

Request for Proposals
2015–2016 E-Rate Wireless Project
Alcorn School District
Form 470 Application # 664570001301104

Notice to Bidders

Notice is hereby given to interested bidders that the Alcorn School District will receive written, sealed bids until the hour of at 1 o'clock p.m. on Monday, March 2, 2015 at the Alcorn School District Central office at 31 County Road 401, Corinth, MS. Bids will be opened at 3 o'clock p.m. on Wednesday, March 4, 2015 in the Board Room of the Alcorn School District Administration Office.

2015–2016 E-Rate Wireless Project

The Alcorn School District wishes to create a wireless infrastructure that would allow all schools to have wireless devices connected to the network simultaneously in all areas as indicated on the attached map of the school buildings. Alcorn School District is asking for multiple options to the wireless project, a managed wireless solution and a solution that can be managed by the Alcorn School District's Technology Department.

The capacity of the wireless infrastructure should allow staff and students to conduct moderate to heavy Web access for video streaming, such as all students being able to view a 2-4 minute web based video in HD once every hour. In addition to the video streaming other moderate to heavy Web access such as online testing, online gaming, and web based courses must also be supported. (Vendor may assume that the Alcorn School District has sufficient Internet bandwidth to supply the requirements above. The primary objective is to ensure that bottlenecks do not occur at the wireless access point under the specified conditions).

All equipment proposed must be compatible and/or equivalent to all exiting network equipment in use in the Alcorn School District network infrastructure. Equipment must be able to integrate fully (standard protocols, switch management, security specifications, and other related network features) with exiting Alcorn School District network infrastructure.

Additional capacity requirements for this project include the ability of the wireless infrastructure to support up to 1500+ simultaneously connected devices on each of the six campuses in classrooms, auditoriums, libraries, gyms, cafeterias etc. Plus all campus locations must be supported simultaneously throughout the entire school day. Devices must be able to connect and roam across the campuses without dropping signal or needing to refresh DHCP.

Additional Wireless Requirements:

- Minimum RSSI of -63dBm or better
- Minimum SNR of 25dBm
- No Co-Channel Interference between Aps
- Optimized transmit power
- PoE Devices
- Plenum rated
- Intrusion detection functionality
- Auto-channel & Auto-power
- Band steering, load balancing, and airtime fairness
- Specs on power consumption
- Testing & Analysis of performance under max load
- Spectrum analysis
- Gigabit Edge Switching functionality
- Layer 7 functionality
- Cloud-based and controller-less architecture
- Wave 2
- MU-MIMO

5GHz Network as Primary

- Operate in HT or VHT modes
- Force legacy 11a clients to 2.4GHz band
- Enable Dual-CTS if nearby 11a network exist
- Configure channel width according to necessity in high density areas
- Enforced minimum connection rates

2.4GHz Network as Secondary

- Operate in HT-Mixed mode
- Use 20MHz Channels only
- Ability to disable PCO
- Ability to disable 802.11b rates
- Enforced minimum connection rates

Security specs

- Domain computers – full access
- Personal devices – internet only
- Multiple SSIDs
- Multiple User Roles

- Guest Network
- Ability to disable ad-hoc connections
- GPO configuration capable
- Standard network security protocols functionality

The three focus points for this Wi-Fi project shall be:

- Performance
- Stability
- Reliability

See below for a complete list of Alcorn School District locations:

1. Alcorn Administration Office (Education Center)
2. Alcorn Alternative School (same campus as Career & Technical Center)
3. Alcorn Career & Technical Center
4. Alcorn Central Elementary School
5. Alcorn Central Middle School
6. Alcorn Central High School
7. Biggersville Elementary School
8. Biggersville High School
9. Glendale Elementary School
10. Kossuth Elementary School
11. Kossuth Middle School
12. Kossuth High School
13. Rienzi Elementary School

Proposals shall include a realistic assessment of actual access points, cabling, distribution switches, and any other necessary equipment that is needed for the full implementation of a wireless solution. The proposal must include a HEAT Map or similar site survey of proposed access point placement and coverage area as well as cabling and other equipment necessary to support the wireless needs outlined above. Technical specifications of equipment should be provided with the proposal along with a Full Scope of Work, and Timeline describing this “turn-key” project.

The proposal must guarantee performance sufficient to fulfill the needs of the Alcorn School District as requested within this RFP. If all capacity requirements are not met after implementation of the vendor's proposal, and if additional equipment, cabling or labor is needed, the vendor will bear all costs necessary to satisfy the requirements of this RFP. There should be no additional or reoccurring costs to the Alcorn School District for further functionality.

It is the vendor's responsibility to ensure that the equipment proposed meets the performance specifications of the manufacturer and the previously stated requirements. The Alcorn School District will not release the vendor from the performance guarantee required above, because of

malfunctions or defects in equipment due to manufacturer error or flaws in the equipment.

Because of the diversity of possible solutions, the Alcorn School District is asking for detailed proposals in response to the request for a full wireless solution. Exact specifications and technical details must be submitted, however, proposals can be as innovative as possible.

All prospective vendors must participate in a *mandatory* Site Visit/Walkthrough that is scheduled on two days due to the number of schools in the Alcorn School District. The dates for the Site Visit/Walkthrough are Monday, February 16, & Tuesday, February 17, 2015. In order to participate in this Site Visit/Walkthrough please notify Alcorn School District via an email to Rose Seaborn at rseaborn@alcornschools.org by Friday, February 13, 2015. Proposals from vendors who do not participate in the scheduled Site Visit/Walkthrough WILL NOT be considered. Do not fax or email proposals.

CLARIFICATION

If after the completion of this project, during normal operation of the network, the district discovers that the wireless network will not allow for the capacity required in this RFP as stated in paragraph three in page one of this document, then the vendor will be required to do whatever is necessary to meet the specifications with no additional cost to the Alcorn School District.

General

Provide internal connections as specified herein, in order to support a fully functioning wireless solution.

The specifications herein are provided to convey the intent of the systems and upgrades and do not indicate every cable or component necessary for the complete system that the proposing vendor shall provide.

Prices quoted shall be all-inclusive (including all applicable taxes, shipping cost, installation of equipment, setup and configuration of equipment, training, technical support and trash removal) and represent complete installation and integration with the existing network where necessary. Prices quoted in the vendor's response will remain in effect for a period of eighteen (18) months from the time of the contract signing.

Omissions in the proposal of any provision herein described shall not be construed as to relieve the vendor of any responsibility or obligation to the complete and satisfactory delivery, operation and support of any services.

Should the vendor have questions or find discrepancies in, or omissions from this RFP, or shall be in doubt to its meaning, the vendor shall at once notify Alcorn School District. All questions should be addressed to Rose Seaborn as outlined below. The preferred mode of contact is via email.

Rose Seaborn
Technology Director
Alcorn School District
rseaborn@alcornschools.org
662-286-8833

Questions must be submitted to the email address rseaborn@alcornschools.org. This is an unfiltered account. If a response is not received within 24 hours, it is the responsibility of the respondent to call Rose Seaborn at 662-286-8833 (office) or 662-284-6733 (cell) to confirm receipt of the message.

BID SUBMISSION INSTRUCTIONS

Bids will be opened at 3 p.m., Wednesday, March 4, 2015, in the Board room of the Alcorn School District Administration Office at 31 CR 401, Corinth, MS. Bids must be submitted in a sealed envelope clearly marked as follows:

“2015-2016 E-Rate Wireless Project”

Envelopes not so marked will remain sealed.

The Alcorn School District Board of Education reserves the right to reject any and/or all bids and waive any and/or all informalities.

The first page showing in the bid submission packet must be Attachment A so the total bid price may be easily seen for the bid tabulation. Failure to comply may result in bid disqualification.

Bids must include the following:

Attachment A Completed and Signed by the bidder.

(THIS PAGE MUST BE THE FIRST PAGE IN THE BID SUBMISSION DOCUMENTATION)

Attachment B Completed.

“2015-2016 E-Rate Wireless Project” should be clearly marked on the face of the envelope as well as the opening date of [date].

It is the sole responsibility of the respondents to ensure their responses arrive in a timely manner. Late arrivals will be rejected. The Alcorn School District is not responsible for delays of any commercial carrier or delays incurred by the respondents. Oral, telephone, or telegraphic bids

will not be considered. Signatures on the proposals shall be in longhand and executed by a principal duly authorized by the vendor to make a contract.

Schedule of Events

Event	Dates
Release of RFP to Vendors	January 20, 2015
Participation in Site Visit/Walkthrough Email Notification	February 13, 2015
Scheduled Mandatory Site Visit/Walkthrough	February 16 & 17, 2015
Deadline for Submission of Proposals	March 2, 2015 @ 1 PM
Opening of Proposals (Alcorn School District Office)	March 4, 2015 @ 3 PM

Certificate of Responsibility

- A. Each Bidder submitting a bid in excess of \$50,000 on public projects must show on his bid and on the face of the envelope containing the bid, his Certificate of Responsibility Number, as required by Section 31-3-5 and 31-3-21 (latest edition) Mississippi Code of 1972. If the bid does not exceed the amount of \$50,000 on public projects, a notation so stating must appear on the face of the envelope.

When multiple contractors submit a joint venture bid in excess of \$50,000.00 on public projects, a Joint Venture Certificate of Responsibility Number is required on the bid and face of the envelope. If the Joint Venture has not Joint Venture Certificate of Responsibility number, then each member of the Joint Venture must indicate their individual Certificate of Responsibility numbers on the bid and on the face of the envelope.

- B. Each subcontractor who's Subcontract exceeds \$50,000 on public projects shall have a Certificate of Responsibility Number, as required by Section 31-3-15 and 31-3-21 (latest version), Mississippi Code.
- C. No bid will be opened, considered or accepted unless the above information is given as specified. Sufficient evidence that said Certificate of Responsibility has been issued and is in effect at the time of receiving bids must be submitted when required by the Owner. Likewise, it shall be the responsibility of the Prime Contractor to require a Certificate of Responsibility Number from any subcontractor where applicable.

Evaluation Methodology

The Alcorn School District Board of Education will award a contract based on the vendor submission that best meets the needs of the school system with regard to the current Technology Plan, future growth, RFP specifications, and not necessarily the lowest price even though price will be the priority factor. The following factors will be considered when evaluating responses:

- Price of goods and services
- Preference will be given for prior positive experience with the Vendor
- Preference will be given to Mississippi-based vendors
- Preference will be given for vendors proposing the use of AP devices in which the AP manufacture offers a limited lifetime warranty on the access points with replacement within 10 days.
- Preference will be given for vendors whose product requires no recurring costs for future functionality.
- Preference will be given for a centrally managed solution.
- Other preferences which are deemed appropriate.

Financing

This project will be funded from E-Rate Funds. This project is subject to funding availability and contingent upon E-Rate funding.

Vendor Qualifications

The Alcorn School District may make such investigations as deemed necessary to determine the ability of the bidder or subcontractors or suppliers to perform the work, and the bidder shall furnish to the Alcorn School District all such information and data for this purpose as the Alcorn School District may request. The Alcorn School District reserves the right to reject any bid if the evidence submitted by or investigation of such Bidder fails to satisfy the Alcorn School District that such bidder is properly qualified to carry out the obligations of the contract and/or to complete the work contemplated therein within the time required.

The bidder is specifically advised that any person, firm or other party to whom it proposes to award a subcontract or purchase order under this contract must be acceptable to the Alcorn School District

The successful vendor (contractor) must have or be certified with the following:

- Be able to supply all products and services.
- Be an authorized dealer in the State of Mississippi for all products.
- Have current liability insurance and workers compensation insurance (please enclose a copy of each with your bid).
- Provide the documentation of the vendor's wireless, switching and cabling certifications
- Participate in the mandatory site walkthrough that is scheduled on Thursday, February 19 & Friday, February 20, 2015. Any bid submitted by a vendor who does *not* complete the mandatory walkthrough will be returned unopened. There will be *no* exceptions.

Disqualification of Bidder

The Alcorn School District reserves the right to award to other than the lower bidder when, in the judgment of the district administration, it is in the best interest of the district do so. A Bidder may be disqualified for such reasons as:

- A. Bidder's failure to comply with requirements regarding Certificate of Responsibility.
- B. Bidder's failure to sign Bidder's Proposal Form or to otherwise properly complete the Proposal Form.
- C. Bidder's failure to attend and complete the mandatory site walkthrough.
- D. Bidder's failure to submit a HEAT Map or other similar site survey showing the proposed placement of wireless access points and coverage area.
- E. Bidder being in litigation with the Alcorn School District.
- F. Bidder having defaulted on a previous contract.
- G. Bidder having preformed unsatisfactorily on a previous contract, including but not limited to the Bidder's failure to fulfill the warranty obligations of a previous contract with the Alcorn School District.
- H. Bidder's failure to include documentation for required certifications and authorizations.

The above is not an inclusive list.

Objective:

Alcorn School District's objective is for vendors to propose a solution that will meet the criteria of allowing 1500+ Wi-Fi devices per indicated area (on attached maps) which will then allow students to conduct moderate to heavy Web access for research with moderate video streaming, such as all students being able to view a 2-4 minute streaming video in HD once every hour. Should the bidding propose a solution that does not meet the specifications listed below, the vendor must provide sufficient documentation that the District's objective will be met with their solution.

Equipment & Installation Specification

Cabling for Access Points:

All cable and cabling components including jacks and patch panels used in this proposal will be Category 6 rated.

The amount needed will be determined by the vendors proposed number of access points

- Bid must include cabling and all necessary components (patch cables, patch panels, jacks and mounts, crimp ends, etc.)
- Bid must include cost of labor and installation
- Cabling must be neatly run and connected to the wall via J-hooks in ceiling and may not lay directly on ceiling tiles.
- When cabling runs outside of the building it must be placed in EMT conduit and attached to walkways as instructed during the mandatory site walkthrough.

Wireless Infrastructure:

Wireless access points and applicable software, controllers, etc.

If a WLAN Controller is proposed

- Must support up to 100 access points and up to 2000 clients on compact controller
- Must support extensible licensing
- Must support capacity expansion (adding of additional access points over time)
- Must provide advanced RF and radio resource management
- Must support multicast video delivery across WLAN

- Must support guest access
- Must support hardware-based feature provisioning
- Must support minimal of 6 SSIDs

Access Points

- Must support 802.11ac at 2.4GHz and 5GHz
- Preference will be given if the manufacture offers a limited lifetime warranty (10 day AHR)
- Must use enterprise-class radios for maximum RF performance and coverage
- Must support rogue access point detection and denial of service attack protection
- Must support management frame protection
- Must support coverage for legacy 802.11b/g clients
- Must support client load-balancing across frequencies in mixed client environments
- Must support multicast video delivery across WLAN
- Must overcome outside interference (Bluetooth, microwaves, etc.)
- Must support radio resource monitoring, dynamic channel assignment, interference detection
- Bid must include cost of configuration and installation and 8 hours of training on configuration and maintenance for the Alcorn School District's IT Department.

Other Considerations

Vendor installed Patch Panels and Cabling

- Any cables run by the vendor will be terminated into a patch panel on one end and in a wall mounted full box jack on the other.
- If there is not room on the rack, the vendor will be required to install another, larger rack, placing all of the equipment currently in the small rack into the larger rack. The District will work with you on this.
- If current cables are used, the vendor will be allowed to use the same cable and patch panels regardless of the rating category.
- Vendor may NOT use any available open port on any switch currently in use in the district, unless existing network plans indicate that there is no future plan for that port. If there is insufficient room Vendor will have to provide another switch meeting the same specs as all Alcorn School District's current switches (PoE, etc.)

Current Equipment

Switches

1. The Alcorn School District network is made up of a variety of switches. Any switches added to this proposal MUST be PoE and be equivalent and compatible to the switches already in place.
2. Any VLAN configurations proposed in this project necessary to meet the requirements must be configured completely by the vendor using the existing switches. The Alcorn School District IT department is not capable of properly setting up VLANs on our [manufacturer] Switches; we use an MDE network engineer who can assist you.

Classroom Counts

[Alcorn Admin Office] has [0] Classrooms and [5] Other Areas
[Alcorn Alt School] has [1] Classrooms and [1] Other Areas
[Alcorn Career Center] has [20] Classrooms and [7] Other Areas
[Alcorn Central Elem] has [40] Classrooms and [4] Other Areas
[Alcorn Central Middle] has [43] Classrooms and [5] Other Areas
[Alcorn Central High] has [31] Classrooms and [5] Other Areas
[Biggersville Elem] has [14] Classrooms and [5] Other Areas
[Biggersville High] has [34] Classrooms and [8] Other Areas
[Glendale Elem] has [12] Classrooms and [6] Other Areas
[Kossuth Elem] has [58] Classrooms and [9] Other Areas
[Kossuth Middle] has [34] Classrooms and [3] Other Areas
[Kossuth High] has [25] Classrooms and [17] Other Areas
[Rienzi Elem] has [13] Classrooms and [4] Other Areas

(Floor plans are attached to this document, see Attachment C.)

Current Network Bandwidth and WAN Configuration

- Schools in the Alcorn School District are connected back to the district, except Rienzi Elementary School, via Metro E WAN provided by AT&T.
- School campuses that have multiple buildings are primarily connected via fiber. There are a few instances where the outlying buildings may be connected via copper or wireless bridge.

- Servers and centralized devices are located on site and at the Central Office. Each site has a several switch cabinets and a main demarc area, this will be discussed at the walkthrough meeting.
- Currently, the district has a 100 Mbps Internet connection, except Rienzi Elementary School that services the entire district. It connects at Central Office.
- Traffic from the Internet is firewalled, filtered and regulated by devices also located at the Central Office.

E-Rate

This proposal request is for services to be subsidized under the Universal Services E-Rate Program for Schools and Libraries. No purchase order will be issued, no installation will occur and no services will be provided until approval of the form 471 application that is issued as a result of the proposals being submitted in response to this request.

Right to Reject

The Alcorn School District reserves the right to accept or reject all proposals or sections thereof when the rejection is in the best interest of the school system. The Alcorn School District reserves the right to award without further discussion. Therefore, responses should be submitted initially with the most favorable terms the vendor proposes. The Alcorn School District reserves the right to reject the proposal of a vendor who has previously failed to perform properly or completed on time contracts and to reject the proposal of any vendor who in the opinion of the Alcorn School District Board, is not in a position to adequately perform the contract. The Alcorn School District Board reserves the right to reject any and all proposals any part or parts of a proposal, waive any technicalities/informalities, increase or reduce quantities, make modifications or specifications, and award any or the entire contract in a manner that is in the best interest of the Alcorn School District. Contracts will be awarded to the vendor submitting the proposal determined to be in the best interests of the Alcorn School District.

**ATTACHMENT A
INFORMATION FORM (Type or Print ONLY)**

NAME OF COMPANY	
ADDRESS OF HOME OFFICE	
CITY OF HOME OFFICE	
STATE OF HOME OFFICE	
COUNTY OF HOME OFFICE	
HOME OFFICE ZIP	
PHONE # OF HOME OFFICE	
Federal EIN	
DUNS Number	
E-Rate SPIN number	

CONTACT Name _____

CONTACT Phone Number _____

CONTACT Email Address _____

By signing below, the vendor acknowledges that the prices listed on this sheet are the prices being bid for this project and that the vendor understands that portions of this Project may be funded from E-Rate Funds. This project is subject to funding availability and contingent upon E-Rate funding.

PRINTED NAME _____ **TITLE** _____

SIGNED _____ **DATE** _____

ATTACHMENT A - continued

PRICING INFORMATION

(You may submit your standard quotation instead of this document if you wish)

DELIVERED TO

[31 CR 401, Corinth, MS 38834]

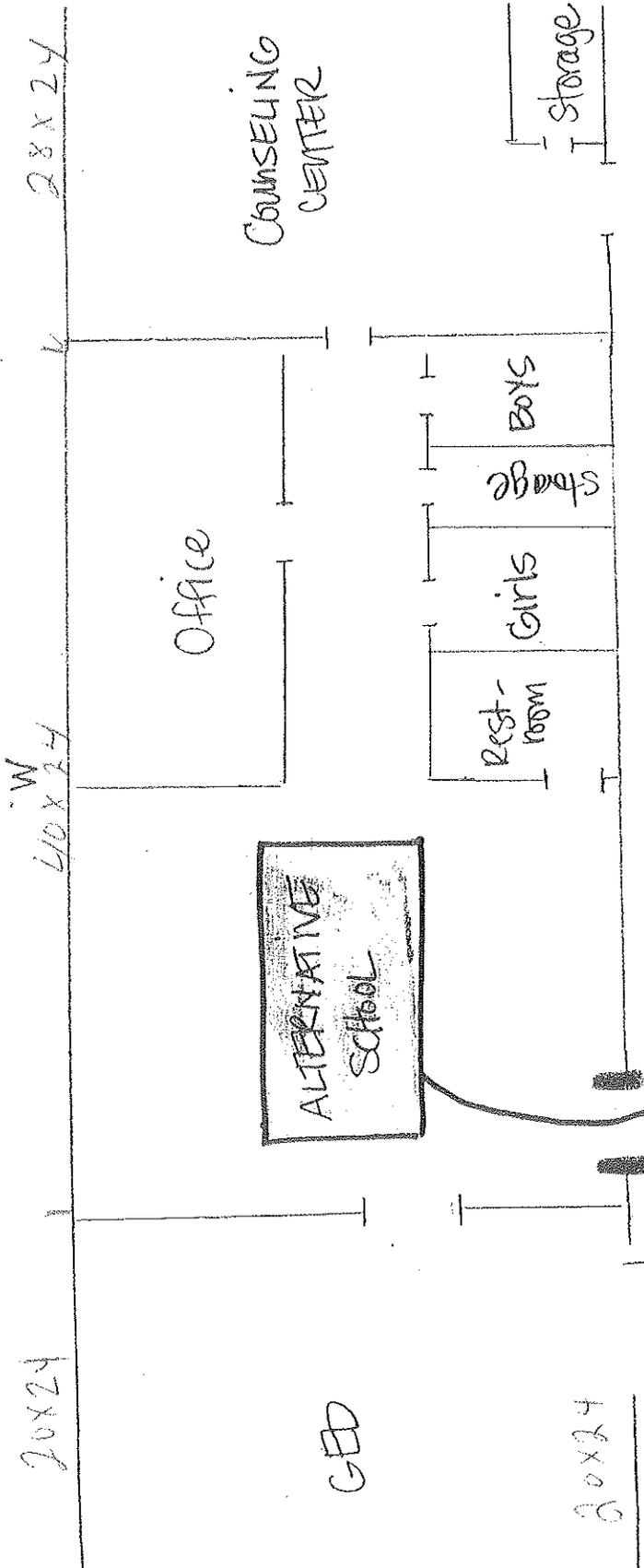
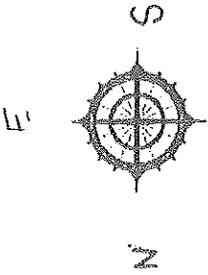
(Specific address to be determined prior to shipment)

Manufacturer Part Number	Description	QTY	Unit Price	Extended Price

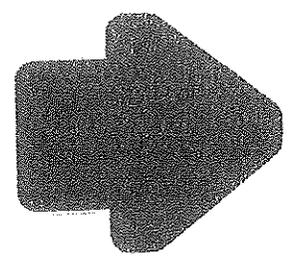
ATTACHMENT B
Vendor Required Documentation

- Specifications for the proposed hardware.
- Vendor shall provide a written summary of their proposal as well as HEAT Maps or similar site survey diagrams of all sites labeled with the location of the each access point being proposed and the path of the access points' cabling to each network closet. Vendor will verify if the district has enough available switch ports and/or patch panel ports in each closet for their proposed solution.
- Current liability insurance and workers compensation insurance.
- Documentation of the vendor's wireless, switching and cabling certifications.
- Three K-12 wireless references.
- Must include a detailed Scope of Work describing this "turn-key" project.

ATTACHMENT C
Floor Plans for schools next 13 pages
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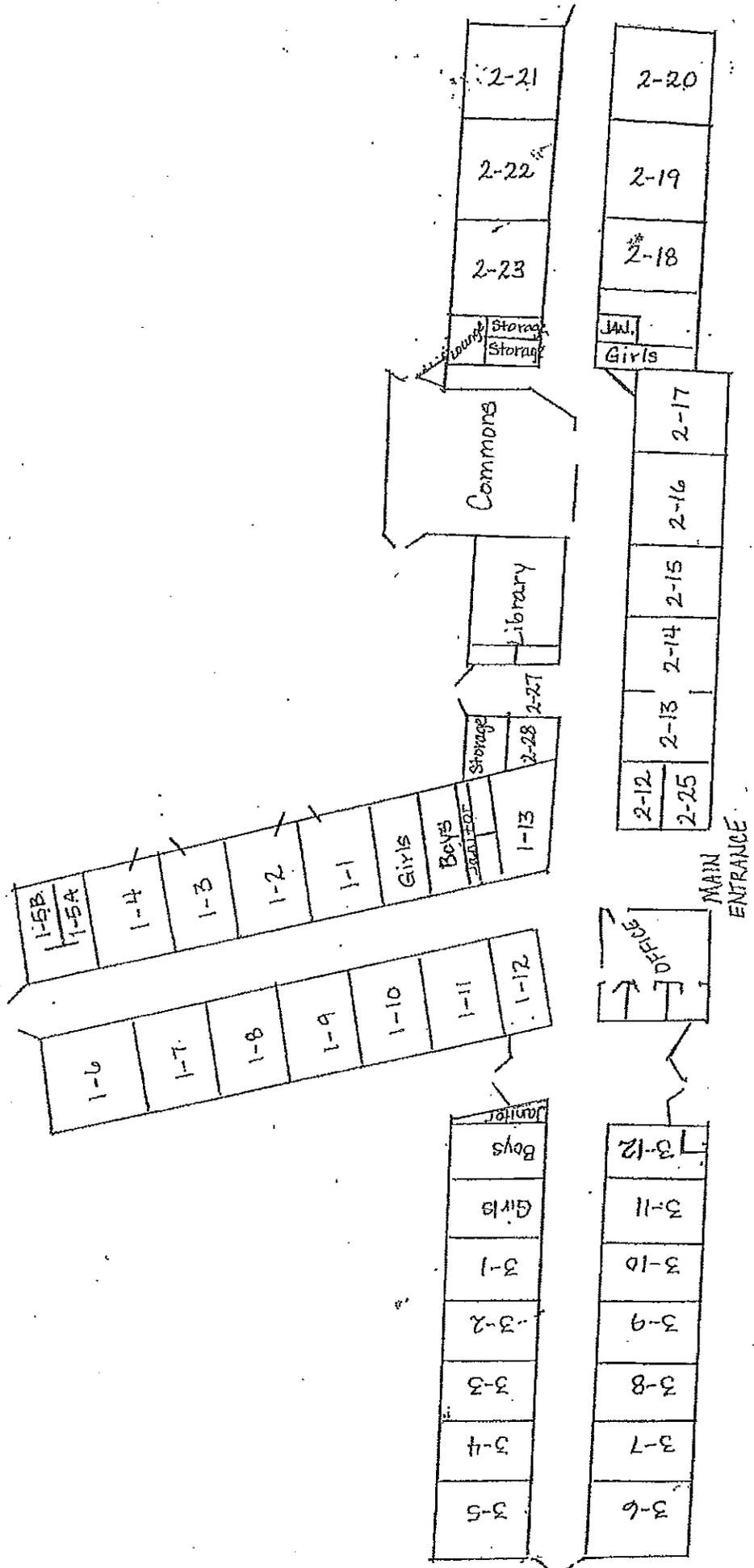
TO VO-TECH



ONE ATTACHED
OFFICE SPACE UNDER
MY ROOF. (Tamm-PAJ & Joyce DUND)

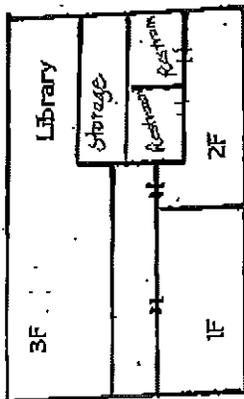
24428

All metal building,
12 feet

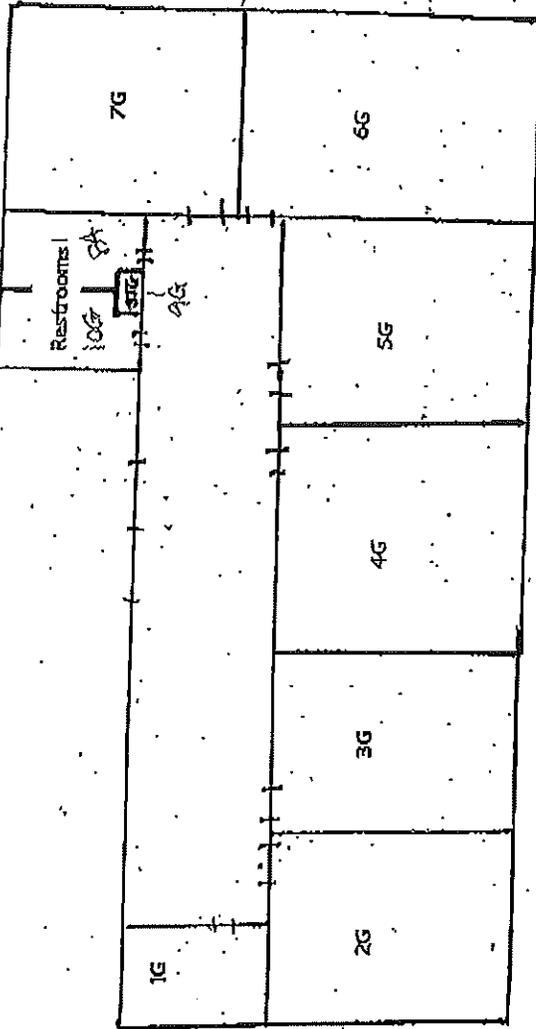
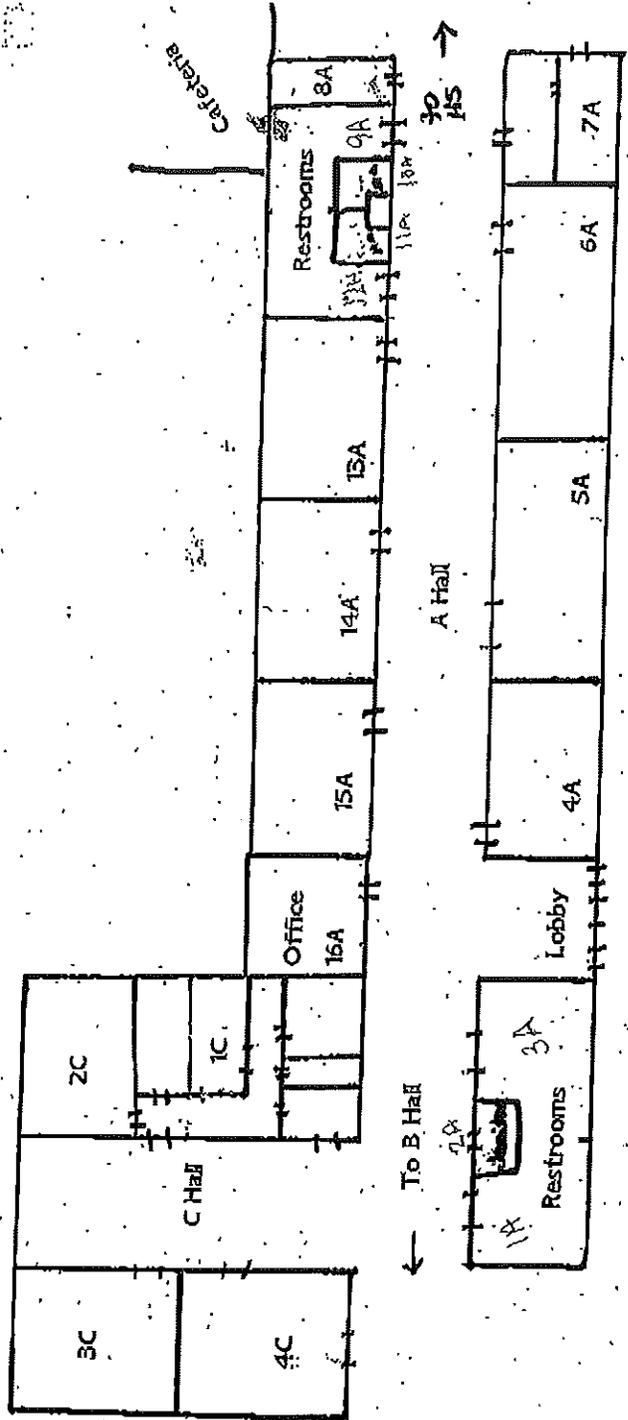


ALCORN CENTRAL ELEMENTARY FLOOR PLAN

ACMS 1 of 2

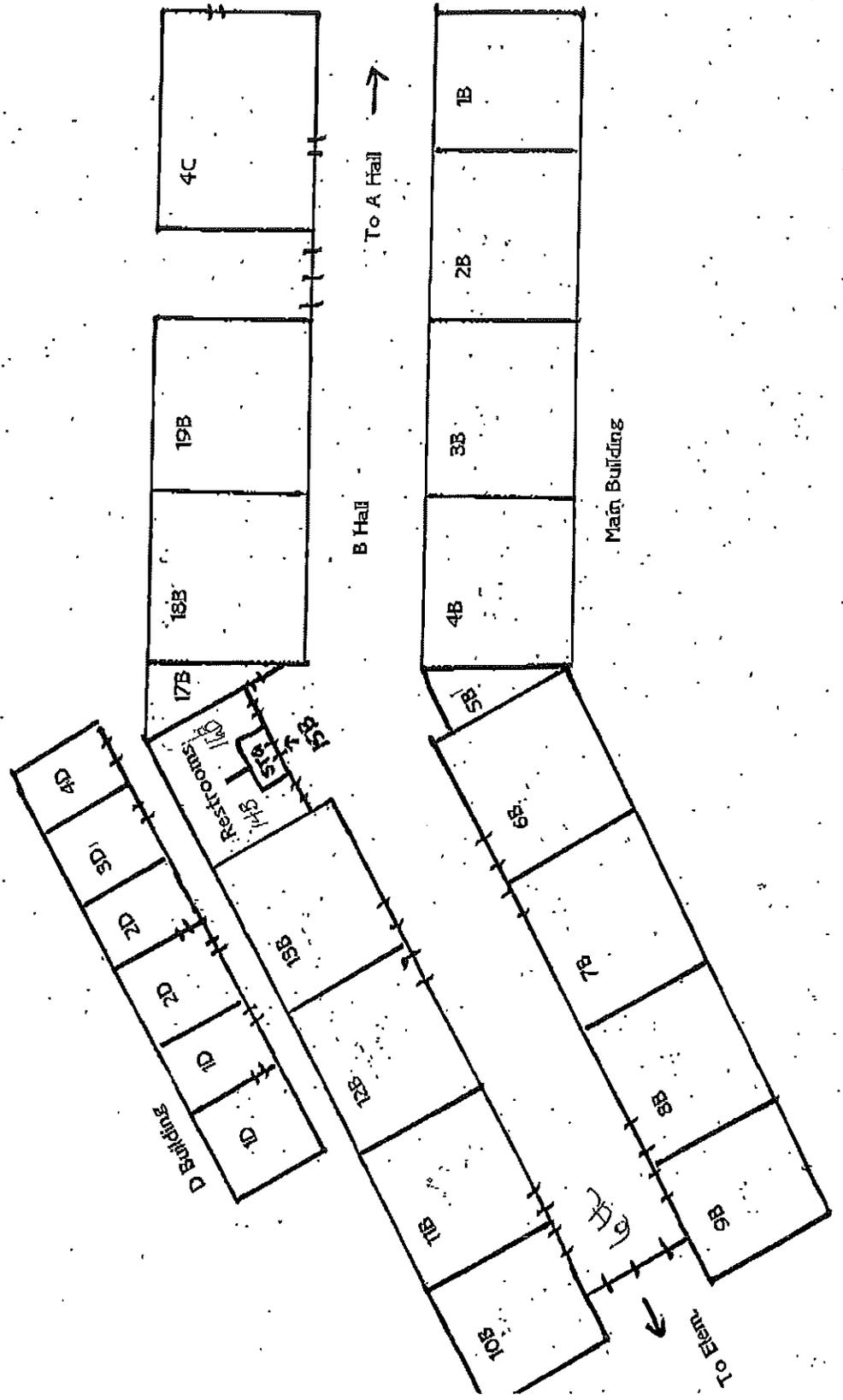


F Buildings

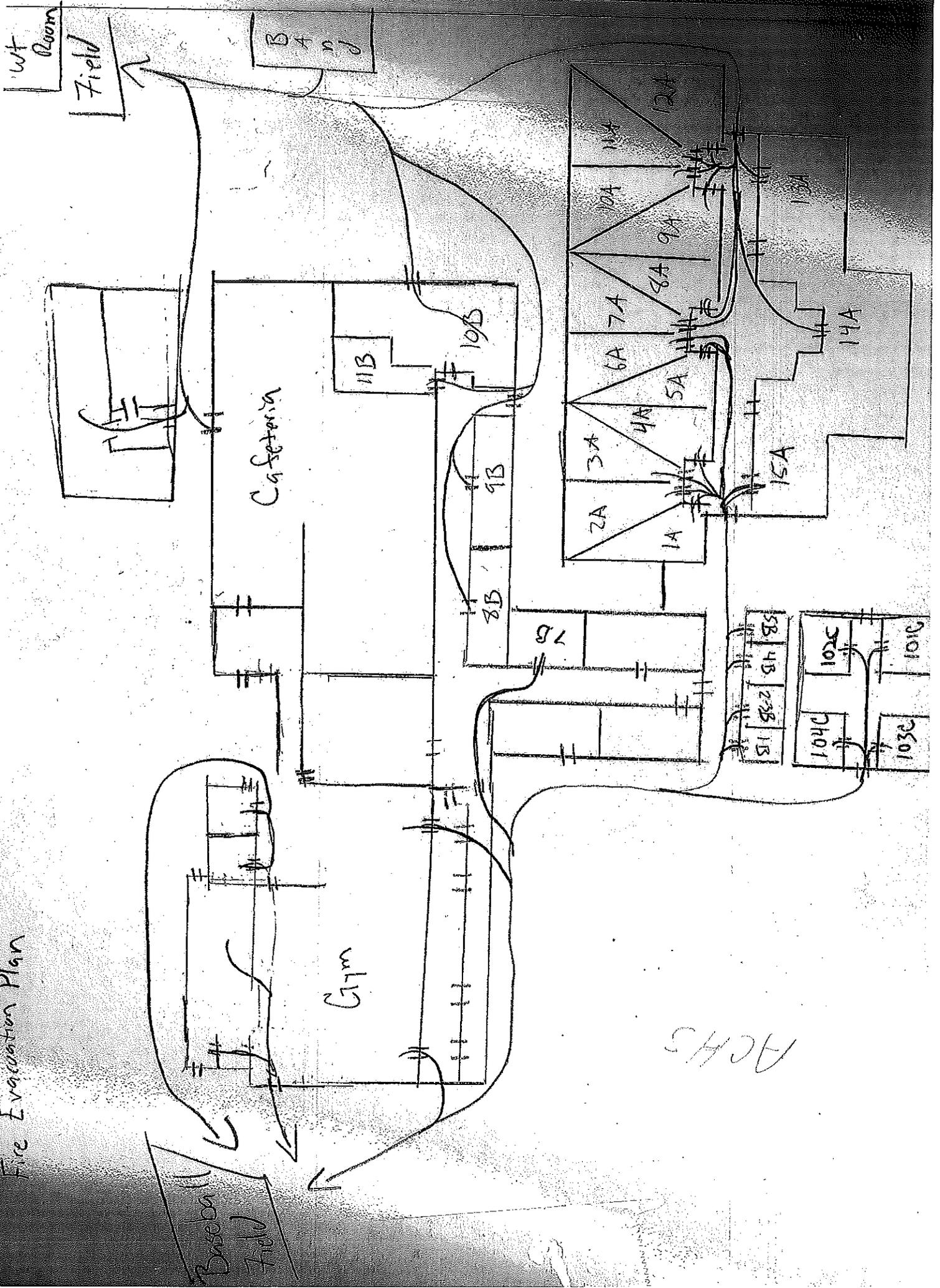


ACMS

2012

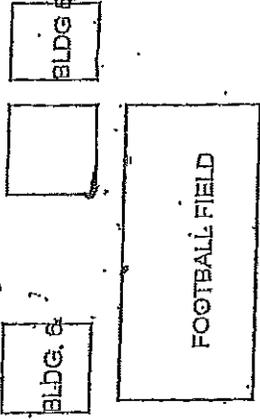
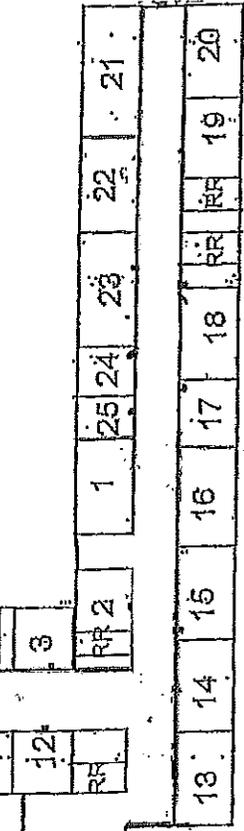
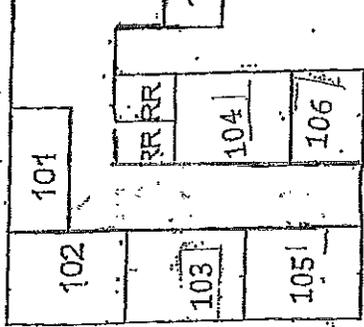
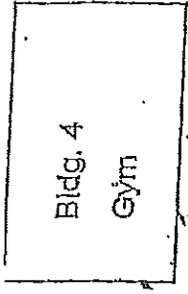
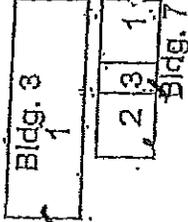
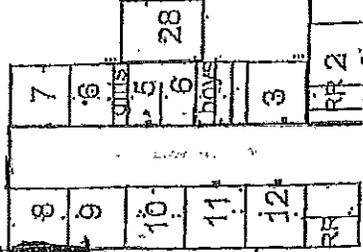


Fire Evacuation Plan



A.C.H.S.

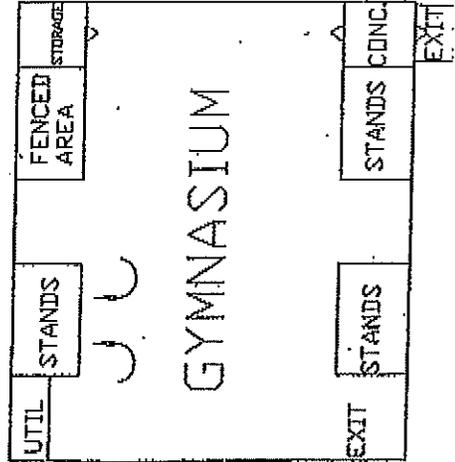
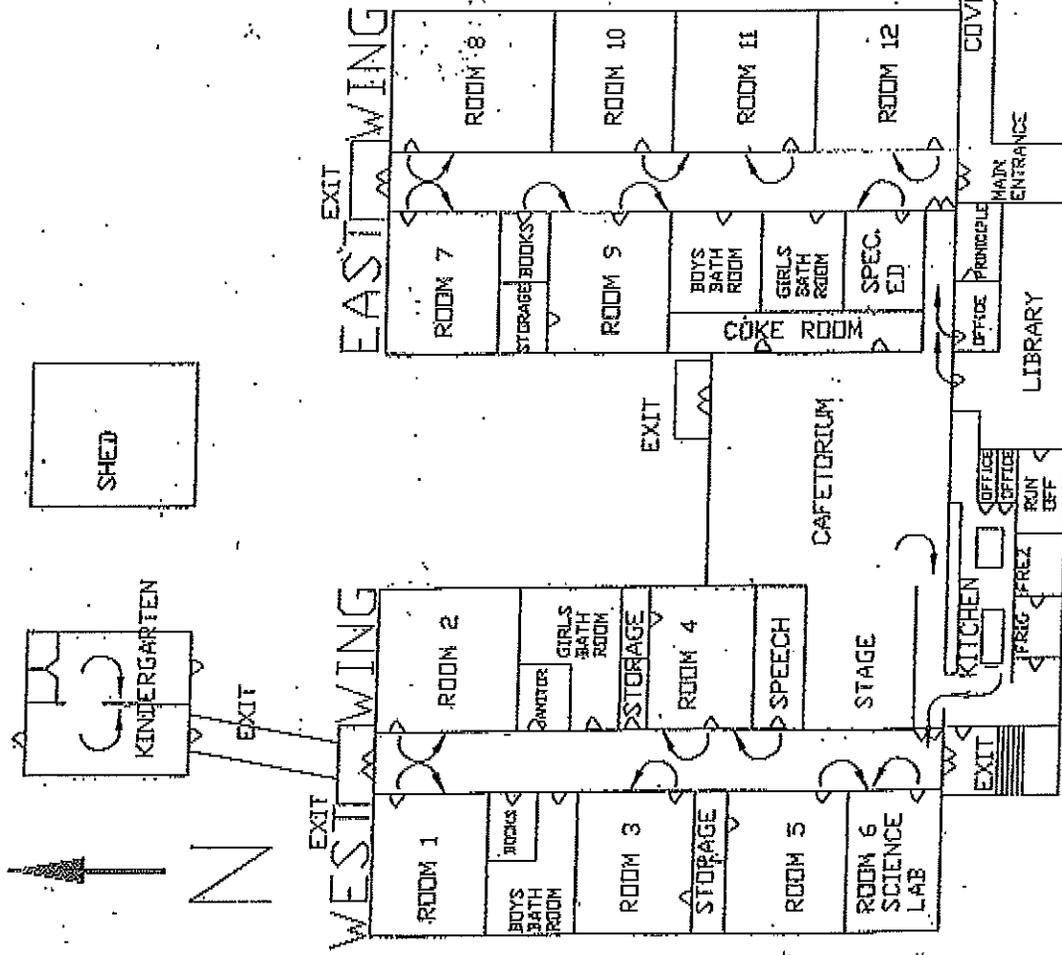
Biggersville High School
Tornado Drill



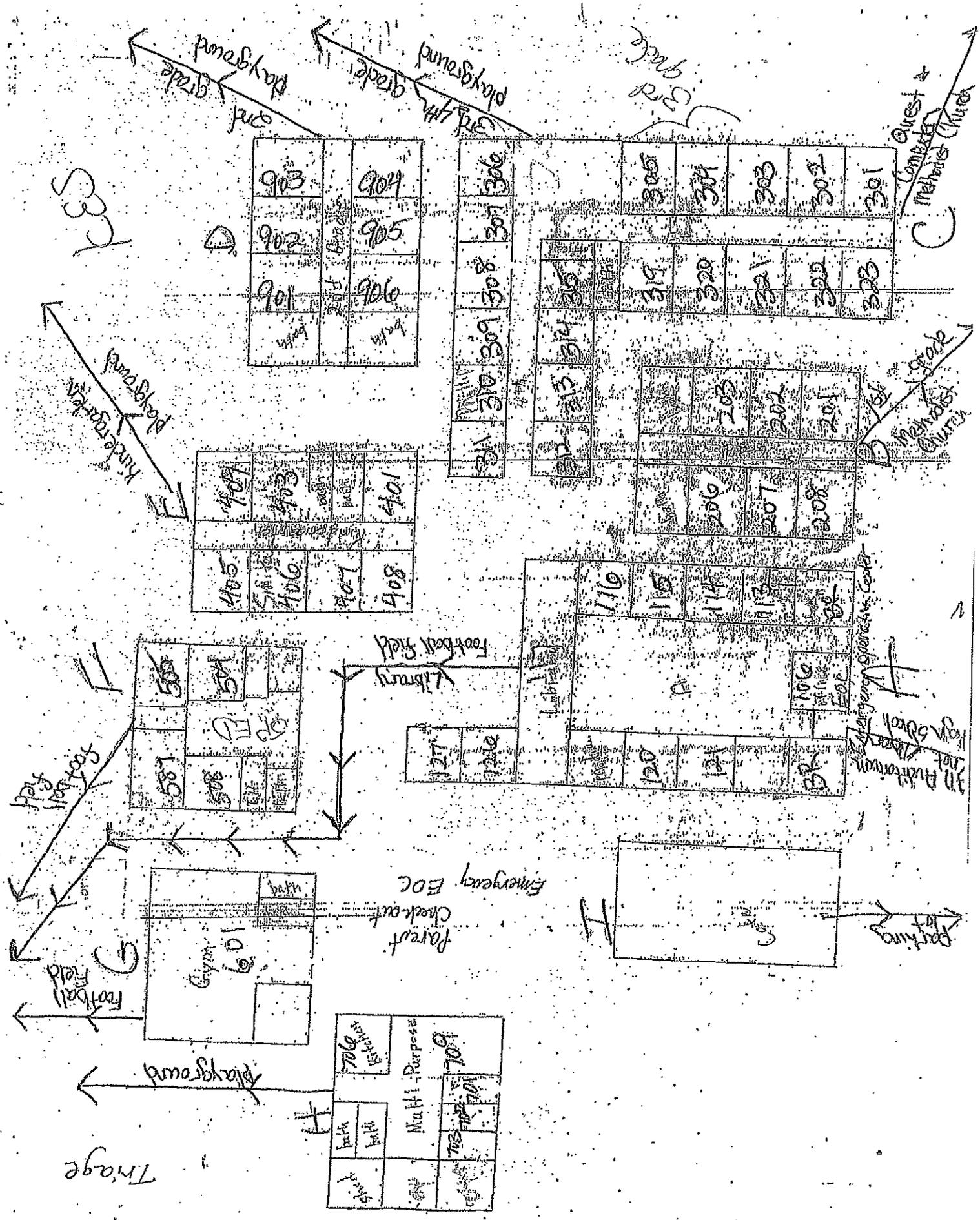
GLEN ELEMENTARY SCHOOL - TORNADO DRILL PLAN

SIGNAL:
MANY SHORT RINGS
OF THE BELL

- (1) STUDENTS WILL PROCEED TO THE HALLWAYS IN AN ORDERLY FASHION.
- (2) STUDENTS WILL ASSUME THE PROTECTIVE POSTURE. (CROUCH ON ELBOWS & KNEES WITH THEIR HANDS OVER THE BACK OF THEIR HEADS, CLOSE TO OTHER STUDENTS)
- (3) NO STUDENT SHOULD BE IN A DOORWAY.
- (4) TEACHER WILL BE THE LAST PERSON OUT OF THE ROOM WITH THEIR ROLL BOOK IN HAND. THE CLASSROOM DOOR SHOULD BE SHUT.
- (5) TEACHER OF ROOM 1 WILL CHECK BOYS' RESTROOM, WEST WING.
- (6) TEACHER OF ROOM 2 WILL CHECK GIRLS' RESTROOM, WEST WING.
- (7) TEACHER OF ROOM 9 WILL CHECK BOYS' RESTROOM, EAST WING.
- (8) TEACHER OF ROOM 11 WILL CHECK GIRLS' RESTROOM, EAST WING.
- (9) ALL PEOPLE IN THE GYM WILL ASSUME PROTECTIVE POSTURE NEAR THE NORTH BANNISTER OR BE EVACUATED TO THE SCHOOL BUILDING.
- (10) ALL PEOPLE IN THE CENTRAL SECTION WILL GO TO THE NEAREST HALLWAY.
- (11) KINDERGARTEN STUDENTS WILL ASSUME THE PROTECTIVE POSTURE NEAR THE CENTER WALL OF THEIR BUILDING.



PREPARED BY:
GLEN FIRE DEPARTMENT
DATE: 9-11-2000



Shower	Bath	Bath	Restroom
Multi-Purpose			
703	702	701	700

601	602
-----	-----

Library

Football Field

Emergency Operations Center
Nog Office EOC

3D Auditorium
1st Floor
High School

Emergency Operations Center

Methodist Church

Methodist Church

Methodist Church

Methodist Church

Methodist Church

Triage

Playground

Football Field

Soccer Field

507	508	509	510
511	512	513	514

405	406	407	408
409	410	411	412

901	902	903
904	905	906

301	302	303	304	305
306	307	308	309	310

311	312	313	314	315
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316	317	318	319	320	321	322	323
324	325	326	327	328	329	330	331

201	202	203	204	205
206	207	208	209	210

110	111	112	113	114	115	116
117	118	119	120	121	122	123

100	101	102	103	104	105
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Parking

Parent Check-out
Emergency EOC

1st-4th grade playground

5th-8th grade playground

3rd grade playground

K-3

Kindergarten playground

1st-4th grade playground

5th-8th grade playground

School's House

Herbert

Ag Shop

Stone Build.

DR ED

Weight Room

Field House

Gate

KMS IH

Main Gate

CON/DATH

South Gate

Gym

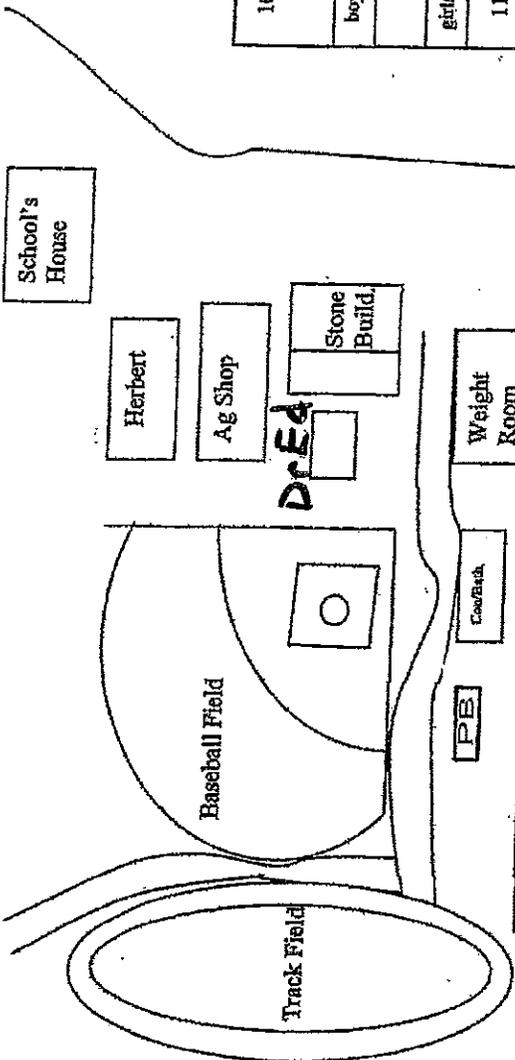
Road to SB Field

SB FH

Blue Bld.

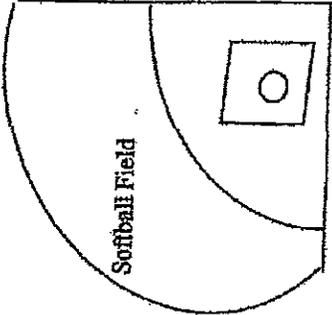
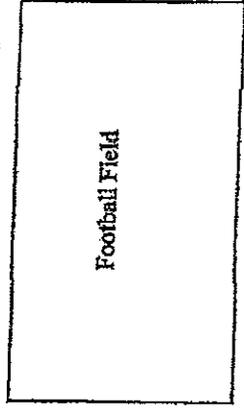
HWY 2

4-way stop



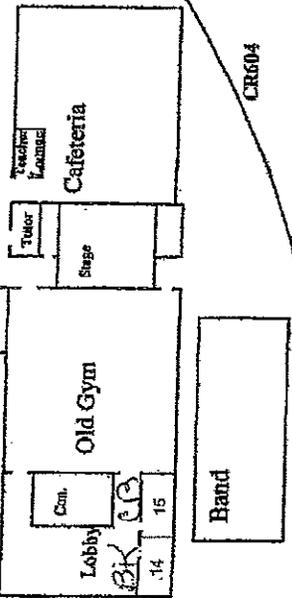
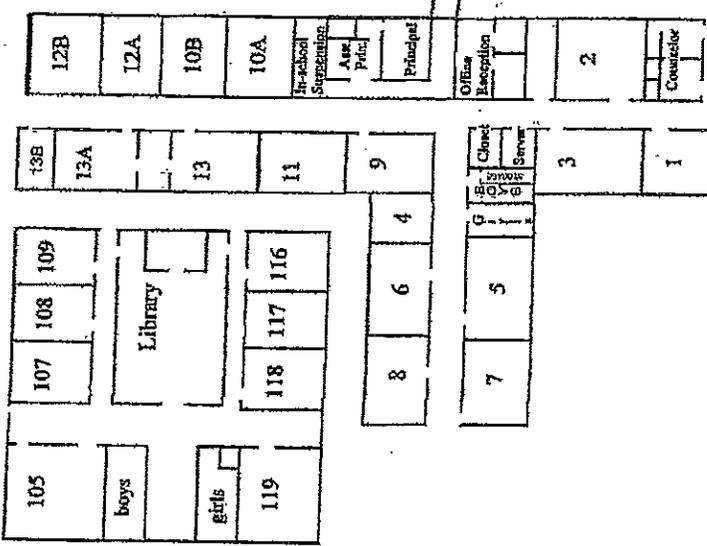
Coed Bath

PE



Kossmuth High School
 15 CR 604
 Corinth, MS 38834
 662-286-4697

Main Entrances



CR 604

CR 604

CR 512

3 way stop

HWY 2

