EDINBURG CONSOLIDATED INDEPENDENT SCHOOL DISTRICT
PURCHASING DEPARTMENT
411 North 8th/DRAWER 990
EDINBURG, TEXAS 78541
PH: (956) 289-2311
FX: (956) 383-7687

Request for
COMPETITIVE SEALED PROPOSALS

This Proposal includes the following forms:

- Intent to Bid
- Vendor Check List
- Standard Terms & Conditions
- Felony Conviction Notification
- Conflict of Interest Questionnaire
- Certification of Interested Parties Example
- Deviation Form
- Authorization for W-9/Direct Deposit
- Special Terms & Conditions
- General Terms & Conditions
- ATTACHMENT: Proposal Form

Amaro Tijerina
Purchasing Coordinator Date

NO: 21-54

TITLE: NEW FIRE ALARM VOICE EVACUATION SYSTEM FOR SOUTH MIDDLE SCHOOL

CLOSING TIME/DATE:
Closing Time: 3:00 P.M.
Closing Date: February 19, 2021

BUYER:
Jacqueline Kingan, Senior Buyer
Phone: 956-289-2311, Ext.2137
Fax: 956-383-7687
Email: j.kingan@ecisd.us

DELIVER BIDS TO:
Edinburg CISD
Office of the Purchasing Coordinator
411 North 8th Ave, 2nd Floor
Edinburg, TX 78541

DATE WEBBED: January 29, 2021

*Do not deliver Bids/CSPs/RFPs/RFQs to other ECISD locations. All Bids/CSPs/RFPs/RFQs must be delivered to the delivery address above on or before the Bids/CSPs/RFP/RFQs closing time/date. Purchasing will not be responsible for late submittals as per Board Policy CH (LOCAL).

Vendor Certification

The undersigned, by his/her signature, represents the he/she is authorized to bind the bidder to fully comply with the terms and conditions on this bid, including all forms and attachments included herein, for the amount(s) shown on the accompanying bid form(s), if accepted within sixty (60) calendar days after bid opening. **Note: Bidder is strongly encouraged to read the entire Solicitation prior to submitting. Failure to provide the above information in its entirety may be grounds for disqualification of response.**

Firm Name:_____

Address:_____

City:_____

State:_____ Zip:_____

_____
(Signature of Person Authorized to Sign Bid)

Printed Name:_____
(Please print or type name above)

Telephone 1-800-_____

Or:_____

Fax:_____

Web Address:_____

Email:_____

Date:_____

Title:_____

I can deliver in _____ days. Early Payment Discount_____% if Paid in ___ Days, Net 30

INTENT TO BID

Fax, this **page only,** if solicitation was not faxed or e-mailed directly to your company. All other solicitation documents must be enclosed in a sealed envelope and mailed to the Purchasing Department.

This page is required if solicitation was downloaded without receiving an invitation by the District. Please complete and fax to 956-383-7687 immediately in order to be added to the vendor list and receive addendums or updates regarding this solicitation. It is the intent of the Purchasing Department to ensure that all interested vendors receive addendums or updates, but it will be the vendor's responsibility to check the Purchasing site periodically. If there are addendums posted on the site and your company has not been notified by fax or e-mail, it will be the vendor's responsibility to download from Purchasing site and make sure to include with their packet.

The Edinburg CISD Purchasing solicitations and addendums are available on line at www.ecisd.us.

NAME: _____

TITLE: _____

ORGANIZATION: _____

STREET ADDRESS: _____

STREET ADDRESS 2: _____

CITY: _____

STATE: _____

ZIP CODE: _____

WORK PHONE: _____

FAX: _____

E-MAIL: _____

WEB SITE: _____

VENDOR CHECK LIST

1. Signed Standard Terms & Conditions	___ Yes	___ No
2. Signed Felony Conviction Notification	___ Yes	___ No
3. Signed Conflict of Interest Questionnaire	___ Yes	___ No
4. Signed Deviation Form	___ Yes	___ No
5. Read and understood Special Terms & Conditions	___ Yes	___ No
6. Filled out Proposal Form	___ Yes	___ No
7. Completed & submitted W9/Authorization for Direct Deposit Form	___ Yes	___ No
8. Signed Certification of Interested Parties (Form 1295)	___ Yes	___ No
9. Completed & Signed Vendor Check List	___ Yes	___ No

I have read all the specifications and general bid requirements and do hereby certify that all items submitted meet all specifications, conditions, and instructions of said solicitation, and will follow District policy DBD (Local). The signature below confirms that our company will enter into a binding contract with Edinburg CISD for item(s) awarded to our company.

_____
Company Name

_____
Print/Type Signature Name

_____
Authorized Signature Date

_____
Official Title

STANDARD TERMS & CONDITIONS

(REVISED SEPTEMBER 2018)

PLEASE READ THE FOLLOWING CAREFULLY, AND RETURN THE SIGNATURE PAGE WITH YOUR BID OR PROPOSAL.

The following terms and conditions are requirements that are binding upon the vendor awarded the bid and they communicate the Edinburg School District's expectations in regard to the bidder's performance in connection with the district's purchase.

1. **Seller of Package Goods:** Seller will package goods in accordance with good commercial practice. Each shipping container shall be clearly and permanently packed as follows:
   a. Seller's name and address:
   b. Consignee's name, address and purchase order or purchase release number and the supply agreement number if applicable;
   c. Container number and total number of containers, e.g. box 1 of 4 boxes; and the number of the container bearing the packing slip.
   d. Seller shall bear cost of packaging unless otherwise provided.
   e. Goods shall be suitably packed to secure lowest transportation costs and to conform to requirements of common carriers and any applicable specifications.
   f. Buyer's count or weight shall be final and conclusive on shipments not accompanied by packing lists.

2. **Shipment under Reservation Prohibited:** Seller is not authorized to ship the goods under reservation and no tender of a bill of lading will operate as a tender of goods.

3. **Title and Risk of Loss:** The title and risk of loss of the goods shall not pass to Buyer until Buyer actually receives and takes possession of the goods at the point or points of delivery.

4. **Delivery Terms and Transportation Charges:** F.O.B. Destination Freight Prepaid unless terms are specified otherwise in bid:

5. **No Placement of Defective Tender:** Every tender or delivery of goods must fully comply with all provisions of this contract as to time of delivery, quality and the like. If a tender is made which does not fully conform, this shall constitute a breach and Seller shall not have the right to substitute a conforming tender provided, where the time for performance has not yet expired, the Seller may reasonably notify Buyer of his intention to cure and may then make a conforming tender within the contract time but not afterward.

6. **Place of Delivery:** The place of delivery shall be that set forth on the purchase order. Any change thereto shall be effected by modification as provided for in Clause 20, "Modifications," hereof. The terms of this agreement are "no arrival, no sale."

7. **Invoices:** Seller shall submit separate invoices, in duplicate, on each purchase order after each delivery. Invoices shall indicate the purchase order number, shall be itemized and transportation charges, if any, shall be listed separately. A copy of the bill of lading, and the freight weight bill when applicable, should be attached to the invoice. Mail to:

   Edinburg Consolidated Independent School District
   Attn.: Accounts Payable Department
   Drawer 990
   Edinburg, Texas 78540-0990

8. **Payments:** The payment shall not be due until the above instruments are submitted after delivery. Suppliers should keep the Accounts Payable Department advised of any changes in your remittance addresses.

9. **Taxes:** Do not include Federal Excise, State or City Sales Tax. School District shall furnish tax exemption certificate, if required.

10. **Gratuities:** The Buyer may, by written notice to the Seller, cancel this contract without liability to Seller if it is determined by Buyer that gratuities, in the form of entertainment, gifts, or otherwise, were offered or given by the Seller, or any agent, or representative of the Seller, to any officer or employee of the School District with a view toward securing a contract or securing favorable treatment with respect to the awarding or amending or the making or any determinations with respect to the performing of such a contract. In the event this contract is canceled by Buyer pursuant to this provision, Buyer shall be entitled, in addition to any other rights and remedies, to recover or withhold the amount of the cost incurred by Seller in providing such gratuities.

11. **Special Tools and Test Equipment:** If the price stated on the face hereof includes the cost of any special tooling or special test equipment fabricated or required by Seller for the purpose of filling this order, such special tooling equipment and any process sheets related thereto shall become the property of the Buyer and to the extent feasible shall be identified by the Seller as such.

12. **Warranty Price:** The price to be paid by the Buyer shall be that contained in Seller's bid which Seller warrants to be no higher than Seller's current prices on orders by others for products of the kind and specification covered by this agreement for similar quantities under similar or like conditions and methods of purchase. In the event Seller breaches this warranty, the prices of the items shall be reduced to the Seller's current prices on orders by others, or in the alternative, Buyer may cancel this contract without liability to Seller for breach or Seller's actual expense. The Seller warrants that no person or selling agency has been employed or retained to solicit or secure this contract upon an agreement or understanding for commission, percentage, brokerage, or contingent fee excepting bona fide employees of bona fide established commercial or selling agencies maintained by the Seller for the purpose of securing business. For breach or violation of this warranty, the Buyer shall have the right in addition to any other right or rights to cancel this contract without liability and to deduct from the contract price, or otherwise recover the full amount of such commission, percentage, brokerage or contingent fee.

13. **Warranty Products:** Seller warrants that the goods furnished will conform to the specifications, drawings and descriptions listed in the bid invitation and to the sample(s) furnished by Seller, if any. In the event of a conflict between the specifications, drawings and descriptions, the specifications shall govern. Seller shall not limit or exclude any implied warranties and any attempt to do so shall render this contract voidable at the option of the Buyer.

14. **Safety Warranty:** Seller warrants that the product sold to Buyer shall conform to the standards promulgated by the U.S. Department of Labor under the Occupational Safety and Health Act (OSHA) of 1970. In the event the product does not conform to OSHA standards, Buyer may return the product for correction or replacement at the Seller's expense. In the event Seller fails to make the appropriate correction within 15 working days, correction made by Buyer will be at Seller's expense.

15. **No Warranty by Buyer against Infringements:** As part of this contract for sale, Seller agrees to ascertain whether goods manufactured in accordance with the specifications attached to this agreement will give rise to the rightful claim of any third person by way of infringement or the like. Buyer makes no warranty that the production of goods according to the specification will not give rise to such a claim, and in no event shall Buyer be liable to Seller for indemnification in the event that Seller is sued on the grounds of infringement or the like. If Seller is of the opinion that an infringement or the like will result, the Seller will notify Buyer to this effect in writing within two weeks after the signing of this agreement. If Buyer does not receive notice and is subsequently held liable for the infringement or the like, Seller will hold Buyer harmless. If Seller in good faith ascertains that production of the goods in accordance with the specifications will result in infringement or the like, this contract shall be null and void except that Buyer will pay Seller the reasonable cost of his search as to infringements.

16. **Right of Inspection:** Buyer shall have the right to inspect the goods at delivery before accepting them.

17. **Cancellation:** Buyer shall have the right to cancel for default all or any part of the undelivered portion of this order if Seller breaches any of the terms hereof including warranties of Seller or if the Seller becomes insolvent or commits acts of bankruptcy. Such right of cancellation is in addition to and not in lieu of any other remedies, which Buyer may have in law or equity.

18. **Termination:** The performance of work under this order may be terminated in whole or in part by the Buyer in accordance with this provision. Termination of work there under shall be effected by the delivery to the Seller of a "Notice of Termination" specifying the extent to which performance of work under the order is terminated and the date upon which such termination becomes effective. Such right of termination is in addition to and not in lieu of rights of Buyer set forth in Clause 15, herein.

19. **Force Majeure:** If by reason of Force Majeure, either party hereto shall be rendered unable wholly or in part to carry out its obligations under this Agreement then such party shall give notice and full particulars of Force Majeure in writing to the other party within a reasonable time after occurrence of the event or cause relied upon, and the obligation of the party giving such notice, so far as it is affected by such Force Majeure, shall be suspended during the continuance of the inability then claimed, except as hereinafter provided, but for no longer period, and such party shall endeavor to remove or overcome such inability with all reasonable dispatch. The term Force Majeure as employed herein, shall mean acts of God, strikes, lockouts, or other industrial disturbances, act of public enemy, orders of any kind of government of the United States or the State of Texas or any civil or military authority; insurrections; riots; epidemics; landslides; land sinkage; lighting; earthquake; fires; hurricanes; storms; floods; washouts; droughts; arrests; restraint of government and people; civil disturbances; explosions, breakage or accidents to machinery, pipelines or canals, or other causes not reasonably within the control of the party claiming such inability. It is understood and agreed that the settlement of strikes and lockouts shall be entirely within the discretion of the party having the difficulty, and that the above requirement that any Force Majeure shall be remedied with all reasonable dispatch shall not require the settlement of strikes and lockouts by acceding to the demands of the opposing party or parties when such settlement is unfavorable in the judgment of the party having the difficulty.

20. **Assignment Delegation:** No right or interest in this contract shall be assigned or delegation of any obligation made by Seller without the written permission of the Buyer. Any attempted assignment or delegation by Seller shall be wholly void and totally ineffective for all purposes unless made in conformity with this paragraph.

21. **Waiver:** No claim or right arising out of a breach of this contract can be discharged in whole or in part by a waiver or renunciation of the claim or right unless the waiver or renunciation is supported by consideration and is in writing signed by the aggrieved.

22. **Modifications:** This contract can be modified or rescinded only by a writing signed by both parties to the contract or their duly authorized agents.

23. **Interpretation Parole Evidence:** This writing is intended by the parties as a final expression of their agreement and is intended also as a complete and exclusive statement of the terms of their agreement. No course of prior dealings between the parties and no usage of the trade shall be relevant to supplement or explain any term used in this agreement. Acceptance or acquiescence in a course of performance rendered under this agreement shall not be relevant to determine the meaning of this agreement even though the accepting or acquiescing party has knowledge of the performance and opportunity for objection. Whenever a term defined by the Uniform Commercial Code is used in this agreement, the definition contained in the Code is to control.

24. **Applicable Law:** This agreement shall be governed by the Uniform Commercial Code. Wherever the term "Uniform Commercial Code" is used, it shall be construed as meaning the Uniform Commercial Code as adopted in the State of Texas effective and in force on the date of this agreement.

25. **Advertising:** Seller shall not advertise or publish, without Buyer's prior consent, the fact that Buyer has entered into this contract, except to the extent necessary to comply with proper requests for information from an authorized representative of the federal, state or local government.

26. **Right to Assurance:** Whenever one party to this contract in good faith has reason to question the other party's intent to perform he/she may demand that the other party give written assurance of his/hers business intent to perform. In the event that a demand is made and no assurance is given within five (5) days, the demanding party may treat this failure as an anticipatory repudiation of the contract.

27. **Venue:** Both parties agree that venue for any litigation arising from this contract shall lie in Hidalgo County, Texas.

28. **Prohibition Against Personal Interest in Contracts:** Any board member which has any substantial interest, either direct or indirect, in any business entity seeking to contract with the district, shall, before any vote or decision on any matter involving the business entity, file an affidavit stating the nature and extent of interest and shall abstain from any participation in the matter. This is not required if the vote or decision will not have any special effect on the entity other than its effect on the public. However, if a majority of the governing body are also required to file, and do file similar affidavits, then the member is not required to abstain from further participation. Vernon's Texas Codes Annotated, Local Government Code. Chapter 171.

29. **Penalties for Non-Performance:** If, at any time, the contractor fails to fulfill or abide by the terms, conditions, or specifications of the contract, the Edinburg Consolidated Independent School District reserves the right to:
    a. Purchase on the open market and charge the contractor the difference between contract and actual purchase price, or
    b. Deduct such charges from existing invoice totals due at the time, or
    c, Cancel the contract within thirty (30) days written notification of intent

30. **Right to Investigate**:
    a. Capacity
    b. Financial Information
    c. Business Records (Federally Funded Contracts)

31. **Bidder Qualification:** Bidders not on the District's bid list, may be required to prove their qualifications concerning the following criteria:
    a. Financial capabilities
    b. Bonding status
    c. Contractual history (references)
    d. Ability to fulfill and abide by the terms and specifications
    e. Quality and stability of product and sources

32. **District Bid Forms:** Bid proposal not submitted on District's bid forms will be rejected. Faxed or e-mail submittals will not be accepted. These forms of submittals will be destroyed or deleted and the vendor will be notified immediately.

33. **Addendums:** In the event that it becomes necessary to clarify or revise this solicitation, such clarification or revision will be by an addendum. Any addendum will be posted on the District's Purchasing Website. It will be the vendor's responsibility to check the site for any and all addendums. Any addendums to this solicitation shall become part of this solicitation. It is also at the Districts discretion to fax or email addendums as deemed necessary.

34. **Delinquent School Taxes:** The Edinburg CISD shall not do business with any individual or company that is delinquent in the payment of their school taxes. In accordance with law, the District shall not enter into a contract or other transaction with a person indebted to the District, nor shall the District award a contract to or enter into a transaction with an apparent low Contractor or successful proposer indebted to the District.

    _____ I am not a delinquent taxpayer to the Edinburg CISD.

    _____ I am a delinquent taxpayer to Edinburg ISD (your bid may be disqualified if your debt is not cleared prior to award.)

35. **"OR EQUAL" Products:** Whenever an article or material is defined by describing a proprietary product or by using the name of a manufacturer, the term "or equal", if not inserted, shall be implied. The specified article or material shall be understood as indicating the type, function, minimum standard of design, efficiency, and quality desired and shall not be construed as to exclude other manufactured products of comparable quality, design and efficiency. The District reserves the right to waive any or all technicalities, and shall be the sole judge in determining equality, technicalities and formalities. Bidders offering substitute items must indicate manufacturer's name and model number.

36. **Deviation(s)** – Any deviation(s) to the specification(s) shall be listed on a separate sheet(s) of paper and attached to the bid response form identifying the section number, component(s) with deviation(s) and a clearly defined explanation for the deviation(s). It is the bidder's responsibility to submit a bid that meets all mandatory specifications stated within. Because of the variations in manufacturer's construction, the bidder must compare their product bid with the required listed minimum specifications and identify any deviations. Failure to properly identify deviations may render the bidder's proposal non-responsive and not capable of consideration for award. Bidders should note that a descriptive brochure of the model bid may not be sufficient or acceptable as proper identification of deviations from the written specifications.

37. **Right to award:** The District reserves the right to award the bid in its entirety, partially, or reject it. The District reserves the right to buy any and/or all supplies from any vendor.

38. **Right to increase or decrease quantities:** The District reserves the right to increase or decrease the number of articles called for in any item of the specifications or to eliminate items entirely. Bidder's proposal will be adjusted in accordance with the unit price quoted therein.

39. **Renewal Option for Term Contracts:** There will be a renewal option to extend this term contracts, if applicable, for an additional one (1) year period if all parties agree to the renewal in writing and all bid prices, discounts, terms and conditions remain the same. In no instance shall this extension be considered automatic.

40. **Warranty & Guarantees:** Except as otherwise specified, the bidder warrants and guarantees all work against defects in materials, equipment or workmanship for one (1) year from the date of final acceptance. Upon receipt of written notice from the District of the discovery of any defects, the bidder shall remedy the defects and replace any property damaged there from occurring within the warranty and guarantee period.

41. **Evaluation Factors:** The bid award shall be based on the following evaluation factors:
   a. the purchase price;
   b. the reputation of the vendor and of the vendor's goods or services;
   c. the quality of the vendor's goods or services;
   d. the extent to which the goods or services meet the district's needs;
   e. the vendor's past relationship with the district;
   f. the total long-term cost to the district to acquire the vendor's goods or services

42. **Non-Collusive Bidding Certification:** By submission of this bid or proposal, the bidder certifies that:
   a. This bid or proposal has been independently arrived at without collusion with any other bidder or with any competitor;
   b. This bid or proposal has not been knowingly disclosed and will not be knowingly disclosed, prior to the opening of bids, or proposals for this project, to any other bidder, competitor or potential competitor;
   c. No attempt has been or will be made to induce any other person, partnership or corporation to submit or not to submit a bid or proposal;
   d. The person signing this bid or proposal certifies that he has fully informed himself regarding the accuracy of the statements contained in this certification, and under the penalties being applicable to the bidder as well as to the person signing in its behalf.

43. **EEOC Non-Discrimination Statement:** It is the policy of Edinburg CISD not to discriminate on the basis of sex, age, handicap, religion, race, color, or national origin in its educational programs.

44. **Conflict of Interest Disclosure:** Pursuant to Chapter 176, Texas Local Government Code, vendors doing or seeking to do business with Edinburg CISD must submit a Conflict of Interest disclosure form if they have a business relationship as defined by Section 176.001 (1-a) with a local government entity and meet the disclosure requirements of Section 176.006(a). A person commits an offense (Class C misdemeanor) if they knowingly violate Section 176.006, Local Government Code.

45. **Certificate of Interested Parties:** All Bids, CSPs, RFPs, RFQs prior to award or award of Contract by the School Board will require that the Texas Ethics Commission (TEC) Form 1295 Electronic (on line) Vendor filing procedure be completed by Vendor. All Vendors being recommended to the Board of Trustees for award or renewal of award on Agenda must register and obtain a TEC Certification for the specific award. This certification Form 1295 must be electronically submitted, printed and notarized. Notarized form must be submitted as a required form for this solicitation. There is no charge for this TEC online process.

    Texas Ethics Commission (TEC) Form 1295 must be completed (by firm – on line "New Form 1295 Certificate of Interested Parties Electronic Filing Application" site at: https://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm). The TEC website includes Question/Answers and Video instructions.

46. **Declaration of Business Location** – Texas Education Code 44.031 (b)(8). By signing below, Contractor certified the Contractor's or the Contractor's ultimate parent company or majority owner:

    _____A. Has its principal place of business in the State of Texas; OR _____B. Employs at least 500 persons in the State of Texas

    _____C. Principal Place of business is not in the State of Texas: _____(City,State)

47. **Owner(s) Name of Business**: By signing below, Contractor certified the owner(s) name of the business submitting bid is/are: (Please print name(s) below. If not applicable, please indicate N/A.)

    _____ _____

    _____ _____

    _____ _____

    _____ _____

    _____ _____

    _____ _____

48. **Texas Historically Underutilized Business (HUB)** - Texas Education Code 44.031(b)(6) or Small and Minority Firms, Women's Business Enterprises and Labor Surplus Area Firm: Contractor certified the Bidder's company is HUB certified with the State of Texas.

    _____ I am an Active certified HUB vendor. HUB expiration date: _____

    _____ Small and Minority Firms, Women's Business Enterprises and Labor Surplus Area Firms

    _____ I am neither.

49. **Criminal History Record Information Review of Certain Contract Employees:** By signing below, the Contractor agrees to comply with Section 22.0834. Criminal History Record Information Review of Certain Contract Employees, Texas Education Code if awarded a contract through this solicitation. The undersigned Contractor, if awarded a contract, shall obtain criminal history record information through the

criminal history clearinghouse as provided by Section 411.0845, Government Code relating to an employee or applicant who has or will have continuing duties related to the contracted services; and the employee or applicant has or will have direct contact with students. The contractor agrees to certify of the receipt of criminal history record information before or immediately after employing or securing the services of the employee or applicant that has or will have continuing duties related to the contracted services if the employee or applicant has or will have direct contact with students. The Contractor further agrees that if awarded a contract, shall assume all expenses associated with the criminal background check and shall immediately remove any employee or agent who was convicted of a felony, or misdemeanor involving moral turpitude, as defined by Texas law, from District property or the location where students are present.

_____ None of my employees and any of the subcontractors has or will have continuing duties related to the contracted services; and has or will have direct contact with students. I further certify that my company has taken precautions or imposed conditions to ensure that my employees and any subcontractor will not have continuing duties related to the contracted services; and will not have direct contact with students throughout the term of the Contract.

OR

_____ Some or all of my employees and/or my subcontractors will have continuing duties related to the contracted services; and will have direct contact with students. I further certify that:

1. I have obtained all required criminal history record information regarding all of my employees and/or my subcontractors. None of my employees and/or my subcontractors has any conviction or other criminal history information if a the time of the offense, the victim was under 18 or enrolled in a public school: (a) a felony offense under Title 5, Texas Penal Code; (b) an offense for which a defendant is required to register as a sex offender under Chapter 62, Texas Code of Criminal Procedures; or (c) an equivalent offense under federal law or the laws of another state. IF AVAILABLE, ATTACH A COPY OF YOUR FAST PASS RECEIPT.

2. If you received information that any of my employees and/or subcontractors subsequently has a reported criminal history, I will immediately remove the covered employee from contract duties and notify the District in writing immediately.

3. I will provide the District with the names and any other requested information regarding any of my employees and/or subcontractors so the District may obtain criminal history record information if awarded a contract.

4. If the District objects to the assignment of any of my employees and/or subcontractors, I agree to discontinue using the individual to provide services to the District.

50. **Contract Provisions for contracts under Federal Awards:** By submission of this bid, Contractor agrees to comply with the following provisions.

50.1 Contracts for more than the simplified acquisition threshold currently set at $150,000, which is the inflation adjusted amount determined by the Civilian Agency Acquisition Council and the Defense Acquisition Regulation Council (Councils) as authorized by 41 U.S.C.1908, must address administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as appropriate.

50.2 All contracts in excess of $10,000 must address termination for cause and for convenience including the manner by which it will be effected and the basis for settlement.

50.3 Equal Employment Opportunity. Except as otherwise provided under 41 CFR Part 60, all contracts that meet the definition of "federally assisted construction contract" in 41 CFR Part 60-1.3 must include the equal opportunity clause provided under 41 CFR 60-1.4(b), in accordance with Executive Order 11246, "Equal Employment Opportunity" (30 FR 12319, 12935, 3 CFR Part, 1964-1965 Comp., p. 339), as amended by Executive Order 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," and implementing regulations at 41 CFR part 60, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor."

50.4 Davis-Bacon Act, as amended (40 U.S.C. 3141-3148). When required by Federal program legislation, all prime construction contracts in excess of $12,000 must include a provision for compliance with the Davis-Bacon Act (40 U.S.C 3141-3144, and 3146-3148 as supplemented by Department of Labor regulations (29 CRF Part 5, "Labor Standards Provisions Applicable to Contracts Covering Federally Finance and Assisted Construction"). In accordance with the statue, contractors must be required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, contractors must be required to pay wages not less than once a week. The non-Federal entity must place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation. The decision to award a contract or subcontract must be conditioned upon the acceptance of the wage determination. The entity must report all suspected or reported violations to the Federal awarding agency. The contracts must also include a provision for compliance with the Copeland "Anti-Kickback" Act (40 U.S.C. 3145) as supplemented by Department of Labor regulations (20 CFR Part 3, "Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States"). The Act provides that each contractor or sub-recipient must be prohibited from including, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled. The entity must repair all suspected or reported violation to the Federal awarding agency.

50.5 Contract Work Hours and Safety Standards Act (40 U.S.C. 3701-3708). Where applicable, all contracts awarded in excess of $100,000 that involve the employment of mechanics or laborers must include a provision for compliance with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5). Under 40 U.S.C. 3702 of the Act, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of 40 U.S.C. 3704 are applicable to construction work and provide that no

laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

50.6 Rights to Inventions Made Under a Contract or Agreement. If the Federal award meets the definition of "funding agreement" under 37 CFR §401.2 (a) and the recipient or sub recipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that "funding agreement," the recipient or sub recipient must comply with the requirements of 37 CFR Part 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements," and any implementing regulations issued by the awarding agency.

50.7 Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act (33 U.S.C. 1251-1387), as amended—Contracts and sub grants of amounts in excess of $150,000 must contain a provision that requires the award to agree to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

50.8 Debarment and Suspension (Executive Orders 12549 and 12689)—A contract award (see 2 CFR 180.220) must not be made to parties listed on the government wide exclusions in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 CFR 180 that implement Executive Orders 12549 (3 CFR part 1986 Comp., p. 189) and 12689 (3 CFR part 1989 Comp., p. 235), "Debarment and Suspension." SAM Exclusions contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.

50.9 Byrd Anti-Lobbying Amendment (31 U.S.C. 1352)—Contractors that apply or bid for an award exceeding $100,000 must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the award.

50.10 A an entity that is a state agency or agency of a political subdivision of a state and its contractors must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds $10,000 or the value of the quantity acquired during the preceding fiscal year exceeded $10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

51. Debarment and Suspension (Executive Orders 12549 and 12689): By signing below Contractor certified that neither it nor its principals are currently listed on the government-wide exclusions in SAM as debarred, suspended, or otherwise excluded by agencies or declared ineligible under statutory or regulatory authority other than Executive Order 12549. Contractor further agrees to immediately notify the District if he/she is later listed on the government-wide exclusions in SAM, or is debarred, suspended, or otherwise excluded by agencies or declared ineligible under statutory or regulatory authority other than Executive Order 12549.

52. Vendor must comply with H.B. No. 89 Chapter 2270. Prohibition on Contracts with Companies Boycotting Israel.

I, the undersigned authorize agent for the company named below, certify that the information concerning Section 1-52 listed above has been reviewed by me and the information furnished is true to the best of my knowledge. I further certify that I agree to comply with Sections 1-52 listed above.

Print/Type Signature Name	Official Title
Authorized Signature	Date

FELONY CONVICTION NOTIFICATION

State of Texas Legislative Senate Bill No. 1, Section 44.034, Notification of Criminal History, Subsection (a), states "a person or business entity that enters into a contract with a school district must give advance notice to the district if the person or an owner or operator of the business entity has been convicted of a felony. The notice must include a general description of the conduct resulting in the conviction of a felony."

Subsection (b) states "a school district may terminate a contract with a person or business entity if the district determines that the person or the person or business entity failed to give notice as required by Subsection (a) or misrepresented the conduct resulting in the conviction. The district must compensate the person or business entity for services performed before the termination of the contract."

This Notice Is Not Required of a Publicly-Held Corporation

I, the undersigned agent for the firm named below, certify that the information concerning notification of felony convictions has been reviewed by me and the following information furnished is true to the best of my knowledge.

_____
Vendor's Name

_____
Authorized Company Official's Name (Printed)

A. My firm is a publicly-held corporation; therefore, this reporting requirement is not applicable.

_____
Signature of Company Official

B. My firm is not owned nor operated by anyone who has been convicted of a felony:

_____
Signature of Company Official

C. My firm is owned or operated by the following individual(s) who has/have been convicted of a felony:

_____
Names of Felon(s)

_____
Details of Conviction(s)

_____
Signature of Company Official

CONFLICT OF INTEREST QUESTIONNAIRE

FORM CIQ

For vendor or other person doing business with local governmental entity

This questionnaire reflects changes made to the law by the H.B. 1491 80th Leg., Regular Session.

OFFICE USE ONLY
Date Received

This questionnaire is being filed in accordance with Chapter 176, Local Government Code by a person who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the person meets requirements under Section 176.006(a).

By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the person becomes aware of facts that require the statement to be filed. See Section 176.006, Local Government Code.

A person commits an offense if the person knowingly violates Section 176.006, Local Government Code. An offense under this section is a Class C misdemeanor.

1 **Name of person doing business with local governmental entity.**

2

☐ **Check this box if you are filing an update to a previously filed questionnaire.**

(The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than September 1 of the year for which an activity described in Section 176.006 (a), Local Government Code, is pending and not later than the 7th business day after the date the originally filed questionnaire becomes incomplete or inaccurate.)

3 **Name of local government officer with whom filer has employment or business relationship.**

_____
Name of Officer

This section (item 3 including subparts A, B, C & D) must be completed for each officer with whom the filer has an employment or other business relationship as defined by Section 176.001(1-a), Local Government Code. Attached additional pages to this form CIQ as necessary.

A. Is the local government officer named in this section receiving or likely to receive taxable income, other than investment income, from the filer of the questionnaire?

☐ Yes ☐ No

B. Is the filer of the questionnaire receiving or likely to receive taxable income, other than investment income,

☐ Yes ☐ No

C. Is the filer of this questionnaire employed by a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership of 10 percent or more?

☐ Yes ☐ No

D. Describe each employment or business relationship with the local government officer named in this section

4

_____ _____
Signature of person doing business with the governmental entity Date

CERTIFICATION OF INTERESTED PARTIES – FORM 1295

Definitions and Instructions for Completing Form 1295
Edinburg Consolidated Independent School District is required to comply with House Bill 1295, which amended the Texas Government Code by adding Section 2252.908, Disclosure of Interested Parties. Section 2252.908 prohibits Edinburg CISD from entering into a contract resulting from a Bid, CSP, RFP, RFQ, Inter-local Cooperative Quote with a business entity unless the business entity submits a Disclosure of Interested Parties – Form 1295 to Edinburg CISD at the time the business entity submits the signed contract. The Texas Ethics Commission has adopted rules requiring the business entity to file Form 1295 electronically with the Texas Ethics Commission.

As a "business entity," vendors must electronically complete, print, manually fill out Unsworn Declaration portion and sign. Once form is completed, submit with your proposals or contracts even if no interested parties exist.

Proposers must file Certificate of Interested Parties – Form 1295 with the Texas Ethics Commission using the following online application: https://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm

- Proposers must use the filing application on the Texas Ethics Commission's website (see link above) to enter the required information on Form 1295.
- Proposers must print a copy of the completed form, which will include a certification of filing containing a unique certification number.
- The Form 1295 must be printed and then signed by an authorized agent of the business entity.
- The completed Form 1295 with the certification of filing must be filed with Edinburg Consolidated Independent School District by including a copy of the completed form with the proposal response.
- Edinburg CISD must acknowledge the receipt of the filed Form 1295 by notifying the Texas Ethics Commission of the receipt of the filed Form 1295 no later than the 30th day after the date the contract binds all parties to the contract.
- After Edinburg CISD acknowledges the Form 1295, the Texas Ethics Commission will post the completed Form 1295 to its website within seven (7) business days after receiving notice from Edinburg CISD.

Instructions to Vendors:

1. **Read these instructions,**
2. **Go to the Ethics Commission Website https://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm,**
3. **Register and complete Form 1295 online - include the bid/proposal # and the contract/(Bid,CSP,RFQ,RFP name,**
4. **Print a copy of the submitted Form 1295 and sign - it will have a certification # in the top right corner,**
5. **Include a copy of the completed, signed Form 1295 with the proposal response.**

Definitions:

- **Interested Party:** a person who:
  1) has controlling interest in a business entity with whom Edinburg CISD contracts; or
  2) actively participates in facilitating a contract or negotiating the terms of a contract, including a broker, intermediary, adviser, or attorney for the business entity.
- **Controlling Interest** means:
  1) an ownership interest or participating interest in a business entity by virtue of units, percentage, shares, stock, or otherwise that exceeds 10 percent;
  2) membership on the board of directors or other governing body of a business entity of which the board or other governing body is composed of not more than 10 members; or
  3) service as an officer of a business entity that has four or fewer officers, or service as one of the four officers most highly compensated by a business entity that has more than four officers.
- **Intermediary:** a person who actively participates in the facilitation of the contract or negotiating the contract, including a broker, advisor, attorney, or representative of or agent for the business entity who:
  1) receives compensation from the business entity for the person's participation;
  2) communicates directly with the governmental entity or state agency on behalf of the business entity regarding the contract; and
  3) is not an employee of the business entity.
- **Business Entity:** includes an entity through which business is conducted with a governmental entity or state agency, regardless of whether the entity is a for-profit or nonprofit entity.

Resources:

Form 1295 Frequently Asked Questions:

- https://www.ethics.state.tx.us/whatsnew/FAQ_Form1295.html

Instructional Video – First Time Business User:

- https://www.ethics.state.tx.us/filinginfo/videos/Form1295/FirstLogin-Business/Form1295Login-Business.html

Instructional Video – How to Create a Certificate:

- https://www.ethics.state.tx.us/filinginfo/videos/Form1295/CreateCertificate/CreateCertificate.html

A person or business entity entering into a contract and/or agreement with ECISD is required by the new Government Code Statute 2252.908, to complete Form 1295 "Certificate of Interested Parties". This form must be submitted online at http://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm. Once the online submission has been processed and a claim number has been issued, the form must be printed with the claim number, Unsworn Declaration must be manually filled out and signed. Submit form along with this solicitation documents. IF Form 1295 is not submitted along with this solicitation documents, your response may be considered "non-responsive" and may be disqualified.

CERTIFICATE OF INTERESTED PARTIES

FORM 1295

1 of 1

Complete Nos. 1 - 4 and 6 if there are interested parties.
Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

OFFICE USE ONLY
CERTIFICATION OF FILING
Certificate Number:

Date Filed:

Date Acknowledged:

1 **Name of business entity filing form, and the city, state and country of the business entity's place of business.**

Vendor Name

2 **Name of governmental entity or state agency that is a party to the contract for which the form is being filed.**

Edinburg CISD

3 **Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.**

Use District's Proposal # & Proposal Title located on cover page of solicitation

4 Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
		Controlling	Intermediary

Example

5 **Check only if there is NO Interested Party.** ☐

6 **UNSWORN DECLARATION**

My name is _____, and my date of birth is _____.

My address is _____, _____, _____, _____, _____.
(street) (city) (state) (zip code) (country)

I declare under penalty of perjury that the foregoing is true and correct.

Executed in _____ County, State of _____, on the _____ day of _____, 20_____.
(month) (year)

_____
Signature of authorized agent of contracting business entity
(Declarant)

Forms provided by Texas Ethics Commission www.ethics.state.tx.us Version V1.0.3337

DEVIATION FORM

(This form must be signed)

1. DEVIATION(S) – Any deviations to the attached specifications shall be listed below, or on a separate sheet of paper, and attached to the bid response form identifying the section number, item number and a clearly defined explanation for the deviations.

2. It is the bidder's responsibility to submit a bid that meets all mandatory specifications stated within. Because of the variations in manufacturer's construction, the bidder must compare their product bid with the required listed minimum specifications and identify any deviations.

3. Failure to properly identify deviations may render the bidder's proposal non-responsive and not capable of consideration for award.

4. Bidders should note that a descriptive brochure of the model bid may not be sufficient or acceptable as proper identification of deviations from the written specifications.

NO - Deviations: _____ YES - Deviations: _____

List any deviations your company is submitting below: (List on separate page, if necessary)

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____
Company Name

_____
Print Name of Authorized Company Official

_____
Signature of Authorized Company Official

Edinburg Consolidated Independent School District Substitute W-9 & Direct Deposit Authorization Form

Complete form if: 1. You are a U.S. entity (including a resident alien) 2. You are a vendor that provides goods or services to ECISD; AND 3. You will receive payment from the Edinburg Consolidated ISD	New Request ☐	Update – Select from the following: Tax ID ☐ Legal Name ☐ Vendor Order Address ☐ Direct Deposit ☐ Contact Information ☐ Vendor Payment Address ☐

Individual/Company/Entity Legal Name (Must match TIN below): _____

DBA Name (IF Applicable): _____

Taxpayer Identification Number (TIN) _____-_____

OR

Federal Tax ID Number (FID) -

SSN – Individual/Sole Proprietor - -

Vendor Contact Information:

Name: Title: Phone: Fax:

Vendor Type – Select5 only one of the following boxes:

☐ Individual/Sole Proprietorship ☐ C-Corporation ☐ S-Corporation ☐ Partnership ☐ Trust/Estate ☐ Other: Explain

☐ Limited Liability Company (LLC). Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) _____

☐ Exempt payee code (if any)_____ ☐ Exemption from FATCA reporting code (if any) _____

Order Address:

Street/PO Box: _____

Second Line:_____

City: State: Zip Code:

Payment Remittance Address:

☐ Check if Order Address is same as Payment Address

Street/PO Box: _____

Second Line:_____

City: State: Zip Code:

Banking Information:

In an effort to process your payment faster, we request that you complete the ACH enrollment section below. All fields must be completed for direct deposit setup. Attach a voided check or letter from your financial institution.

Account Type: Checking ☐ Savings ☐ Email for Direct Deposit Notification:_____

Bank Name:_____ ABA Routing Number:_____

Bank Address:_____ Account Number:_____

City: State: Zip Code: Phone: Fax:

W-9 Certification

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for anumber to be issued to me), AND
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Services (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, AND
3. I am a U.S. citizen or other U.S. person.

Certification Instructions: You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions, to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the Certification, but you must provide your correct TIN.

Signature:_____ Date:_____

Print Name/Title:

Direct Deposit Authorization and Agreement

I authorize Edinburg Consolidated Independent School Districe (ECISD) to initiate direct deposit of funds to the account and financial institution indicated above, and to recover funds deposited in error in necessary, in compliance with Texas and U.S. Law, and the Automatic Clearing House (ACH) rules. I understand that:

1. It is my responsibility to provide accurate and current banking information.

Notification of direct deposits will be by e-mail; and it is my responsibility to provide a valid e-mail address.

2. It is my responsibility to verify payment has been credited to my account, and that ECISD assumes no liability for overdrafts for any reasons.

3. This authorization will remain in effect until; (a) a written request is received from a vendor officer to change or terminate direct deposit agreement; (b) notification is sent by my bank that the account is no longer valid.

Signature:_____ Date:_____

Print Name/Title:

Send completed form to: ECISD requestor or:
Mail to: Edinburg Consolidated Independent School District, ATTN: Accounts Payable, PO Box 990, Edinburg, TX 78540 **OR**; E-mail: ECISDinvoice@ecisd.us, **OR**; Fax: 956-383-4354. Any Questions on this form, call 956-289-2300 ext. 2074

Finance Office Use Only: Updated Record on: Updated by: Bank Code: Vendor #:

SPECIAL TERMS & CONDITIONS

1. **INTENTION**: It is the intention of the Board of Trustees of the Edinburg Consolidated Independent School District to receive proposals from interested vendors to select vendor(s) offering the best value for **NEW FIRE ALARM VOICE EVACUATION SYSTEM FOR SOUTH MIDDLE SCHOOL.**

2. **CONTACT**: Please call Jacqueline Kingan, Senior Buyer at 956-289-2311, ext. 2137 or e-mail to j.kingan@ecisd.us if you have any questions regarding this proposal.

3. **CONTRACT SERVICE PERIOD**: This is a onetime purchase.

4. **EEOC NON-DISCRIMINATION STATEMENT**: It is the policy of Edinburg CISD not to discriminate on the basis of sex, age, handicap, religion, race, color, or national origin in its educational programs.

5. **PAYMENT INFORMATION**: Payments will be made on the District's regular payment schedule.

6. **TERMS:** Net 30 days unless otherwise noted as an exception.

7. **PRE-BID CONFERENCE:** Pre-Bid conference to be held February 9, 2021 at 9:00 A.M. in the Maintenance and Facilities Department located at 1305 E. Schunior, Edinburg, TX 78541. Vendors are highly encouraged to attend to answer any questions they may have and to better understand the general scope of work required for this project. You will meet with Julio Camacho.

8. **DISTRICT PROPOSAL FORM:** Proposals not submitted on the Edinburg CISD proposal form may be rejected as non-responsive. **Send 3 Proposals: 1 Original & 2 Copies Plainly Marked.**

9. **RIGHT TO AWARD PROPOSAL:** The Edinburg CISD reserves the right to accept or reject any or all proposals.

10. **INSURANCE REQUIREMENTS:**

    a. General Liability
    b. Workmen's Compensation
    c. Property Liability

11. **FORMS TO BE FILLED OUT:** The following forms **MUST** be filled out:

    a. Conflict of Interest (If it does not apply, put N/A and **sign**).

    b. Certificate of Interest Parties-Form 1295 (Does not need to be notarized, however, the bottom part **MUST** be filled out and **signed**).

    c. Edinburg Consolidated Independent School District Substitute W-9 and District Deposit Authorization Form (Fill out and sign)

12. **ADDENDUMS:** It will be the vendor's responsibility to check the Purchasing Website for any addendums or additional information. ECISD website is www.ecisd.us. Click on Departments, then Purchasing. Once at the Purchasing site, locate the calendar list in middle and click on title of the solicitation. If you do not see it on the list, click the month button on top and you will see complete month with all solicitations the District is currently seeking out. Any questions, please contact the Purchasing office and we will assist you.

FIRE ALARM AND EMERGENCY VOICE EVACUATION SYSTEM

PART 1.0 - GENERAL

1.1 DESCRIPTION:

A. This section of the specifications includes the furnishing, installation, and connection of a multiprocessor controlled, intelligent fire alarm and integrated emergency voice evacuation system required to form a complete coordinated system ready for operation. It shall include, but not be limited to, intelligent alarm initiating devices, alarm notification appliances, auxiliary control devices, annunciators, and wiring as shown on the drawings and specified herein.

B. The intelligent fire alarm system shall comply with requirements of NFPA 72 Standard for protected premises signaling systems. The system shall be electrically supervised and monitor the integrity of all conductors.

1.2 SCOPE:

A. A new intelligent, multiprocessor controlled fire alarm and emergency voice evacuation system shall be installed in accordance with the specifications and drawings.

B. Basic Performance:

1. Alarm, trouble and supervisory signals from all intelligent addressable reporting devices shall report to the intelligent fire alarm and emergency voice evacuation system over Class B (Style 4), or Class A (Style 6, 7) Signaling Line Circuits (SLCs).

2. Initiation Device Circuits (IDCs) shall be wired Class B (Style B) or Class A (Style D).

3. Notification Appliance Circuits shall be wired Class B (Style Y) or Class A (Style Z).

4. Speaker/Strobe synchronization shall be provided where required with selective silence capability.

5. A single ground or open on a Signaling Line Circuit (SLC) shall not cause system malfunction, loss of operating power or the ability to report an alarm.

6. Alarm signals arriving at the intelligent fire alarm and emergency voice evacuation system shall not be lost following a power failure or outage.

C. Basic System Functional Operation

When a fire alarm condition is detected and reported by one of the system's intelligent initiating devices, the following functions shall immediately occur:

1. The system Alarm LED shall flash.

2. A local piezo in the control panel shall sound.

3. A 240 x 64 graphical LCD display shall indicate all information associated with the fire alarm condition, including zone of origin, the type of alarm device and its location within the protected premises.

4. Printing and history storage equipment shall log the information associated with each new intelligent fire alarm and emergency voice evacuation system condition, along with time and date of occurrence.

5. All system output programs assigned via software programming to be activated by the particular intelligent device and alarm shall be executed, and the associated system outputs (alarm Notification Appliances and/or Relays) shall be activated.

1.3 SUBMITTALS

A. General:

1. 1 Original + 3 Copies of all submittals shall be submitted to the Architect/Engineer for review.

2. All references to manufacturer's model numbers and other pertinent information herein is intended to establish minimum standards of performance, function and quality. Equivalent equipment (compatible ANSI/UL864, 9th Edition Listed) from other manufacturers may be substituted for the specified equipment as long as the minimum standards are met.

3. For equipment other than that specified, the contractor shall supply proof that such substitute equipment equals or exceeds the features, functions, performance, and quality of the specified equipment.

B. Shop Drawings:

1. Sufficient information, clearly presented, shall be included to determine compliance with drawings and specifications.

2. Include manufacturer's name(s), model numbers, ratings, power requirements, equipment layout, device arrangement, complete wiring point-to-point diagrams, and conduit layouts.

3. Show remote annunciator(s) layout, configurations, and terminations.

C. Manuals:

1. Submit simultaneously with the shop drawings, complete operating and maintenance manual listing the manufacturer's name(s) including technical data sheets.

2. Provide a clear and concise description of operation that gives, in detail, the information required to properly operate the equipment and system.

D. Certifications:

Together with the shop drawing submittal, submit a certification from the major equipment manufacturer indicating that the proposed supervisor of installation and the proposed performer of contract maintenance is an authorized representative of the major equipment manufacturer. Include names and addresses in the certification.

1.4 GUARANTEE:

All work performed and all material and equipment furnished under this contract shall be free from defects and shall remain so for a period of at least three (3) years from the date of purchase. The full cost of labor and materials required to correct any defect during a one-year period shall be included in the submittal bid.

1.5 MAINTENANCE:

Maintenance and testing shall be on a semi-annual basis or as required by the local AHJ. A preventive maintenance schedule shall be provided by the Contractor that shall describe the protocol for preventive maintenance. The schedule shall include:

1. Systematic examination, adjustment and cleaning of all detectors, manual fire alarm stations, control panels, power supplies, relays, water flow switches and all accessories of the fire alarm and emergency voice evacuation system.

2. Each circuit in the fire alarm system shall be tested semi-annually.

3. Each smoke detector shall be tested in accordance with the requirements of NFPA 72.

1.6 POST CONTRACT EXPANSIONS

A. Contractor shall consider possible future expansion of the system by not less than 10% of the original count of field devices. The same shall be included in the technical submittal for approval. This provision shall eliminate the need for major changes and alternations in the system.

B. Submittals that do not consider an extra 10% provision for future expansions will not be accepted.

1.7 APPLICABLE SPECIFICATIONS:

The specifications and standards listed below form a part of this specification. The system shall fully comply with all applicable standards.

A. National Fire Protection Association (NFPA):

No. 70 National Electrical Code (NEC)

No. 72 National Fire Alarm Code

No. 90A Standard for the Installation of Air Conditioning and Ventilating Systems

No. 101 Life Safety Code

B. National Recognized Testing Laboratories (NRTL); Underwriters Laboratories Inc. (UL), Intertek (ETL), Factory Mutual (FM):

No. 268 Smoke Detectors for Fire Protective Signaling Systems

No. 864, 9th Edition Control Units for Fire Protective Signaling Systems

No. 268A Smoke Detectors for Duct Applications.

No. 521 Heat Detectors for Fire Protective Signaling Systems

No. 464 Audible Signaling Appliances.

No. 38 Manually Actuated Signaling Boxes.

No. 346 Water flow Indicators for Fire Protective Signaling Systems.

No. 1971 Visual Notification Appliances for the hearing impaired.

No. 1711 Amplifiers for Fire Protective Signaling Systems

C. FCC Part 15

D. Local and State Building Codes

E. All requirements of the Authority Having Jurisdiction (AHJ).

1.8 APPROVALS:

The intelligent fire alarm and emergency voice evacuation system shall have proper listing and/or approval to ANSI/UL-864 9th Edition.

PART 2.0 PRODUCTS

2.1 EQUIPMENT AND MATERIAL, GENERAL:

A. All equipment and components shall be new, and the manufacturer's current model.

B. All equipment and components shall be installed in strict compliance with manufacturers' recommendations. Consult the manufacturer's installation manuals for all wiring diagrams, schematics, physical equipment sizes, etc., before beginning system installation.

C. All Equipment shall be attached to walls and/or ceiling/floor assemblies and shall be held firmly in place (e.g., detectors shall not be supported solely by suspended ceilings). Fasteners and supports shall be adequate to support the required load.

D. Equipment shall be manufactured by an ISO 9001 Certified Company.

2.2 WIRE:

A. Wire:

1. Wiring shall be in accordance with Civil Defense Authority, local, state and national codes (e.g., NEC Article 760) and as recommended by the manufacturer of the fire alarm system. Number and size of conductors shall be as recommended by the fire alarm system manufacturer.

2. Wire and cable not installed in conduit shall have a fire resistance rating suitable for the installation as indicated in NFPA 70 (e.g., FPLP).

3. All field wiring shall be completely supervised.

B. Terminal Boxes, Junction Boxes and Cabinets:

1. All boxes and cabinets shall be listed by a National Recognized Testing Laboratory for their use and purpose.

2.3 MAIN FIRE ALARM CONTROL PANEL:

A. The intelligent fire alarm and emergency voice evacuation system shall contain multiprocessors for communications with and control of equipment used to make up the system: intelligent detectors, intelligent modules, printer, annunciators, and other system controlled devices.

B. System Capacity and General Operation

1. Each intelligent fire alarm and voice evacuation system shall be capable of providing up to 504 intelligent analog addressable devices and shall be networkable up to a total of 200 intelligent fire alarm and emergency voice evacuation systems.

2. The intelligent fire alarm and emergency voice evacuation system shall include a full featured user/operator interface control and annunciation panel that shall be composed of a 240 x 64 graphical LCD display, individual system status LEDs, and an alphanumeric keypad for field programming and control of the entire system.

3. All programming or editing of the existing program in the system shall be achieved without special equipment and without interrupting the alarm monitoring functions of the intelligent fire alarm and emergency voice evacuation system.

4. The intelligent fire alarm and emergency voice evacuation system shall provide the following features; detector maintenance alert to warn of excessive dirt/dust within an individual detector, detector sensitivity read/test information, with real-time status reports capable of being viewed on the display or printed, intelligent smoke detector alarm verification and pre-signal capabilities, meeting NFPA 72 requirements and rapid (priority) manual pull station reporting (<3 seconds). Field programmability of various voice communications messages to meet various application requirements. An integral walk test feature shall also be provided capable of selecting with or without signals.

5. The Base Card of the system shall contain three Form-C relay contacts rated 2.0 amps @ 30VDC for; Alarm, Trouble (with or with/out AC delay), and Supervisory status conditions. These three contacts shall be field programmable to meet any installation requirement.

6. The Base Card shall contain two Notification Appliance Circuits (NACs) capable of being wired Class A or B (NFPA Style Y or Z). NAC circuits shall be 24VDC filtered and registered and Listed to operate with any Listed NAC device available or previously installed.

7. The Base System shall as a minimum include a dual 40 Watt amplifier capable of being field configured for 80 Watts of power or 40 Watts of power with 100% backup. Additional amplifiers shall be capable of being added to the intelligent fire alarm and emergency voice evacuation system to meet the total wattage requirement of the installation.

C. Main System Microprocessors

1. The intelligent fire alarm and emergency voice evacuation system shall include a minimum of four microprocessors; one for the main system, one for each Signaling Line Circuits (SLCs), one for the intelligent amplifier, and one for each switching regulated power supply.

2. The microprocessors shall communicate with, monitor, and control all internal and external interfaces within the intelligent fire alarm and emergency voice evacuation system. Each microprocessor shall include flash memory for program storage and a "watch-dog" timer circuit to detect and report microprocessor failure.

3. The microprocessors shall contain and execute all programming for specific action to be taken based on system status changes. Such programming shall be held in non-volatile programmable memory and shall not be lost if both the system primary and secondary power supplies fail.

4. The intelligent fire alarm and emergency voice evacuation system shall provide a real-time clock for device programmable time functions, time stamping system displays, printers, and history files.

5. The microprocessors shall contain flash memory capabilities for easy upload/download of future product upgrades and enhancements.

6. All clock, date and history file information shall be maintained during AC and DC power loss.

D. User Interface Graphical Display

1. The user interface graphical display shall provide all the controls and indicators for use by the system operator and may also be used to program all system operational parameters.

2. The user interface graphical display shall include status information and custom alphanumeric labels for all system zones and intelligent devices.

3. The user interface graphical display shall be a backlit graphical LCD (liquid crystal display) providing 240 x 64 characters. It shall provide 17 LEDs (light emitting diodes), consisting of Power, Alarm, Supervisory, System Trouble, Pre-Alarm, Test, P.A.S., Disable, NAC Silenced, NAC Trouble, NAC Disabled, Programming, and five field programmable LEDs based on installation requirements.

4. The user interface graphical display shall include a 12-button keypad and 5-button arrow/checkmark for the control, programming, and diagnostic capabilities of the intelligent fire alarm and emergency voice communication system. Entry of numeric, alphanumeric and various other character sets shall be available through these buttons. Up to twelve programmable passwords shall be available with various password access capabilities programmable based on installation needs to prevent unauthorized system access, control and/or programming.

5. The user interface graphical display shall include the following user operator buttons: RESET, ACK (Acknowledge), SILENCE, RESOUND, and DRILL.

6. The user interface graphical display shall contain eight programmable switch inputs which can be utilized for connecting project specified switches (keyed or non-keyed) for various control by-pass functions.

7. The user interface graphical display shall include a contrast adjustment feature for the backlit display, to allow optimum viewing/display. In addition, the backlit display shall minimize current consumption during AC failure, by turning off the backlit feature during AC power failures.

E. Signaling Line Circuits (SLCs)

1. Each SLC communications shall be 100% digital, providing power and communications for all of the intelligent detectors and intelligent modules over a single pair of wires. The SLC shall be capable of NFPA Style's 4, 6 or 7 operation. As a100% digital circuit, each SLC shall be capable of providing optimum performance with enhanced transient false alarm protection.

2. Each SLC, in conjunction with its associated microprocessor, shall process individual intelligent device status. Intelligent device status shall be determined by the individual device's microprocessor and relayed to the SLC microprocessor. Device status shall include; normal, alarm, or trouble conditions. Each individual intelligent smoke detector shall also perform automatic detector testing and automatic drift compensation to meet strict detector maintenance requirements. If during automatic intelligent detector maintenance a problem is found, this status shall be relayed to the SLC microprocessor for processing.

3. Each SLC shall be capable of providing a minimum of .5 Amps of power for intelligent loop-powered devices such as relays, linear beam detectors, etc.

4. In real-time, proper SLC operating characteristics shall be capable of being validated by a built-in intelligent system voltage and current meter. The intelligent voltage and current meter shall be capable of displaying samples within the communication signaling of the SLC to give optimum consistency of information. Systems requiring the use of an independent voltmeter shall not be considered equal due to lack of availability, potential errors and erratic information based on SLC communication signals.

5. Each SLC shall be capable of distances of 10,000 feet (@ AWG, twisted) (?). For retrofit applications, the system shall be capable of supporting untwisted, unshielded wire.

1. To avoid adverse conditions during loss of AC power, each SLC shall contain circuitry to maintain normal operating voltage levels. Systems that don't maintain normal voltage levels, but vary based on battery voltage availability shall not be considered equal.

F. Emergency Voice Evacuation

1. The intelligent fire alarm and emergency voice evacuation system shall include microphones, amplifies, power supplies, switch controls, and status LED indications to meet the complete requirements of the installation.

2. To accommodate future expansion of the system the integral amplifiers of the intelligent fire alarm and emergency voice evacuation system shall be designed around a "building block" approach where the amplifier is completely flexible and scalable to accommodate small standalone to large networked system applications.

3. The amplifier shall be a dual 40 Watt amplifier capable of being field configured for 80 Watts of power or 40 Watts of power with 100% backup.

4. Each amplifier shall be capable of communicating with the intelligent fire alarm and emergency voice evacuation system via contact trigger inputs or an integral RS-485 serial port. When communicating serially, communications shall include amplifier 1 & 2 status, Speaker Circuit 1 & 2 status, on/off activation, volume, and message selection/assignment to individual channels.

5. To reduce wiring and minimize distance restrictions, amplifier booster units shall be distributed throughout the facility. To provide the ultimate in survivability, each amplifier booster unit shall be a standalone entity allowing message generation locally if communications failure with the main intelligent fire alarm and emergency voice evacuation system occurs.

6. The amplifiers of the intelligent fire alarm and emergency voice evacuation system shall be capable of providing a high quality 400 Hz to 4 kHz response across 25 Volt RMS speakers.

7. Each audio amplifier shall provide 4 industry standard message and tone combinations for fire alarm evacuation and alarm alert signaling. For customizing installations, each amplifier shall be capable of storing up to 16 messages, with a total of 20 minutes storage capacity.

8. The available 16 messages shall be prioritized where message 1 has a higher priority than message 2 and message 2 has a higher priority than message 3, etc.

9. Amplifier cascading (booster wiring) shall provide automatic synchronization of all audio output channels. Systems that do not synchronize all audio channels throughout the system and peer-to-peer network shall not be considered equal.

10. Each amplifier shall have the capability of broadcasting background music via one of the audio inputs. Background music input shall be an analog 1 Volt RMS signal.

11. Detailed status and trouble indications shall be available at each amplifier with further troubleshooting diagnostic information available at the intelligent fire alarm and emergency voice evacuation user graphical display.

12. Switch controls shall be available to select individual speakers, speaker circuits, zones and/or groups/areas for options such as: All Call, General Evacuation and General Alert across the entire (networked) system.

13. Local and/or remote microphones to allow and to provide live, voice commands at a priority over any stored recorded message(s).

G. Fire Fighter Phone Jacks

1. The intelligent fire alarm and emergency voice evacuation system shall have the capability of generating a local phone riser for use with remote addressable fire fighter telephone modules allowing phone-to-command center and party-line communications.

2. The phone riser shall accommodate any number of addressable fire fighter telephone modules as required for the installation.

3. The system shall be capable of communicating with a minimum of 5 remote fire fighters phones simultaneously in a party-line format.

4. When a fire fighters phone is plugged into a remote fire fighters phone jack the addressable fire fighter telephone module shall send a call-in signal to the intelligent fire alarm and emergency voice evacuation system command center. The call-in signal shall sound a district tone and indicate via an LED the specific remote fire fighter phone jack calling in. Pressing the associated addressable fire fighter telephone module button will silence the call-in tone, and allow for communications with the remote fire fighters phone.

5. It shall be possible to selectively patch-in any fire fighters telephone to the intelligent fire alarm and emergency voice communications system's speaker circuits.

H. The system shall feature an auto dialing which would initiate an automated phone call to local fire Brigade.

I. IP Internet interface

1. An intelligent IP internet interface shall be provided that will gather real-time information from a standard web browser giving visual and audible indication of the complete intelligent fire alarm and emergency voice evacuation system, including all associated network nodes.

2. The state of each network node, including alarms, troubles, supervisory conditions as well as the status of individual devices (such as analog values of intelligent smoke detectors) on the network shall be capable of being displayed at any time in a user-friendly clear and concise manner.

3. From the web browser all installation event logs shall be capable of being viewed, saved, and/or printed as needed without the need to be physically at the installation site.

4. In addition to providing real-time remote access to the intelligent fire alarm and emergency voice evacuation system and its network nodes, the IP Internet Interface shall be capable of being configured to provide email notification based on various system/installation status changes. Status events such as alarms, pre-alarms, troubles, disables, etc. shall be capable of being sent via email to various designated email accounts based on time-of-day and day-of-week settings. Specific custom user text messages shall be configurable for any email, providing precise and accurate information immediately to critical personnel.

J. Network Interface

1. The intelligent fire alarm and emergency voice evacuation system shall have an integral RS-232 port for interfacing the intelligent fire alarm and emergency voice evacuation system to a National Recognized Listed Electronic Data Processing (EDP) peripheral or other local/remote serial device. The RS-232 port shall allow for the use of printers, local/remote virtual panel software, and for PC connection to upload/download field configuration programming of the system. In addition to the RS-232 port, the intelligent fire alarm shall have an integral USB port for upload/downloading of field configuration programming.

2. The intelligent fire alarm and emergency voice evacuation system shall also include an internal RS-485 port for the connection of audio amplifiers, switch modules, I/O annunciate drivers and various other optional modules.

3. A Network Card (Style 4 or 7) shall be available for the connection of peer-to-peer network devices such as; additional intelligent fire alarm systems, additional intelligent fire alarm and emergency voice

evacuation systems, remote graphical displays (with or without control capabilities), IP Gateways and other network Interfaces.

4. It shall be possible to interrogate the peer-to-peer network wiring from any graphical display connected to the network. Interrogation shall include network ground voltage monitoring, data packets received, bad packets, number of communication failures, and number of Style 7 communication failures at each individual network node. This interrogation feature shall be historical from the date of installation, with technician reset capabilities while troubleshooting issues. Networks that do not provide a means for technicians to interrogate network wiring and problems shall not be considered equal.

K. Enclosures:

1. The intelligent fire alarm and emergency voice evacuation system shall be housed in a listed cabinet suitable for surface or semi-flush mounting. Cabinet and front shall be corrosion resistive.

2. The door shall provide a key lock (equivalent with installed intelligent manual pull stations) and shall include a glass or other transparent opening for viewing of all indicators, switches and graphical display.

3. An optional semi-flush trim ring shall be available for a neat cabinet dress.

L. All interfaces and associated equipment shall be protected so that they will not be affected by voltage surges or line transients consistent with ANSI/UL standard 864.

M. Optional components shall be provided for NFPA 72 auxiliary and remote station fire alarm systems as well as a Digital Alarm Communicator Transmitter for NFPA 72 Central Station systems. The DACT shall meet all current Nationally Recognized Listing requirements for delayed AC fail reporting, communicate general system status and provide the option of communicating the zone or point status of any SLC device to the Central Station

N. Power Supply:

1. The intelligent fire alarm and emergency voice evacuation system shall include two switching power supplies capable of operating on 120 VAC, 60 Hz, and shall provide all necessary power for the system. Voltages of 240 VAC, 50 Hz shall also be accommodated with the standard switching power supply.

2. The power supplies shall provide a minimum of 5.0 amps of filtered and regulated power for Amplifiers, Notification Appliance Circuits (NACs), resettable, and non-resettable power requirements.

3. It shall be possible to expand system power requirements as needs require. Power supply expansion shall be an integral part of the overall system. All monitoring and control of the expansion power supplies shall be performed by the intelligent fire alarm and emergency voice evacuation system.

4. Where required power supplies shall provide temperature compensated battery charging for 24 or 60 hours of standby using dual-rate charging techniques for fast battery recharge. The temperature compensated circuitry shall extend the life of the system batteries by minimizing/maximizing the charger current based on ambient temperature surrounding the batteries. In addition, the batteries shall be continuously load tested by the power supply/charger to confirm optimum performance when

required. Chargers that do not temperature charge the batteries, test the batteries and recognize battery cell failures shall not be considered equal.

5. The power supplies shall be power-limited using fuse-less, quick-acting electronic circuitry meeting the latest ANSI/UL-864 9th Edition requirements.

O. Operators Controls

1. Acknowledge Button

a. Activation of the intelligent fire alarm and emergency voice evacuation system Ack (acknowledge) Button in response to new Alarms, Supervisory and/or Troubles shall silence the local panel piezo and change the Alarm, Supervisory and Trouble LED's from flashing to steady-ON.

2. Silence Button

a. Activation of the intelligent fire alarm and emergency voice evacuation system Silence Button shall cause all programmed notification appliances and relays to return to their normal state. The selection of notification appliance circuits and relays that are silence able by the Silence Button shall be field programmable within the confines of all applicable standards. The intelligent fire alarm and emergency voice evacuation system software shall include silence inhibit, auto-silence timers, and an option to silence various other system functions, as deemed necessary.

3. Resound Button

a. Activation of the intelligent fire alarm and emergency voice evacuation system Resound Button shall cause all silenced notification appliances and relays to return to their programmed alarm functionality.

4. Reset Button

a. Activation of the intelligent fire alarm and emergency voice evacuation system Reset Button shall cause all latched initiating devices, appliances or zones, as well as all associated output devices and circuits, to return to their normal state.

5. Drill (Evacuate) Button

a. Pressing and holding the intelligent fire alarm and emergency voice evacuation system Drill Button shall activate all programmed notification appliance circuits. The Drill function shall latch until the intelligent fire alarm and emergency voice evacuation system Silence Button is activated.

6. The intelligent fire alarm and system shall include a programmable password access menu that shall allow users with proper password to:

a. View various system status events including; off-normal conditions, input/output device status, history logs, network diagnostics, and panel input/output circuit voltages and currents

b. Disable I/O groups of devices, zones, or individual device points.

c. Enable I/O groups of devices, zones, or individual device points.

d. Test zones, devices, display, system piezo, and RS-232 peripheral device.

e. Print I/O status, troubles, disabled devices, and history logs.

f. Program the intelligent fire alarm and emergency voice evacuation system..

P. Printer

1. A printer may be connected internally or externally to the fire alarm panel(s) to provide hard-copy printout of all changes in status of the system and shall time-stamp such printouts with the current-time-of-day and date. The printer shall be capable of receiving Standard, Standard +, and Diagnostic printing. Standard printing shall print all status changes from normal, and any acknowledge, silence, reset or drill button activations. Standard + shall print all Standard printing plus print automatic restoral's of non-latching devices. Diagnostic printing shall include all Standard and Standard + printing, in addition to any event change of an analog/addressable device even when not confirmed by the system. The printer shall communicate with the intelligent fire alarm and emergency voice evacuation system using the Base Card interface complying with Electrical Industries Association standard EIA-2320.

Q. Field Programming

1. The intelligent fire alarm and emergency voice evacuation system and its respective devices (i.e. intelligent smoke detectors and modules) shall be programmable, configurable and expandable in the field without the need for special tools or electronic equipment and shall not require field replacement of any electronic circuitry.

2. All programming may be accomplished through the intelligent fire alarm and emergency voice evacuation system user interface graphical display, as well through the use of a standard PC with configuration software.

3. All field-defined programs shall be stored in non-volatile memory and shall not be lost if AC mains and/or battery is lost.

4. The programming function shall be enabled with a password that may be defined specifically for the system when it is installed. Four levels of password protection shall be provided in addition to a key-lock on the cabinet. Level One (Untrained User) allows restricted access to basic system controls. Level Two (Authorized User) allows full access and control of system functions such as zone disable or manual on/off commands. Level Three (Programming) allows programming of all system features and functions. Level Four (Firmware Upgrade) is the highest level, which permits flash programming of system firmware. The intelligent fire alarm system shall have a minimum of 12 passwords which shall be freely programmable for Level access capabilities and Level functionalities.

5. Programming the intelligent fire alarm and emergency voice evacuation system shall not interfere with normal operation and fire protection. If an alarm condition is detected during programming operation, the system shall perform all fire protection functions as programmed.

6. A special program check function shall be provided to detect common operation errors and non-related input to output relationships.

7. An Auto-Learn function shall be provided to quickly program initial functions of the system within several seconds. During this operation, intelligent devices connected to the Signaling Line Circuits shall be automatically installed without labor intensive operator key commands and the using of additional electronic equipment to program each individual device. Auto-Learn programming shall be capable of being imported to a standard PC using field configuration program. In addition, if future devices are added or deleted from the system the Auto-Learn feature shall be capable of reading these changes without deleting the existing system programming. Systems that delete existing programs during auto-Learn shall not be considered equal.

8. For flexibility, an optional off-line programming tool, with upload/download capabilities, shall be available.

R. Specific System Operations

1. Alarm Verification: The intelligent fire alarm and emergency voice evacuation system shall have the ability to alarm verify any individual or all intelligent smoke detectors.

2. Disable: Any zone, programmed group, or individual device connected to the system shall be capable of being Enabled or Disabled through the intelligent fire alarm and emergency voice evacuation system user interface graphical display, through switches allocated for such functionality and/or through input devices programmed for enable/disable functionality.

3. Point Read: The intelligent fire alarm and emergency voice evacuation system shall be able to display or print the following point status diagnostic functions; Device Status, Device Type, Device Label, Device Zone Assignments and Program Parameters.

4. System Status Reports: Upon command from an operator with proper password access system status report shall be generated and printed.

5. Device Sensitivity Reports: Upon command from the operator, intelligent detector sensitivity can be read and printed.

6. System History Event Log: The intelligent fire alarm and emergency voice evacuation system shall contain a History Event Log capable of storing up to 1,500 system events, of the 1,500 events the log shall dedicate 500 of these events to fire alarm status to avoid critical alarm events being overwritten by non-critical status events.

7. Automatic Detector Maintenance Alert: The intelligent smoke detectors shall automatically interrogate themselves and analyze for proper detector responses over a period of time. If any intelligent smoke detector on an SLC loop reports a reading that is below or above normal limits, then the intelligent fire alarm and emergency voice evacuation system will enter a maintenance Warning mode, and the particular detector will be annunciated on the system graphical display, and printed on the optional printer if so provided. This feature shall in no way inhibit the receipt of alarm conditions in the system, nor shall it require any special hardware, special tools or computer expertise to perform.

8. Individual intelligent detector maintenance information shall remain with the intelligent detector, even if the intelligent detector is removed from its present location and placed in another location in the facility.

9. Software Zones: The intelligent fire alarm and emergency voice evacuation system shall be capable of being programmed for up to 200 software zones (networked systems 1000 software zones). All intelligent devices may be field programmed, to be grouped into these zones for control activation and annunciation purposes. Systems that utilize limited programmability, such as general alarm operation, are unacceptable.

S. Intelligent System Maintenance

1. Input/output circuit voltages/currents are critical diagnostic tools during installation and maintenance of any fire alarm system. For this reason, the system shall include an integral real-time intelligent multi-meter (voltage/current) with the capability of monitoring NAC circuits, batteries, charger, grounds, auxiliary supply voltages, and SLC circuits (out/in for Style 8/7).

2. In addition to the intelligent multi-meter, the system shall include status monitoring of main system switch inputs and relay outputs. This status monitoring shall be viewable at any time by a qualified service technician for diagnostic and troubleshooting assistance.

3. Remote diagnostic tools shall be available for use over a dedicated phone line or IP internet. Remote diagnostic display shall be PC based, to avoid confusion the remote diagnostic display shall look and operate identical to the diagnostic display available when standing in front of the system.

2.4 SYSTEM COMPONENTS:

A. Programmable Electronic Sounders

1. Electronic sounders shall operate on 24 VDC nominal.

2. Electronic sounders shall be field programmable without the use of special tools. To provide slow whoop, continuous, or interrupted tones (Temporal Pattern) with an output sound level of at least 90 dBA measured at 10 feet from the device.

3. Shall be flush or surface mounted as shown on plans.

B. Strobe Lights:

1. Shall operate on 24 VDC nominal.

2. Shall meet the requirements of the ADA (Americans with Disabilities Act) as well as UL Standard 1971.

C. Audible/Visual Combination Devices:

1. Shall meet the applicable requirements of Section A listed above for audibility.

2. Shall meet the requirements of Section B listed above for visibility.

D. Intelligent Manual Pull Station

1. Intelligent manual pull stations shall be provided to connect to the intelligent fire alarm and emergency voice evacuation system Signaling Line Circuit (SLC) Loops. Up to 126 intelligent manual pull stations may be connected to each SLC loop. Intelligent Manual Pull Stations shall be either of the single or dual action type, as shown on the plans.

2. The intelligent manual pull station shall send data to the intelligent fire alarm system representing the state of the manual switch associated with the pull station. The intelligent manual pull stations shall use a key operated test-reset lock, and shall be designed so that after actual emergency operation, they cannot be restored to normal use except by the use of the key. The intelligent manual pull station key shall be the same key as that required for the intelligent fire alarm system access. All operated stations shall provide the option of a red LED which illuminates steady to indicate a positive, visual indication of operation.

3. Intelligent manual pull stations shall be constructed of die-cast metal with clearly visible operating instructions provided on the cover. The word FIRE shall appear on the front of the stations in raised letters.

4. Intelligent manual pull stations shall be suitable for surface mounting, or semi-mounting as shown on the plans, and shall be installed in accordance with ADA and local codes.

5. The intelligent manual pull station shall provide address-setting means using DIP switches with binary addresses already stamped on the PCB to eliminate installation confusion.

6. Intelligent manual pull stations shall have an alarm interrupt feature built in, allowing the manual pull station to alarm in less than 3 seconds.

E. Intelligent Photoelectric Detectors

1. Intelligent photoelectric detectors shall be analog addressable and shall connect with two wires to the intelligent fire alarm Signaling Line Circuit. Up to 126 intelligent detectors may connect to each SLC.

2. The intelligent detectors shall use the photoelectric (light-scattering) principal to measure smoke density.

3. The intelligent detectors shall be low profile ceiling-mount and shall include a twist-lock base.

4. The intelligent detectors shall be self contained and not dependent upon the intelligent fire alarm system for alarm monitoring, sensitivity adjustment, environmental compensation or self testing. Analog/addressable detectors that require fire alarm system intervention for detector status monitoring and control shall not be considered equal.

5. The intelligent photoelectric detectors shall be addressed via the intelligent detector base, by means of an "xpert" card. The xpert card shall remain with the detector base when the detector head is removed, thereby maintaining detector address location. Detectors that are addressed in the detector

head rather than in the detector base shall not be considered equal due to the errors that can occur during detector removal and cleaning.

6. Xpert card programming shall be a simple pip removal based on address number. Addressing schemes utilizing binary jumpers, dip switches or decimal switches shall not be considered equal due to the errors that can occur during system installation and maintenance.

7. The intelligent photoelectric detectors shall store within its individual microprocessor an identifying code that the intelligent fire alarm and emergency voice evacuations system shall use to identify the type of intelligent detector.

8. The intelligent photoelectric detectors shall provide two LEDs for alarm and power indication. The LEDs shall be field programmable on a device basis, to flash under normal condition, indicating that the detector is operational and in regular communication with the intelligent fire alarm system and emergency voice evacuation system. When in alarm the LEDs on the intelligent detectors shall illuminate steady. Control of these LEDs during alarm shall be controlled by the individual intelligent detector. Systems requiring fire alarm system commands to illuminate detector alarm LEDs shall not be considered equal. An individual sub-addressable output shall be available from each intelligent photoelectric detector. This output shall be field programmable to act as a remote alarm LED for the individual associated intelligent detector or as a remote LED for any indication required of the intelligent fire alarm and emergency voice evacuation system.

F. Intelligent Multi Sensor Detectors (Combination Photoelectric and Thermal Technology)

1. Intelligent multi sensor detectors shall be analog addressable and shall connect with two wires to the intelligent fire alarm and emergency voice evacuation system Signaling Line Circuit, Up to 126 intelligent multi sensor detectors may connect to each SLC.

2. The intelligent multi sensor detectors shall use a combination of photoelectric (light-scattering) principle and thermal sensing technologies to monitor two types of fire signatures (smoke and heat). This type of detector technology offers increased immunity to potential false alarms from standard detectors and shall be utilized in all areas indicated on the plans. Detectors that do not offer these features and functionalities shall not be considered equal.

3. The intelligent multi sensor detectors shall be ceiling-mount and shall include a twist-lock base.

4. It shall be possible to have only the thermal sensor portion of the multi sensor active during specific times, or events when the standard operating functions of the multi sensor may create potential false alarms.

5. The intelligent multi sensor detectors shall be self contained and not dependent upon the intelligent fire alarm system for alarm monitoring, sensibility adjustment, environmental compensation or self testing. Analog/addressable detectors that require fire alarm system intervention for detection status monitoring and control shall not be considered equal.

6. The intelligent multi sensor detectors shall be addressed via the intelligent detector base, by means of an "xpert" card. The Xpert card shall remain with the detector base when the detector head is removed, thereby maintaining detector address location. Detectors that are addressed in the detector

head rather than in the detector base shall not be considered equal due to the errors that can occur during detector removal and cleaning.

7. Xpert card programming shall be a simple pip removal based on address number. Addressing schemes utilizing binary jumpers, dip switches or decimal switches shall not be considered equal due to the errors that can occur during system installation and maintenance.

8. The intelligent multi sensor detectors shall store within its individual microprocessor an identifying code that the intelligent fire alarm system shall use to identify the type of intelligent detector.

9. The intelligent multisensory detectors shall provide two LEDs for alarm and power indication. The LEDs shall be field programmable on a device basis, to flash under notmal condition, indicating that the detector is operational and in regular communication with the intelligent fire alarm and emergency voice evacuation system. When in alarm the LEDs on the intelligent multi sensor detectors shall illuminate steady. Control of these LEDs during alarm shall be controlled by the individual intelligent detector, systems requiring fire alarm system commands to illuminate detector alarm LEDs shall not be considered equal. An individual sub-addressable output shall be available from each intelligent multi sensor detector, this output shall be field programmable to act as a remote alarm LED for the individual associated intelligent detector or as a remote LED for any indication required of the intelligent fire alarm and emergency voice evacuation system.

G. Intelligent Ionization Smoke Detectors

1. Intelligent ion smoke detectors shall be analog addressable and shall connect with two wires to the intelligent fire alarm and emergency voice evacuation system Signaling Line Circuit. Up to 126 intelligent ion detectors may connect to each SLC.

2. The intelligent ion detectors shall use the dual-chamber ionization principal to measure products of combustion.

3. The intelligent ion smoke detectors shall be low profile ceiling-mount and shall include a twiet-lock base.

4. The intelligent ion smoke detectors shall be self contained and not dependent upon the intelligent fire alarm system for alarm monitoring, sensitivity adjustment, environmental compensation or self testing. Analog/addressable detectors that require fire alarm system intervention for detector status monitoring and control shall not be considered equal.

5. The intelligent ion detectors shall be addressed via the intelligent detector base, by means of an "xpert" card. The Xpert card shall remain with the detector base when the detector head is removed, thereby maintaining detector address location. Detectors that are addressed in the detector head rather than in the detector base shall not be considered equal due to the errors that can occur during detector removal and cleaning.

6. Xpert card programming shall be a simple pip removal based on address number. Addressing schemes utilizing binary jumpers, dip switches or decimal switches shall be considered equal due to the errors that can occur during system installation and maintenance.

7. The intelligent ion smoke detectors shall store within its individual microprocessor an identifying code that the intelligent fire alarm system shall use to identify the type of intelligent detector.

8. The intelligent ion smoke detectors shall provide two LEDs for alarm and power indication. The LEDs shall be field programmable on a device basis, to flash under normal condition, indicating that the detector is operational and in regular communication with the intelligent fire alarm system. When in alarm the LEDs on the intelligent ion detectors shall illuminate steady. Control of these LEDs during alarm shall be controlled by the individual intelligent detector, systems requiring fire alarm system commands to illuminate detector alarm LEDs shall not be considered equal. An individual sub-addressable output shall be available from each intelligent ion smoke sensor detector, this output shall be field programmable to act as a remote alarm LED for the individual associated intelligent detector or as a remote LED for any indication required of the system.

H. Intelligent Heat Detectors

1. Intelligent heat detectors shall be analog addressable and shall connect with two wires to the intelligent fire alarm and emergency voice evacuation system Signaling Line Circuit. Up to 126 intelligent heat detectors may connect to each SLC loop.

2. The intelligent heat detectors shall use a single thermistor to sense the air temperature at the intelligent heat detector. Intelligent heat detectors shall be capable of being set for fixed temperature and/or rate-of-rise.

3. The intelligent heat detectors shall be low profile ceiling-mount and shall include a twist-lock base.

4. The intelligent heat detectors shall be self contained and not dependent upon the intelligent fire alarm and emergency voice evacuation system for alarm monitoring or self testing. Analog/addressable detectors that require fire alarm system intervention for detector status monitoring and control shall not be considered equal.

5. The intelligent heat detectors shall be addressed via the intelligent detector base, by means of an "xpert" card. The Xpert card shall remain with the detector base when the detector head is removed, thereby maintaining detector address location. Detectors that are addressed in the detector head rather than in the detector base shall not be considered equal due to the errors that can occur during detector removal and cleaning.

6. Xpert card programming shall be a simple pip removal based on address number. Addressing schemes utilizing binary jumpers, dip switchers or decimal switches shall not be considered equaldue to the errors that can occur during system installation and maintenance.

7. The intelligent heat detectors shall store within its individual microprocessor an identifying code that the intelligent fire alarm and emergency voice evacuation system shall use to identify the type of intelligent detector.

8. The intelligent heat detectors shall provide two LEDs for alarm and power indication. The LEDs shall be field programmable on a device basis, to flash under normal condition, indicating that the detector is operational and in regular communication with the intelligent fire alarm and emergency voice evacuation system. When in alarm the LEDs on the intelligent heat detectors shall illuminate steady. Control of these LEDs during alarm shall be controlled by the individual intelligent detector, systems requiring fire alarm system commands to illuminate detector alarm LEDs shall not be considered

equal. An individual sub-addressable output shall be available from each intelligent heat detector, this output shall be field programmable to act as a remote alarm LED for the individual associated intelligent detector or as a remote LED for any indication required of the system.

I. Standard and Optional Intelligent Detector Bases

1. The intelligent detectors shall be addressed via the intelligent detector bases, by means of an "xpert" card. The Xpert card shall remain with the detector base when individual detector heads are removed, thereby maintaining detector address locations. Systems that employ addressing of detector heads rather than detector bases shall not be considered equal due to the errors that can occur during detector removal and cleaning.

2. Intelligent detector base Xpert card programming shall be a simple pip removal, based on address number. Addressing schemes utilizing binary jumpers, dip switches or decimal switches shall not be considered equal due to the errors that can occur during system installation and maintenance.

3. Each intelligent detector base shall incorporate a remote LED output. The remote LED output shall be capable of tracking the status of its associated detector or shall be freely programmable to activate on any status change within the system.

4. Intelligent Relay Bases shall be available and indicated on the plans where required. The relay portion of the detector base shall be freely programmable to activate on an individual point, zone, or group. The relay base shall be loop-powered and not require separate power operation of the relay.

5. Intelligent Isolator Bases shall be available for automatic isolation of wire-to-wire short circuits. It shall be possible to provide intelligent isolator bases at each intelligent detector installed within the installation. The number of intelligent isolation bases installed shall have no impact on the number of intelligent devices that can be connected to an SLC loop.

J. Intelligent Loop-Powered Linear Beam Detectors

1. Intelligent loop-powered linear beam detectors shall be analog addressable. The transmitter power of the intelligent loop-powered linear beam detector shall be obtained directly from the Signaling Line Circuit, requiring no additional power from the intelligent fire alarm and emergency voice evacuation system. The receiver portion of the intelligent loop-powered linear beam detector shall connect to the Signaling Line Circuit via an intelligent interface module, which contains all of the electronics for linear beam detector monitoring and control while providing Signaling Line Circuit communications. Linear beam detectors that require resettable power from the intelligent fire alarm and emergency voice evacuation system for operation shall not be considered equal due to the costs associated with installation and maintenance requirements.

2. The intelligent interface module shall be capable of being installed in an accessible area, remote from the actual transmitter and receiver.

3. The intelligent loop-powered linear beam detector shall be capable of providing maximum total area coverage of16,000 square feet.

4. Each intelligent loop-powered linear beam detector shall be capable of being programmed for four levels of detector obscuration, based on installation requirements. Levels shall be 25%, 35%, 50% and 65%, where 25% is the most sensitive and 65% is the least sensitive.

5. The intelligent loop-powered linear beam detectors shall incorporate a drift compensation feature, which will allow the detector to compensate for light decrease over time due to lens contamination from environmental dirt and dust. This feature shall be provided to minimize the risk of unwanted alarms. If drift compensation limits have been reached, a detector dirty indication shall be indicated at the intelligent fire alarm system. Linear beam detectors that do not offer drift compensation shall not be considered equal.

6. A highly bright flashing LED shall be available on the receiver for commissioning/alignment. Once alignment is correct, the LED will cease to flash, indicating correct alignment. Linear beam detectors that require complicated equipment and procedures to align the transmitter and receiver shall not be considered equal.

K. Intelligent Switch Monitors

1. Intelligent switch monitors shall be provided to connect one supervised IDC (zone) of conventional alarm initiating devices (any N.O. dry contact device) to the intelligent fire alarm and emergency voice evacuation system Signaling Line Circuit (SLC).

2. The intelligent switch monitor shall mount on a standard 4" square or 2-gang electrical box.

3. The IDC (zone) shall be capable of being wired for Style D (Class A) or Style B (Class B) operation. The intelligent switch monitor shall provide address-setting means using DIP switches with binary addresses already stamped on the PCB to eliminate installation confusion and shall also store an internal identifying code that the intelligent fire alarm and emergency voice evacuation system shall use to identify the type of device. An LED shall be provided on the individual device that shall be field programmable to flash under normal condition, indicating that the device is operational and in regular communication with the intelligent fire alarm and emergency voice evacuation system. When active the LED on the individual device shall illuminate steady.

4. Two (2) versions of the intelligent switch monitor shall be available, as indicated on the drawings; one with a priority interrupt and one without the interrupt. The priority interrupt version shall be utilized in monitoring critical devices requiring the fastest response possible to the intelligent fire alarm and emergency voice evacuation system.

5. For difficult to reach areas, the intelligent switch monitor shall be available in a miniature package. These versions shall also offer Style D (Class A) or Style B (Class B) operation, and incorporate an active status LED.

L. Intelligent Dual Switch Monitor

1. Intelligent dual switch monitors shall be provided to connect two supervised IDCs (zones) of conventional alarm initiating devices (any N.O. dry contact device) to the intelligent fire alarm and emergency voice evacuation system Signaling Line Circuit (SLC).

2. The intelligent dual switch monitor shall mount on a standard 4" square or 2-gang electrical box.

3. The IDC (zone) shall be wired for Style D (Class A) or Style B (Class B) operation. The intelligent dual switch monitor module shall provide address-setting means using DIP switches with binary addresses already stamped on the PCB to eliminate installation confusion and shall also store an internal identifying code that the intelligent fire alarm and emergency voice evacuation system shall use to identify the type of device. Two LEDs shall be provided, one for each IDC, which shall be field programmable to flash under normal condition, indicating that the devices are operational and in regular communication with the intelligent fire alarm and emergency voice evacuation system. When an IDC is active its associated LED shall illuminate steady.

4. The intelligent dual switch monitor shall include a priority interrupt feature allowing for the monitoring of critical devices, and providing the fastest response possible to the intelligent fire alarm and emergency voice evacuation system.

M. Intelligent NAC Module

1. Intelligent NAC modules shall be provided to supervise and control the operation of a single Notification Appliance Circuit (NAC) of compatible, 24 VDC powered polarized audio/visual appliances or speakers.

2. The intelligent NAC module shall mount on a standard 4" square or 2-gang electrical box.

3. The intelligent NAC module shall be wired for Class B (Style Y) or Class A (Style Z) operation. Each intelligent NAC module output shall be rated for 24 VDC @ 1 Amp or 25/70 Vrms @ 500 mA.

4. Audio/visual power shall be provided by a separate supervised regulated DC Listed power supply either from the main intelligent fire alarm and emergency voice evacuation system of from a supervised, UL listed remote power supply.

5. The intelligent NAC module shall provide address-setting means using DIP switches with binary addresses already stamped on the PCB to eliminate installation confusion and shall also store an internal identifying code that the intelligent fire alarm and emergency voice evacuation system shall use to identify the type of device. An LED shall be provided on the individual device that shall be field programmable to flash under normal condition, indicating that the device is operational and in regular communication with the intelligent fire alarm and emergency voice evacuation system. When acticve the LED on the individual device shall illuminate steady.

N. Isolators

1. Isolators shall be provided to automatically isolate wire-to-wire short circuits on an SLC loop. The isolator shall limit the number of intelligent modules that may be rendered inoperative by a short circuit fault.

2. If a wire-to-wire short occurs, the isolator shall automatically open the SLC circuit. When the short circuit condition is corrected, the isolator shall automatically reconnect the isolated section of the SLC loop.

3. The isolators shall not require any address setting, and operation shall be automatic. It shall not be necessary to replace or reset an isolator after operation.

4. The isolators shall provide a single LED that shall illuminate steady to indicate that a short circuit condition has been detected and isolated.

O. Remote Graphical LCD Annunciators

1. The remote graphical LCD annunciator shall communicate with the intelligent fire alarm and emergency voice evacuation system via a true peer-to-peer network. The annunciator shall include a 24064 backlit graphical LCD display. Two versions of the remote graphical LCD annunciator shall be available; one with system control capabilities and one without controls. The control annunciator shall provide all the same controls that are available on the intelligent fire alarm and emergency voice evacuation system. A local piezo sounder shall also be included on each remote graphical LCD annunciator.

2. The remote graphical LCD annunciator shall be a graphical LCD (liquid crystal display) display providing 240 x 64 characters. It shall provide 12 LEDs (light emitting diodes), consisting of Power, Alarm, Supervisory, System Trouble, Pre-Alarm, Test, Disable, and five field programmable LEDs based on installation requirements.

3. The remote graphical LCD annunciator shall include a 12-button keypad and 5-button arrow/checkmark for the control, programming, and diagnostic capabilities. Entry of numeric, alphanumeric and various other character sets shall be available from these buttons. Up to twelve programmable passwords shall be available with various password access capabilities programmable based on installation needs to prevent unauthorized system access.4. The remote graphical LCD annunciator with control capabilities shall include the following user operator buttons; RESET, ACK (Acknowledge), SILENCE, RESOUND, and DRILL.

5. The remote graphical LCD annunciator shall include a programmable switch input which can be utilized as an access enable switch or for connecting a project specific switch (keyed or non-keyed) for a control/by-pass function.

6. The remote graphical LCD annunciator shall be capable of being programmed for limited or full system access and control. In addition, it shall be possible to program the remote graphical LCD for sector base (alarm only, trouble only, etc.) information reporting and control. Remote annunciators that cannot be programmed for these functionalities shall not be considered equal.

7. The remote graphic LCD annunciator shall include an RS-232 and USB port for device programming and remote printer connection. The printer shall be capable of receiving Standard, Standard +, and Diagnostic printing. Standard printing shall print all status changes from normal, and any acknowledge, silence, reset or drill button activations. Standard + shall print all Standard printing plus print automatic restoral's of non-latching devices. Diagnostic printing shall include all Standard and Standard + printing, in additions to any event change of an intelligent device even when not confirmed by the intelligent fire alarm and emergency voice evacuation system.

8. The remote graphical LCD annunciator shall include a contrast adjustment feature to allow optimum viewing/display.

2.5 BATTERIES:

A. Shall be 12 volt.

B. Batteries (two required) shall have sufficient capacity to power the intelligent fire alarm and emergency voice evacuation system for not less than twenty-four hours plus 5 minutes of alarm upon a normal AC power failure.

C. The batteries are to be completely maintenance free. No liquids are required. Fluid level checks refilling, spills and leakage shall not be required.

PART 3.0 - EXECUTION

3.1 INSTALLATION:

A. Installation shall be in accordance with the NEC, NFPA 72, local and state codes, as shown on the drawings, and as recommended by the equipment manufacturer.

B. All conduit, junction boxes, conduit supports and hangers shall be concealed in finished areas and may be exposed in unfinished areas. Intelligent smoke detectors shall not be installed prior to the system programming and test period. If construction is ongoing during this period, measures shall be taken to protect intelligent smoke detectors from contamination and physical damage.

C. All fire detection and alarm system devices, control panels and remote annunciators shall be flush mounted when located in finished areas and may be surface mounted when located in unfinished areas.

3.2 TEST:

Provide the service of a competent, factory-trained engineer or technician authorized by the manufacturer of the fire alarm equipment to technically supervise and participate during all of the adjustments and tests for the system.

1. Before energizing the cables and wires, check for correct connections and test for short circuits, ground faults, continuity, and insulation.

2. Close each sprinkler system flow valve and verify proper supervisory alarm at the intelligent fire alarm system. (if applicable)

3. Verify activation of all flow switches (if applicable)

4. Open initiating device circuits and verify that the trouble signal actuates.

5. Open and short signaling line circuits and verify that the trouble signal actuates.

6. Open and short Notification Appliance Circuits and verify that trouble signal actuates.

7. Ground all circuits and verify response of trouble signals.

8. Check presence and audibility of tone at all alarm notification devices.

9. Check installation, supervision, and operation of all intelligent smoke detectors using the intelligent fire alarm system Walk Test.

10. Each of the alarm conditions that the system is required to detect should be introduced on the system. Verify the proper receipt and the proper processing of the signal at the intelligent fire alarm system and the correct activation of the control outputs.

11. When the system is equipped with optional features, the manufacturer's manual should be consulted to determine the proper testing procedures.

3.3 FINAL INSPECTION:

At the final inspection, a manufacturer-trained representative shall demonstrate that the intelligent fire alarm and emergency voice evacuation system functions properly in every respect.

3.4 INSTRUCTION:

Provide instruction as required for operating the intelligent fire alarm and emergency voice evacuation system. "Hands-on" demonstrations of the operation of all system components and the entire system including program changes and functions shall be provided. The contractor and/or the systems manufacturer's representatives shall provide a typewritten "Sequence of Operation" to the Owner if required.

Edinburg Consolidated Independent School District

CSP: 21-54 Fire Alarm & Emergency Voice Evacuation System for South M.S.

PROPOSAL FORM

ITEM #	DESCRIPTION	QTY	UNIT	TOTAL PRICE
1	Materials for the Fire Alarm & Emergency Voice Evacuation System	1	EACH	
2	Labor for complete project	1	EACH	
			TOTAL	

You MUST submit a detailed list of materials and labor hours with this proposal.

You must send 3 proposals: 1 Original & 2 copies PLAINLY MARKED