETY SYSTEMS that do not support virtual call buttons shall not be considered.

Security Integration

35. The LIFE SAFETY SYSTEM shall allow for the integration of motion sensors, glass break sensors, and door contacts in parallel with call buttons. Events from these sensors shall be capable of being programmed to activate pre-recorded WAV files, outputs, and cameras. LIFE SAFETY SYSTEMS that do not support integration of security sensors shall not be considered.

Video Surveillance

36. The LIFE SAFETY SYSTEM shall provide eight transmission paths and control of closed-circuit television (CCTV) UTP type cameras. LIFE SAFETY SYETEMS that do not provide camera transmission paths shall not be considered.

37. The LIFE SAFETY SYSTEM shall support cameras connected on the same cable as speaker/call button ports. LIFE SAFETY SYETEMS that require additional cabling for cameras shall not be considered.

J. LIFE SAFETY SYSTEM OPERATION

1. The LIFE SAFETY SYSTEM shall allow for user-programmable room number assignment in the form of 3, 4, 5 or 6-digit alphanumeric format for architectural room numbering and a 60 character alpha-numeric caller ID description associated with each audio port. LIFE SAFETY

SYETEMS that do not support caller-ID on all ports or require additional equipment to support caller-ID shall not be considered.

2. The LIFE SAFETY SYSTEM shall allow for a minimum of 64 page/time/program zones that can be assigned and configured as desired. LIFE SAFETY SYSTEMS with less than 64 zones shall not be considered.

3. The LIFE SAFETY SYSTEM shall allow for the assigning of each call-in button to one or more of 32 distinct call-in destination groups. LIFE SAFETY SYSTEMS with less than 32 call-in groups shall not be considered.

4. The LIFE SAFETY SYSTEM administrative telephone shall allow for the user to view the alphanumeric room address and the caller-ID information of the calling station and the call priority (e.g., emergency, normal) on the display. The administrative telephone shall use distinctive ringing patterns to annunciate the type of call. LIFE SAFETY SYSTEMS that do not support caller-ID or call priority shall not be considered.

5. The LIFE SAFETY SYSTEM shall be capable of receiving 2048 call-ins simultaneously without data collisions or loss of any call-ins. Call-ins shall remain in the system call queue until answered. Emergency Call-ins shall automatically move to the top of the call-in queue and annunciated in the in-use telephone earpiece to notify the user of an emergency call. LIFE SAFETY SYSTEMS that do not maintain a system call queue or do not prioritize call-ins shall not be considered.

6. The LIFE SAFETY SYSTEM shall communicate with each classroom loudspeaker hands-free. The staff member or occupant in the classroom need not operate any buttons to reply to a call. The Administrative telephone operator shall be able to use the hands-free speaker phone or handset on an Administrative telephone. LIFE SAFETY SYSTEMS requiring "push to talk" shall not be considered.

7. The LIFE SAFETY SYSTEM shall operate under the following audio priority scheme. LIFE SAFETY SYSTEMS not following the audio priority scheme listed below shall not be considered.

    a. An emergency page suspends all other audio
    b. An emergency tone suspends all other audio except the above
    c. A normal page suspends all other audio except the above
    d. A tone suspends all other audio except the above
    e. A program source audio event suspends nothing
    f. Interrupted lower priority functions shall be restored after conclusion of the higher priority function.

8. The LIFE SAFETY SYSTEM shall allow a call-in to be escalated from a normal call-in to an emergency call-in at any time by pressing the call button twice within 2 seconds. LIFE SAFETY SYSTEMS that do not allow for call escalation shall not be considered.

9. The LIFE SAFETY SYSTEM shall allow for any connected telephone to place an emergency voice paging announcement. LIFE SAFETY SYSTEM that restricts access to emergency paging shall not be considered.

10. The LIFE SAFETY SYSYEM shall allow the activation of connected dormant cameras based on an emergency call-in, security sensor activation, or telephone code. LIFE SAFETY SYSTEMS not allowing for integrated emergency camera functions shall not be considered.
11. The LIFE SAFETY SYSTEM shall allow for operation via a GUI based PC based application. The PC application shall allow for emergency paging, normal paging, intercom, activation of any system/user tone, schedule changes, program distribution, call-in management, and on the fly room exclusion. LIFE SAFETY SYSTEMS that do not support PC based control shall not be considered.

12. The LIFE SAFETY SYSTEM shall use a PC based GUI scheduling tool for schedules and tone management. This tool shall not allow access to any system configuration controls. This tool

shall not prevent the LIFE SAFETY SYSTEM from operating when being used. This tool shall allow the user to schedule events and manage tones over the local LAN/WAN and the Internet. It shall not be required to be directly connected to the central system to use this tool. LIFE SAFETY SYSTEMS that do not separate scheduling and tone functions from any other configuration functions or cannot be used over LAN/WANs or the Internet shall not be considered.

13. The LIFE SAFETY SYSTEM shall have a built in 30 day log of every system function and access. LIFE SAFETY SYSTEMS not having a 30 day log shall not be considered.

14. The LIFE SAFETY SYSTEM shall have a built in real time system diagnostics application. LIFE SAFETY SYSTEMS that do not have any real time system diagnostics shall not be considered.

15. The LIFE SAFETY SYSTEM shall allow for system diagnostics, system log access firmware updates, and programming over the local LAN/WAN or over the Internet. LIFE SAFETY SYSTEMS not providing all of the above functions shall not be considered.

BIDDER CERTIFICATION & PROPOSAL

To: Kalkaska Public Schools

We hereby submit the following bid proposal to furnish and install an Intercom/Clock system at the Kalkaska Public Schools.

The undersigned hereby certifies that he/she has examined in their entirety the "Notice to Bidders"' the "Request for Proposal"' and this "Bidders Certification & Proposal" and is/are fully informed as to the nature of the material and services to be finished.

The undersigned agrees that, if awarded this bid, he/they will deliver and install the proposed equipment on or before the stated completion date, at the bid price. This bid, by mutual agreement of each party may be extended for additional purchases for one (1) year from the date of installation completion.

The undersigned further states that he/she has/have not directly or indirectly entered into any combination collusion, undertaking or agreement with any other bidder or bidders to maintain the price or bid on this work or equipment, or to prevent any bidder or bidders from bidding, and that this proposal is without reference or regard to any other proposal or agreement, understanding or combination with any other bidder or prospective bidder or agent thereof in any way or manner whatsoever.

Company Name: _____

Address: _____

City/State: _____

Submitted By: _____

Signature: _____

Print Name: _____

Title: _____

Telephone 1: (____) _____ Telephone 2: (____) _____

Fax: (____) _____

Email: _____

Proposal Date: _____

State the warranty and guarantee to be furnished by the supplier and/or the manufacturer(s):

_____

_____

State the terms of the sale and any discount information:

_____

_____

REFERENCES (Three Similar Installations)

Name: _____

Job Details: _____

Address: _____

City/State: _____

Telephone: (____) _____

Email: _____

Contact: _____

Name: _____

Job Details: _____

Address: _____

City/State: _____

Telephone: (____) _____

Email: _____

Contact: _____

Name: _____

Job Details: _____

Address: _____

City/State: _____

Telephone: (____) _____

Email: _____

Contact: _____

BID SHEET

Company Name: _____

Address: _____

City/State: _____

Telephone: (____) _____

Email: _____

Contact Name and Title: _____

Years in Business: _____

Number of Employees: _____

Are company's technicians factory-trained and authorized/certified with Carehawk/Dukane? Yes / No

Intercom System Bid

Manufacturer(s): _____

Model(s):_____

Cost to add one Speaker: $_____

Cost to add one 40W Horn: $_____

Cost to add one Call-In Station: $_____

- **Kalkaska High School Total Intercom Bid:** $_____
- **Kalkaska Middle School Total Intercom Bid:** $_____
- **Cherry Street Intermediate Total Intercom Bid:** $_____
- **Birch Street Elementary Total Intercom Bid:** $_____
- **Rapid City Elementary Total Intercom Bid:** $_____

Total Intercom Bid for All Schools: **$_____**

CLOCK SYSTEM BID

Manufacturer(s): _____

Model(s):_____

Cost to add one Single Sided Digital Clock: $_____

Cost to add one Dingle Sided Digital Clock: $_____

- **Kalkaska High School Total Clock Bid:** $_____
- **Kalkaska Middle School Total Clock Bid:** $_____
- **Cherry Street Intermediate Total Clock Bid:** $_____
- **Birch Street Elementary Total Clock Bid:** $_____
- **Rapid City Elementary Total Clock Bid:** $_____

Total Clock Bid for All Schools: **$_____**

Performance Bond Amount (Required) $_____

Total Technology Bid for All Schools: **$_____**

*The above **Total Technology Bid** is the bid amount for intercom and clocks for all schools, not including the bid for the Optional District Wide Communication Integration & Synchronization and Optional Press Box Paging Solution - both shown separately below. **Performance Bond amount to be included**.*

OPTIONAL SYSTEMS BIDS

Optional Press Box Paging Solution for Football Field & Track Area (Bottom of Section 6.)

Manufacturer(s): _____

Model(s):_____

Optional Press Box Paging Solution for Football Field & Track Area Bid: **$_____**

Optional District Wide Communication Integration & Synchronization (Section A., 7.)

Manufacturer(s): _____

Model(s):_____

Optional District Wide Communication Integration & Synchronization Bid: **$_____**