

Anchor Bay School District



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DIVISION 00 - BIDDING AND CONTRACT REQUIREMENTS

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END OF SECTION

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INVITATION TO BID

PART 1 - GENERAL

1.01 WORK INCLUDED: TECHNOLOGY SYSTEMS UPGRADES

- A. Anchor Bay School District (Owner) is seeking bids for new uninterruptable power supplies, low voltage cabling, phone system, clock/ PA components, and installation. Proposed systems shall be configured and installed to service Owner's needs, as described herein.

- B. Project: DISTRICT TECHNOLOGY SYSTEMS UPGRADE

- C. Owner: Anchor Bay School District
5201 County Line Road
Casco Township, Michigan 48064

- D. Designer: Communications by Design, Inc.

- E. Sites of Work:
 - 1. Administration Center / MacDonald Elementary School
5201 County Line Road
Casco Township, Michigan 48064

 - 2. Anchor Bay High School
6319 County Line Road
Fair Haven, Michigan 48023

 - 3. Aquatic Center
52401 Ashley
New Baltimore, Michigan 48047

 - 4. Ashley Elementary
52347 Ashley
New Baltimore, Michigan 48047

 - 5. Early Childhood Center
52680 Washington Street
New Baltimore, Michigan 48047

 - 6. Great Oaks Elementary
32900 24 Mile Road
Chesterfield Township, Michigan 48047

7. Lighthouse Elementary
51880 Washington Street
New Baltimore, Michigan 48047
8. Lottie Elementary
33700 Hooker
New Baltimore, Michigan 48047
9. Maconce Elementary
6033 Church Road
Ira, Michigan 48023
10. Maintenance / Transportation / Operations
51890 Washington
New Baltimore, Michigan 48047
11. Middle School North
52805 Ashley Street
New Baltimore, Michigan 48047
12. Middle School South
18650 Sugarbush
New Baltimore, Michigan 48047
13. Naldrett Elementary
47800 Sugarbush
New Baltimore, Michigan 48047

1.02 GENERAL DESCRIPTION OF PROJECT SEQUENCE

- A. Sequences and dates specified herein are for information only and indicate the plan and intent of the Owner. Actual dates shall be established based on final award of project.
- B. Sequence of operations shall be established by the Contractor within the guidelines established by the Owner as required to meet schedules.
- C. Schedule:
 1. Request for Bid Distributed: February 28, 2025
 2. Pre-Bid Meeting: Thursday, March 6, 2025 at 9:00am
 3. Question and Clarification Deadline: Friday, March 7, 2025 at 5:00pm
 4. Intent to bid forms due: Wednesday, March 12, 2025 at 5:00pm
 5. Public Bids Due: Friday, March 21, 2025 at 10:00am

1.03 TYPES OF BIDS

- A. Bids shall be submitted in total and with required detail for each item bid and as is required herein and include all portions of the work identified for the individual bid package as specified herein. Bids shall be made on unaltered bid forms as included herein. Bidder shall fill in all blank spaces and the bid shall be signed by a legal officer or agent authorized to bind the bidder to a contract.

1.04 PRE-BID CONFERENCE

- A. A pre-bid conference will be held. A discussion of the project and review of bid documents will be followed by a site review and an opportunity to ask questions. Attendance is highly encouraged for all contractors interested in bidding on any components or portions of this project. Attendance at the pre-bid conference will be a factor considered during evaluation of bids.
- B. Date: Thursday, March 6, 2025 at 9:00am
- C. Location: Administration Center / Mac Donald Elem School
5201 County Line Road
Casco Township, Michigan 48064
- D. Any drawings identified in the table of contents herein will be distributed and reviewed at this conference.
- E. Physical building inspections of sites of work will be provided for at this time.

1.05 TIME AND PLACE OF BID RECEPTION

- A. Physically sealed bids for the base bid work will be received at the district office and read aloud at a public opening. Bids arriving after the appointed time as determined by the Owner shall be returned unopened.
- B. Bid Receipt Deadline: Friday, March 21, 2025 at 10:00am
- C. Bid Opening Location: Administration Center / Mac Donald Elem School
5201 County Line Road
Casco Township, Michigan 48064
- D. Faxed or electronically delivered bids will not be accepted.

1.06 EXAMINATION AND PROCUREMENT OF DOCUMENTS

- A. Specifications and any relevant Drawings may be obtained from the Technology Designer. Contractors may obtain copies by documented request to Communications by Design, Attn: Rebecca Szilagy. Requests may be made by:

1. Writing – 4101 Sparks Drive Grand Rapids, Michigan 49546
2. Email – rszilagy@cbdconsulting.com

1.07 BID SECURITY

- A. Bid security equal to five percent (5%) of the total bid amount, must accompany each base bid in accordance with the Instruction to Bidders.
- B. Bid security shall be either a Bid Bond issued by a company licensed in the State of Michigan to furnish bid security or Certified Check made payable to the Owner.

1.08 PERFORMANCE BOND COVERAGE

- A. Selected Contractor(s) will be required to provide a performance bond and payment bond in an amount equal to one hundred percent (100%) of the bid amount including any accepted alternates at the Owner's discretion. Such bonds shall be issued by surety licensed by the State of Michigan and acceptable to the Owner.

1.09 OWNER'S RIGHT TO REJECT BIDS

- A. The Owner reserves the right to reject any and/or all bids. The Owner reserves the right to accept a bid, or portion thereof by issuance of a valid purchase order within ninety (90) calendar days following the bid opening. No bids may be withdrawn during this time without the specific approval of the Owner.
- B. Withdrawal of any Bids after the opening time without specific approval by Owner may result in forfeiture of required bid security by Bidder.

1.10 DEFINITIONS

- A. "Owner" is intended to mean Anchor Bay School District; a general powers school district.
- B. For purposes of this project, the terms "Architect", "Engineer" and "Designer" are used synonymously to refer to Communications by Design, Inc., a Michigan Corporation.
- C. The term "Contractor" herein is a reference to the firm(s) eventually selected by the Owner to provide the intended system(s), or any portion thereof, and fulfill the terms of the contract.
- D. The term Contract is a reference to the collective set of documents, drawings, diagrams, Owner's Purchase Order, Addenda and all other materials as provided for herein defining arrangement between Owner and Contractor.

- E. The term Addenda (or Addendum) are that portion of the Contract consisting of modifications, amendments, deletions or substitutions to the contract documents issued prior to the execution of the Contract.

END OF SECTION

Intent to Bid Form

Complete and submit the following form if you have interest or intend to submit a Bid for this project. Unaltered and completed forms must be received on or before 5:00 PM on Wednesday, March 12, 2025. Only bidders returning a completed "Intent to Bid Form" will be notified of required addenda.

Company Information

Name: _____

Address Line1: _____

Address Line2: _____

City, State and Zip Code _____

Primary Contact Information

Name: _____

Phone No.: _____

Fax. No.: _____

E-Mail Address: _____

Portions of the bid for which you will be responding:

- Section 26 33 53 – Uninterruptable Power Supplies
- Section 27 20 00 – Low Voltage Cabling
- Section 27 30 00 – Phone System
- Section 27 51 16 – Clock/ PA System

Submit unaltered and completed form to:

Rebecca Szilagy

Communications by Design, Inc.

rszilagy@cbdconsulting.com

SEALED BID LABEL

Separate, or fold over, the label on the line below, and affix to the exterior of sealed container so information is clearly visible for Bid Submission. Insure label is attached in a manner to prevent accidental removal or defacement. Label shall serve as sole identification for sealed bid at submission.

BID TO: Anchor Bay School District
 Attention: Mr. Todd Rathbun
 5201 County Line Road
 Casco Township, Michigan 48064

BID FROM: _____

PROJECT: DISTRICT TECHNOLOGY SYSTEMS UPGRADE
 TECHNOLOGY BID #3066

INCLUDING Addendum No. _____ Dated _____
ADDENDA: Addendum No. _____ Dated _____

DUE: Friday, March 21, 2025 at 10:00am

BID FORM

BID TO: Anchor Bay School District
Attention: Mr. Todd Rathbun
5201 County Line Road
Casco Township, Michigan 48064

BID FROM: _____

PROJECT: DISTRICT TECHNOLOGY SYSTEMS UPGRADE
TECHNOLOGY BID #3066

The undersigned, having familiarized themselves with all local conditions affecting the cost of work, and having examined the site and all applicable Bidding Documents herein, and herein referenced, including, but not limited to, all addenda issued thereto, hereby propose to furnish all labor, material, equipment, applicable taxes and services required for proper completion of each of the following categories of this project for the sum of:

Bid Category _____ Title _____

Dollars (\$) _____).
Said amount written above constituting the Base Bid

Bid Category _____ Title _____

Dollars (\$) _____).
Said amount written above constituting the Base Bid

Bid Category _____ Title _____

Dollars (\$) _____).
Said amount written above constituting the Base Bid

Bid Category _____ Title _____

Dollars (\$) _____).
Said amount written above constituting the Base Bid

TAXES:
Bid sum includes all applicable taxes.

ALLOWANCES:
Base bid includes all applicable allowance cost(s) as set forth herein.

COST OF BONDS:

Bid sum includes cost of furnishing a Performance Bond and Labor and Material Payment Bond, each in the amount of one hundred percent (100%) of the bid.

Amount of Performance Bond and Labor and Material Payment Bond included in Bid Amount:

_____ Dollars (\$ _____)

ACKNOWLEDGEMENT OF ADDENDA:

The following addenda have been received, are hereby acknowledged, and their execution is included in both base bid and alternate bids herein.

Addendum No. _____ Dated _____ Addendum No. _____ Dated _____

ALTERNATES:

Based bid amount may be increased or decreased in accordance with each of the following alternate bids as may be selected, following procedures stated herein. Voluntary Alternates shown below are identified and described in detail on appropriate attachment(s) as referenced herein.

Mandatory Alternate A _____

Mandatory Alternate B _____

Mandatory Alternate C _____

Voluntary Alternate A _____

Voluntary Alternate B _____

PRINCIPAL SUBCONTRACTORS

As required herein, the following Subcontractors are proposed to be used for this project:

Legal Name: _____ Work Proposed _____

Legal Name: _____ Work Proposed _____

BID SECURITY:

Accompanying this Bid, as required herein, is a bid security in the form of Certified Check/Cashier's Check/Bidder's Bond in the amount of:

_____ Dollars (\$ _____),

payable to the Owner, which it is agreed, shall be retained as liquidated damages, not as a penalty, by the Owner, if the undersigned fails to execute the Contract in conformity with the form of Contract incorporated and referenced herein and fails to furnish specified bonds within ten (10) days after date of issuance of a Letter of Intent to the undersigned.

If awarded the Contract, the undersigned agrees to commence work within ten (10) calendar days after date of issuance of a Purchase Order, which shall be considered as the notice to proceed, and agrees to complete the work in accordance with the schedule herein.

FAMILIAL DISCLOSURE:

Accompanying this Bid, as required herein, is a legally executed and notarized Michigan Familial Disclosure Statement.

EXCEPTIONS:

Bidder takes no exception to terms, conditions, specifications and/or any other requirements herein unless expressly noted, and specifically identified as provided for herein on unaltered Contract Exception form accompanying this Bid.

SIGNATORY AUTHORITY:

The undersigned certifies they are an authorized agent of the bidding entity, and legally able to bind the bidding entity to the terms, conditions and responsibilities of this, and all referenced bid documents. Furthermore, the undersigned acknowledges an understanding that non-compliance of this authority or any other bidding requirements may result in forfeiture of bid security and/or dismissal of consideration of bid submitted.

AGREEMENT:

The undersigned agree(s) to provide the post-bid information required within ten (10) days after notification of a Letter of Intent and to execute an agreement for work covered by this Bid on the Owner's standard Purchase Order for which terms and conditions are expanded to include all Bidding Documents and subsequent addenda issued thereto.

In submitting this bid, it is understood that the Owner reserves the right to reject any or all bids. It is further agreed that this bid is binding for a period of Ninety (90) days from the opening thereof.

Respectfully submitted,

Date: _____

Firm Name: _____

By: _____

Signed: _____

Title: _____

Official Address: _____

Telephone Number: _____

Fax Number: _____

Primary Contact Email Address: _____

(If Corporation, affix Seal)

Michigan Familial Relationship Disclosure Statement

In accordance with Section 1267 of Michigan Revised School Code this sworn and notarized statement of an authorized representative, discloses any familial relationship between the owner and/or any employee of the Bidder, and any member of the project Owner’s governing Board(s) or Superintendent(s).

If any conflict of interest is discovered subsequent to submission of bid, written disclosure shall be submitted to the project Owner within seven (7) days of discovery. The project Owner reserves the right to immediately terminate any contract with Bidder upon notification of a conflict of interest. Upon such termination, the project Owner shall compensate Bidder only for the value of any goods or services provided to the Owner prior to such termination as determined by Designer.

(Check only one Box Below)

It is hereby acknowledged and certified by Bidder that no familial relationship exists between the owner or any employee of the Bidder and any member of the project Owner’s governing Board(s) or Superintendent(s).

A familial relationship exists between the owner or an employee of the Bidder and a member of the project Owner’s governing Board(s) or Superintendent(s). The person(s) and the relationship(s) are as follows:

Bidder

Board or Superintendent

Bidder Authorized Representative:

Bidder: _____

Representative’s Signature: _____

Print or Type Name: _____

Representative’s Title: _____

Subscribed and sworn this _____ day of _____, 2025.

In the County of _____ State of _____

By _____
Notary Public Signature

Seal or Stamp:

My commission expires on: _____

AFFIDAVIT OF COMPLIANCE – IRAN ECONOMIC SANCTIONS ACT
Michigan Public Act No. 517 of 2012

The undersigned, the owner or authorized officer of the below named contractor (the “Contractor”), pursuant to the compliance certification requirement provided in the **ANCHOR BAY SCHOOL DISTRICT** (the “School District”) Request For Proposals for **DISTRICT TECHNOLOGY SYSTEMS UPGRADE** (the “RFP”), hereby certifies, represents and warrants that the Contractor (including its officers, directors and employees) is not an “Iran linked business” within the meaning of the Iran Economic Sanctions Act, Michigan Public Act No. 517 of 2012 (the “Act”), and that in the event Contractor is awarded a contract as a result of the aforementioned RFP, the Contractor will not become an “Iran linked business” at any time during the course of performing the Work or any services under the contract.

The Contractor further acknowledges that any person who is found to have submitted a false certification is responsible for a civil penalty of not more than \$250,000.00 or 2 times the amount of the contract or proposed contract for which the false certification was made, whichever is greater, the cost of the School District’s investigation, and reasonable attorney fees, in addition to the fine. Moreover, any person who submitted a false certification shall be ineligible to bid on a request for proposal for three (3) years from the date the it is determined that the person has submitted the false certification.

CONTRACTOR:

BIDDER’S FIRM NAME _____

BY (SIGNATURE) _____

PRINTED NAME AND TITLE _____

STATE OF MICHIGAN)

)

COUNTY OF)

Subscribe and sworn before me on this _____

Seal:

day of _____, 20____, a Notary Public

in and for _____ County,

Notary Public

My Commission expires _____

REFERENCES

Customer name: _____
Address: _____
City/State/Zip: _____
Contact name: _____
Contact title: _____
Phone: _____
E-mail: _____
Scope of project: _____

Date of completion: _____

Customer name: _____
Address: _____
City/State/Zip: _____
Contact name: _____
Contact title: _____
Phone: _____
E-mail: _____
Scope of project: _____

Date of completion: _____

Customer name: _____
Address: _____
City/State/Zip: _____
Contact name: _____
Contact title: _____
Phone: _____
E-mail: _____
Scope of project: _____

Date of completion: _____

CONTRACT EXCEPTIONS

Check one Box

Bidder takes no exception to, and agrees to comply with all sections, terms, conditions and/or requirements of the Contract Documents.

Bidder proposes the following exceptions to the Contract Documents:

<i>Paragraph Number</i>	<i>Explanation</i>
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

NOTE:
Exception(s) to any bid sections, terms, conditions and/or requirements deemed excessive for any reason by the Owner and/or Designer may result in disqualification of Bid.

END OF SECTION

SECTION 00 21 13
INSTRUCTIONS TO BIDDERS

PART 1 - GENERAL

1.01 OWNERSHIP

- A. Bidders prepare and provide bids without any cost to the Owner and/or Designer. Once opened, bids become the sole property of the Owner. Bidders have no claim to, or ownership of bids opened. Bids become subject to all legal statutes including, if applicable, United States and Michigan Freedom of Information Acts and related laws.

1.02 COMPLIANCE

- A. This document establishes the primary system(s) design configuration. The Bidder's bid response shall include all services, supplies, components and equipment required to provide a complete turnkey system(s) which meets or exceeds all specifications for each given bid item being proposed.
- B. Owner prefers to enter into a contract with a single bidder for all materials for completion of this project, but shall consider combinations of portions of bids from various bidders. If portions of separate bids are deemed compatible and compliant with the intent of the project, and a combination of partial bids is deemed to be in the Owner's best interest, and the Owner reasonably expects willing and compliant bidders will cooperate with others for the benefit of the Owner during implementation of the system, the Owner reserves the right to award portions of the project to multiple bidders which will cooperate to complete the work.
- C. By their response, Bidders agree to comply with all sections, terms, conditions and/or requirements of the contract documents except as expressly noted, and specifically identified by paragraph number on the unaltered Contract Exceptions Bid Form. Exceptions to any bid sections, terms, conditions and/or requirements deemed excessive by the Owner and/or Bid Coordinator may disqualify Bid.
- D. In compliance with the Freedom of Information Act (FOIA), the Owner shall make bid documents available for public review after issuance of purchase order to the successful bidder/s.
- E. In connection with the execution of this Contract, Contractor and any Subcontractors shall not discriminate against any employee or applicant for employment because of race, religion, color, sex, age, or national origin.

- F. Negligence in preparation, improper preparation, errors in, or omissions from Bids shall not relieve Bidder from fulfillment of any and all obligations and requirements of the Contract Documents.
- G. All Bid documents and worksheets must be completed in detail and submitted together on time.
- H. All documents constituting the entire present agreement shall be construed in accordance with and governed by the laws of the State of Michigan.
- I. Designer shall have authority for interpretation of Contract Documents. In the event terms, provisions or any other portion of the Contract Documents is/are in dispute, Designer shall have full and final authority to interpret the Contract Documents, and such interpretation shall be final and binding.
- J. In the event of a conflict between any terms or conditions in any of the documents comprising the entire present Agreement, the terms and conditions set forth in this document shall take precedence.

1.03 NOTICE AND RESPONSE

- A. Upon notification of Bidder being considered as a finalist, the Bidder shall provide to the Owner and Designer, within 48 hours, a current “Dunn and Bradstreet Supplier Evaluation Report” and other documentation as may be required of finalists herein and as requested by Owner and/or Bid Coordinator.
- B. Bidder shall provide timely response to all requests from Designer and/or Owner regarding clarification and/or elaboration concerning, but not limited to its Bid as may be deemed relevant by the Owner and/or Designer.

1.04 PROTECTION AND SAFETY

- A. Contractor shall continuously maintain adequate protection of all Work from damage and shall protect the Owner’s property from injury or loss arising in connection with the execution of the Contract. Contractor shall make good any such damage, injury or loss, except such as may be directly caused by agents or employees of the Owner. The Contractor shall adequately protect adjacent property as required by law, by the Contract Documents, or as otherwise required, to cause no damage to them during the execution of the Contract. This requirement shall also apply to structures above and below ground as conditions of the site require.
- B. Contractor shall be solely responsible for, and have control over means, methods, techniques, sequences and procedures for initiating, maintaining and supervising all safety precautions and programs in connection with the performance of the contract. Contractor shall take all necessary precautions for the safety of employees and visitors on the site of the Project and shall comply with applicable provisions of federal, state, and municipal safety laws

and building codes to prevent accidents or injury to persons on, about, or adjacent to the premises where the Work is being performed. Contractor shall erect and properly maintain at all times, as required by the conditions and progress of the Work, all necessary safeguards for the protection of workers and the community.

- C. Contractor shall vigorously defend any and all suits that may be brought against the Owner by any person and/or entity, whether in the employ of the Contractor or not, for damage to property, and/or injury or death to persons alleged or claimed to have been caused by or through the performance of work.

1.05 DRAWINGS DIAGRAMS AND ILLUSTRATIONS

- A. Drawings, Diagrams and Illustrations are diagrammatic in nature and indicate general arrangement and nature of systems and work included.
- B. Floor plan drawings are provided to assist the contractor in preparing documentation and reports as required herein.

PART 2 - MATERIALS

2.01 VOLUNTARY ALTERNATES AND SUBSTITUTION OF SPECIFIED PRODUCTS

- A. This Request for Bid describes a particular implementation. All Bids must provide pricing on the “base bid” as described herein. Voluntary alternatives providing comparable functionality with significant cost reduction and/or performance enhancement may be proposed. Voluntary alternatives are encouraged, but must be identified as “Voluntary Alternates” and detailed on unaltered Bid Forms contained herein. Voluntary Alternates may be further detailed and/or explained in attachments to the unaltered Bid Forms contained herein. Exceptions to the Request for Bid specifications must be clearly noted and explained for each Voluntary Alternate proposed.
- B. No substitutions of specified products may be made without specific prior authorization by Designer and Owner. Individual bid divisions herein contain particular information related to acceptable manufacturer and product requirements.

PART 3 - EXECUTION

3.01 EXAMINATION OF DOCUMENTS AND SITE

- A. Bidders shall carefully examine the Contract Documents and the construction site to obtain first-hand knowledge of existing conditions and requirements. No plea of ignorance of conditions that exist, or any other relevant matter concerning work to be performed in the execution of work will be accepted as

justification for failure to fulfill every detail of all requirements as described herein.

3.02 QUESTIONS, INTERPRETATIONS AND ADDENDA

- A. Any bidder finding discrepancies between Drawings, Specifications and/or Bid Documents, or be in doubt as to the exact meaning of any provision or detail shall notify the Designer at once, and before the deadline for Questions and Clarifications. The Designer may then, at their option, issue Addenda clarifying same. The Designer is not responsible for oral instructions, or Bidder's/Contractor's misinterpretations of Drawings, Specifications and/or Bid Documents.
- B. The Designer reserves the right to issue Addenda at any time up to thirty-six (36) hours prior to the scheduled bid opening. All such addenda shall become, upon issuance, an inseparable part of the Specification/Contract Documents. Each bidder shall incorporate within their bid all costs for items listed in any/all Addenda, and shall acknowledge receipt and identifying number of each Addendum on the Bid Form and on the outside of the sealed bid container.

3.03 BID SECURITY, BONDS AND INSURANCE

- A. Bid Security, Performance and Payment Bonds are required on this project.
 - 1. Bid security equal to five percent (5%) of the bid amount must accompany each bid in accordance with the Instruction to Bidders.
 - a. Bid security shall be either a Bid Bond issued by a company licensed in the State of Michigan to furnish bid security or Certified Check made payable to the Owner.
- B. The selected Contractor will be required to provide a performance bond and a payment bond in an amount equal to one hundred percent (100%) of the bid amount including any accepted alternates at the Owner's discretion.
 - 1. The surety of the performance bond shall remain in effect until all acceptances and final contract close-out requirements herein have been executed by the Owner.
- C. Contractor shall provide, prior to beginning any work at the sites, certificate of insurance for delivery to Owner indicating all required insurance coverage is in force.
 - 1. Workers' Compensation and Employer's Liability Insurance
 - a. Coverage A – Statutory

- b. Coverage B - \$1,000,000 Per Accident
2. Broad Form Comprehensive General Liability Insurance (including – Premises, Elevators, Contractor’s Protective Liability, Contractual, Products & Completed Operations – including Broad Form Extensions).
 - a. Each Occurrence - \$1,000,000
 - b. General Aggregate - \$2,000,000
 - c. Products & Completed Operation Aggregate - \$2,000,000
 - d. Personal Injury & Advertising Injury - \$1,000,000
 - e. Fire Legal - \$100,000
 3. Sub-contractors Operations, Products – Completed Operations and Contractual Liabilities, plus such excess coverage as may be appropriate for the limits listed.
 4. Comprehensive Automobile Liability Insurance (owned, hired, and non-owned automobiles).
 - a. Bodily - \$1,000,000 each Person and \$1,000,000 each Occurrence
 - b. Property Damage - \$1,000,000
 5. Furnish Owner with Contingent Liability Insurance Policy with coverage and liability limits the same as for Public Liability Insurance specified herein. Designate on policy as assured, only the Owner.
 6. Furnish Owner with Contingent Property Damage Insurance Policy with coverage and liability limits the same as for Property Damage specified herein. Designate on policy as assured, only the Owner.
 7. Policies shall include notification clause requiring ninety (90) days written notice to Owner in the event of policy cancellation, expiration, non-renewal, coverage reduction or other material change.
 8. Contractor shall not commence work under the Contract until after all insurance required herein has been obtained and certificates for such are approved by Owner.
- D. All such bonds and/or insurance shall be issued by surety licensed by the State of Michigan and acceptable to the Owner.
1. Insurance certificate(s) shall be signed by insurance agent licensed in the state of Michigan or a representative of the insurance company.

- E. Contractor agrees to indemnify and hold harmless the Owner and Designer, including their agents and employees, from and against all claims, damages, losses and expenses, including, but not limited to, attorney fees arising out of, or resulting from the performance of the work.

3.04 MODIFICATION AND WITHDRAWAL

- A. Bids may be withdrawn and/or changed any time prior to the bid opening. Bids may not be withdrawn or changed after the bid opening, and shall be deemed a firm offer continuing for ninety (90) calendar days. Bids received after the time and date for the public opening will be returned unopened at the Owner's discretion.
- B. Withdrawal of any Bid after the opening time without specific approval by Owner may result in forfeiture of required bid security by Bidder.

3.05 CODES, ORDINANCES, REGULATIONS AND RELATED

- A. All labor and materials shall be furnished and installed in strict accordance with the latest applicable codes, ordinances and regulations of any governing body having jurisdiction over this project.
- B. In the event the quality of labor and materials required by the Drawings and Specifications herein exceeds requirements of current applicable codes, ordinances and regulations, the Drawings and Specifications shall take precedence.
- C. In the event the quality of labor and materials required by current applicable codes, ordinances and regulations having jurisdiction over this project exceeds that of the Drawings and Specifications herein, the applicable codes, ordinances and regulations shall take precedence.
- D. The Contractor shall give all notices and comply with all codes, laws, ordinances, rules and regulations of any authority having jurisdiction, which bears on the performance of its work. This compliance includes, but is not limited to, the Michigan School Safety Initiative (PA129, PA130, PA131 and PA138) if applicable to work being performed.
- E. The Contractor shall pay for all licenses, permits, taxes, and fees required for this project; and shall comply with all federal, state, local and Owner's codes, laws, ordinances, regulations and other requirements applicable to the work specified at no additional cost to the Owner. Contractor shall submit copies of all approved certificates and approvals to the Owner upon receipt.

3.06 SUB-CONTRACTOR AND MATERIAL SUPPLIER

- A. The successful Bidder shall submit to the Owner and Designer a complete list of all sub-contractors and all material suppliers proposed to engage on the

work. Sub-contracts shall not be awarded until after they have been approved by the Designer and Owner.

- B. Finalist bidders may be required to submit additional details related to sub-contractors and suppliers within forty-eight (48) hours after the bid opening.
- C. Names of any principal sub-contractors must be listed on the Bid Form.
- D. All contracts made by the successful Bidder with Subcontractors shall be covered by the terms and conditions herein. The successful Bidder shall see to it that Subcontractors are fully informed in regard to these terms and conditions, and shall bind all subcontractors to the same terms and conditions. Failure to do so will absolve the Owner from any liability for additional cost due to subcontractor claims for additional cost, time or any claim(s) for additional cost by subcontractor(s).

3.07 BID RESPONSE FORMAT

- A. Bidder shall provide complete Bid copies in two formats as described herein.
 - 1. One (1) Hard copy format responses shall be in a bound tabulated format. Each response shall have tab indicators for each section.
 - 2. One (1) Electronic copy format responses shall be submitted on a USB Drive, readable by a standard Microsoft Windows 11 workstation. Electronic media shall contain separate folders to organize response documentation as described herein. Files submitted on USB Drive shall be *Adobe Acrobat* "PDF" format (SCHEDULE OF VALUES is additionally required to be on the disk in the appropriate folder as a spreadsheet and as described herein).
- B. All Bid Response formats shall be clearly externally marked to include, but not be limited to:
 - 1. Bidder identification.
 - 2. Project Owner identification.
 - 3. Project name.
 - 4. Bid submission date.
- C. Bid Responses shall include an index containing copies/PDF of a complete index of documents comprising Bid Response. Responses shall include, but not be limited to the following tabbed/folder sections:
 - 1. Section 1 – Forms, which shall contain copies/PDF files of all required and completed bid forms.

- a. BID FORM
 - b. Michigan Familial Relationship Disclosure Statement
 - c. Iranian Economic Sanctions Form
 - d. REFERENCES
 - e. CONTRACT EXCEPTIONS
 - f. SCHEDULE(s) OF VALUES
 - g. BID BOND
2. Section 2 – Overview, which shall contain copies/PDF files of cover letter and/or executive overview.
 3. Section 3 – Submittals, which shall contain copies/PDF files of all required and voluntary submittals.
 4. Section 4 – Appendices, which shall contain copies/PDF files of other reference materials Bidder wishes to, or is required to submit.

3.08 AWARD OF CONTRACT

- A. The material proposed to be used for the completion of work, and the competency, solvency and responsibility of bidders will receive due consideration before award of contract. In the reception of bids for this work, the Owner incurs no obligation to accept the lowest, or any bid submitted. The right to accept or reject any and all bids or portion thereof is reserved by the Owner. The Owner reserves the right to require testimonial, accounting or legal documents pertaining to the solvency of a Contractor, or any other decision factor the Owner deems appropriate, prior to award of contract.
- B. Owner reserves the right to select individual components from schedule of values independent of installation as may be determined in Owners best interest. Selected bidder may be required to install selected components provided by others.
- C. Issuance of a Purchase Order by Owner in response to a valid bid shall be a Notice to Proceed, and shall become part of, but not limited to, all terms, conditions and requirements herein. Notice to Proceed shall have the full effect of contract award, and shall make all terms, conditions, requirements and responsibilities of Bidder binding upon issuance. Notice to Proceed, once issued, shall become an inseparable part of the contract documents herein, and constitute both Bidder and Owner's acceptance of contract.

3.09 TIME, SCHEDULES, PROJECT MANAGEMENT, MEETINGS AND PLANS

- A. Time is of the essence on this project. Award of contracts for this project will be contingent on the bidder's agreement to complete the work on or before the contract completion date stated herein.
- B. All Contractors will commence work in such a manner and at such a time as to expeditiously interface with the work of other Contractors, and will pursue the project diligently to completion. All Contractors will work in a cooperative manner with Owner and other Contractors.
- C. Contractor shall appoint an overall Project Manager acceptable to Owner, with skills and experience deemed appropriate by the Owner for the scope and size of the project. Project Manager shall be responsible for the scheduling of all Contractor resources and attending all project meetings. Upon notification of Bidder being considered a finalist, the Bidder shall submit professional resume of proposed Project Manager within forty-eight (48) hours.
 - 1. Project meetings shall be conducted at Owner's selected and identified location weekly and at Owner's and/or Designer's discretion.
 - 2. Within five (5) days of Notice to Proceed (issuance of a Purchase Order by the Owner), Contractor's Project Manager shall provide to the Owner a critical flow path in the form of a "Gantt Chart" (or equivalent) indicating the proposed sequence of events and approximate beginning and completion dates in accordance with, compliance to, and coordinated with requirements herein.
 - 3. Changes of the Project Manager during the project shall not be acceptable without prior written approval from the Owner.
 - 4. It is the responsibility of the Contractor's Project Manager to schedule work, work out issues, ensure that all required products and services are delivered according to schedule and attend to any other matters required by the Owner in the interest of professional and timely completion of the project.
 - 5. The appointed Project Manager, or a designee acceptable to the Owner, shall be in attendance of all project meetings throughout the term of the project. Failure to do so may be considered a material breach of contract.
 - 6. After a ten (10) business day notice, the Owner reserves the right to request a new Project Manager, when it appears that, in the Owner's sole discretion, the Project Manager is not fulfilling the full responsibilities of the position. Failure by Contractor to provide adequate Project Manager meeting requirements of the Owner, may result in Contract termination.

3.10 CHANGES IN THE WORK

- A. No changes in work with the effect of either increasing or decreasing in the project value shall be made without specific and prior authorization by the Owner and Designer.
- B. Owner, without invalidating the contract and without notice to any surety, may at any time order extra work or make changes by altering, adding to or deducting from the work, the Contract Sum being adjusted accordingly. All such work shall be authorized by a written Change Order approved by Owner and Contract Designer. Upon receipt of such an order Contractor shall promptly proceed with the work involved. All such work shall be executed under the conditions of the original Contract. Owner authorized change order(s) may be issued at any time prior to Contract close out.
- C. When so directed, Contractor shall promptly submit an itemized estimate and a unit price for performing or deleting such extra or changed work as may be contemplated. Any extensions or reductions of the contract time associated with extra or changed work shall be identified at the time Contractor submits such documentation.
- D. At the Owner's discretion, adjustments in the Contract Sum shall be determined by one or more of the following methods:
 - 1. By mutual acceptance of a lump sum cost, including overhead and profit, itemized and supported by sufficient substantiating data to permit evaluation.
 - 2. By unit prices stated in the Contract Documents including, but not limited to, Schedule of Values.
 - 3. By unit prices mutually agreed upon.

3.11 PAYMENT REQUESTS AND PAYMENTS

- A. Contractor's invoices shall be submitted monthly in correlation with the Project Schedule indicating percentage of work completed.
- B. All contract and change order invoices shall be sent directly to Contract Designer.
- C. A 10% retainage shall be held back on all payment requests, including, but not limited to hardware, software, change orders and services, until final completion and close out of the project or project phase as determined by Owner and Designer.
- D. Contractors are required to submit all invoices on approved AIA Payment Request Forms or other billing format pre-approved by Contract Designer. Each AIA Payment Request Form shall be accompanied by a properly

completed, executed and notarized Waiver of Lien which shall be in a format and contain verbiage approved by Owner.

- E. The Contract Designer and Owner shall process payment requests on a monthly schedule and in accordance with their respective established processes and procedures. Payments will be made by the Owner based only on AIA Request Forms having been previously certified, audited and approved by Contract Designer and accompanied by acceptable Waiver of Lien.

END OF SECTION

SECTION 00 65 00
CONTRACT CLOSE OUT

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. Provide an orderly and efficient transfer of the completed work to Owner.
- B. Details affecting work of this Section include, but is not limited to all other Sections herein and all related Contract Documents.
- C. Activities relative to Contract close-out are described in, but not limited to, this and other Sections of this document.

1.02 SUBSTANTIAL COMPLETION

- A. "Substantial Completion" shall be defined as:
 - 1. All responsibilities of Contractor for all provisions and requirements of all divisions and sections of complete Contract herein, and as amended, are properly and fully completed or properly, accurately and acceptably provisioned for.
 - 2. All systems, equipment, facilities, services, programming and/or components required by all divisions and sections of complete Contract are fully operational, acceptable and useful to the Owner for their intended purposes.
- B. Prior to requesting inspection by Designer to certify Substantial Completion, Contractor shall use adequate means to assure the Work is completed in accordance with the specified requirements and is ready for such inspection.

PART 2 - MATERIALS

2.01 NOT USED FOR THIS SECTION

PART 3 - EXECUTION

3.01 PROCEDURES

- A. Contractor shall submit a written request to Designer indicating they have achieved Substantial Completion of Work.
- B. Within a reasonable time after receipt of the request, Designer will inspect Work to determine status of completion.
- C. Should Designer determine the Work is not substantially complete:

1. Designer promptly will so notify Contractor, in writing giving reasons therefore and providing sufficient details to allow Contractor to make corrective actions.
 2. Contractor shall then expeditiously remedy the deficiencies and notify Designer in writing when ready for re-inspection.
 3. Designer will re-inspect the Work.
 4. Excessive re-inspections of Work may result in fees being assessed Contractor.
- D. Should Designer concur the Work is substantially complete:
1. Designer will prepare a letter of Substantial Completion.
 2. Designer will submit the letter to Owner and Contractor.
 3. Contract shall be deemed “Closed Out” for retainage purposes.
 4. Final Acceptance of the system shall be deemed complete.

END OF SECTION

SECTION 26 33 53
UNINTERRUPTABLE POWER SUPPLIES

PART 1 - GENERAL

1.01 DESCRIPTION OF PROJECT

- A. Work described in this specification section pertains to supply and installation of new uninterruptable power supply (UPS) units for Anchor Bay School District.
- B. Contractor shall advise, coordinate, and work cooperatively with Owner representatives and/or owner's designee related to any installation or special security provisions.
- C. Contractor shall configure, supply, connect, test, document, train Owner representatives and warrant a fully operational and compliant system; complete and with full functionality as specified herein.
- D. Contractor shall coordinate installation with other contractors, Architect and the Owner as is appropriate.
- E. Contractor shall provide service rates for additional services not specified herein for Owner consideration. Rates shall be provided for the duration of the warranty period. Owner will consider rate structures for additional services outside of the base contract as a factor in determining contract award.

1.02 WARRANTY

- A. Complete installation shall be free from defect and/or failure for a period of five (5) years. Any replacement, upgrade or fix, including labor for any non-conforming, unsupportable or non-operational part of the system shall be fixed and/or replaced at no cost to the Owner.
- B. Manufacturer's warranty shall be provided for all components of the system.
 - 1. Any documents and/or submittals required by individual manufacturers for compliance with the standard and/or applicable extended warranty programs shall be provided and submitted for approval by the Contractor.
 - 2. Contractor shall submit all documents, apply for warranty or extended warranty certification, and provide a Certificate of Warranty or Extended Warranty as may be applicable from the manufacturer prior to project closeout.
- C. On site services provided under the warranty shall be performed by personnel or representatives of Contractor as herein defined and located within physical proximity to provide response levels deemed acceptable to Owner.

- D. System Warranty shall commence on date of substantial completion as certified by Architect and provided for herein. Delivery to work site of materials, physical removal from packaging, issuance of Contractor documents including, but not limited to invoices and/or packing slips, or any event or documentation, not specifically provided for herein, shall have no effect on Warranty or System Acceptance by Owner and/or Architect.

1.03 STORAGE OF MATERIALS

- A. All materials shall be secured when not in use by the Contractor.
- B. It shall be the Contractor's responsibility to secure all equipment including material to be installed as part of the contract. No changes shall be made to the contract due to loss or theft of equipment and/or materials not officially accepted by the Owner.
- C. Formal receipt of the materials shall not be completed by the Owner until completion of project closeout. The Contractor shall be responsible for all equipment until time of closeout as provided for herein.

1.04 SUBMITTALS

- A. Submittals shall consist of, but not be limited to, technical cut sheets and detailed information pamphlets on all components of the system to be installed. All cut sheets and submittals shall be distinctly marked to highlight the actual part number of the item being submitted for approval with Bid Proposals.
- B. Shop drawings and diagrams shall be submitted by Bidder for approval by Architect with Bid Proposals.
 - 1. Shop drawings and diagrams shall show all data relating to structural, electrical, wiring, cross connect, interconnect, equipment arrangement/layout, and any other information deemed significant by the Architect.
 - 2. No work constituting final installation shall be commenced until after approval of shop drawings by Architect.
- C. Contractor shall provide proof of manufacturer support by photocopy of certification and letter of support from major component manufacturers for this specific project with Bid Proposals.
- D. Equipment or material installed for this project that does not have an approved submittal associated with it, will be removed and replaced with acceptable equipment or material as defined by the Architect. All replacement costs including, but not limited to material and labor, shall be the sole responsibility of the Contractor.

1. The Owner and/or Architect may notify Contractor of any offending situations under this provision allowing Contractor up to forty-eight (48) hours to correct the situation prior to taking other corrective action.
2. The Owner reserves the right to replace unapproved materials and deduct the costs of doing so as defined herein from any amounts that may be due, or become due Contractor.

1.05 REFERENCE SPECIFICATIONS

- A. All work, products, and materials shall conform with the following standards as applicable for the intended use:
 1. EIA/TIA Commercial and Administration Standards
 2. FCC – All Applicable Rules and Regulations
 3. IEEE
 4. MOSHA Safety Standards
 5. NEC
 6. UL

1.06 CONTRACTOR

- A. The Contractor shall accept complete responsibility for the installation, certification and support of the system. Contractor shall be an authorized vendor of all major components.
- B. All work shall be performed and supervised by Project Managers, Engineers and/or Technicians who are qualified to install system and perform related tests as recommended by the manufacturer and in accordance with the manufacturer's best practices and methods.
- C. Project Managers, Engineers and Technicians employed on this project shall be properly and fully trained and qualified by the manufacturer on the installation and testing of the equipment and systems to be installed.
- D. The Contractor shall have a proven track record in relevant similar system configuration and installation. This must be shown by the inclusion of references of at least three (3) projects involving the installation of similar systems completed by the Contractor in the prior two (2) years on unaltered forms with the sealed Bid Proposal as provided herein. Bid Proposal Form(s) may be duplicated as required in order to provide adequate space to list required number of reference installations for each division Bidder is responding to.

PART 2 - PRODUCTS

- 2.01 Supply most current version of all products provided.
- A. Manufacturer shall have five (5) years of experience and history manufacturing similar products to those specified.
 - B. Proposed components shall have been field tested and proven in actual use.
 - C. Prior and/or old versions of products, unless specifically approved and documented by Architect and/or Owner shall not be acceptable.
 - D. In cases where a newer version of hardware or software is available at the time of installation, Contractor shall request clarification from Architect on which version is to be used.
- 2.02 Acceptable Manufactures (in alphabetical order)
- A. APC
 - B. VERTIV/LIEBERT
 - C. Or Equal
- 2.03 Furnish only new, first-class quality materials and equipment.
- 2.04 Administration access shall be protected by unique and secure log on.
- 2.05 In the event of a power failure, complete system shall automatically re-initialize and “become active” to the last configuration in use with no human intervention.
- 2.06 UNINTERRUPTABLE POWER SUPPLIES (UPS) UNITS -TYPE A
- A. Thirteen (13) Uninterruptable Power Supplies shall be provided; meeting or exceed the following required feature sets, specifications and/or standards:
 - 1. 3000KVA
 - 2. Each unit shall include specific rack mount kit
 - 3. Each unit shall include any required cabling or accessories to connect to owners existing power infrastructure.
 - 4. Units shall protect all active components from power surges, sags and/or spikes in the power system.
 - 5. Units shall be capable of providing a safe working load of +/- 2100 Watts.

- B. UPS units shall be supplied with the appropriate input plug to connect to Owner's 30 amp circuitry.
 - 1. Specific/ appropriate receptacle/ plug/ building power accommodations shall be coordinated upon project kickoff.
- C. Each unit shall attach to Owner's existing Ethernet network using standard 10/100/1000 port and provide alerting and management tools.
- D. Where individual units cannot be installed in Owner racks, units shall be securely and permanently mounted on walls in communication closets by Contractor. Contractor shall supply all materials and labor for a safe, Secure and permanent wall mounting of UPS unit adjacent to wall mounted communication cabinet or rack.
- E. UPS equipment shall be SNMP manageable, and be connected to a dedicated Ethernet port in each wire center (IDF/MDF).
- F. UPS equipment shall be installed and mounted as space, location details, and Owner standards dictate.
- G. Full UPS monitoring and management software shall be included providing, but not limited to, the following features:
 - 1. Battery Condition
 - 2. Power Quality
 - 3. All other features currently a part of the manufacturer's latest commercial release.
- H. UPS units shall be installed at locations noted on appendices included within.

2.07 UNINTERRUPTABLE POWER SUPPLIES (UPS) UNITS – TYPE B

- A. Thirty (30) Uninterruptable Power Supplies shall meet or exceed the following required feature sets, specifications and/or standards:
 - 1. 2200KVA
 - 2. Each unit shall include specific rack mount kit
 - 3. Each unit shall include any required cabling or accessories to connect to owners existing power infrastructure.
 - 4. Units shall protect all active components from power surges, sags and/or spikes in the power system.

5. UPS units shall be capable of providing a safe working load of +/- 1440 Watts.
- B. UPS units shall be supplied with the appropriate plug or adapter to connect properly and securely to Owner's existing 20 amp circuitry.
 1. Specific/ appropriate receptacle/ plug/ building power accommodations shall be coordinated upon project kickoff.
- C. Each unit shall attach to Owner's existing Ethernet network using standard 10/100/1000 port and provide alerting and management tools.
- D. Where individual units cannot be installed in Owner racks, units shall be securely and permanently mounted on walls in communication closets by Contractor. Contractor shall supply all materials and labor for a safe, Secure and permanent wall mounting of UPS unit adjacent to wall mounted communication cabinet or rack.
- E. UPS equipment shall be SNMP manageable and be connected to a dedicated Ethernet port in each wire center (IDF/MDF).
- F. UPS equipment shall be installed and mounted as space, location details, and Owner standards dictate.
- G. Full UPS monitoring and management software shall be included providing, but not limited to, the following features:
 1. Battery Condition
 2. Power Quality
 3. All other features currently a part of the manufacturer's latest commercial release.
- H. UPS units shall be installed at locations noted on appendices included within.

2.08 ALLOWANCES

- A. Contractor shall include allowances for contract service reimbursements as required in base bid lump sum amount(s).
 1. Allowance shall be made in the amount of \$25,000 for power renovations necessary to support new uninterruptable power supply units.
 2. Allowance shall be made in the amount of \$10,000 for system additions at the Owner's discretion.

- B. Contract services shall be provided and sourced at Owner's discretion, direction and convenience with full cooperation by Contractor, and paid for from successful bidder's contract in the amount(s) provided for herein.
- C. Any allowance amount proving to be excessive for the intended equipment and/or contract services shall be credited to the Owner against contract payment requests.
- D. No material or labor charges and/or mark-ups or margins will be permitted on allowance expenditures approved by Owner and Designer.

PART 3 - EXECUTION

3.01 PREPARATION

- A. Contractor shall conduct detailed system overview and examination with Architect verifying equipment and material locations as well as mounting and placement requirements prior to commencement of other installation activities.
- B. Contractor shall insure all submittals and shop drawings have been provided to, and approval has been obtained from Architect prior to commencement of any final installation activities.

3.02 INSTALLATION

- A. Installation work shall take place after school hours. Work areas shall be cleaned at the end of each day. All debris shall be cleared, removed and disposed of in an approved container for the site.
- B. Contractor shall conduct an initial programming meeting with the Owner and designer to review content available and planned, as well as establish schedule for project completion.
- C. Contractor shall assure that all designated network switches are powered by installed UPS units upon project completion. Designated switches shall be determined by Owner.
 - 1. Contractor shall coordinate "cutover" from existing power accommodations to new UPS units with Owner to avoid any unexpected network outages during sensitive times.
- D. Contractor shall be familiar with the environment where work will be done as specified herein and make every reasonable effort to minimize interference with Owner's or other contractor's activities.
- E. The Contractor shall furnish, set in place, and install all equipment necessary for a fully compliant and operational system as specified herein. Such

materials shall include all items necessary for full and final operation of the system. The installation process includes, but is not limited to the following:

1. Inventory receipt of all components and equipment.
 2. Storage of all equipment and components until such time those items are installed according to the specifications.
 3. Transport equipment to the Owner's installation location(s).
 4. Assemble, install, configure and test all equipment and components, maintaining accurate inventory records and status documents and discarding packaging.
 5. Collect all information necessary to accurately program all system devices to the Owner's intended use and need.
 6. Contractor shall strictly follow both industry best practices and Manufacturer requirements and recommendations for proper installation.
- F. It shall be the responsibility of the Contractor to repair or replace any damage done to the structure of finishes in the building by the Contractor. If in the course of work, Contractor damages, marks or misplaces any surfaces or access plates/panels the Contractor shall repair and/or replace the surface, plate or panel to the original condition.
- G. Worksites include the following:
1. Administration Center / MacDonald Elementary School
5201 County Line Road
Casco Township, Michigan 48064
 2. Anchor Bay High School
6319 County Line Road
Fair Haven, Michigan 48023
 3. Aquatic Center
52401 Ashley
New Baltimore, Michigan 48047
 4. Ashley Elementary
52347 Ashley
New Baltimore, Michigan 48047
 5. Early Childhood Center
52680 Washington Street
New Baltimore, Michigan 48047

6. Great Oaks Elementary
32900 24 Mile Road
Chesterfield Township, Michigan 48047
7. Lighthouse Elementary
51880 Washington Street
New Baltimore, Michigan 48047
8. Lottie Elementary
33700 Hooker
New Baltimore, Michigan 48047
9. Maconce Elementary
6033 Church Road
Ira, Michigan 48023
10. Maintenance / Transportation / Operations
51890 Washington
New Baltimore, Michigan 48047
11. Middle School North
52805 Ashley Street
New Baltimore, Michigan 48047
12. Middle School South
18650 Sugarbush
New Baltimore, Michigan 48047
13. Naldrett Elementary
47800 Sugarbush
New Baltimore, Michigan 48047

3.03 DEMOLITION

- A. Contractor shall carefully remove any existing decommissioned UPS equipment and transport to Owner designated location for inspection. Any equipment not retained shall be properly disposed of by Contractor.
- B. Contractor shall expect to remove and dispose of all existing UPS mounting brackets, cables and accessories that will no longer be required.
- C. Contractor shall not use Owner refuse receptacles for disposal of equipment associated with this project.

3.04 TESTING

- A. In an effort to ensure a smooth “turn-up” of the new system Contractor shall submit to a thorough testing process as defined herein prior to cut-over.

- B. Prior to requesting testing by Designer, the Contractor shall use adequate means to assure the work is completed in accordance with the specified requirements, meets the owner's specific application requirements and is ready for functionality and integrity testing.
- C. Testing Procedures
1. Prior to system "turn-up", Contractor shall submit a written request to Architect indicating they have completed full and final configuration of the system, and are ready to have system integrity and functionality tested.
 2. Within reasonable time after receipt of request, Architect will provide a test schedule and coordinate testing date(s) with Owner and Contractor.
 3. Should Architect determine the Work is not acceptably configured or not of adequate integrity:
 - a. Architect promptly will so notify Contractor, giving reasons therefore and providing sufficient details to allow Contractor to make corrective actions.
 - b. Contractor shall then expeditiously remedy the deficiencies and notify Architect in writing when ready for re-testing.
 - c. Architect will schedule re-test of the Work.
 - d. Excessive re-testing of Work may result in fees being assessed Contractor.
 4. Should Architect and Owner concur the Work is configured properly, and system integrity is as required:
 - a. Architect will review Contractor's detailed "turn-up" plan, and upon finding it acceptable issue a memorandum of Testing Completion to Owner and Contractor after which system "turn-up" can proceed.

3.05 DOCUMENTATION

- A. Contractor shall provide Owner as-built drawings and manuals of all equipment installed, warranty and maintenance information and other information the Contractor, Architect and/or Owner deem necessary. Documentation shall also be provided in a digital format in file formats and on media as specified by Owner and/or Architect.
- B. Contractor shall be responsible for providing thorough, timely documentation on all hardware, software. Documentation shall include, but not be limited to:
1. Equipment description.

2. Equipment make.
3. Model number.
4. Software release.
5. Date installed.
6. Manufacturer's warranty.
7. Maintenance contract terms.
8. Verification of maintenance contract engagement.
9. Telephone numbers for service and support.
10. Detailed technical support and service procedure instructions.
11. All product (hardware and software) manuals and manufacturer supplied documentation, including, but not limited to owner manuals, system administrator manuals and configuration guides. Where number of duplicate copies for particular manual or documentation item could be reasonably considered excessive, Contractor shall request direction from Owner and Architect.
12. Photocopy of original invoice listing make and model for all components and equipment from individual manufacturer(s), distribution source(s), or authorized agent(s) to establish manufacturer warranty start date for potential use after end of contract warranty provisions.
13. System Configuration Report.
14. Complete inventory of installed hardware and system software. Hardware inventory shall include, but not be limited to, model numbers, serial number, physical installation location and software/firmware options.
15. Complete record of all system and administrative passwords for full operation and administration of all system components and operations.

3.06 TRAINING

- A. Contractor shall provide physical on-site training for the Owner designated system administrator(s). Owner shall designate up to three (3) system administrators to be trained. Training shall be a minimum of one (1), one (1) hour session(s) in length, at the convenience of the Owner personnel, and of sufficient duration to satisfactorily complete training on all system administration functions including, but not limited to:
 1. Basic configuration and system administration of the installed system

2. Basic trouble shooting of the installed system and components including diagnostic and problem resolution actions.
3. System back-up and restore functions and procedures for all system parameters and configurations.
4. Review of system alerts, logs and monitoring of configuration parameters including, but not limited to, configuration changes and device status.
5. System database updates and maintenance.
6. Review standard system reports

3.07 SCHEDULE, MEETINGS AND PLANS

- A. The planned sequence of operations shall be established by the Contractor within the guidelines established by the Owner, as required herein and as required to meet schedules.
- B. Schedule
 1. Post bid Interviews: Week of April 7, 2025
 2. Contractor Chosen: April 23, 2025
 3. Work Commences: May 1, 2025
 4. Substantial Completion of Project: July 1, 2025
 5. Project Close-out: August 1, 2025
- C. All work shall be coordinated with Owner's construction manager on site.
- D. Project progress meetings shall be held, but not limited to, weekly at a site and time identified as convenient for Owner and as required herein. Meetings will be attended as required herein.

END OF SECTION

SECTION 27 20 00
LOW VOLTAGE CABLING

PART 1 - GENERAL

1.01 DESCRIPTION OF PROJECT

- A. Work described in this specification section pertains to structured cabling to support various types and styles of communications systems. Owner expects structured cable system shall be used to provide connectivity for items including, but not limited to, IP Speakers, IP clocks, IP Strobes, IP Phones, etc.
- B. Structured cable system shall be compliant with EIA/TIA 568B.
- C. The Contractor shall configure, supply, install, connect, test, document and train Owner representatives and warrant a fully operational and compliant communications transport system, complete and with full functionality as specified herein including, but not limited to:
 - 1. Cables
 - 2. Jacks
 - 3. Cable support hardware
 - 4. Communication distribution racks
 - 5. Cross connect blocks and devices
- D. Contractor shall coordinate their installation with other contractors, Architect, Construction Manager, Architect/Engineer and the Owner as is appropriate.

1.02 DRAWINGS

- A. Drawings show the location and general arrangement of equipment, systems and related items. They shall be followed as closely as elements of construction permit.
- B. Examine drawings of other trades and verify conditions of work sites. Arrange work accordingly.
- C. Deviations from drawings, with the exception of minor changes in routing and other such incidental changes not affecting functionality or serviceability of systems, shall not be made without written approval of Architect/Engineer.

1.03 WARRANTY

- A. Complete installation shall be free from defect and/or failure for a period of fifteen (15) years. Any replacement, upgrade or fix, including labor for any non-conforming or non-operational part of the system shall be fixed and/or replaced at no cost to the Owner.
- B. Manufacturer's warranty shall be provided for all components of the system.
 - 1. Any paperwork and/or submittals required by individual manufacturers for compliance with the standard and/or applicable extended warranty programs shall be provided and submitted for approval by the Contractor.
 - 2. Contractor shall submit all paperwork, apply for warranty or extended warranty certification, and provide a Certificate of Warranty or Extended Warranty as may be applicable from the manufacturer prior to project closeout.
- C. On site services provided under the warranty shall be performed by personnel or representatives of Contractor as herein defined and located within physical proximity to provide response levels deemed acceptable to Owner.
 - 1. Contractor shall provide response times for all malfunctioning equipment of two (2) business days or less.
 - 2. Response time shall be measured from the time Contractor is notified by Owner to the time work is begun to resolve the matter.

1.04 SUBMITTALS

- A. Submittals shall consist of technical cut sheets and information pamphlets on all components of the system to be installed. All cut sheets and submittals shall be distinctly marked to highlight the actual part number of the item being submitted for approval.
- B. Equipment or material installed for this project that does not have an approved submittal associated with it, shall be removed and replaced with acceptable equipment or material as defined by the Architect/Engineer. All replacement costs including, but not limited to material and labor, shall be the sole responsibility of the Contractor.
 - 1. The Owner and/or Architect/Engineer may notify Contractor of any offending situations under this provision allowing Contractor up to forty-eight (48) hours to correct the situation prior to taking other corrective action.
 - 2. The Owner reserves the right to replace unapproved materials and deduct the costs of doing so as defined herein from any amounts that may be due, or become due Contractor.

- C. Shop drawings and diagrams shall be submitted by Bidder for approval by Architect/Engineer with Bids.
 - 1. Shop drawings and diagrams shall show all data relating to structural, electrical, wiring, cross connect, interconnect, equipment arrangement/layout, and any other information deemed significant by the Architect/Engineer.
 - 2. No work constituting final installation shall be commenced until after approval of shop drawings by Architect/Engineer.

1.05 REFERENCE STANDARDS

- A. All work, products, and materials shall conform with the following standards as applicable for the intended use:
 - 1. ANSI/NFPA
 - 2. EIA/TIA Commercial and Administration Standards
 - 3. NECA
 - 4. BICSI
 - 5. UL
 - 6. MOSHA Safety Standards

1.06 CONTRACTOR

- A. The Contractor shall accept complete responsibility for the installation, certification and support of the system. Contractor shall provide proof of manufacturer support by photocopy of certification and letter of support from major component manufacturers for this specific project. Contractor shall be an authorized vendor of all major components.
- B. All work shall be performed and supervised by Project Managers, Engineers and/or Technicians who are qualified to install system and perform related tests as recommended by the manufacturer and in accordance with the manufacturer's best practices and methods.
- C. Project Managers, Engineers and Technicians employed on this project shall be properly and fully trained and qualified by the manufacturer on the installation and testing of the equipment and systems to be installed. Certification of such training shall promptly be provided if requested by Architect/Engineer.

- D. The Contractor shall have a proven track record in structured cable configuration and installation. This must be shown by the inclusion of references of at least three (3) projects involving the installation of similar systems completed by the Contractor in the prior two (2) years on unaltered forms with the sealed Bid as provided herein.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. Manufacturer(s) of major components of the structured cable system shall be a known and leading entities in the communications field, and shall have been designing, manufacturing and installing similar systems for a period of no less than four (4) years.
- B. Acceptable Manufacturers (In alphabetical order):
 - 1. Belden
 - 2. Gen Speed
 - 3. Hubbel
 - 4. Panduit
 - 5. Superior Essex
- C. System shall be built upon an open and standard platform, supporting industry standards. Systems that are deemed Proprietary in nature shall not be considered.

2.02 COPPER CABLE

- A. Station Cable shall meet or exceed:
 - 1. Four (4) pair Category 6 Unshielded Twisted Pair (UTP) cable.
 - 2. Rated and certified for installation in plenum air return spaces as may be required.
 - 3. Twenty-three (23) AWG
 - 4. Compliant as per EIA/TIA-36 specifications
 - 5. Certified under UL's LAN Cable Certification Program
- B. All cables shall be terminated for T568B compliant connection.
- C. Coordinate cable color(s) with Owner requirements prior to installation.

1. Cable jacket shall be blue in color.

2.03 CROSS CONNECT EQUIPMENT

A. Cross Connect Equipment shall meet or exceed:

1. Patch Panel for UTP Category 6 Cable Termination.
 - a. Rack mounted patch panels shall be of the Keystone snap in style. Rack mounted patch panels shall be Category 6 compliant, with T568B compliant terminations on front of panel and 110 type terminations on rear of panel.
 - b. Rack mounted patch panels shall be no larger than Forty-eight (48) ports each.
 - c. All patch panel keystone openings shall be populated with the appropriate keystone insert, whether or not there is a cable terminated on the back of the keystone insert.

1. All keystone inserts shall be RED in color.

2. Furnish and install smear resistant, mechanically imprinted polyester or similar material labels to identify each port of all patch panels (fiber optic and copper) in compliance with EIA/TIA 606 standards or Owner required scheme. Labels shall be permanently affixed to patch panels.
3. Coordinate cable color per Owner requirements as noted herein.
 - a. Cable jacket shall be blue in color.

2.04 WIRING DEVICES

A. All station cable shall terminate on modular jacks that meet or exceed:

1. Category 6 compliant
2. 8 position T568B compliant modular female jack.
3. Jacks shall be RED in color.
4. Snap-in, high impact housing
5. Field verify and coordinate insert color to match Owner requirements.
6. Field verify and coordinate plates and/or outlet frame colors and materials to coordinate with electrical devices and Owner requirements.

7. Where station cable is to terminate above finished ceiling or behind a finished wall for clocks, speakers, or other special station devices, modular jack may be surface mounted in appropriate high strength, impact resistant plastic enclosure.
8. Furnish and install matching coordinating blank cover plates for all unused communications outlets indicated on drawings.
9. Mount flush plates so all four edges are in continuous contact with finished surfaces.
10. Furnish and install smear resistant, mechanically imprinted polyester or similar material labels to identify each port of all patch panels (fiber optic and copper) in compliance with EIA/TIA 606 standards or Owner required scheme. Labels shall be permanently affixed to patch panels.

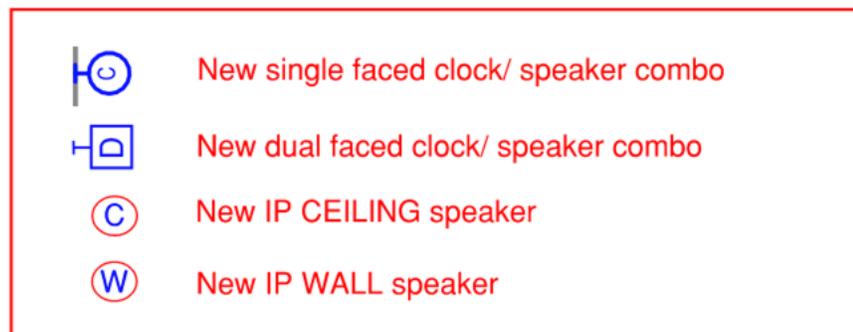
2.05 OWNER STANDARDS

- A. Contractor shall provide connectors in a color to match the Owner's existing standards.
 1. Connectors shall be RED in color.
- B. Contractor shall provide cover plates and any associated keystone inserts as may be required matching Owner's existing standards.
 1. Stainless Steel cover plates in the rare locations where outlets will be in visible boxes.
 2. Red keystone inserts.
- C. Contractor shall provide connector identification and labels on all terminations matching Owner's existing standard. Field verify all label conditions per site prior to final installation.

2.06 PROJECT CABLE CONFIGURATIONS

- A. Contractor shall provide data outlets in locations identified on provided drawings.
- B. Wall Data Outlet (only where necessary)
 1. Contractor shall provide data outlets including, but not limited to:
 - a. UTP station cable(s) terminated on compliant patch panel in nearest IDF and wire devices in a single box location.
 - b. Wire device(s) shall be installed in standard keystone insert with six (6) positions. All unused positions shall be blanked.

- c. Faceplate compliant with Owner standards shall be provided.
 - 2. Outlet shall be provided at each location indicated on drawings, noting the number of station cables to be terminated.
- C. Above Ceiling Outlet / Behind finished surface Outlet
- 1. Contractor shall provide above ceiling outlets including, but not limited to:
 - a. UTP station cable(s) terminated on compliant patch panel in nearest IDF and wire device with a single surface mounted biscuit jack.
 - b. Device location shall be as indicated on drawings in respect to each new device location identified and above finished ceiling/surface, but accessible for station connection. Cable shall provide for a field surface loop of ten (10') feet at the termination end and be located within fifteen (15') feet of the indicated device location.
- D. New cables shall be installed One (1) per new device location as noted on maps included herein, and as shown below:



- a. All cable shall be terminated on a female Category 6 connector installed in an appropriate surface mount box.
 - b. Surface mount device box shall be bright in color and/or contain a permanently attached brightly colored reflective identification label to facilitate visual location of connection point behind finished surfaces.
2. Outlet shall be provided at each location indicated on drawings, noting the number of station cables to be terminated.

2.07 PREPARATION

- A. Contractor shall conduct detailed walk-through examination with Architect/Engineer verifying equipment and material locations as well as mounting and placement requirements prior to commencement of other installation activities.

- B. Contractor shall ensure all submittals and shop drawings have been provided to, and approval has been obtained from Architect/Engineer prior to commencement of any final installation activities.

2.08 DEMOLITION

- A. NOT USED

2.09 INSTALLATION

- A. Contractor shall be familiar with the environment where work shall be done as specified herein.

- B. Work Areas shall be cleaned at the end of each day. All debris shall be cleared, removed and disposed of in an approved container for the site. All equipment and tools shall be removed from common areas and stored in approved, secure storage locations. Any work that may impede the general use of the space and cannot be removed shall be flagged and cordoned off by the Contractor prior to their departure.

- C. All equipment and materials shall be installed in a neat and workmanlike manner. Best practices installation principles shall be used throughout the project.

- D. The Contractor shall furnish, set in place, and install all equipment necessary for a fully compliant and operational system as specified herein. The installation process includes, but is not limited to the following:

1. Cables installed in a professional manner to prevent tangling and congestion and to facilitate installation or removal of cables in the future.
2. Cables installed without kinks (any bend with a radius less than manufacturer defined minimum).
3. Cabling installed in any pool deck shall be outdoor rated (or similar) to protect from chlorine and moisture damage.
4. All cable free of abrading or penetrating of cable jacketing.
5. In suspended ceiling where cable trays or conduit are not available, Contractor shall support wiring with "D – rings", beam clamps or other approved cable support devices at appropriate distances (5 ft. minimum).
6. All information outlets shall be labeled according to the Owner's cable identification scheme. Labels shall be completed using pre-printed labels. Handwritten labels are not acceptable.

7. The Contractor shall label all cables, jacks, patch panel positions, faceplates and cross connects.
8. In-line cable splicing shall not be permitted.
9. Length of each individual run of horizontal cable from the MDF/IDF to the information outlet shall not exceed 90 meters (295 ft.).
10. IDF(s) and MDF locations have been identified in the drawings. Contractor shall calculate distances to ensure the adherence to the EIA/TIA 568 distance limitations. Contractor shall notify Architect/Engineer of cable length exceptions prior to installation in writing and request direction.
11. All copper data cabling shall terminate on Category 6 compliant connectors. Approximately 10 ft. of Category 6 and/or fiber cabling shall be coiled and stored at each cable distribution center in order to accommodate future change.
12. All copper data cabling shall terminate on Category 6 compliant connectors. Approximately 15 ft. of Category 6 and/or fiber cabling shall be coiled and stored at each cable device termination location.
13. Wiring not installed in conduit shall not be routed within 18 inches of light fixture ballasts or within 36 inches of motors or transformers.
14. Coordinate cable colors with Owner requirements prior to installation.
 - a. Cabling shall be blue in color.
15. Contractor shall include any sleeves where wall penetrations are needed. Sleeves shall be a minimum of 2" diameter and sized for cable being installed with a maximum fill rate of 25%. All installed sleeves shall be fully fire stopped with compliant fire stop material following cable installation.
16. Assemble, install, configure and test all equipment and components, maintaining accurate inventory records and status documents and discarding packaging.
17. Contractor shall provide code compliant fire stop materials in all wall penetrations vacated and not being used for newly installed cable.
18. Work shall be performed to meet local codes and industry standards, including, but not limited to:
 - a. Grounding and Bonding.

E. Sites of Work:

1. Administration Center / MacDonald Elementary School
5201 County Line Road
Casco Township, Michigan 48064
2. Anchor Bay High School
6319 County Line Road
Fair Haven, Michigan 48023
3. Aquatic Center
52401 Ashley
New Baltimore, Michigan 48047
4. Ashley Elementary
52347 Ashley
New Baltimore, Michigan 48047
5. Early Childhood Center
52680 Washington Street
New Baltimore, Michigan 48047
6. Great Oaks Elementary
32900 24 Mile Road
Chesterfield Township, Michigan 48047
7. Lighthouse Elementary
51880 Washington Street
New Baltimore, Michigan 48047
8. Lottie Elementary
33700 Hooker
New Baltimore, Michigan 48047
9. Maconce Elementary
6033 Church Road
Ira, Michigan 48023
10. Maintenance / Transportation / Operations
51890 Washington
New Baltimore, Michigan 48047
11. Middle School North
52805 Ashley Street
New Baltimore, Michigan 48047

12. Middle School South
18650 Sugarbush
New Baltimore, Michigan 48047

13. Naldrett Elementary
47800 Sugarbush
New Baltimore, Michigan 48047

F. It shall be the responsibility of the Contractor to repair or replace any damage done to the structure of finishes in the building by the Contractor. If in the course of work, Contractor damages, marks or misplaces any surfaces or access plates/panels the Contractor shall repair and/or replace the surface, plate or panel to the original condition.

1. Final determination as to the damage condition and/or repair/replacement fitness of any surface, plate or panel shall be the sole responsibility of the Designer.
2. The building and work area shall be returned to its original condition prior to final sign off of the project.

2.10 ALLOWANCES

A. Contractor shall include allowances for equipment and/or other contract service reimbursements as required below in base bid lump sum amount(s). Equipment and/or contract services shall be provided and sourced at Owner's discretion and convenience with full cooperation by Contractor, and paid for from successful bidder's contract in the amount(s) provided for herein. Any allowance amount proving to be excessive for the intended equipment and/or contract services shall be credited to the Owner against contract payment requests.

1. Allowance shall be made in the amount of \$20,000 for additional Owner desired upgrades.

2.11 DOCUMENTATION

A. Contractor shall be responsible for providing thorough, timely documentation. Documentation shall include, but not be limited to both printed and electronic copies of:

1. As-built drawings of each building.
2. Copper station cable test results.

2.12 TESTING

A. End to end testing of UTP copper Category 6 cables shall be conducted at 350 Mhz to meet or exceed reference standards. 100% of all pairs shall be tested. Documentation of test results shall be provided including, but not limited to the following parameters:

1. Attenuation.
2. Near End Cross Talk (NEXT).
3. Signal to noise ratio.
4. continuity
5. Pair integrity
6. EMI interference.
7. Any cable that does not meet Category 6 EIA/TIA 568 specifications shall be repaired or replaced at the Contractor's expense.
8. Cable length.

2.13 TRAINING

A. Not Used.

2.14 SCHEDULE, MEETINGS AND PLANS

A. Sequence of operations shall be established by the Contractor within the guidelines established by the Owner, documented herein, required by Designer, Architect and/or Construction Manager and as required to meet schedules.

B. Schedule

1. Post bid Interviews: Week of April 7, 2025
2. Contractor Chosen: April 23, 2025
3. Work Commences: May 1, 2025
4. Substantial Completion of Project: November 1, 2025
5. Project Close-out: December 1, 2025

C. All work shall be coordinated with Owner's construction manager on site.

Project progress meetings shall be held, but not limited to, weekly at a site and time identified as convenient for Owner and as required herein. Meetings will be attended as required herein.

END OF SECTION

SECTION 27 30 30
PHONE SYSTEM

PART 1 - GENERAL

1.01 DESCRIPTION OF PROJECT

- A. Work described in this specification section pertains to a Voice Telecommunications System replacement for Anchor Bay School District. Work shall include, but not be limited to telephone instruments, gateways and all other components and services required for a full and operational system.
- B. Owner desires to replace telephone systems currently in operation and serving all locations with new and more maintainable technology. See appendices included within for overview of current system components.
- C. Contractor shall propose a System to be deployed using Ethernet transport foundation. The system shall be installed and connected to the owner's existing Ethernet infrastructure.
 - 1. Existing Wide Area Network (WAN) links are in place to all locations for packet based communication.
- D. Fail-over gateways shall be installed in the Owner's Main Distribution Frame (MDF) in each building affected.
- E. Access to centralized call processor(s) and centralized PSTN gateways shall be provided.
- F. Contractor shall advise, coordinate and work cooperatively with Owner representatives and others related to any configuration changes required and/or proposed for Owner's existing Ethernet infrastructure (VLAN configuration, QoS mapping, routing, etc.).
- G. Power for all new voice terminals will be provided for, by way of standard IEEE Power over Ethernet (PoE) installed in appropriate distribution frames throughout sites of work and configured by others.
- H. The Contractor shall design, engineer, configure, supply, connect, test, document, train Owner representatives and warrant a fully operational and compliant Voice Communication System, complete and with full functionality as specified herein.
- I. Contractor shall coordinate their installation with other communication systems, contractors, Designer and the Owner as is appropriate.

1.02 WARRANTY

- A. Complete installation shall be fully functional and free from defect and/or failure for a period of three (3) years. Any replacement, upgrade, patch or fix, including labor for any non-conforming or non-operational part of the system shall be fixed and/or replaced at no cost to the Owner.
 - 1. REQUIRED ALTERNATE: Five (5) year warranty.
- B. Manufacturer's warranty shall be provided for all components of the system.
 - 1. Any paperwork and/or submittals required by individual manufacturers for compliance with the standard and/or applicable extended warranty programs shall be provided and submitted for approval by the Contractor.
 - 2. Contractor shall submit all paperwork, apply for warranty or extended warranty certification, and provide a Certificate of Warranty or Extended Warranty as may be applicable from the manufacturer prior to project closeout.
- C. On site services provided under the warranty shall be performed by personnel or representatives of Contractor as herein defined and located within physical proximity to provide response levels deemed acceptable to Owner.
- D. Contractor shall provide the following response times for all malfunctioning equipment:
 - 1. Four (4) hours or less for matters that render twenty percent (20%) or more of the system users unable to maintain normal productivity.
 - 2. Two (2) business days for matters not meeting the above criteria.
 - 3. Response time shall be measured from the time Contractor is notified by Owner to the time work is begun to resolve the matter.
- E. Bidder shall provide current annual maintenance/service contract pricing for recommended programs for all equipment following the specified and included period as additional information. This information will be considered by Owner and Designer as part of the bid evaluation process.
- F. System Warranty shall commence on date of substantial completion as certified by Designer and provided for herein. Delivery to work site of materials, connection of circuits, turn-up of system, physical removal from packaging, issuance of Contractor documents including, but not limited to invoices and/or packing slips, or any event or documentation, not specifically provided for herein, shall have no effect on Warranty or System Acceptance by Owner and/or Designer.
- G. Bidder shall provide alternate bid that includes five (5) year warranty, in lieu of required and included warranty as defined herein.

1.03 STORAGE OF MATERIALS

- A. All materials shall be secured when not in use by the Contractor.
- B. It shall be the Contractor's responsibility to secure all equipment including material to be installed as part of the contract. No changes shall be made to the contract due to loss or theft of equipment and/or materials not officially accepted by the Owner.
- C. Formal receipt of the materials shall not be completed by the Owner until completion of project closeout. The Contractor shall be responsible for all equipment until time of closeout as provided for herein.

1.04 SUBMITTALS

- A. Submittals shall consist of, but not be limited to, technical cut sheets and detailed information pamphlets on all components of the system to be installed. All cut sheets and submittals shall be distinctly marked to highlight the actual part number of the item being submitted for approval with Bid Proposals.
- B. Shop drawings and diagrams shall be submitted by Bidder for approval by Designer with Bid Proposals.
 - 1. Shop drawings and diagrams shall show all data relating to structural, electrical, wiring, cross connect, interconnect, equipment arrangement/layout, and any other information deemed significant by the Designer.
 - 2. No work constituting final installation shall be commenced until after approval of shop drawings by Designer.
- C. Contractor shall provide proof of manufacturer support by photocopy of certification and letter of support from major component manufacturers for this specific project with Bid Proposals.
- D. Equipment or material installed for this project that does not have an approved submittal associated with it, will be removed and replaced with acceptable equipment or material as defined by the Designer. All replacement costs including, but not limited to material and labor, shall be the sole responsibility of the Contractor.
 - 1. The Owner and/or Designer may notify Contractor of any offending situations under this provision allowing Contractor up to forty-eight (48) hours to correct the situation prior to taking other corrective action.

2. The Owner reserves the right to replace unapproved materials and deduct the costs of doing so as defined herein from any amounts that may be due, or become due Contractor.
- E. The Contractor shall submit within five (5) calendar days after the Notice to Proceed, a schedule that reflects the sequence of activities of the contractor's approach to the execution of and completion of the work. The schedule shall be broken into work areas to provide for a clear identification of the planned progress of the work. Included in the schedule will be a list of tasks with list of deliverables and the percentage of work completed. This schedule shall coincide with progress payments applications dates and projected amounts. All durations shown will be in working days. The timeframe described in the Contractor's Schedule shall represent the Contractor's plan for organizing, directing, managing, controlling, staffing and executing the work required by the Contract Documents. Owner will rely on such schedules to coordinate and otherwise plan related work of Owner personnel, other separate contractors, or the Owner's routine daily work.

1.05 REFERENCE SPECIFICATIONS

- A. All work, products, and materials shall conform with the following standards as applicable for the intended use:
1. EIA/TIA Commercial and Administration Standards
 2. NEC
 3. IEEE 802
 4. IETF RFCs
 5. FCC Emissions Ratings
 6. UL
 7. MOSHA Safety Standards

1.06 CONTRACTOR

- A. The Contractor shall accept complete responsibility for the installation, certification and support of the system. Contractor shall be an authorized vendor of all major components. Contractor shall be provided with a valid "Letter of Agency" by Owner to facilitate this responsibility.
- B. All work shall be performed and supervised by Project Managers, Engineers and/or Technicians who are qualified to install Voice Communication System and perform related tests as recommended by the manufacturer and in accordance with the manufacturer's best practices and methods.

- C. Project Managers, Engineers and Technicians employed on this project shall be properly and fully trained and qualified by the manufacturer on the installation and testing of the equipment and systems to be installed.
- D. The Contractor shall have a proven track record in Voice Communication System configuration and installation. This must be shown by the inclusion of references of at least three (3) projects involving the installation of similar systems completed by the Contractor in the prior two (2) years on unaltered forms with the sealed Bid Proposal as provided herein.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. Manufacturer of major components of the Voice Communication System shall be a known and leading entity in the communications field, and shall have been designing, manufacturing and installing similar systems for a period of no less than five (5) years.
 - 1. Acceptable Manufacturers (In alphabetical order):
 - a. Avaya
 - b. CISCO
 - c. MITEL
 - 2. System shall be compatible with and support industry SIP VoIP standards.

2.02 Supply most current version of all products provided.

- A. Prior and/or old versions of products, unless specifically approved and documented by Designer and/or Owner shall not be acceptable.
- B. In cases where a newer version of hardware or software is available at the time of installation, Contractor shall request clarification from Designer on which version is to be used.

2.03 Furnish only new, first class quality materials and equipment.

2.04 System shall be comprised of interoperable components including, but not limited to, servers, controllers, speakers, terminals, gateways, power injectors/switches and battery/power conditioning equipment, cabling and management software, integrated into a common working system.

2.05 CENTRAL VOICE PROCESSOR

- A. Contractor shall insure building based telephone system provides access to Contractor supplied central voice processor capable of supporting the

specified configuration and an additional ten percent (10%) more stations without additional hardware or software investment required (actual station hardware cost excluded) from Owner.

B. System shall provide full functionality of the following feature sets:

1. Distinguish internal calls from external calls and route them accordingly.
2. Incoming callers must have the option to transfer out of a call path/control to a directed number, central answering position, and/or specific extension.
3. Automatic Call Back (Redial)
4. Call Block
5. Call Forwarding
 - a. Ring no answer
 - b. External
 - c. Internal
6. Call Hold
7. Call Park
8. Busy Override
9. Call Pick-up
 - a. Directed
 - b. Group
10. Call Queuing
11. Camp-on (Call Waiting)
12. Conference Calling
 - a. Dial-up conferencing for 6 connections
 - b. "Meet-me" conferencing for twenty (40) parties
13. Day/Night Class of Service
14. Direct Inward Dial (DID)

15. Direct Outward Dial (DOD)
16. Disconnect Supervision
17. Do not Disturb
18. Flexible Numbering Plan
19. Forced and Verified Authorization Codes
20. Incoming Call Identification (Caller ID)
 - a. Name
 - b. Number
21. Last Number Redial
22. Least Cost Routing
23. Multiple Console Operation
24. Night Ring Assignments
25. Power Fail Transfer (PFT)
26. Paging
 - a. Zone
 - b. All Call
27. Remote Diagnosis
28. Remote moves, adds and changes
29. Music/Message on Hold
30. Cellular Phone Integration
31. Restrictive Station Control
32. Hunt Groups (Line Hunting)
 - a. Multi-Line
 - b. Linear
33. Speed Dial

- a. System
 - b. Personal
34. Station to Station Dialing (4 digit)
35. System Security Codes
36. Toll Restriction
- a. 0 /1 Access
 - b. By Area Code
37. Trunk Hunting (Inbound and Outbound)
38. Call Recording
- a. Call Recording shall be on demand, when initiated a user by depressing a function key, for up to ten (10) simultaneous calls from any of up to thirty (30) Owner pre-designated telephone instruments.
39. Central voice processor shall be powered by UPS unit within associated MDF/ IDF room.
- C. Local system administration functions shall be capable of being performed from any web browser attached to the local area network (LAN).
- 1. Administration access shall be protected by unique and secure log on (User ID and Password).
 - 2. System shall be capable of bulk moves, adds and changes.
 - 3. System administrator shall be capable of complete system back-up and full system restoration from a previously saved configuration.
 - 4. System reporting shall include, but not be limited to:
 - a. Real time trunk and gateway status.
 - b. Historical trunk and gateway utilization for administrator defined period.
 - c. Status of all system and call routing components.
 - d. Real time Station status.
 - e. Real time call trace capability.

- f. Complete historical call detail reporting.
- D. Systems shall connect across Owner's fiber optic network to provide for 4 digit dialing.
- E. System shall provide access to standard, trunked SIP circuits located at Owner's central facility designated location.
- F. System shall be configured to provide standard acceptable Ethernet Quality of Service (QoS) identification at both layer two (2) and layer three (3) to Owner's network infrastructure so as to insure end-to-end priority delivery of voice traffic across the network.
- G. System shall provide for adequate call admission control with Owner's network infrastructure to guarantee Local Area Network/Wide Area Network (LAN/WAN) links are not oversubscribed.
- H. System shall automatically detect the presence of an Internet Protocol (IP) telephone.
- I. System shall comply with all requirements for telephone access, including, but not limited to the following, and as required by federal, state, local and Owner statutes, guidelines and/or policies:
 - 1. Enhanced 911 services
 - 2. TDD services
- J. In the event of a power failure, system shall automatically re-initialize and "become active" to the last configuration in use with no human intervention.
- K. All other features currently a part of the manufacturer's latest commercial release.

2.06 MASS NOTIFICATION SYSTEM

- A. Contractor shall provide a district wide, premise-based Mass Notification System complete with all hardware and software required to meet or exceed the following:
 - 1. System shall provide for event notification through web based and telephony-based password/code protected interfaces.
 - 2. Event notification shall be capable of being initiated through Owner provided contact closures.
 - 3. Notification delivery must be able to be provided for the following:

- a. All telephone stations/instruments in the system via visual display and audio indication.
 - b. Email to a list of user-maintained subscribers.
 - c. SMS text messages to a list of user-maintained subscribers.
4. System shall provide for notification delivery to limited numbers or recipients based on how and where the notification event is initiated.
 5. The following events and notification scenarios shall be configured in the base system installation and configuration provided by Bidders:
 - a. Pressing an existing “lock-down button” at a building will result in the building lockdown message being broadcasted on clocks and speakers defined in other sections herein, and limited distribution of notification to telephone instruments, email and text messages to users at that building and select other administrative stations/personnel in other buildings.
 - b. Any telephone that a user dials 911 from will result in limited distribution of notification to telephone instruments, email and text messages to users at that building and select other administrative stations/personnel in other buildings.
 - c. Two additional “triggers” shall be configured for limited notification to telephones, email and text messages as directed by Owner. Owner shall remain responsible for any “third party” system configuration to outside devices and/or servers. All equipment, materials, cables, connections and configuration to the Contractor supplied systems and components shall remain the responsibility of the Contractor.
 6. Complete audit logs of all notifications delivered and system reporting shall be configured for Owner reviews at Owner discretion.

2.07 NEW VOICE TERMINALS

- A. All New Voice Terminals (Telephone Instruments/Sets) shall be Ethernet devices, and shall properly and acceptably communicate over, and attach to, Owner’s standard, existing, installed Ethernet communications network provided by others.
 1. Work includes supply and installation of new connection/patch cables to all phone instruments which require data network connectivity.
 - a. Contractor shall supply all patch cables for system operation and a connected computer to each telephone instrument. All patch cables shall be Category 6 cable.

1. Cable from wall to telephone shall be fifteen (15) feet in length.
 2. Cable from telephone to computer shall be fifteen (15) feet in length and black in color. This shall be included for contractor provided Administrator Voice Terminals.
 3. Patch cable in wire closet from patch panel to switch port shall be installed by contractor and provided by owner.
2. Voice terminals often will be required to be installed “in line” on cable and switch ports, and supply Ethernet connectivity to existing workstations, printers, or other devices from the second port supplied on the voice terminal, as specified herein and/or as provided for during the station review and installation planning process required of Contractor.
 3. When attaching existing equipment to phone instruments “in line”, contractor shall install all supplied CAT 6 patch cables between wall outlet and phone and between phone and devices. No existing device cables shall be installed between phone and the device. Contractor shall remove and dispose of all existing and excess cable as part of the installation work.
- B. New Standard Voice Terminal (SVT)
1. A total of Five Hundred Forty Six (546) SVT handsets shall be provided. See Appendix C for quantities and locations.
 2. SVTs shall simultaneously provide, but not be limited to the following:
 - a. Dual (2) line operation.
 - b. Two (2) Ethernet ports (Integrated 2 port 10/100/1000 Ethernet switch).
 - c. Hearing aid compatible handset.
 - d. Message waiting notification lamp or indicator.
 - e. Hold button.
 - f. Transfer button.
 - g. Conference button.
 - h. Dial pad on base.
 - i. Four (4) programmable feature access buttons.
 - j. Multiple line display.

- k. Speaker and Microphone for hands free communication.
 - l. Session Initiation Protocol (SIP) compliance.
 - m. IEEE Standard Power over Ethernet (PoE) compliance.
- C. New Administrator Voice Terminal (AVT)
- 1. A total of One Hundred Thirty Nine (139) AVT handsets shall be provided. See Appendix C for quantities and locations.
 - 2. AVTs shall simultaneously provide, but not be limited to the following:
 - a. Eight (8) line operation.
 - b. Two (2) Ethernet ports (Integrated 2 port 10/100/1000 Ethernet switch).
 - c. Hearing aid compatible handset.
 - d. Message waiting notification lamp or indicator.
 - e. Hold button.
 - f. Transfer button.
 - g. Conference button.
 - h. Dial pad on base.
 - i. Eight (8) programmable feature access buttons.
 - j. Eight (8) line display.
 - k. Full Duplex Speaker and Microphone for hands free communication.
 - l. Session Initiation Protocol (SIP) compliance.
 - m. IEEE Standard Power over Ethernet (PoE) compliance.
 - 3. Provide unit pricing for owner consideration for DECT wireless headsets compatible with contractor provided Administrator Voice Terminals.
 - 4. Provide unit pricing for owner consideration for expansion module providing additional programable keys compatible with contractor provided Administrator Voice Terminals.
- D. Contractor shall supply and install ten (10) wall mount kits compatible with supplied standard voice terminals (SVT), to be installed in locations identified

by Owner and Designer. Wall mount kits shall securely and neatly fasten phone instrument to wall. Contractor to supply all necessary parts and installation for a fully functional and compliant system.

2.08 VOICE GATEWAYS (TRUNK CAPACITY)

- A. System shall provide and be provisioned for all equipment and software including gatekeeper(s) and gateway(s) to meet system requirements and be fully functional for intended applications as defined herein.
- B. System gateways shall support, but not be limited to the following circuits and services:
 - 1. All features currently a part of the manufacturer's latest commercial release.
 - 2. Bidder shall include voluntary alternate to provide all necessary hardware, labor and licensing to accommodate cellular backup functionality.
 - 3. Bidder shall include voluntary alternate to provide all necessary hardware, labor and licensing to accommodate SIP trunking in initial system configuration as required herein in lieu of base bid required ISDN PRI gateway based termination of telco circuits.

2.09 POWER OVER ETHERNET (PoE)

- A. All new equipment for system bid shall connect to Owner's Ethernet distribution system providing standard IEEE 802.3 PoE. Proprietary power distribution shall not be acceptable.

2.10 CENTRAL VOICE MESSAGE SYSTEM

- A. Central Voice Message System shall be provided. Central Voice Message System shall provide for full proper and acceptable communications over, and attachment to, Owner's standard, existing, installed Ethernet communications network provided by others.
- B. Owner intends to deploy a suite of basic unified messaging features as part of this system deployment.
- C. System shall provide for One Thousand, One Hundred (1,100) mail boxes in the initial deployment.
- D. System shall include capability of answering telephone calls from the Public Switched Telephone Network (PSTN) gateways or internally. System shall provide full functionality of the following feature sets:

1. System wide Auto-Attendant feature providing for menu guided self-service of callers.
2. Record personal greetings
3. Message waiting lamp indication(s)
4. Information mailboxes
5. User modifiable security codes
6. Set calendar days and hours for alternate greetings
7. Guest mailboxes
8. Out calling for message waiting notification
9. Multiple distribution lists
10. Message forwarding
11. Message reply
12. Users must be able to retrieve messages from both on and off premise
13. Messages must be time and date stamped.
14. Pause and replay messages
15. Record messages, send and mark “urgent”, “private”, etcetera
16. Transfer messages to other subscribers and append them with comments
17. Edit and/or modify personal distribution lists
18. Dial by name / organization directory
19. If a message is sent from another subscriber, the senders name and mailbox number shall be a part of the message envelope. If the message is sent from an extension on the system, the extension number must be part of the message envelope.
20. System shall produce reports detailing voice mail and automated attendant usage, system availability, and capacity utilization.
21. All other features currently a part of the manufacturer’s latest commercial release.

E. System shall support the following standard protocols for interconnection to other systems or components and to provide for basic form of unified messaging with Owner's installed and existing email system:

1. VPIM
2. LDAP
3. IMAP4
4. POP3
5. SIP

2.11 ALLOWANCES

A. Contractor shall include allowances for equipment and/or other contract service reimbursements as required below in base bid lump sum amount(s). Equipment and/or contract services shall be provided and sourced at Owner's discretion and convenience with full cooperation by Contractor, and paid for from successful bidder's contract in the amount(s) provided for herein. Any allowance amount proving to be excessive for the intended equipment and/or contract services shall be credited to the Owner against contract payment requests.

1. Allowance shall be made in the amount of \$12,000 for additional owner desired upgrades.

PART 3 - EXECUTION

3.01 PREPARATION

- A. Contractor shall conduct detailed walk-through examination with Designer and Owner verifying equipment and material locations as well as mounting and placement requirements prior to commencement of other installation activities.
- B. Contractor shall insure all submittals and shop drawings have been provided to, and approval has been obtained from Designer prior to commencement of any final installation activities.

3.02 INSTALLATION

- A. Contractor shall conduct complete departmental interviews throughout the Owner's Technology Department Staff and additional District Staff as deemed necessary to review current station and feature usage and provide for station and feature programming standards (Class of Services - CoS).

1. Interviews and station reviews shall be fully documented by Contractor and submitted to Owner for approval.
 2. Such station reviews shall include, but not be limited to detailed telephone and dial plan reviews for all key user groups and individuals:
 - a. Building Secretaries
 - b. Building Principals
 - c. Teachers
 - d. Central Office Administrators
 - e. Administrative Assistants
 - f. Transportation Administrators
 - g. Early Child Care Administrators
 3. Such station reviews shall be completed, documented and reviewed with the Owner project team prior to any new system configuration work being initiated.
- B. Contractor shall expect to assure that all cable drops supporting new telephone equipment are patched into network switches designated by Owner, to assure they are powered by UPS equipment.
- C. Contractor shall be familiar with the environment where work will be done as specified herein.
- D. Work Areas shall be cleaned at the end of each day. All debris shall be cleared, removed and disposed of in an approved container for the site. All equipment and tools shall be removed from common areas and stored in approved, secure storage locations. Any work that may impede the general use of the space and cannot be removed shall be flagged and cordoned off by the Contractor prior to their departure.
- E. All equipment and materials shall be installed in a neat and workmanlike manner. Best practices installation principles shall be used throughout the project.
- F. The Contractor shall furnish, set in place, and install all equipment necessary for a fully compliant and operational system as specified herein. The installation process includes, but is not limited to the following:
1. Inventory receipt of all components and equipment.

2. Storage of all equipment and components until such time those items are installed according to the specifications.
3. Transport equipment to the Owner's installation location(s).
4. Assemble, install, configure and test all equipment and components, maintaining accurate inventory records and status documents and discarding packaging.
5. Collect all information necessary to accurately program all station sets and/or system devices to the Owner's intended use and need.
6. Contractor shall strictly follow all industry standards and best practices as well as Manufacturer recommendations and requirements for installation and configuration of all system components.
7. Label all station sets and system devices as may be appropriate and required by Owner and Designer.
8. Contractor shall provide and install blank cover plates for all locations that wall mounted telephones are removed and not reinstalled.
9. Complete end user and system administrator training programs as specified herein.
10. Prepare, execute, confirm and coordinate with the carrier(s) all new trunk/circuit orders, changes of existing circuits, as well as disconnect orders required by Owner. This effort shall include Contractor request(s) and verification of carrier(s) to identify and tag all existing circuits terminating on Owner premises to industry standards. Owner shall provide a "Letter of Agency" to Contractor to facilitate this activity.
11. Work shall be performed to meet local codes and industry standards, including, but not limited to:
 - a. Adequate gas tube protection for outside plant cable connections.
 - b. Grounding and Bonding.
12. Work includes extending trunks and circuits, as required, to Owner identified equipment installation locations at all locations.
13. Contractor will provide permanent asset tags for each system component that exceeds \$100.00 in value and each telephone instrument. Equipment installed in wiring closets will have district asset tags installed in a prominent location. Assets installed in public areas, such as staff desktop devices, will have asset tags installed in discreet but consistent area of each asset.

- a. Asset number, device/component description, serial number, make, model, part-number, site, room number/name and any other critical asset information shall be recorded for Owner as part of the documentation described and required herein.

G. Sites of Work:

1. Administration Center / MacDonald Elementary School
5201 County Line Road
Casco Township, Michigan 48064
2. Anchor Bay High School
6319 County Line Road
Fair Haven, Michigan 48023
3. Aquatic Center
52401 Ashley
New Baltimore, Michigan 48047
4. Ashley Elementary
52347 Ashley
New Baltimore, Michigan 48047
5. Early Childhood Center
52680 Washington Street
New Baltimore, Michigan 48047
6. Great Oaks Elementary
32900 24 Mile Road
Chesterfield Township, Michigan 48047
7. Lighthouse Elementary
51880 Washington Street
New Baltimore, Michigan 48047
8. Lottie Elementary
33700 Hooker
New Baltimore, Michigan 48047
9. Maconce Elementary
6033 Church Road
Ira, Michigan 48023
10. Maintenance / Transportation / Operations
51890 Washington
New Baltimore, Michigan 48047

11. Middle School North
52805 Ashley Street
New Baltimore, Michigan 48047

12. Middle School South
18650 Sugarbush
New Baltimore, Michigan 48047

13. Naldrett Elementary
47800 Sugarbush
New Baltimore, Michigan 48047

H. It shall be the responsibility of the Contractor to repair or replace any damage done to the structure of finishes in the building by the Contractor. If in the course of work, Contractor damages, marks or misplaces any surfaces or access plates/panels the Contractor shall repair and/or replace the surface, plate or panel to the original condition.

1. Final determination as to the damage condition and/or repair/replacement fitness of any surface, plate or panel shall be the sole responsibility of the Designer.
2. The building and work area shall be returned to its original condition prior to final sign off of the project.

I. Following installation and prior to final acceptance of the system, Contractor shall conduct follow-up interviews with Owner identified administrators and staff to review system functionality, suitability and confirm feature and program fitness for Owner applications.

1. Follow-up interviews shall be fully documented by Contractor and submitted to Owner for approval.

3.03 TESTING

A. In an effort to insure a smooth cut-over to the new system Contractor shall submit to a thorough testing process as defined herein prior to cut-over. Testing shall include, but not be limited to the following:

1. Telephone routing
2. Voice message interface to email system
3. System fail-over
4. Gateway connectivity
5. Paging and Public-Address integration and programming

6. Emergency alert trigger functionality.
- B. Prior to requesting testing by Designer, the Contractor shall use adequate means to assure the Work is completed in accordance with the specified requirements, meets the owner's specific application requirements and is ready for functionality and integrity testing.
- C. PROCEDURES
1. Prior to system cut-over, Contractor shall submit a written request to Designer indicating they have completed full and final configuration of the system, and are ready to have system integrity and functionality tested.
 2. Within reasonable time after receipt of request, Designer will provide a test schedule and coordinate testing date(s) with Owner and Contractor.
 3. Should Designer determine the Work is not acceptably configured or not of adequate integrity:
 - a. Designer promptly will so notify Contractor, giving reasons therefore and providing sufficient details to allow Contractor to make corrective actions.
 - b. Contractor shall then expeditiously remedy the deficiencies and notify Designer in writing when ready for re-testing.
 - c. Designer will schedule re-test of the Work.
 - d. Excessive re-testing of Work may result in fees being assessed Contractor.
 4. Should Designer and Owner concur the Work is configured properly and system integrity is as required:
 - a. Designer will review Contractors detailed cut-over plan, and upon finding it acceptable issue a memorandum of Testing Completion to Owner and Contractor after which system cut-over can proceed.

3.04 DOCUMENTATION

- A. Contractor shall, throughout the completion of the project, provide Owner a file storage system that shall include all necessary equipment (file drawers, folders, dividers, etc.), to contain all as-built drawings, owners manuals of all equipment installed, warranty and maintenance information and other information the Contractor, Designer and/or Owner deem necessary.
- B. Contractor shall be responsible for providing thorough, timely documentation on all hardware, software. Documentation shall include, but not be limited to:

1. Equipment description.
2. Equipment make.
3. Model number.
4. MAC Address
5. Asset Tag ID
6. Software release.
7. Date installed.
8. Manufacturer's warranty.
9. Maintenance contract terms.
10. Verification of maintenance contract engagement.
11. Telephone numbers for service and support.
12. Detailed technical support and service procedure instructions.
13. All product (hardware and software) manuals and manufacturer supplied documentation, including, but not limited to owner manuals, system administrator manuals and configuration guides. Where number of duplicate copies for particular manual or documentation item could be reasonably considered excessive, Contractor shall request direction from Owner and Designer.
14. Photocopy of original invoice listing make and model for all components and equipment from individual manufacturer(s), distribution source(s), or authorized agent(s) to establish manufacturer warranty start date for potential use after end of contract warranty provisions.
15. As built drawings for each building.
16. Dial Plan Report.
17. Complete inventory of installed station hardware and system software. Hardware inventory shall include set type (model number), Ethernet MAC address, station serial number, extension number, station user's name, location, software groups (including call pick-up, intercom, class of service, speed call, etc.).

3.05 TRAINING

- A. Contractor shall provide training for the Owner designated system administrator(s). Owner shall designate up to Four (4) administrators to be trained. Training shall be a minimum of Two (2), four (4) hour sessions in length, at the convenience of the Owner personnel, and of sufficient duration to satisfactorily complete training on all system administration functions including, but not limited to:
1. Basic trouble shooting of the installed system and components including diagnostic and problem resolution actions.
 2. System back-up and restore functions and procedures for all system parameters and configurations.
 3. Device additions, moves and changes as well as device reconfiguration.
 4. Dial plan manipulation.
 5. A basic syllabus shall be supplied to Owner and Designer at least one week prior to training.
- B. Contractor shall provide training for the Owner's key personnel who use, or may use the telecommunication system, or any of the system features. Owner shall coordinate schedules to provide for reasonable and efficient use of time in scheduling key personnel training. Training shall be a minimum of thirty (30) minutes in duration, conducted at each physical location of work. Training is required to reasonably cover the operational training needs of all Owner key personnel to an acceptable degree. Training shall include, but not be limited to:
1. Making or placing telephone calls inside and outside the organization.
 2. Receiving telephone calls from inside and outside the organization.
 3. Administration of personal telecommunication features.
 - a. Call forwarding
 - b. Conference Calling
 - c. Transferring Calls
 - d. Listening to, Saving, Deleting and administering voice messages.
 - e. Administering voice greetings.
 - f. Other features as required by Owner.
 4. A basic syllabus shall be supplied to Owner and Designer prior to training.

5. Training with this same content shall be video recorded for posting on Owner's internal employee training site to be used for recurrent training and new hire training. Video training shall be reasonably professional in quality.
- C. General User System Training shall be video recorded for posting on Owner's internal employee training site to be used for general staff recurrent training and new hire training. Video training shall be reasonably professional in quality and include, but not be limited to:
1. Making or placing telephone calls inside and outside the organization.
 2. Receiving telephone calls from inside and outside the organization.
 3. Administration of personal telecommunication features.
 - a. Call forwarding
 - b. Conference Calling
 - c. Transferring Calls
 - d. Listening to, Saving, Deleting and administering voice messages.
 - e. Administering voice greetings.
 - f. Other features as required by Owner.

3.06 SCHEDULE, MEETINGS AND PLANS

- A. Sequence of operations shall be established by the Contractor within the guidelines established by the Owner, documented herein, required by Designer, Architect and/or Construction Manager and as required to meet schedules.
- B. Schedule
1. Post bid Interviews: Week of April 7, 2025
 2. Contractor Chosen: April 23, 2025
 3. Work Commences: May 1, 2025
 4. Substantial Completion of Project: August 1, 2025
 5. Project Close-out: September 1, 2025

- C. Planned sequence of operations shall be established by the Contractor within the guidelines established by the Owner, as required herein and as required to meet schedules.
- D. All work shall be coordinated with Owner's construction manager on site.
- E. Project progress meetings shall be held, but not limited to, weekly at a site and time identified as convenient for Owner and as required herein. Meetings will be attended as required herein.

3.07 DEMOLITION

- A. Contractor shall remove and dispose of all existing telephone handsets and components, unless otherwise noted by Owner.
- B. Demolition shall not commence until cutover procedure for new system has been followed, as noted herein (sec. 3.03-C).
- C. Contractor shall remove and dispose of all existing equipment; including, but not limited to equipment located locally and within the district head end (MDF) and other places, unless otherwise approved by Owner.
- D. Contractor shall expect to demo an approximate total of 635 current devices.
- E. Demolition shall be done in a professional manner, so that there is as little evidence of the old system as possible, and so that there is very little to no damage done to the structure or its aesthetic components.
- F. Contractor shall not expect to use Owner refuse receptacles for disposal of equipment associated with this project.

END OF SECTION

SECTION 27 51 16
PUBLIC ADDRESS/ CLOCK SYSTEM UPGRADE

PART 1 - GENERAL

1.01 DESCRIPTION OF PROJECT

- A. Work described in this specification section pertains to Public Address/ Intercom and Clock System upgrades; including an integrated emergency alerting system for Anchor Bay School District. Work shall include, but not be limited to, head-end equipment, ceiling and/or wall speakers/ clocks, interface units, and all other components and services required for a full and operational system.
- B. This document describes and defines the new phone system and associated emergency alert system that is intended to be purchased and installed by Contractor(s) for the Owner. It is anticipated that a standard emergency alert system (likely Intrado Revolution or SingleWire Informacast) provided for by that category of work will drive the devices in this category of work.
- C. Owner desires to upgrade systems currently in operation and serving indicated locations.
 - 1. Administration Center / MacDonald Elementary School
5201 County Line Road
Casco Township, Michigan 48064
 - 2. Anchor Bay High School
6319 County Line Road
Fair Haven, Michigan 48023
 - 3. Aquatic Center
52401 Ashley
New Baltimore, Michigan 48047
 - 4. Ashley Elementary
52347 Ashley
New Baltimore, Michigan 48047
 - 5. Early Childhood Center
52680 Washington Street
New Baltimore, Michigan 48047
 - 6. Great Oaks Elementary
32900 24 Mile Road
Chesterfield Township, Michigan 48047

7. Lighthouse Elementary
51880 Washington Street
New Baltimore, Michigan 48047
 8. Lottie Elementary
33700 Hooker
New Baltimore, Michigan 48047
 9. Maconce Elementary
6033 Church Road
Ira, Michigan 48023
 10. Maintenance / Transportation / Operations
51890 Washington
New Baltimore, Michigan 48047
 11. Middle School North
52805 Ashley Street
New Baltimore, Michigan 48047
 12. Middle School South
18650 Sugarbush
New Baltimore, Michigan 48047
 13. Naldrett Elementary
47800 Sugarbush
New Baltimore, Michigan 48047
- D. The Contractor shall design, engineer, configure, supply, connect, test, document, and warrant a fully operational and compliant system, complete and with full functionality as specified herein.
- E. Contractor shall coordinate their installation with other communication systems, contractors, Designer, and the Owner as is appropriate.

1.02 WARRANTY

- A. Complete installation shall be fully functional and free from defect and/or failure for a period of five (5) years. Any replacement, upgrade, or fix, including labor for any non-conforming or non-operational part of the system shall be fixed and/or replaced at no cost to the Owner.
 1. Owner shall be provided full operation of system functions and features during the complete warranty period incurring absolutely no costs during that time.
- B. Manufacturer's warranty shall be provided for all components of the system.

1. Any paperwork and/or submittals required by individual manufacturers for compliance with the standard and/or applicable extended warranty programs shall be provided and submitted for approval by the Contractor.
 2. Contractor shall submit all paperwork, apply for warranty or extended warranty certification, and provide a Certificate of Warranty or Extended Warranty as may be applicable from the manufacturer prior to project closeout.
- C. On site services provided under the warranty shall be performed by personnel or representatives of Contractor as herein defined and located within physical proximity to provide response levels deemed acceptable to Owner.
- D. Contractor shall provide the following response times for all malfunctioning equipment:
1. Four (4) hours or less for matters that render twenty percent (20%) or more of the system users unable to maintain normal productivity.
 2. Two (2) business days for matters not meeting the above criteria.
 3. Response time shall be measured from the time Contractor is notified by Owner to the time work is begun to resolve the matter.
- E. Bidder shall provide current monthly maintenance/service contract pricing for recommended programs for all equipment following the specified and included period as additional information. This information will be considered by Owner and Designer as part of the bid evaluation process.
- F. System Warranty shall commence on date of substantial completion as certified by Designer and provided for herein. Delivery to work site of materials, connection of circuits, turn-up of system, physical removal from packaging, issuance of Contractor documents including, but not limited to invoices and/or packing slips, or any event or documentation, not specifically provided for herein, shall have no effect on Warranty or System Acceptance by Owner and/or Designer.

1.03 STORAGE OF MATERIALS

- A. All materials shall be secured when not in use by the Contractor.
- B. It shall be the Contractor's responsibility to secure all equipment including material to be installed as part of the contract. No changes shall be made to the contract due to loss or theft of equipment and/or materials not officially accepted by the Owner.

- C. Formal receipt of the materials shall not be completed by the Owner until completion of project closeout. The Contractor shall be responsible for all equipment until time of closeout as provided for herein.

1.04 SUBMITTALS

- A. Submittals shall consist of, but not be limited to, technical cut sheets and detailed information pamphlets on all components of the system to be installed. All cut sheets and submittals shall be distinctly marked to highlight the actual part number of the item being submitted for approval with Bid Proposals.
- B. Shop drawings and diagrams shall be submitted by Bidder for approval by Designer with Bid Proposals.
 - 1. Shop drawings and diagrams shall show all data relating to structural, electrical, wiring, cross connect, interconnect, equipment arrangement/layout, and any other information deemed significant by the Designer.
 - 2. No work constituting final installation shall be commenced until after approval of shop drawings by Designer.
- C. Contractor shall provide proof of manufacturer support by photocopy of certification and letter of support from major component manufacturers for this specific project with Bid Proposals.
- D. Equipment or material installed for this project that does not have an approved submittal associated with it, will be removed, and replaced with acceptable equipment or material as defined by the Designer. All replacement costs including, but not limited to material and labor, shall be the sole responsibility of the Contractor.
 - 1. The Owner and/or Designer may notify Contractor of any offending situations under this provision allowing Contractor up to forty-eight (48) hours to correct the situation prior to taking other corrective action.
 - 2. The Owner reserves the right to replace unapproved materials and deduct the costs of doing so as defined herein from any amounts that may be due or become due Contractor.
- E. The Contractor shall submit within five (5) calendar days after the Notice to Proceed, a schedule that reflects the sequence of activities of the contractor's approach to the execution of and completion of the work. The schedule shall be broken into work areas to provide for a clear identification of the planned progress of the work. Included in the schedule will be a list of tasks with list of deliverables and the percentage of work completed. This schedule shall coincide with progress payments applications dates and projected amounts.

All durations shown will be in working days. The timeframe described in the Contractor's Schedule shall represent the Contractor's plan for organizing, directing, managing, controlling, staffing and executing the work required by the Contract Documents. Owner will rely on such schedules to coordinate and otherwise plan related work of Owner personnel, other separate contractors, or the Owner's routine daily work.

1.05 REFERENCE SPECIFICATIONS

- A. All work, products, and materials shall conform with the following standards as applicable for the intended use:
 - 1. EIA/TIA Commercial and Administration Standards
 - 2. NEC
 - 3. IEEE 802
 - 4. IETF RFCs
 - 5. FCC Emissions Ratings
 - 6. UL
 - 7. MOSHA Safety Standards

1.06 CONTRACTOR

- A. The Contractor shall accept complete responsibility for the installation, certification, and support of the system. Contractor shall be an authorized vendor of all major components.
- B. Project Managers, Engineers and Technicians employed on this project shall be properly and fully trained and qualified by the manufacturer on the installation and testing of the equipment and systems to be installed.
- C. The Contractor shall have a proven track record in IP Clock/ Public Address System configuration and installation. This must be shown by the inclusion of references of at least three (3) projects involving the installation of similar systems completed by the Contractor in the prior two (2) years on unaltered forms with the sealed Bid Proposal as provided herein.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. Manufacturer of major components of the included IP Clock/ Public Address / Intercom system shall be known and leading entity in the relevant

communications field, and shall have been designing, manufacturing, and installing similar systems for a period of no less than three (3) years.

1. Acceptable Manufacturers

- a. ATLAS IED
- b. ADVANCED NETWORK DEVICES (A.N.D.)
- c. VALCOM
- d. Or Owner approved equivalent components that integrate with Owner's mass notification system as defined in other sections herein.

2.02 Supply most current version of all products provided.

- A. Prior and/or old versions of products, unless specifically approved and documented by Designer and/or Owner shall not be acceptable.
- B. In cases where a newer version of hardware or software is available at the time of installation, Contractor shall request clarification from Designer on which version is to be used.

2.03 Furnish only new, first-class quality materials and equipment.

2.04 PUBLIC ADDRESS/ CLOCK/ EMERGENCY ALERTING AND PROGRAM SYSTEM

- A. A fully compliant public address/ clock and program system shall be configured and installed to service Owner's worksites listed herein.
- B. Contractor shall fully configure all PA/ Clock/ Speaker devices to function per Owner's requirements/ specifications.
- C. New Interior PoE speakers shall be provided in locations identified on provided drawings. Quoted cost must include all materials and labor to integrate speakers into Contractor provided mass notification software.
- D. New exterior, weatherproof wide-angle sound dispersion POE exterior speaker(s) shall be provided in locations identified on provided drawings. Quoted cost must include all parts and labor to integrate into Contractor provided mass notification software.
- E. CENTRAL CONTROLLER
 - 1. Contractor shall supply appropriate licensing and labor to integrate all devices into Owner's mass notification system. Licensing shall be provided for term of warranty. At the time of this documents publication, it is not clear which system licensing will be required. Successful bidders

should include either Intrado Revolution or SingeWire Informacast in their base bid for all appropriate licensing and provide a voluntary alternate for the other product.

2. Central control software shall be configured for amplification and distribution of audio programming to all areas of all facilities listed herein. Owner applications may include, but will not be limited to:
 - a. Emergency alerting including, but not limited to:
 1. Lockdown (Red)
 2. Lockout (Blue)
 3. Evacuation (Green)
 4. Shelter in Place (Yellow)
 5. Fight in Process (COLOR TBD)
 6. All Clear (COLOR TBD)
 - b. Interface to computer data network system over Owner provided Ethernet network.
 - c. System shall store pre-recorded schedule for tone generation and interface to Owner's existing time sync (NTP Server) over Ethernet.
 - d. System shall broadcast school "bells".
 - e. Paging system zones shall be customizable to allow complete control over paging zone output. Zones shall be easily modified using the web browser interface to add or eliminate individual classrooms, hallways, and large venue spaces from zone lists.
 - f. Owner provided POE+ switches shall supply suitable power to enable intelligible audio from supplied Ethernet connected speakers.
 - g. Feedback elimination precautions or system features shall be employed to suppress any audio coupling between and audio source and nearby speaker.
 - h. All building-based equipment shall be mounted in Owner designated rack in MDF/ IDF room(s), except classroom equipment, which shall be installed in each classroom.
 - i. Gain control of alarms and announcements shall be individually configurable to different volume levels.

- j. Central controller shall be powered by UPS unit in associated MDF/IDF room.
- 3. Program System shall provide for, but not be limited to:
 - a. Separate program databases for each facility that can be manipulated/managed by that facility's specific administrative team.
- 4. Preference will be given to system architectures where a common central server can be used from the district's data center for control and management of building operations.
- 5. Contractor shall work collaboratively with Owner and other trades to fully integrate provided paging speakers and devices for emergency events as noted herein; triggered from within Owner's mass notification system.
- 6. System will be configured to integrate with IP messaging clock devices and door access software via provided contact closure.
- 7. While the main system controller will be located at the main district MDF, the system shall include a localized accommodation, at each location, that will allow for fail over operation, in the event of a network/ fiber outage.

F. INTERIOR POWER OVER ETHERNET (PoE) IN-CEILING (2x2) SPEAKERS

- 1. Acceptable Manufacturer(s)
 - a. Valcom
 - 1. VIP-402A-IC
 - 2. Or equivalent
- 2. Interior Speakers shall be installed where noted on building maps included within. Speakers are identified on provided drawings.
 - a. Final speaker placement shall be adjusted as needed for appropriate audio intelligibility, volume levels and ceiling obstructions and/or conditions and shall remain the responsibility of the contractor.
 - b. 2x2 lay in speakers shall be the preference in any indoor speaker locations specified. Wall speakers shall be used only where 2x2 lay in speakers are not feasible.
- 3. Speakers shall meet or exceed the following requirements:
 - a. Square ceiling tile IP speaker (2'x 2')

- b. Frequency response – 60 Hz – 17kHz
- c. Built-in 8 W amplifier
- d. PoE IEEE 802.3af/802.3af Type 1 Class 3 (max 12.95 W)
- e. Support for SIP integration with Voice over IP (VoIP) systems.
- f. Full multicast and broadcast support.
- g. All devices, including but not limited to, amplifiers, brackets, baffles, and Control Unit shall be mounted square and plumb and as recommended by the manufacturer and required by Owner and Architect.
- h. Each speaker shall be connected to central equipment using standard category 6 ethernet cabling. Contractor shall supply (RED) ethernet patch cables at both the closet and device location to extend provided cabling to optimal speaker location, cable shall not exceed 30'. Cable color shall be coordinated with Owner and/or designer
- i. Contractor shall be responsible for cross connecting speakers in data closet and reporting back switch and switch port locations to Owner for programming.
- j. Contractor shall include all parts and accessories for a fully functional and securely installed system using manufacturer and industry best practices.
- k. Each speaker shall be volume adjusted at installation to accommodate specific acoustical properties of the intended coverage area.
- l. System shall produce audio at a peak level of approximately eighty-five (85) dBA at probable listener's positions.
- m. Provided speakers must be fully Mitel Revolution/ Informacast compatible.

G. INTERIOR POWER OVER ETHERNET (PoE) SURFACE MOUNT SPEAKERS

- 1. Acceptable Manufacturer(s)
 - a. Valcom
 - 1. VIP-410A-IC
 - 2. Or equivalent

2. Interior Surface Mount Speakers shall be provided as noted on drawings within. Speakers are identified on provided drawings.
 - a. Final speaker placement shall be adjusted as needed for appropriate audio intelligibility, volume levels and ceiling obstructions and/or conditions and shall remain the responsibility of the contractor.
 - b. 2x2 lay in speakers shall be the preference in any indoor speaker locations specified. Wall speakers shall be used only where 2x2 lay in speakers are not feasible.
3. Speakers shall meet or exceed the following requirements:
 - a. Surface mount IP speaker
 - b. Frequency response – 60 Hz – 17kHz
 - c. Built-in 8 W amplifier
 - d. PoE IEEE 802.3af/802.3af Type 1 Class 3 (max 12.95 W)
 - e. Support for SIP integration with Voice over IP (VoIP) systems.
 - f. Full multicast and broadcast support.
 - g. All devices, including but not limited to, amplifiers, brackets, baffles, and Control Unit shall be mounted square and plumb and as recommended by the manufacturer and required by Owner and Architect.
 - h. Each speaker shall be connected to central equipment using standard category 6 ethernet cabling. Contractor shall supply (RED) ethernet patch cables at both the closet and device location to extend provided cabling to optimal speaker location, cable shall not exceed 30'. Cable color shall be coordinated with Owner and/or designer
 - i. Contractor shall be responsible for cross connecting speakers in data closet and reporting back switch and switch port locations to Owner for programming.
 - j. Each speaker shall be volume adjusted at installation to accommodate specific acoustical properties of the intended coverage area.
 - k. Each surface speaker shall include appropriate back box .
 - l. Contractor shall include all parts and accessories for a fully functional and securely installed system using manufacturer and industry best practices.

- m. System shall produce audio at a peak level of approximately eighty-five (85) dBA at probable listener's positions.
- n. Provided speakers must be Mitel Revolution/ Informacast compatible.

H. INTERIOR/ EXTERIOR POWER OVER ETHERNET (PoE) SPEAKERS

- a. ATLASIED

- 1. IP-HVP
- 2. Or equivalent

- 2. Interior/Exterior Horn Speakers shall be where noted on maps provided within. Speakers are identified on provided drawings.
 - a. Final speaker placement shall be adjusted as needed for appropriate audio intelligibility, volume levels and ceiling obstructions and/or conditions and shall remain the responsibility of the contractor.
- 3. Speakers shall meet or exceed the following requirements:
 - a. Built-in 8 W Class D amplifier
 - b. 120 dB at 15 Watts (peak)
 - c. PoE IEEE 802.3af/802.3af Type 1 Class 3 (max 12.95 W)
 - d. Support for SIP integration with Voice over IP (VoIP) systems.
 - e. Vandal and weather resistant.
 - f. Speaker to include appropriate vandal proof back box.
 - g. Frequency response of 600Hz – 14 kHz.
 - h. Each speaker shall be connected to central equipment using standard category 6 ethernet cabling. Contractor shall supply (RED) ethernet patch cables at both the closet and device location to extend provided cabling to optimal speaker location, cable shall not exceed 30'. Cable color shall be coordinated with Owner and/or designer
 - i. Contractor shall be responsible for cross connecting speakers in data closet and reporting back switch and switch port locations to Owner for programming.
 - j. Contractor shall include all parts and accessories for a fully functional and securely installed system using manufacturer and industry best practices.

k. Provided speakers must be Mitel Revolution/ Informacast compatible.

2.05 CLOCK/SPEAKER COMBO DEVICES

- A. Clock/Speaker combo devices shall be provided in locations as identified on provided drawings.
- B. Acceptable Manufacturers
 - 1. ATLASIED
 - a. IP-SDMF
 - b. IP-DD
 - 2. Advanced Network Devices (A.N.D)
 - a. IPSWDHD-MW
 - b. IPCSHD-DS-MB
 - 3. Or equivalent
- C. Mitel/ Intrado Revolution/ Informacast Compatible
- D. Speaker/Clock Combo shall include the following ports:
 - 1. 1 General Purpose Output
 - 2. Aux Audio Line-In Balanced
 - 3. Aux Audio Line-Out Balanced
- E. Contractor shall supply single sided factory assembled digital clock with integral speaker as indicated on provided drawings and specified herein.
- F. Each speaker shall be connected to central equipment using standard category 6 ethernet cabling. Contractor shall supply (RED) ethernet patch cables at both the closet and device location to extend provided cabling to optimal speaker location, cable shall not exceed 30'. Cable color shall be coordinated with Owner and/or designer
- G. Contractor shall be responsible for cross connecting speakers in data closet and reporting back switch and switch port locations to Owner for programming.
- H. Clocks shall display time during normal operation.

- I. Clocks shall include all necessary hardware including back box to be surface mounted in identified locations.
- J. Clocks shall function as a scrolling message board during emergency notification operation.
- K. Clocks shall include all necessary hardware including back box to be surface mounted in identified locations.
- L. Clocks shall meet or exceed the following:
 - 1. Integrated flashers to draw visual attention.
 - 2. Function fully on PoE+ Power.
 - 3. Communicate to Owners existing NTP server
 - 4. Fully communicate over Owner's existing ethernet network.
 - 5. Viewable clock display shall be at least 12 inches by 3.75 inches in size.
- M. Clocks shall be capable of changing the color of the display for viewer attention. Available colors shall include, but not be limited to Red, Green and Blue.
- N. Clocks installed in gymnasium locations shall include protective cages.
- O. Clock configuration expectations shall include, but may not be limited to:
 - a. Emergency alerting including, but not limited to:
 - 1. Lockdown (Red)
 - 2. Lockout (Blue)
 - 3. Evacuation (Green)
 - 4. Shelter in Place (Yellow)
 - 5. Fight in Process (COLOR TBD)
 - 6. All Clear (COLOR TBD)

2.06 MANDATORY ALTERNATE

A. IP Strobe Light/ Flashers

- 1. IP Strobe Light/ Flashers shall be provided in the following spaces at each applicable building location:

- a. Gymnasium
 - b. Cafeteria
 - c. Kitchen
 - d. Instrumental Music Room
 - e. Auto Shop
 - f. Welding Shop
2. Acceptable Manufacturers:
 - a. Advanced Network Devices (A.N.D.)
 1. AND-STROBE-KIT-1
 - b. Or Equal
 3. Contractor shall provide any components necessary, including licensing, to provide a fully functional and compliant system.

2.07 COMPONENT INTERCONNECTION

- A. All wiring not installed in conduit shall be plenum type cable and shall be so identified with continuous marking.
- B. No wiring installed shall be visible unless specifically and individually approved by Owner and Designer. All wire that traverses open areas shall be installed in metal raceway of appropriate size for the number of wires installed plus twenty percent more.
 1. All metal raceway shall be ordered in standard colors to as closely match the environment in which it is being installed as possible.
 2. Metal raceway shall be carefully and neatly installed, to meet manufacturer recommendations and standards for professional installation.
 3. Sharp edges, gaps in the covering or corners or other unprofessional workmanship characteristics of installation will not be acceptable.
- C. Patch cables shall be RED in color, and shall remain the same throughout the system. Colors used for coding shall be as directed by the system manufacturer, Owner, and Architect.

D. Clock/ Speaker devices shall be patched into the network switch(es) of the Owner's designation.

E. Wire shall be copper.

2.08 ALLOWANCES

A. Contractor shall include allowances for equipment and/or other contract service reimbursements as required below in base bid lump sum amount(s). Equipment and/or contract services shall be provided and sourced at Owner's discretion and convenience with full cooperation by Contractor and paid for from successful bidder's contract in the amount(s) provided for herein. Any allowance amount proving to be excessive for the intended equipment and/or contract services shall be credited to the Owner against contract payment requests.

1. Allowance shall be made in the amount of \$35,000 for contract services related to supply, installation, and connection of contingency upgrades.
2. Allowance shall be made in the amount of \$15,000 for contract services related to supply of network switching upgrades.

PART 3 - EXECUTION

3.01 PREPARATION

- A. Contractor shall conduct detailed walk-through examination with Designer and Owner verifying equipment and material locations as well as mounting and placement requirements prior to commencement of other installation activities.
- B. Contractor shall ensure all submittals and shop drawings have been provided to, and approval has been obtained from Designer prior to commencement of any final installation activities.

3.02 INSTALLATION

- A. Contractor shall expect to assure that all cable drops supporting new clock/ speaker equipment are patched into network switches designated by Owner, to assure they are powered by UPS equipment.
- B. Contractor shall be familiar with the environment where work will be done as specified herein.
- C. Work Areas shall be cleaned at the end of each day. All debris shall be cleared, removed, and disposed of in an approved container for the site. All equipment and tools shall be removed from common areas and stored in approved, secure storage locations. Any work that may impede the general use

of the space and cannot be removed shall be flagged and cordoned off by the Contractor prior to their departure.

- D. All equipment and materials shall be installed in a neat and workmanlike manner. Industry best practice installation principles and all manufacturer recommendations and requirements shall be used throughout the project.
- E. The Contractor shall furnish, set in place, and install all equipment necessary for a fully compliant and operational system as specified herein. The installation process includes, but is not limited to the following:
 - 1. Inventory receipt of all components and equipment.
 - 2. Storage of all equipment and components until such time those items are installed according to the specifications.
 - 3. Transport equipment to the Owner's installation location(s).
 - 4. Assemble, install, configure, and test all equipment and components, maintaining accurate inventory records and status documents and discarding packaging.
 - 5. Collect all information necessary to accurately program all sets and/or system devices to the Owner's intended use and need.
 - 6. Complete end user and system administrator training programs as specified herein.
 - 7. Work shall be performed to meet local codes and industry standards, including, but not limited to:
 - a. Adequate gas tube protection for outside plant cable connections.
 - b. Grounding and Bonding.
 - 8. Work includes extending cable bundles, as required, to Owner identified equipment installation locations at all locations.
 - 9. Contractor will provide permanent asset tags for each system component that exceeds \$100.00 in value. Equipment installed in wiring closets will have district asset tags installed in a prominent location. Assets installed in public areas, such as staff desktop devices, will have asset tags installed in discreet but consistent area of each asset.
 - a. Asset number, device/component description, serial number, make, model, part-number, site, room number/name and any other critical asset information shall be recorded for Owner.

- F. It shall be the responsibility of the Contractor to repair or replace any damage done to the structure of finishes in the building by the Contractor. If in the course of work, Contractor damages, marks, or misplaces any surfaces or access plates/panels the Contractor shall repair and/or replace the surface, plate, or panel to the original condition.
 - 1. Final determination as to the damage condition and/or repair/replacement fitness of any surface, plate or panel shall be the sole responsibility of the Designer.
 - 2. The building and work area shall be returned to its original condition prior to final sign-off of the project.
- G. Following installation and prior to final acceptance of the system, Contractor shall conduct follow-up interviews with Owner identified administrators and staff to review system functionality, suitability and confirm feature and program fitness for Owner applications.
 - 1. Follow-up interviews shall be fully documented by Contractor and submitted to Owner for approval.
- H. Contractor shall install all new devices in accordance with the respective manufacturers' recommended procedures and best practices, including, but not limited to mounting hardware, leveling and safety cables. In addition, industry best practices must be followed throughout the installation procedure.
- I. Contractor will provide permanent asset tags for each system component that exceeds \$100.00 in value. Equipment installed in wiring closets will have district asset tags installed in a prominent location. Assets installed in public areas, will have asset tags installed in discreet but consistent area of each asset.
 - 1. Asset number, device/component description, serial number, make, model, part-number, site, room number/name and any other critical asset information shall be recorded for Owner as part of the documentation described and required herein.

3.03 BALANCING

- A. After installation, Contractor shall conduct a detailed walkthrough to verify optimal sound levels of installed devices.
- B. Contractor shall verify eighty-five (85) dBA at probable listener's positions. Contractor shall verify dB rating with decibel meter.
 - 1. dB readings shall be conducted in the center of each classroom, hallway and other common spaces.

C. Contractor shall supply written report with dB readings identified.

3.04 TESTING

- A. In an effort to ensure a smooth “turn-up” of the new system Contractor shall submit to a thorough testing process as defined herein prior to cut-over. Testing shall include, but not be limited to the following:
- B. Prior to requesting testing by Designer, the Contractor shall use adequate means to assure the Work is completed in accordance with the specified requirements, meets the owner’s specific application requirements and is ready for functionality and integrity testing.

C. PROCEDURES

1. Prior to system “turn-up”, Contractor shall submit a written request to Designer indicating they have completed full and final configuration of the system and are ready to have system integrity and functionality tested.
2. Within reasonable time after receipt of request, Designer will provide a test schedule and coordinate testing date(s) with Owner and Contractor.
3. Should Designer determine the Work is not acceptably configured or not of adequate integrity:
 - a. Designer promptly will so notify Contractor, giving reasons therefore and providing sufficient details to allow Contractor to make corrective actions.
 - b. Contractor shall then expeditiously remedy the deficiencies and notify Designer in writing when ready for re-testing.
 - c. Designer will schedule re-test of the Work.
 - d. Excessive re-testing of Work may result in fees being assessed Contractor.
4. Should Designer and Owner concur the Work is configured properly, and system integrity is as required:
 - a. Designer will review Contractors detailed cut-over plan, and upon finding it acceptable issue a memorandum of Testing Completion to Owner and Contractor after which system cut-over can proceed.

3.05 DOCUMENTATION

- A. Contractor shall, throughout the completion of the project, provide Owner a file storage system that shall include all necessary equipment (file drawers,

folders, dividers, etc.), to contain all as-built drawings, owner's manuals of all equipment installed, warranty and maintenance information and other information the Contractor, Designer and/or Owner deem necessary.

B. Contractor shall be responsible for providing thorough, timely documentation on all hardware, software. Documentation shall include, but not be limited to:

1. Equipment description.
2. Equipment make.
3. Model number.
4. Software release.
5. Date installed.
6. Manufacturer's warranty.
7. Maintenance contract terms.
8. Verification of maintenance contract engagement.
9. Telephone numbers for service and support.
10. Detailed technical support and service procedure instructions.
11. All product (hardware and software) manuals and manufacturer supplied documentation, including, but not limited to owner manuals, system administrator manuals and configuration guides. Where number of duplicate copies for particular manual or documentation item could be reasonably considered excessive, Contractor shall request direction from Owner and Designer.
12. Photocopy of original invoice listing make and model for all components and equipment from individual manufacturer(s), distribution source(s), or authorized agent(s) to establish manufacturer warranty start date for potential use after end of contract warranty provisions.
13. CAD as built drawings for each building.

3.06 TRAINING

A. Training shall be conducted at the Owner's discretion by a certified representative of the mass notification software platform, and at times and places convenient to Owner personnel. Prior to any training being conducted, Contractor shall provide Owner and Designer with detailed training syllabus and schedule for proposed training event. Compliant syllabus and schedule

shall be provided at least ninety-six 96 hours in advance. Owner reserves the right to postpone training if syllabus and/or schedule submitted are deemed inadequate. Training shall not be conducted until such time a syllabus and schedule submitted by Contractor are found to be acceptable to Owner.

- B. Contractor shall provide User/Operator Level training by a certified representative of the mass notification software platform for the Owner designated system operator(s). Owner shall designate up to (25) operators to be trained. Training shall be a minimum of one (1), one (1) hour sessions in length, conducted at two (2) different times at the convenience of the Owner personnel, and of sufficient duration to satisfactorily complete training on all system administration functions including, but not limited to:
1. Call into a classroom(s) within a school building.
 2. Page entire campus, or a section of the campus.
 3. Create/ delete bell schedules.
 4. Play music through PA system in a section(s) of, or the entire building.
 5. Initiation of emergency alert(s).
- C. Contractor shall provide physical on-site training by a mass notification certified representative for the Owner designated system administrator(s). Owner shall designate up to Four (4) system administrators to be trained. Training shall be a minimum of one (1), four (4) hour session(s) in length, at the convenience of the Owner personnel, and of sufficient duration to satisfactorily complete training on all system administration functions including, but not limited to:
1. Add, remove and reconfigure IP speakers on system.
 2. Changing device zone ID/ category/ membership.
 3. Basic configuration and system administration of the installed system.
 4. Basic trouble shooting of the installed system and components including diagnostic and problem resolution actions.
 5. System back-up and restore functions and procedures for all system parameters and configurations.
 6. Review of system alerts, logs and monitoring of configuration parameters including, but not limited to, configuration changes and device status.
 7. System database updates and maintenance.

8. Review standard system reports

3.07 DEMOLITION

- A. Contractor shall remove all existing, and abandoned clocks, P/A speakers, decommissioned head ends, and cabling wherever possible in affected areas.
- B. Demolition may not commence until new system is commissioned, and “turnup” procedures are followed- as noted herein (section 3.04.C.1-4).
 - 1. “Building by building” considerations may be made, based on overall timeline and goals of the project overall, if approved by the Owner.
- C. Demolition shall be done in a professional manner, so that there is as little evidence of the old system as possible, and so that there is very little to no damage done to the structure or it’s aesthetic components.
- D. Contractor shall expect to demo an approximate total of one existing device for every new device installed.
- E. Where existing clocks/ speakers are removed, Contractor shall provide and install appropriate blank cover that completely covers opening from the removed device. Blank covers shall be coated in white paint primer before installation, and shall appear clean, and aesthetically pleasing.
- F. Contractor shall not expect to use Owner refuse receptacles for disposal of equipment associated with this project.

3.08 SCHEDULE, MEETINGS AND PLANS

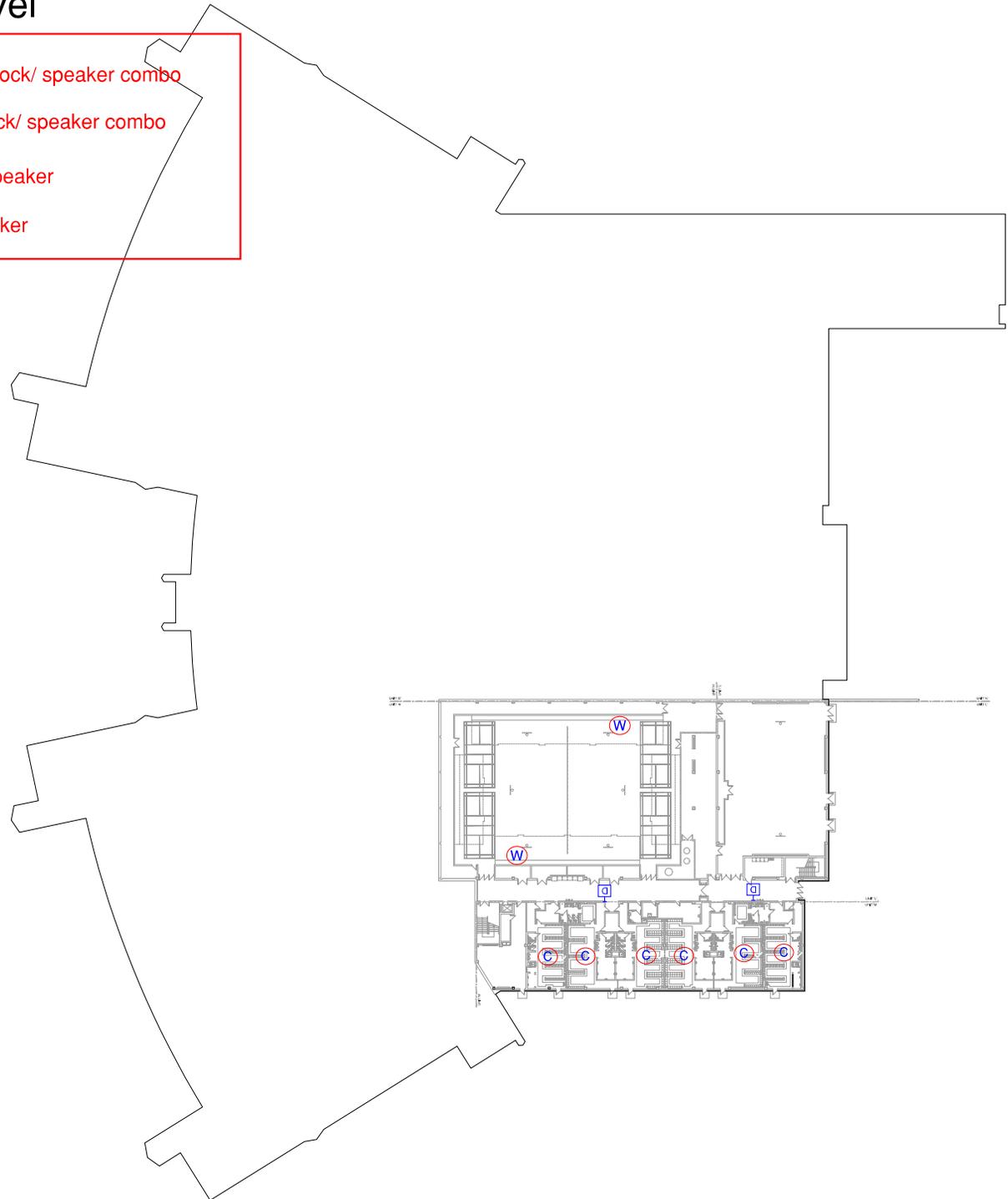
- A. Schedule
 - 1. Post bid Interviews: Week of April 7, 2025
 - 2. Contractor Chosen: April 23, 2025
 - 3. Work Commences: May 1, 2025
 - 4. Substantial Completion of Project: November 1, 2025
 - 5. Project Close-out: December 1, 2025
- B. Planned sequence of operations shall be established by the Contractor within the guidelines established by the Owner, as required herein and as required to meet schedules.
- C. All work shall be coordinated with Owner’s construction manager on site.

- D. Project progress meetings shall be held, but not limited to, weekly at a site and time identified as convenient for Owner and as required herein. Meetings will be attended as required herein.

END OF SECTION

ABHS Lower Level

	New single faced clock/ speaker combo
	New dual faced clock/ speaker combo
	New IP CEILING speaker
	New IP WALL speaker

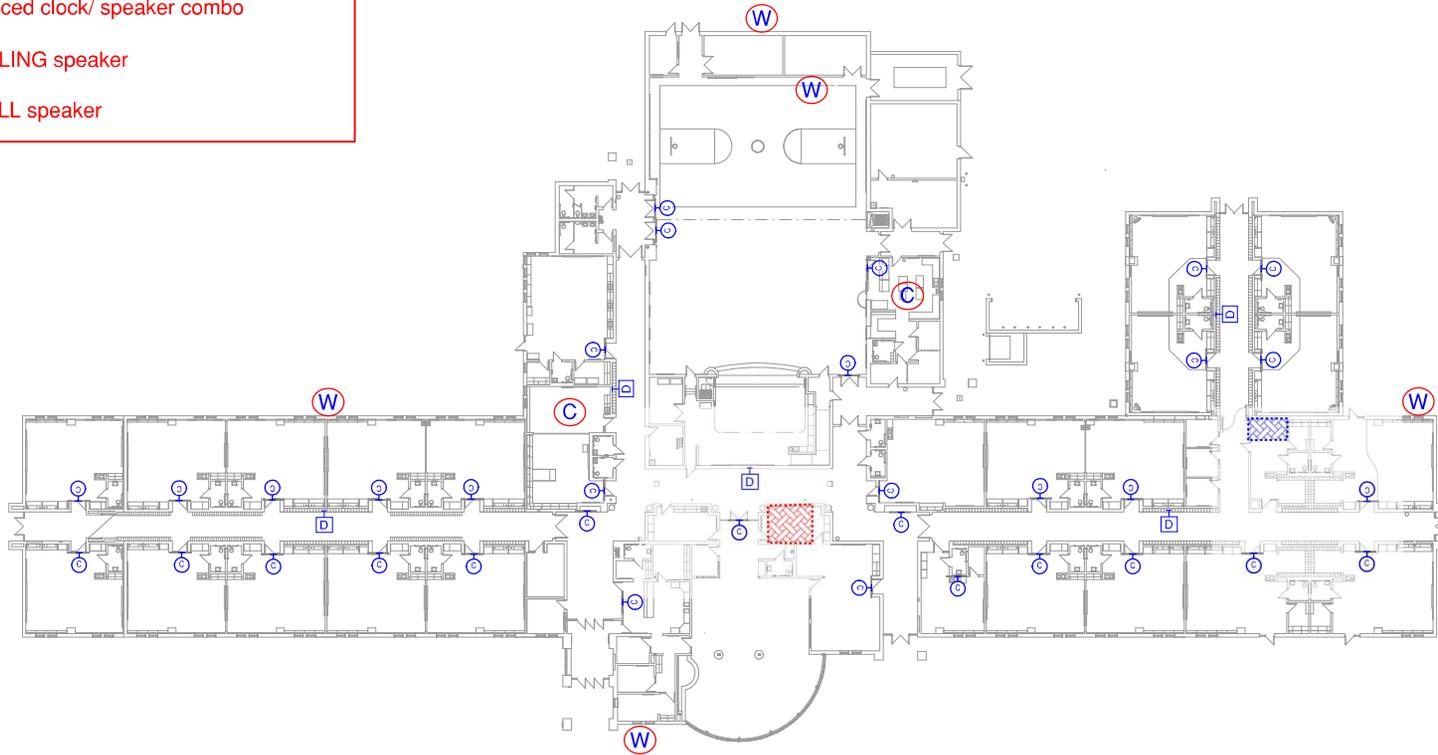


MDF Room

IDF Room

Great Oaks Elementary

-  New single faced clock/ speaker combo
-  New dual faced clock/ speaker combo
-  New IP CEILING speaker
-  New IP WALL speaker

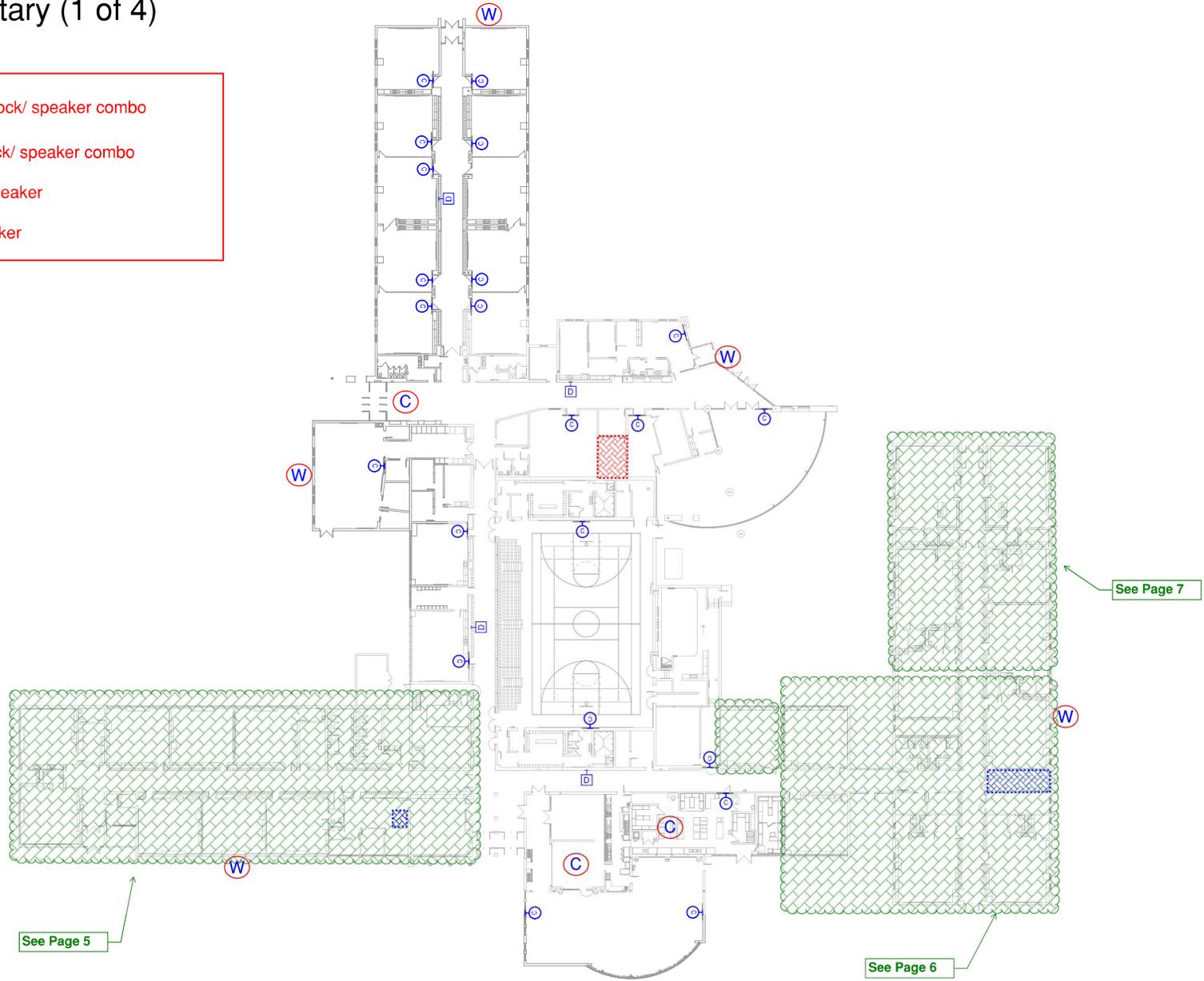


MDF Room

IDF Room

Lighthouse Elementary (1 of 4)

-  New single faced clock/ speaker combo
-  New dual faced clock/ speaker combo
-  New IP CEILING speaker
-  New IP WALL speaker

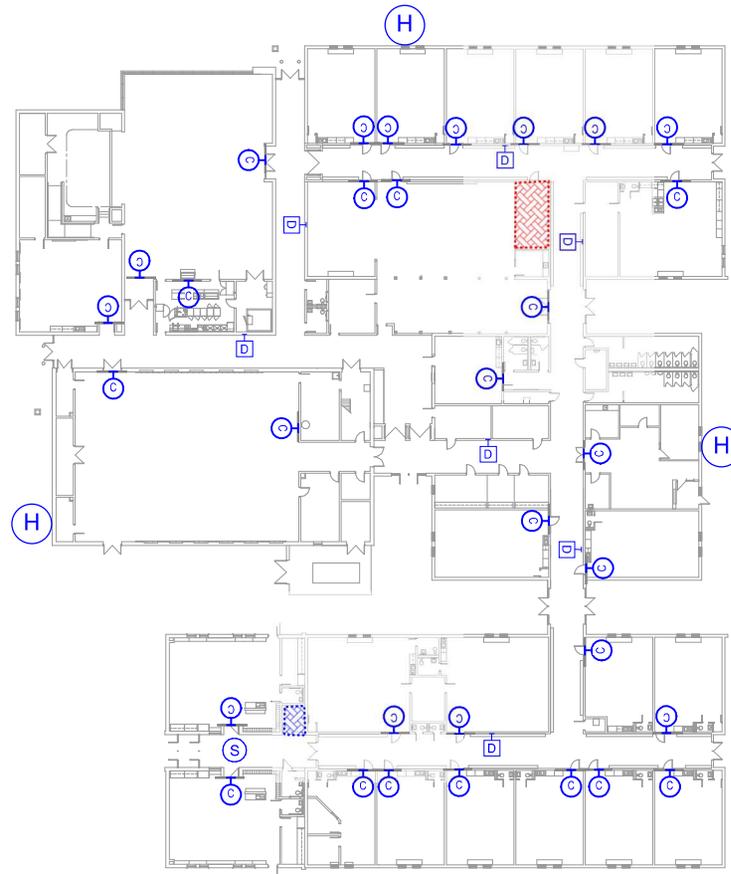


MDF Room

IDF Room

Lottie Elementary

	New single faced clock/ speaker combo
	New dual faced clock/ speaker combo
	New IP CEILING speaker
	New IP WALL speaker

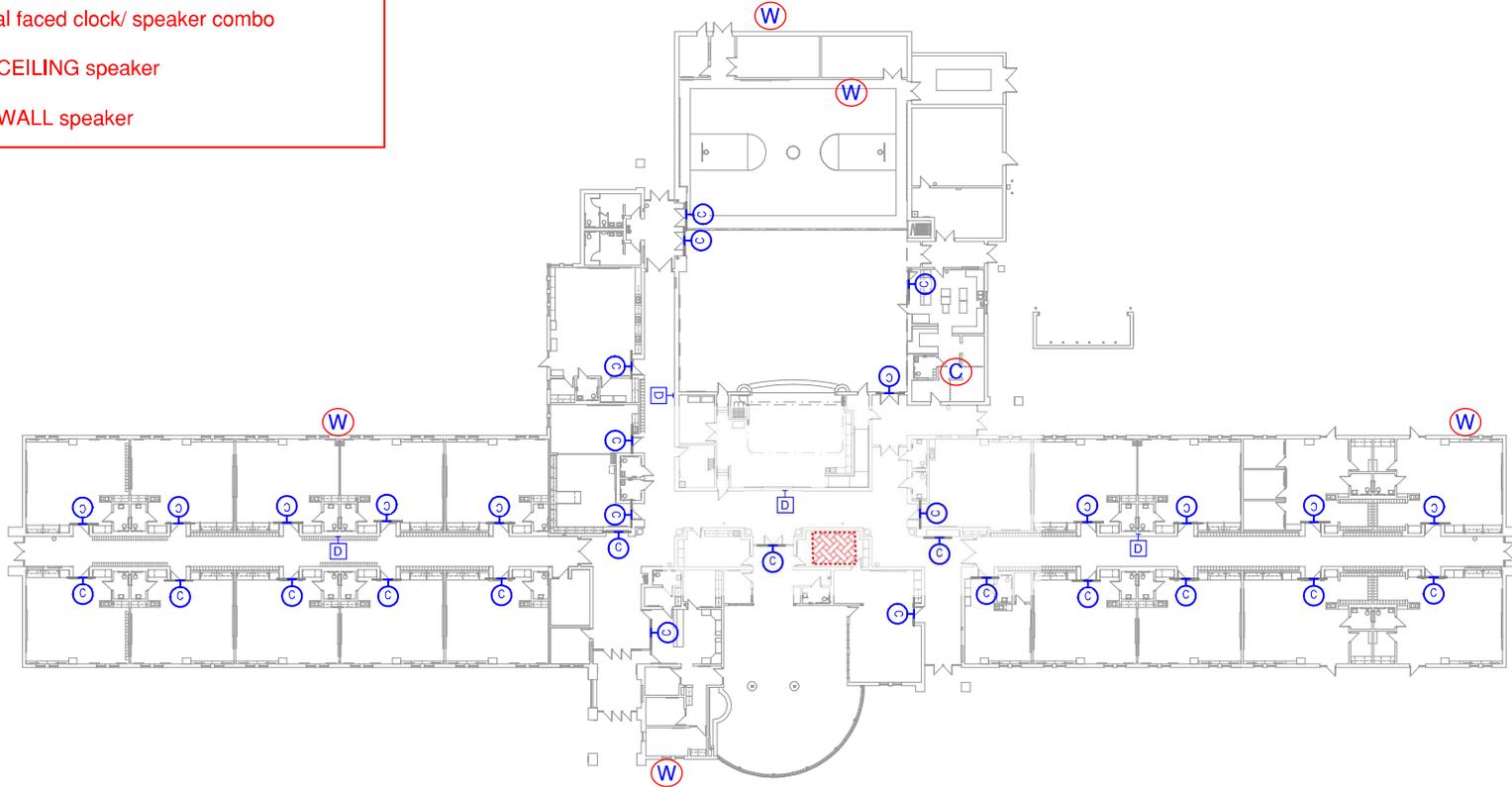


MDF Room

IDF Room

Maconce Elementary

-  New single faced clock/ speaker combo
-  New dual faced clock/ speaker combo
-  New IP CEILING speaker
-  New IP WALL speaker

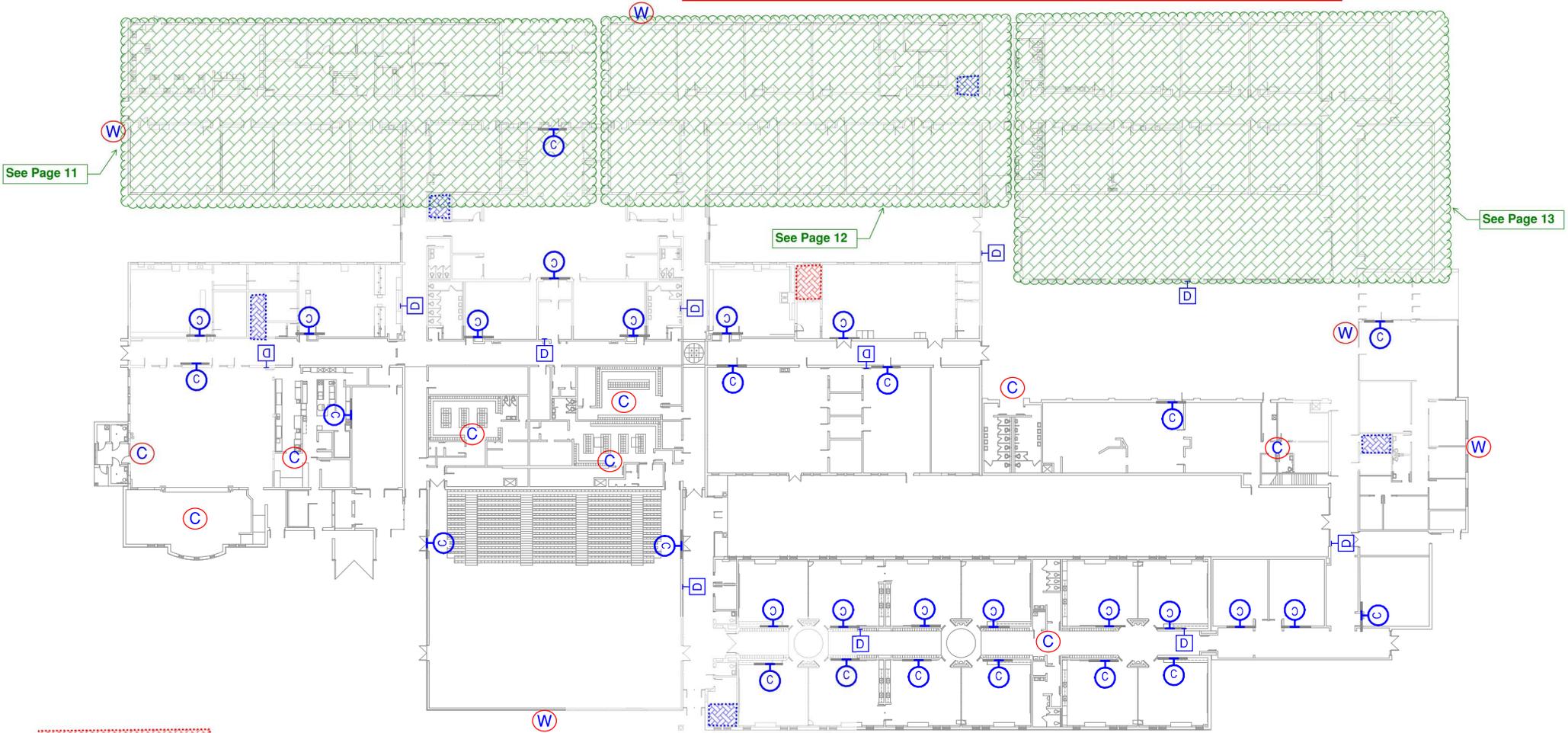


MDF Room

IDF Room

Middle School NORTH (1 of 4)

	New single faced clock/ speaker combo		New IP CEILING speaker
	New dual faced clock/ speaker combo		New IP WALL speaker

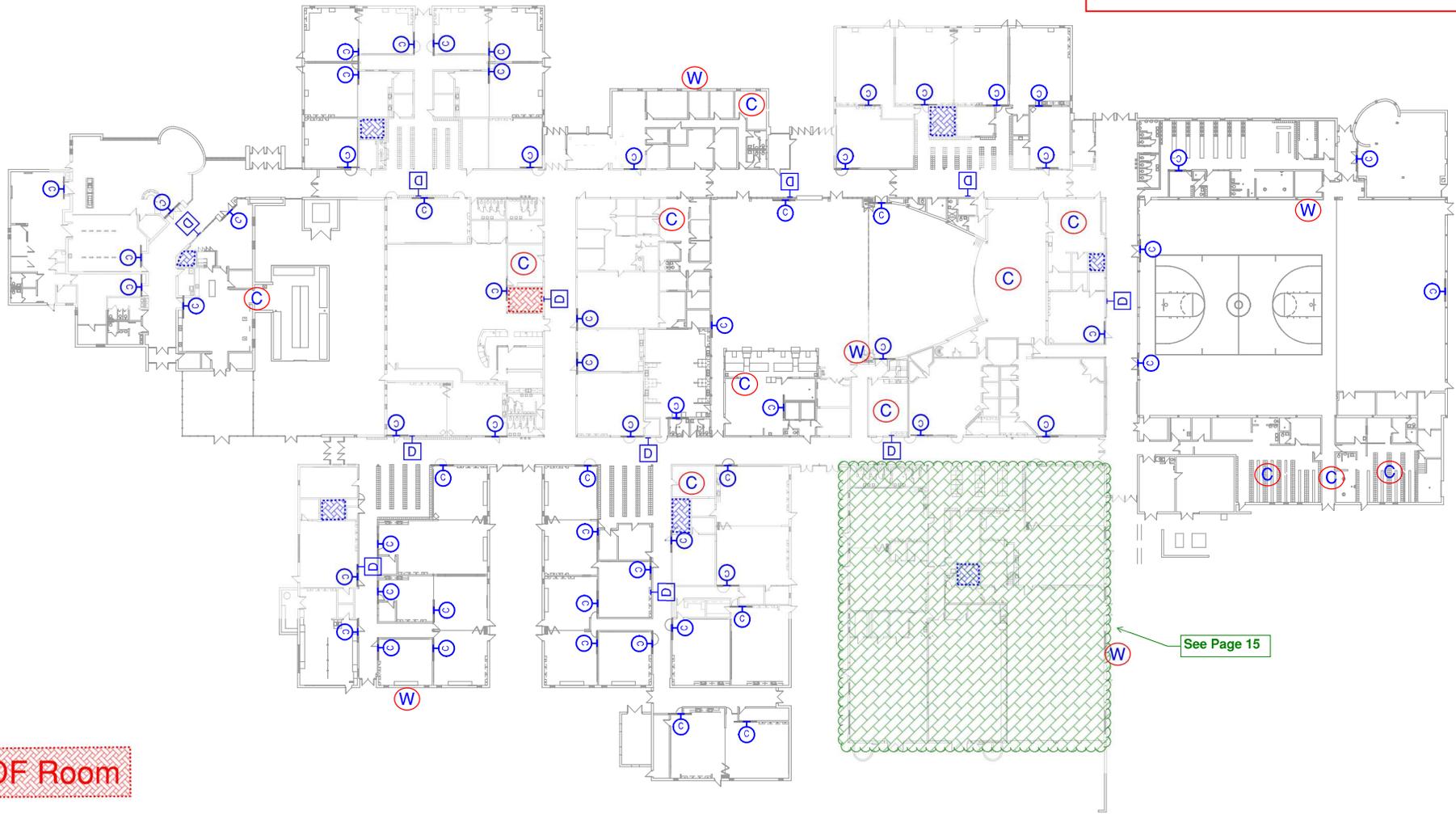


MDF Room

IDF Room

Middle School SOUTH (1 of 2)

-  New single faced clock/ speaker combo
-  New dual faced clock/ speaker combo
-  New IP CEILING speaker
-  New IP WALL speaker

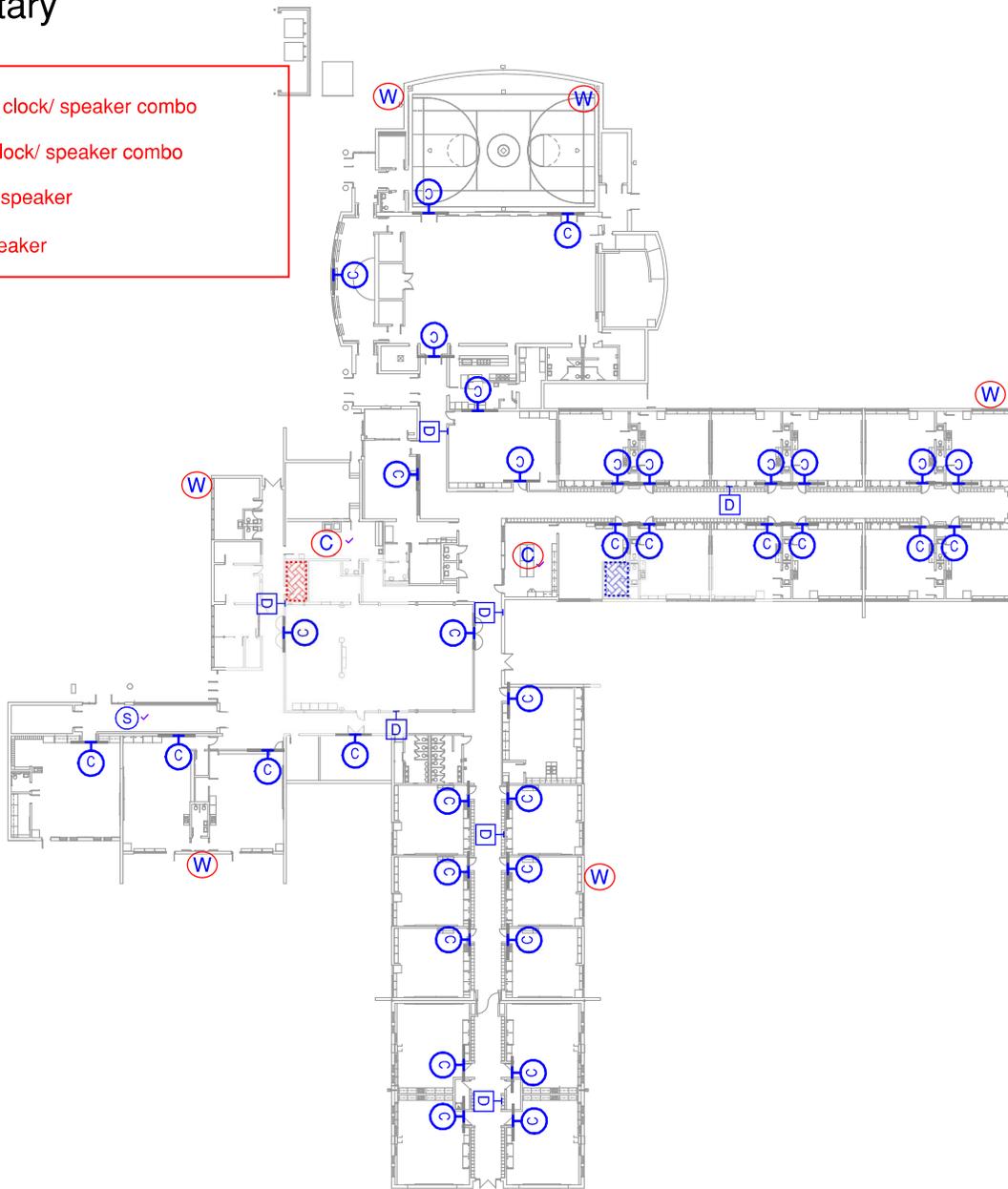


MDF Room

IDF Room

Naldrett Elementary

-  New single faced clock/ speaker combo
-  New dual faced clock/ speaker combo
-  New IP CEILING speaker
-  New IP WALL speaker

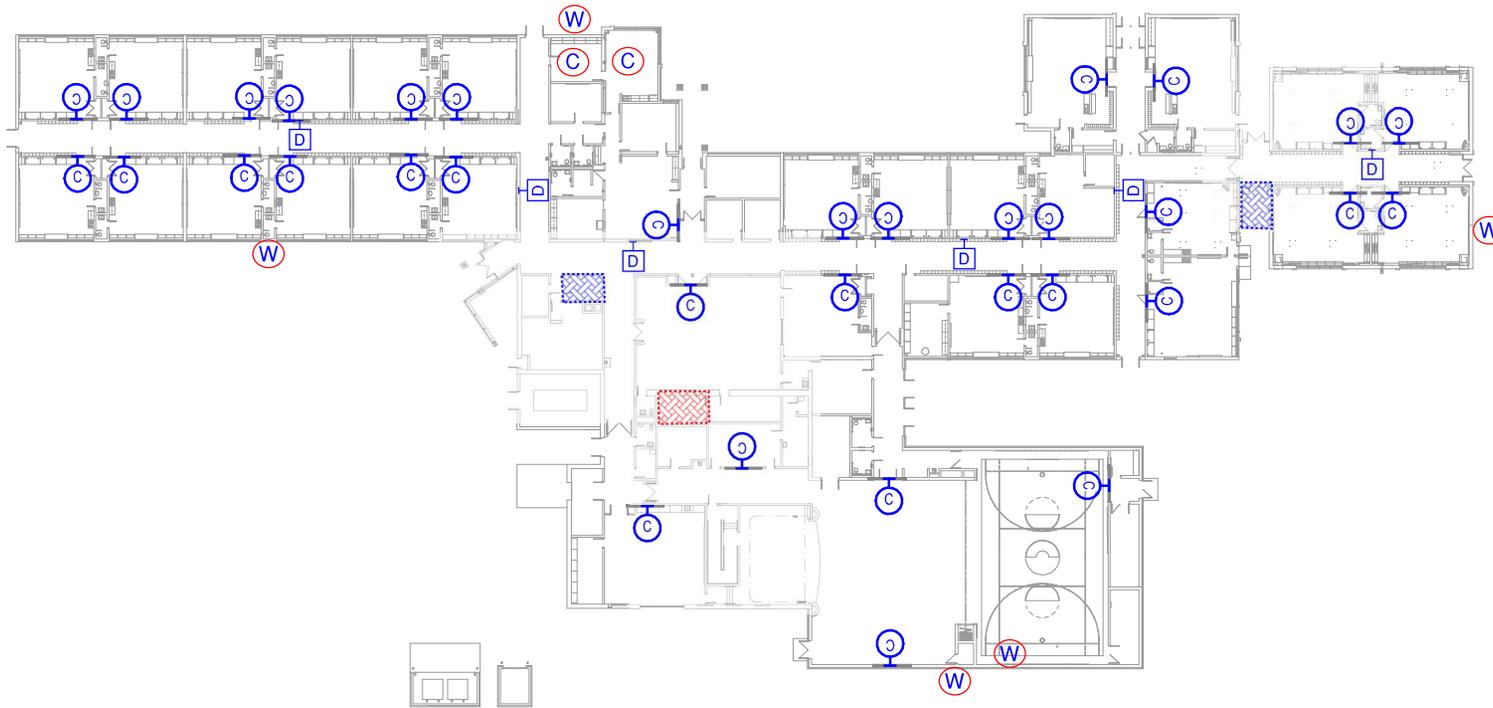


MDF Room

IDF Room

Ashley Elementary

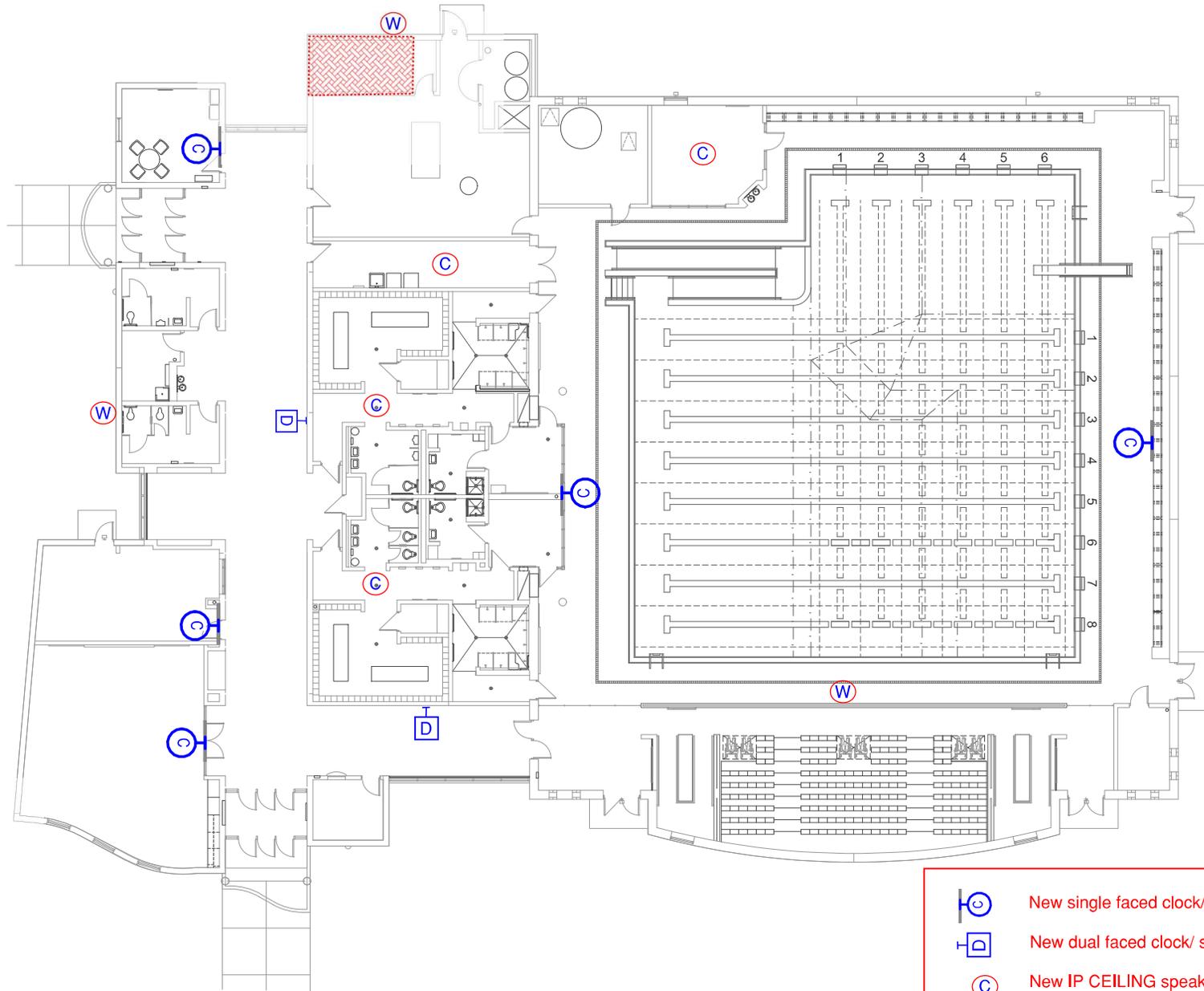
-  New single faced clock/ speaker combo
-  New dual faced clock/ speaker combo
-  New IP CEILING speaker
-  New IP WALL speaker



MDF Room

IDF Room

Aquatic Ctr.

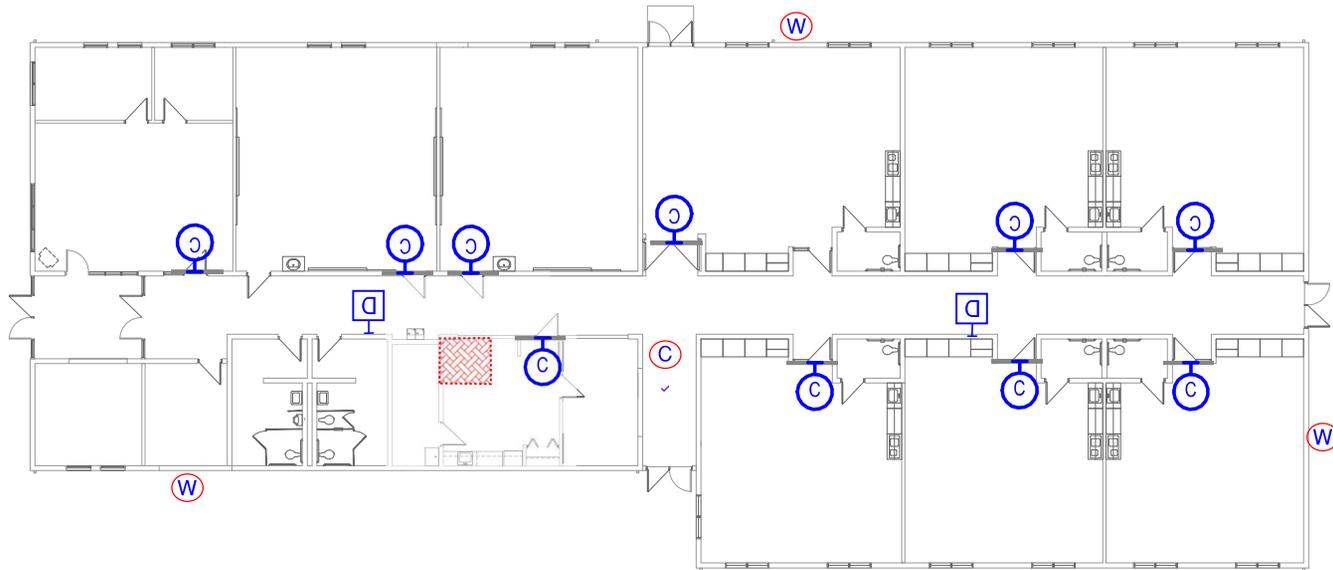
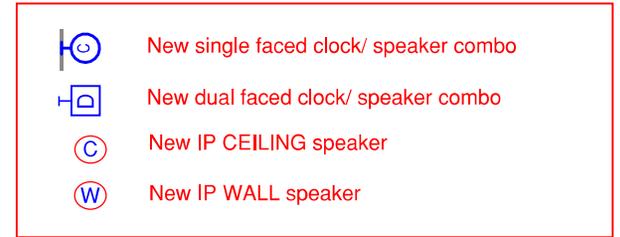


MDF Room

IDF Room

-  New single faced clock/ speaker combo
-  New dual faced clock/ speaker combo
-  New IP CEILING speaker
-  New IP WALL speaker

Early Childhood Ctr.

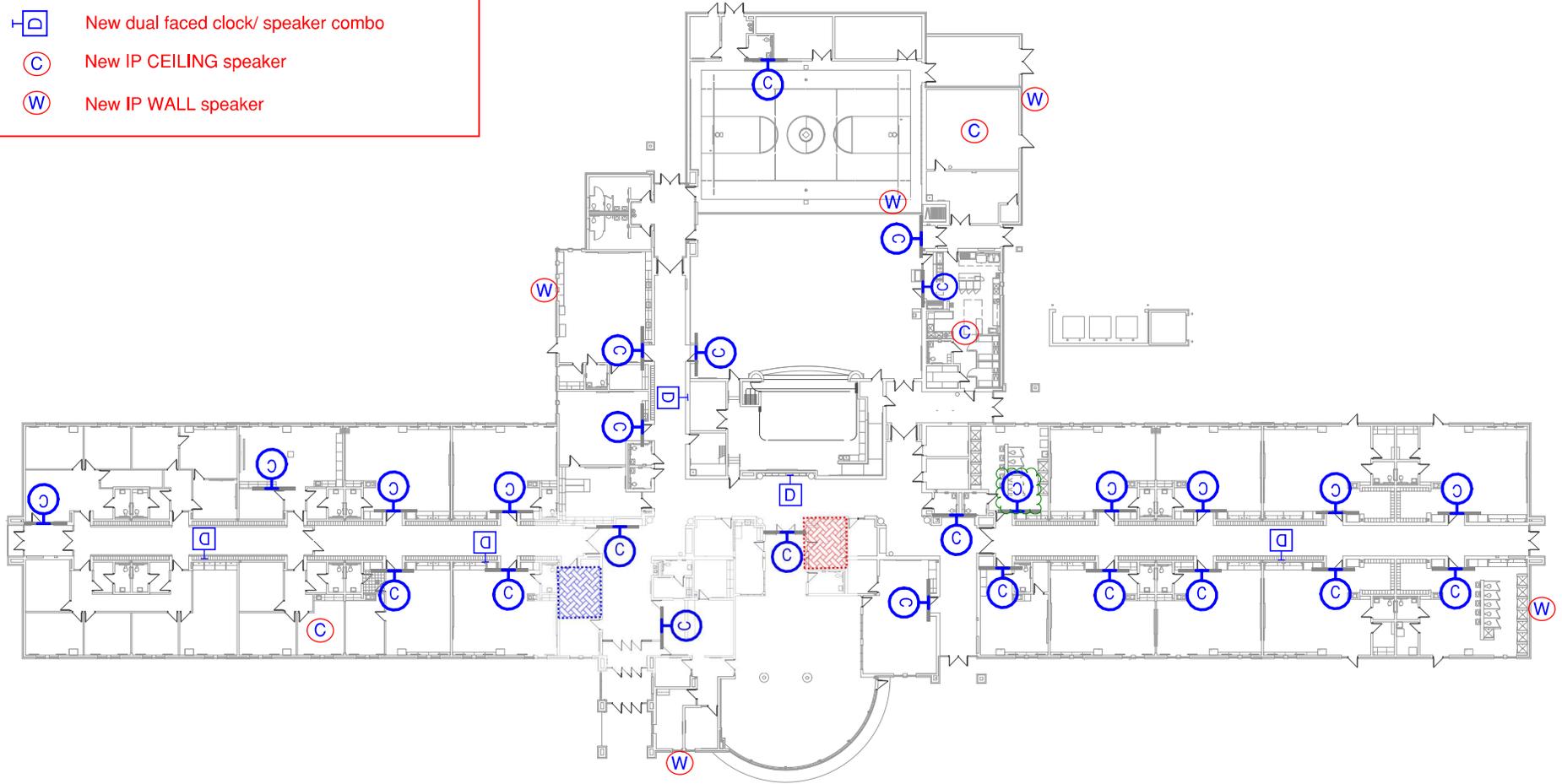


MDF Room

IDF Room

Admin./ MacDonal Elementary

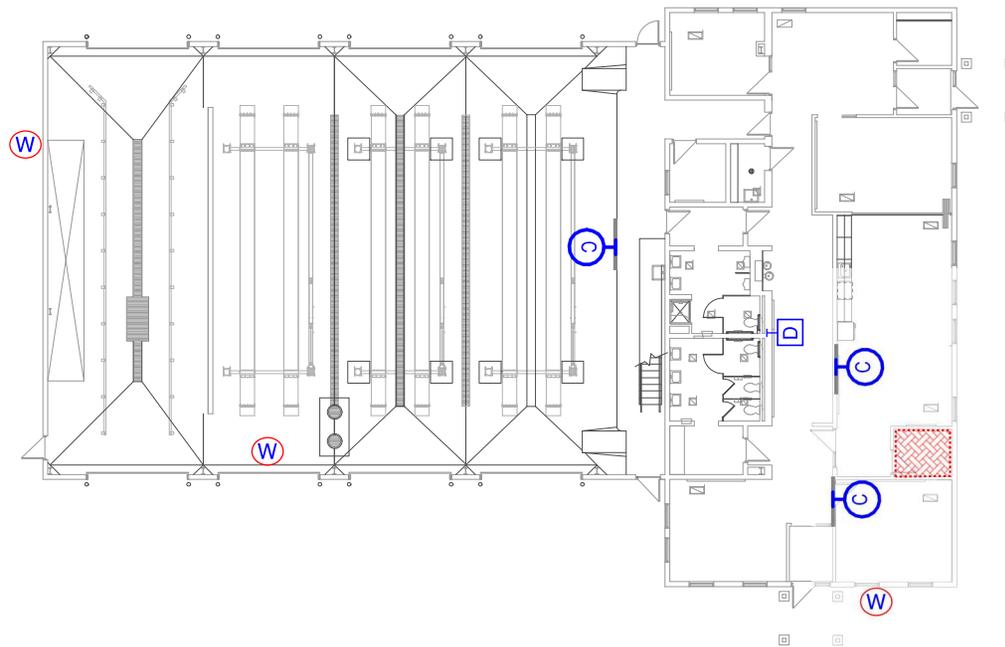
-  New single faced clock/ speaker combo
-  New dual faced clock/ speaker combo
-  New IP CEILING speaker
-  New IP WALL speaker



MDF Room

IDF Room

Transportation



MDF Room

IDF Room

-  New single faced clock/ speaker combo
-  New dual faced clock/ speaker combo
-  New IP CEILING speaker
-  New IP WALL speaker

Device Tallies

	Page	SF Clock	DF Clock	IP Speaker
ABHS	1	86	24	34
	2	54	10	15
	3	0	2	8
Great Oaks	4	34	5	7
Lighthouse	5	22	3	8
	6	10	1	1
	7	6	1	0
	8	6	2	0
Lottie	9	32	7	4
Maconce	10	32	4	6
MSN	11	31	11	15
	12	8	1	1
	13	8	1	0
	14	9	2	0
MSS	15	63	11	17
	16	7	0	4
Naldrett	17	35	7	12
Ashley	18	34	6	7
Aquatic Ctr.	19	5	2	7
ECC	20	10	2	4
Admin./ MacDonald	21	26	5	8
Transportation	22	3	1	3
TOTAL:		521	108	161

APPENDIX B (UPS SCHEDULE)

Anchor Bay Schools					
UPS LOCATION SCHEDULE					
BUILDING	CLOSET	UPS Type A 3000Va	UPS Type B 2200Va	Network Switch Qty.	Dual Power supply REQUIRED
Admin./ MacDonald Elementary	MDF	1	0	3	0
	IDF 1		1	2	0
	IDF 2		1	2	0
Ashley Elementary	MDF	1	0	3	1
	IDF 1		1	2	1
	IDF 2		1	2	0
Early Childhood Ctr.	MDF	0	1	1	0
Great Oaks Elementary	MDF	1	0	3	3
	IDF 1		1	2	0
Lighthouse Elementary	MDF	1	0	3	1
	IDF 1		1	2	1
	IDF 2		1	2	2
Lottie Elementary	MDF	1	0	3	2
	IDF 1		1	2	0
Maconce Elementary	MDF	1	0	3	3
Naldrett Elementary	MDF	1	0	3	2
	IDF 1		1	2	1

APPENDIX B (UPS SCHEDULE)

Anchor Bay Schools					
UPS LOCATION SCHEDULE					
BUILDING	CLOSET	UPS Type A 3000Va	UPS Type B 2200Va	Network Switch Qty.	Dual Power supply REQUIRED
	IDF 2		1	2	0
Middle School (North)	MDF	1	0	3	2
	IDF 1		1	2	1
	IDF 2		1	2	0
	IDF 3		1	2	0
	IDF 4		1	2	1
	IDF 5		1	2	1
Middle School (South)	MDF	1	0	3	1
	IDF 1		1	2	0
	IDF 2		1	2	0
	IDF 3		1	2	0
	IDF 4		1	2	0
	IDF 5		1	2	0
	IDF 6		1	2	0
	IDF 7		1	2	1
Anchor Bay High School	MDF	1		3	1
	IDF 1		1	2	1
	IDF 2	1	0	3	2
	IDF 3		1	2	0
	IDF 4	1	0	3	3
	IDF 5	1	0	3	2
	IDF 6	0	1	2	1

APPENDIX B (UPS SCHEDULE)

Anchor Bay Schools					
UPS LOCATION SCHEDULE					
BUILDING	CLOSET	UPS Type A 3000Va	UPS Type B 2200Va	Network Switch Qty.	Dual Power supply REQUIRED
	IDF 7		1	2	1
	IDF 8		1	2	0
Aquatic Ctr.	MDF		1	1	0
Transportation	MDF		1	1	0
Totals:		13	30		

Note: Columns E,F represent the quantity of devices the associated UPS will be expected to supply. There is NOT an expectation to provide additional network switching or dual power supplies with this package.

APPENDIX C (Telephone Handset Schedule)

Anchor Bay Schools- Overall Handset Totals		
	Admin. (AVT)	Standard (SVT)
Anchor Bay H.S.	15	143
Aquatic Ctr.	4	0
Ashley	9	36
Early Childhood Ctr.	4	7
Great Oaks	4	37
Lighthouse	10	40
Lottie	5	34
Maconce	7	30
MacDonald	36	15
Middle School North	10	70
Middle School South	16	53
Naldrett	4	39
Transportation	5	2
Spares	10	40
Overall Totals:	139	546

APPENDIX C (Telephone Handset Schedule)

<i>High School</i>	<i>AVT</i>	<i>SVT</i>	<i>Ext</i>	<i>DID#</i>	<i>Address#</i>	<i>Street</i>		<i>Locatoin within facility</i>	<i>City</i>	<i>State</i>	<i>Zip</i>
		1	4441	5865914873	6319	County Line	RD	W201	Fair Haven	MI	48023
		1	4439	5865914848	6319	County Line	RD	S233	Fair Haven	MI	48023
		1	4438	5865914847	6319	County Line	RD	S243	Fair Haven	MI	48023
		1	4437	5865914846	6319	County Line	RD	S336	Fair Haven	MI	48023
		1	4436	5865914849	6319	County Line	RD	S232	Fair Haven	MI	48023
		1	4435	5865914851	6319	County Line	RD	S230	Fair Haven	MI	48023
		1	4434	5865914852	6319	County Line	RD	S228	Fair Haven	MI	48023
		1	4433	5865914853	6319	County Line	RD	S226	Fair Haven	MI	48023
		1	4432	5865914856	6319	County Line	RD	S220	Fair Haven	MI	48023
		1	4431	5865914860	6319	County Line	RD	S217	Fair Haven	MI	48023
		1	4430	5865914861	6319	County Line	RD	S215	Fair Haven	MI	48023
		1	4429	5865914863	6319	County Line	RD	S213	Fair Haven	MI	48023
		1	4428	5865914857	6319	County Line	RD	S218	Fair Haven	MI	48023
		1	4427	5865914859	6319	County Line	RD	S216	Fair Haven	MI	48023
		1	4426	5865914862	6319	County Line	RD	S214	Fair Haven	MI	48023
		1	4425	5865914864	6319	County Line	RD	S212	Fair Haven	MI	48023
		1	4424	5865914871	6319	County Line	RD	S203	Fair Haven	MI	48023
		1	4423	5865914872	6319	County Line	RD	S201	Fair Haven	MI	48023
		1	4422	5865914868	6319	County Line	RD	S204	Fair Haven	MI	48023
		1	4421	5865914869	6319	County Line	RD	S202	Fair Haven	MI	48023
		1	4420	5865914870	6319	County Line	RD	S200	Fair Haven	MI	48023
		1	4418	5865914900	6319	County Line	RD	N236	Fair Haven	MI	48023
		1	4416	5865914898	6319	County Line	RD	N232	Fair Haven	MI	48023
		1	4415	5865914896	6319	County Line	RD	N230	Fair Haven	MI	48023
		1	4414	5865914895	6319	County Line	RD	N228	Fair Haven	MI	48023
		1	4413	5865914894	6319	County Line	RD	N226	Fair Haven	MI	48023
		1	4412	5865914890	6319	County Line	RD	N219	Fair Haven	MI	48023
		1	4411	5865914888	6319	County Line	RD	N217	Fair Haven	MI	48023
		1	4410	5865914887	6319	County Line	RD	N215	Fair Haven	MI	48023
		1	4409	5865914886	6319	County Line	RD	N213	Fair Haven	MI	48023
		1	4408	5865914891	6319	County Line	RD	N218	Fair Haven	MI	48023
		1	4407	5865914889	6319	County Line	RD	N216	Fair Haven	MI	48023
		1	4406	5865914885	6319	County Line	RD	N214	Fair Haven	MI	48023
		1	4405	5865914884	6319	County Line	RD	N212	Fair Haven	MI	48023

APPENDIX C (Telephone Handset Schedule)

		1	4404	5865914878	6319	County Line	RD	N203	Fair Haven	MI	48023
		1	4403	5865914877	6319	County Line	RD	N201	Fair Haven	MI	48023
		1	4402	5865914880	6319	County Line	RD	N204	Fair Haven	MI	48023
		1	4401	5865914879	6319	County Line	RD	N202	Fair Haven	MI	48023
		1	4400	5865914837	6319	County Line	RD	S124	Fair Haven	MI	48023
		1	4398	5865914929	6319	County Line	RD	E129	Fair Haven	MI	48023
		1	4397	5865914867	6319	County Line	RD	S206	Fair Haven	MI	48023
		1	4395	5865914919	6319	County Line	RD	N108	Fair Haven	MI	48023
		1	4394	5865914835	6319	County Line	RD	S118	Fair Haven	MI	48023
		1	4392	5865914910	6319	County Line	RD	N118	Fair Haven	MI	48023
		1	4391	5865914899	6319	County Line	RD	N233	Fair Haven	MI	48023
		1	4390	5865914927	6319	County Line	RD	E131	Fair Haven	MI	48023
		1	4363	5865914897	6319	County Line	RD	N231	Fair Haven	MI	48023
		1	4362	5865914909	6319	County Line	RD	N124	Fair Haven	MI	48023
		1	4361	5865914905	6319	County Line	RD	N131	Fair Haven	MI	48023
		1	4359	5865914903	6319	County Line	RD	N133	Fair Haven	MI	48023
		1	4357	5865914850	6319	County Line	RD	S3231	Fair Haven	MI	48023
		1	4355	5865914925	6319	County Line	RD	E132	Fair Haven	MI	48023
		1	4354	5865914826	6319	County Line	RD	S106	Fair Haven	MI	48023
		1	4353	5865914931	6319	County Line	RD	E128 Band	Fair Haven	MI	48023
		1	4351	5865914882	6319	County Line	RD	N208	Fair Haven	MI	48023
		1	4350	5865914855	6319	County Line	RD	S222	Fair Haven	MI	48023
		1	4349	5865914938	6319	County Line	RD	Auditorium	Fair Haven	MI	48023
		1	4348	5865914934	6319	County Line	RD	E121	Fair Haven	MI	48023
		1	4346	5865914881	6319	County Line	RD	N206	Fair Haven	MI	48023
		1	4345	5865914935	6319	County Line	RD	E116	Fair Haven	MI	48023
		1	4344	5865914893	6319	County Line	RD	N224	Fair Haven	MI	48023
		1	4342	5865914941	6319	County Line	RD	E117	Fair Haven	MI	48023
		1	4339	5865914945	6319	County Line	RD	E104	Fair Haven	MI	48023
		1	4338	5865914838	6319	County Line	RD	S126	Fair Haven	MI	48023
		1	4337	5865914841	6319	County Line	RD	S131	Fair Haven	MI	48023
		1	4336	5865914843	6319	County Line	RD	S133	Fair Haven	MI	48023
		1	4334	5865914844	6319	County Line	RD	S134	Fair Haven	MI	48023
		1	4333	5865914842	6319	County Line	RD	S132	Fair Haven	MI	48023
		1	4332	5865914840	6319	County Line	RD	S130	Fair Haven	MI	48023
		1	4331	5865914839	6319	County Line	RD	S128	Fair Haven	MI	48023

APPENDIX C (Telephone Handset Schedule)

		1	4330	5865914834	6319	County Line	RD	S119		Fair Haven	MI	48023
		1	4329	5865914833	6319	County Line	RD	S117		Fair Haven	MI	48023
		1	4328	5865914831	6319	County Line	RD	S115		Fair Haven	MI	48023
		1	4327	5865914829	6319	County Line	RD	S113		Fair Haven	MI	48023
		1	4324	5865914830	6319	County Line	RD	S114		Fair Haven	MI	48023
		1	4323	5865914828	6319	County Line	RD	S112		Fair Haven	MI	48023
		1	4322	5865914892	6319	County Line	RD	N222		Fair Haven	MI	48023
		1	4321	5865914825	6319	County Line	RD	S104		Fair Haven	MI	48023
		1	4320	5865914824	6319	County Line	RD	S102		Fair Haven	MI	48023
		1	4319	5865914822	6319	County Line	RD	S100		Fair Haven	MI	48023
		1	4318	5865914932	6319	County Line	RD	E124		Fair Haven	MI	48023
		1	4317	5865914901	6319	County Line	RD	N136		Fair Haven	MI	48023
		1	4316	5865914907	6319	County Line	RD	N128		Fair Haven	MI	48023
		1	4315	5865914904	6319	County Line	RD	N132		Fair Haven	MI	48023
		1	4314	5865914906	6319	County Line	RD	N130		Fair Haven	MI	48023
		1	4313	5865914933	6319	County Line	RD	E122		Fair Haven	MI	48023
		1	4312	5865914908	6319	County Line	RD	N126		Fair Haven	MI	48023
		1	4311	5865915479	6319	County Line	RD	N119		Fair Haven	MI	48023
		1	4310	5865914912	6319	County Line	RD	N116		Fair Haven	MI	48023
		1	4309	5865914915	6319	County Line	RD	N115		Fair Haven	MI	48023
		1	4308	5865914916	6319	County Line	RD	N113		Fair Haven	MI	48023
		1	4306	5865914913	6319	County Line	RD	N117		Fair Haven	MI	48023
		1	4305	5865914914	6319	County Line	RD	N114		Fair Haven	MI	48023
		1	4304	5865914917	6319	County Line	RD	N112		Fair Haven	MI	48023
		1	4303	5865914924	6319	County Line	RD	N101		Fair Haven	MI	48023
		1	4302	5865914922	6319	County Line	RD	N102		Fair Haven	MI	48023
		1	4301	5865914921	6319	County Line	RD	N104		Fair Haven	MI	48023
		1	4300	5865914923	6319	County Line	RD	N100		Fair Haven	MI	48023
		1	2485	5865914926	6319	County Line	RD	E132 Compass Pointe		Fair Haven	MI	48023
		1	2407	5865914902	6319	County Line	RD	N134		Fair Haven	MI	48023
		1	2403	5865914858	6319	County Line	RD	S219		Fair Haven	MI	48023
		1	2402	5865914865	6319	County Line	RD	S210		Fair Haven	MI	48023
		1	2400	5865914883	6319	County Line	RD	N210		Fair Haven	MI	48023
		1	2375	5865914948	6319	County Line	RD	COACHES OFF- downstairs across from gym		Fair Haven	MI	48023
		1	2370	5865914854	6319	County Line	RD	S224		Fair Haven	MI	48023
		1	2368	5865914866	6319	County Line	RD	S208		Fair Haven	MI	48023

APPENDIX C (Telephone Handset Schedule)

		1	2366	5865914950	6319	County Line	RD	ATHL TRAINER downstairs across from gym	Fair Haven	MI	48023
		1	2365	5865914951	6319	County Line	RD	BOYS GYM downstairs across from gym	Fair Haven	MI	48023
		1	2364	5865914949	6319	County Line	RD	GIRLS GYM downstairs across from gym	Fair Haven	MI	48023
		1	2363	5865914836	6319	County Line	RD	S122	Fair Haven	MI	48023
		1	2362	5865914827	6319	County Line	RD	S108	Fair Haven	MI	48023
		1	2360	5865914937	6319	County Line	RD	E119	Fair Haven	MI	48023
		1	2359	5865914930	6319	County Line	RD	E128	Fair Haven	MI	48023
		1	2357	5865914946	6319	County Line	RD	E104 ROTC	Fair Haven	MI	48023
		1	2356	5865914947	6319	County Line	RD	E104 ROTC	Fair Haven	MI	48023
		1	2355	5865915471	6319	County Line	RD	CONF OFF Across from Main Office	Fair Haven	MI	48023
		1	2354	5865914876	6319	County Line	RD	N200	Fair Haven	MI	48023
		1	2353	5865915469	6319	County Line	RD	CONF OFF Across from Main Office	Fair Haven	MI	48023
		1	2349	5865914818	6319	County Line	RD	CONF OFF Across from Main Office	Fair Haven	MI	48023
		1	2348	5865914942	6319	County Line	RD	E115 STORE	Fair Haven	MI	48023
		1	2345	5865914918	6319	County Line	RD	N110	Fair Haven	MI	48023
		1	2343	5865915465	6319	County Line	RD	MAIN OFFICE	Fair Haven	MI	48023
		1	2342	5865914820	6319	County Line	RD	CONF OFF Across from Main Office	Fair Haven	MI	48023
		1	2341	5865914817	6319	County Line	RD	CONF OFF Across from Main Office	Fair Haven	MI	48023
		1	2340	5865915473	6319	County Line	RD	CONF OFF Across from Main Office	Fair Haven	MI	48023
		1	2339	5865914819	6319	County Line	RD	CONF OFF Across from Main Office	Fair Haven	MI	48023
		1	2338	5865915478	6319	County Line	RD	CONF OFF Across from Main Office	Fair Haven	MI	48023
		1	2337	5865915474	6319	County Line	RD	CONF OFF Across from Main Office	Fair Haven	MI	48023
		1	2336	5865915475	6319	County Line	RD	CONF OFF Across from Main Office	Fair Haven	MI	48023
		1	2335	5865915472	6319	County Line	RD	CONF OFF Across from Main Office	Fair Haven	MI	48023
		1	2335	5865914920	6319	County Line	RD	N106	Fair Haven	MI	48023
		1	2334	5865915476	6319	County Line	RD	CONF OFF Across from Main Office	Fair Haven	MI	48023
		1	2333	5865915467	6319	County Line	RD	CONF OFF Across from Main Office	Fair Haven	MI	48023
		1	2332	5865915468	6319	County Line	RD	CONF OFF Across from Main Office	Fair Haven	MI	48023
		1	2331	5865914823	6319	County Line	RD	S101	Fair Haven	MI	48023
		1	2330	5865914940	6319	County Line	RD	KITCHEN	Fair Haven	MI	48023
		1	2326	5865914874	6319	County Line	RD	Media Center	Fair Haven	MI	48023
		1	2323	5865914821	6319	County Line	RD	W150	Fair Haven	MI	48023
		1	2322	5865914936	6319	County Line	RD	CUST	Fair Haven	MI	48023
		1	2320	5865914875	6319	County Line	RD	Media Center	Fair Haven	MI	48023
		1	2319	5865914845	6319	County Line	RD	S136	Fair Haven	MI	48023
		1	2318	5865914944	6319	County Line	RD	S136	Fair Haven	MI	48023

APPENDIX C (Telephone Handset Schedule)

		1	2317	5865914939	6319	County Line	RD	E113	Fair Haven	MI	48023
	1		2315	5865915470	6319	County Line	RD	CONF OFF Across from Main Office	Fair Haven	MI	48023
	1		2314	5865915466	6319	County Line	RD	MAIN OFFICE	Fair Haven	MI	48023
	1		2313	5866482535	6319	County Line	RD	MAIN OFFICE	Fair Haven	MI	48023
	1		2311	5866482523	6319	County Line	RD	MAIN OFFICE	Fair Haven	MI	48023
	1		2310	5866482502	6319	County Line	RD	MAIN OFFICE	Fair Haven	MI	48023
	1		2309	5866482537	6319	County Line	RD	E100 Athletics Office	Fair Haven	MI	48023
	1		2308	5865914943	6319	County Line	RD	E102	Fair Haven	MI	48023
	1		2307	5865914832	6319	County Line	RD	S116	Fair Haven	MI	48023
	1		2305	5865915463	6319	County Line	RD	MAIN OFFICE	Fair Haven	MI	48023
	1		2304	5865915462	6319	County Line	RD	MAIN OFFICE	Fair Haven	MI	48023
	1		2303	5865915461	6319	County Line	RD	MAIN OFFICE	Fair Haven	MI	48023
	1		2302	5855914524	6319	County Line	RD	MAIN OFFICE	Fair Haven	MI	48023
	1		2301	5855914523	6319	County Line	RD	MAIN OFFICE	Fair Haven	MI	48023
	1		2300	5855914522	6319	County Line	RD	MAIN OFFICE	Fair Haven	MI	48023
	1		2258	5865914928	6319	County Line	RD	E130	Fair Haven	MI	48023
Totals:	15	143									

APPENDIX C (Telephone Handset Schedule)

<i>Aquatic Center</i>	<i>AVT</i>	<i>SVT</i>	<i>Ext</i>	<i>DID#</i>	<i>Address#</i>	<i>Street</i>	<i>Location within facility</i>	<i>City</i>	<i>State</i>	<i>Zip</i>
	1		2064	5865915386	52401	Ashley	Conf Room	New Baltimore	MI	48047
	1		2063	5865915387	52401	Ashley	Front Desk	New Baltimore	MI	48047
	1		2062	5865915388	52401	Ashley	Back Office	New Baltimore	MI	48047
	1		2060	5865915389	52401	Ashley	Pool Office	New Baltimore	MI	48047
Totals:	4	0								

APPENDIX C (Telephone Handset Schedule)

Ashley Elementary School	AVT	SVT	Ext	DID#	Address#	Street	Location within facility	City	State	Zip
		1	3029	5865915345	52347	Ashley	Room A29	New Baltimore	MI	48047
		1	3028	5866482516	52347	Ashley	Room A28	New Baltimore	MI	48047
		1	3027	5865914090	52347	Ashley	Room A27	New Baltimore	MI	48047
		1	3026	5865914054	52347	Ashley	Gym	New Baltimore	MI	48047
		1	3026	5865915341	52347	Ashley	Room A26	New Baltimore	MI	48047
		1	3025	5865914067	52347	Ashley	Room 25	New Baltimore	MI	48047
		1	3024	5865914061	52347	Ashley	Room 24	New Baltimore	MI	48047
		1	3023	5865914066	52347	Ashley	Room 23	New Baltimore	MI	48047
		1	3022	5865914060	52347	Ashley	Room 22	New Baltimore	MI	48047
		1	3021	5865914065	52347	Ashley	Room 21	New Baltimore	MI	48047
		1	3020	5865914092	52347	Ashley	Room 20	New Baltimore	MI	48047
		1	3019	5865914064	52347	Ashley	Room 19	New Baltimore	MI	48047
		1	3018	5865914058	52347	Ashley	Room 18	New Baltimore	MI	48047
		1	3017	5865914063	52347	Ashley	Room 17	New Baltimore	MI	48047
		1	3016	5865914057	52347	Ashley	Room 16	New Baltimore	MI	48047
		1	3015	5865914062	52347	Ashley	Room 15	New Baltimore	MI	48047
		1	3014	5865914056	52347	Ashley	Room 14	New Baltimore	MI	48047
		1	3013	5865915342	52347	Ashley	Room 11	New Baltimore	MI	48047
		1	3012	5865915339	52347	Ashley	Music Rroom 12	New Baltimore	MI	48047
		1	3010	5865914076	52347	Ashley	Room 10	New Baltimore	MI	48047
		1	3009	5865914078	52347	Ashley	Room 9	New Baltimore	MI	48047
		1	3009	5865915343	52347	Ashley	Room 9	New Baltimore	MI	48047
		1	3008	5865915344	52347	Ashley	Room 8	New Baltimore	MI	48047
		1	3007	5865914083	52347	Ashley	Room 7	New Baltimore	MI	48047
		1	3006	5865914081	52347	Ashley	Room 6	New Baltimore	MI	48047
		1	3005	5865914082	52347	Ashley	Room 5	New Baltimore	MI	48047
		1	3004	5865914085	52347	Ashley	Room 4	New Baltimore	MI	48047
		1	3003	5865914086	52347	Ashley	Room 3	New Baltimore	MI	48047
		1	3002	5865914087	52347	Ashley	Room 2	New Baltimore	MI	48047
		1	3001	5865914088	52347	Ashley	Room 1	New Baltimore	MI	48047
		1	1030	5866482507	52347	Ashley	Kitchen	New Baltimore	MI	48047

APPENDIX C (Telephone Handset Schedule)

		1	1022	5865915340	52347	Ashley	Custodial Next to Kitchen	New Baltimore	MI	48047
		1	1020	5865914055	52347	Ashley	Library	New Baltimore	MI	48047
		1	1016	5865914265	52347	Ashley	Room 5	New Baltimore	MI	48047
		1	1014	5865914079	52347	Ashley	Litt Room Across from Room 9	New Baltimore	MI	48047
		1	1013	5865914093	52347	Ashley	Cafeteria	New Baltimore	MI	48047
	1		1010	5866482508	52347	Ashley	Main Office	New Baltimore	MI	48047
	1		1009	5865914072	52347	Ashley	Main Office	New Baltimore	MI	48047
	1		1007	5865914068	52347	Ashley	Conf Room Outside Main Office	New Baltimore	MI	48047
	1		1005	5865914075	52347	Ashley	Psych North of Main Office	New Baltimore	MI	48047
	1		1004	5865914074	52347	Ashley	Speech North of Main Office	New Baltimore	MI	48047
	1		1003	5865914073	52347	Ashley	Staff Lounge Back of Main Office	New Baltimore	MI	48047
	1		1002	5865914071	52347	Ashley	Main Office	New Baltimore	MI	48047
	1		1001	5865914070	52347	Ashley	Main Office	New Baltimore	MI	48047
	1		1000	5865914069	52347	Ashley	Main Office	New Baltimore	MI	48047
Totals:	9	36								

APPENDIX C (Telephone Handset Schedule)

<i>Early Childhood Center</i>	<i>AVT</i>	<i>SVT</i>	<i>Ext</i>	<i>DID#</i>	<i>Address#</i>	<i>Street</i>	<i>Location within facility</i>	<i>City</i>	<i>State</i>	<i>Zip</i>
	1			5865914150	52680	Washington	Office	New Baltimore	MI	48047
		1	2451	5865915395	52680	Washington	Room 6	New Baltimore	MI	48047
		1	2450	5867167862	52680	Washington	Room 1	New Baltimore	MI	48047
		1	2072	5865915390	52680	Washington	Room 3	New Baltimore	MI	48047
		1	2070	5865915396	52680	Washington	Room 4	New Baltimore	MI	48047
		1	2055	5865915393	52680	Washington	Room 9	New Baltimore	MI	48047
		1	2054	5865915394	52680	Washington	Room 7	New Baltimore	MI	48047
	1		2053	5867161814	52680	Washington	Office	New Baltimore	MI	48047
	1		2052	5867163037	52680	Washington	Office	New Baltimore	MI	48047
	1		2051	5865915397	52680	Washington	Office	New Baltimore	MI	48047
		1	2050	5865915391	52680	Washington	Room 8	New Baltimore	MI	48047
Totals:	4	7								

APPENDIX C (Telephone Handset Schedule)

Great Oaks Elementary School	AVT	SVT	Ext	DID#	Address#	Street		Location within facility	City	State	Zip
		1	3130	5865914269	32900	24 Mile	RD	Library Office	New Baltimore	MI	48047
		1	3129	5865914239	32900	24 Mile	RD	Room 3D	New Baltimore	MI	48047
		1	3128	5865915411	32900	24 Mile	RD	Room 3C	New Baltimore	MI	48047
		1	3127	5865914237	32900	24 Mile	RD	Room 3B	New Baltimore	MI	48047
		1	3126	5865914235	32900	24 Mile	RD	Room 3A	New Baltimore	MI	48047
		1	3125	5865914233	32900	24 Mile	RD	Music across from Library	New Baltimore	MI	48047
		1	3125	5865914245	32900	24 Mile	RD	Music	New Baltimore	MI	48047
		1	3124	5865914238	32900	24 Mile	RD	Art across from Cafeteria	New Baltimore	MI	48047
		1	3124	5865914244	32900	24 Mile	RD	Art	New Baltimore	MI	48047
		1	3122	5865914243	32900	24 Mile	RD	Gym	New Baltimore	MI	48047
		1	3120	5865914231	32900	24 Mile	RD	Room 20	New Baltimore	MI	48047
		1	3119	5865914260	32900	24 Mile	RD	Room 19	New Baltimore	MI	48047
		1	3118	5865914258	32900	24 Mile	RD	Room 18	New Baltimore	MI	48047
		1	3117	5865915414	32900	24 Mile	RD	Room 17	New Baltimore	MI	48047
		1	3116	5865914232	32900	24 Mile	RD	Room 16	New Baltimore	MI	48047
		1	3115	5865914241	32900	24 Mile	RD	Room 15	New Baltimore	MI	48047
		1	3114	5865914234	32900	24 Mile	RD	Room 14	New Baltimore	MI	48047
		1	3113	5865914227	32900	24 Mile	RD	Room 13	New Baltimore	MI	48047
		1	3112	5865915409	32900	24 Mile	RD	Room 12	New Baltimore	MI	48047
		1	3111	5865914246	32900	24 Mile	RD	Room 11	New Baltimore	MI	48047
		1	3110	5865914228	32900	24 Mile	RD	Room 10	New Baltimore	MI	48047
		1	3110	5865915413	32900	24 Mile	RD	Room 10	New Baltimore	MI	48047
		1	3109	5865914247	32900	24 Mile	RD	Room 9	New Baltimore	MI	48047
		1	3108	5865914248	32900	24 Mile	RD	Room 8	New Baltimore	MI	48047
		1	3107	5865914259	32900	24 Mile	RD	Room 7	New Baltimore	MI	48047
		1	3106	5865915412	32900	24 Mile	RD	Room 6	New Baltimore	MI	48047
		1	3105	5865914249	32900	24 Mile	RD	Room 5	New Baltimore	MI	48047
		1	3104	5865914230	32900	24 Mile	RD	Room 4	New Baltimore	MI	48047
		1	3103	5865914225	32900	24 Mile	RD	3F	New Baltimore	MI	48047
		1	3102	5865914240	32900	24 Mile	RD	Room 2	New Baltimore	MI	48047
		1	3101	5865914226	32900	24 Mile	RD	Room 1	New Baltimore	MI	48047

APPENDIX C (Telephone Handset Schedule)

		1	3100	5865914236	32900	24 Mile	RD	Computer Lab	New Baltimore	MI	48047
		1	1130	5866482518	32900	24 Mile	RD	Kitchen	New Baltimore	MI	48047
		1	1125	5865914275	32900	24 Mile	RD	Conference Rm	New Baltimore	MI	48047
		1	1122	5865914229	32900	24 Mile	RD	Custodian South of Kitchen	New Baltimore	MI	48047
		1	1120	5865914261	32900	24 Mile	RD	Library	New Baltimore	MI	48047
		1	1113	5865914223	32900	24 Mile	RD	Lit Office Next to Room 1	New Baltimore	MI	48047
		1	1112	5865914224	32900	24 Mile	RD	3E	New Baltimore	MI	48047
	1		1110	5866482509	32900	24 Mile	RD	Main Office	New Baltimore	MI	48047
		1	1107	5865915410	32900	24 Mile	RD	Cafeteria	New Baltimore	MI	48047
		1	1106	5865914242	32900	24 Mile	RD	Room 3G	New Baltimore	MI	48047
		1	1105	5865914256	32900	24 Mile	RD	Lounge across from Cafeteria	New Baltimore	MI	48047
		1	1104	5865914257	32900	24 Mile	RD	Workroom across from Cafeteria	New Baltimore	MI	48047
	1		1103	5865914272	32900	24 Mile	RD	Main Office	New Baltimore	MI	48047
		1	1101	5865914221	32900	24 Mile	RD	Main Office	New Baltimore	MI	48047
		1	1100	5865914222	32900	24 Mile	RD	Main Office	New Baltimore	MI	48047
Totals:		4	37								

APPENDIX C (Telephone Handset Schedule)

<i>Lighthouse Elementary School</i>	<i>AVT</i>	<i>SVT</i>	<i>Ext</i>	<i>DID#</i>	<i>Address#</i>	<i>Street</i>	<i>Location within facility</i>	<i>City</i>	<i>State</i>	<i>Zip</i>
		1	3943	5865915325	51880	Washington	Room 16	New Baltimore	MI	48047
		1	3942	5865914038	51880	Washington	Student Service-Next to RM 8	New Baltimore	MI	48047
		1	3940	5865915321	51880	Washington	Gym	New Baltimore	MI	48047
		1	3938	5865915305	51880	Washington	Media Center Office	New Baltimore	MI	48047
		1	3938	5865914033	51880	Washington	Book room Next to Room 12	New Baltimore	MI	48047
		1	3937	5865915328	51880	Washington	Room 17	New Baltimore	MI	48047
		1	3936	5865915323	51880	Washington	Room 14	New Baltimore	MI	48047
		1	3934	5865915333	51880	Washington	Room 9	New Baltimore	MI	48047
		1	3933	5865915335	51880	Washington	Room 7	New Baltimore	MI	48047
		1	3932	5865915324	51880	Washington	Room 13	New Baltimore	MI	48047
		1	3930	5865914048	51880	Washington	Room 1	New Baltimore	MI	48047
		1	3929	5865914047	51880	Washington	Room 2	New Baltimore	MI	48047
		1	3928	5865914045	51880	Washington	Room 4	New Baltimore	MI	48047
		1	3927	5865915336	51880	Washington	Room 6	New Baltimore	MI	48047
		1	3926	5865914039	51880	Washington	Room 8	New Baltimore	MI	48047
		1	3925	5865915338	51880	Washington	Psychologist across from Computer Lab	New Baltimore	MI	48047
		1	3924	5865915306	51880	Washington	Computer Lab/ across from Main Office	New Baltimore	MI	48047
		1	3922	5865915318	51880	Washington	Student Service across from Gym	New Baltimore	MI	48047
		1	3921	5865915327	51880	Washington	Room 18	New Baltimore	MI	48047
		1	3920	5865915310	51880	Washington	Room 23	New Baltimore	MI	48047
		1	3919	5865915311	51880	Washington	Room 25	New Baltimore	MI	48047
		1	3918	5865915314	51880	Washington	Room 27	New Baltimore	MI	48047
		1	3917	5865915315	51880	Washington	Room 29	New Baltimore	MI	48047
		1	3916	5865915316	51880	Washington	Room 28	New Baltimore	MI	48047
		1	3915	5865915313	51880	Washington	Room 26	New Baltimore	MI	48047
		1	3914	5865915312	51880	Washington	Room 24	New Baltimore	MI	48047
		1	3913	5865915309	51880	Washington	Room 22	New Baltimore	MI	48047
		1	3912	5865915308	51880	Washington	Room 20	New Baltimore	MI	48047
		1	3911	5865915317	51880	Washington	Music Room across from Gym	New Baltimore	MI	48047
		1	3910	5865915319	51880	Washington	Staff Lounge across from Gym	New Baltimore	MI	48047
		1	3908	5865915320	51880	Washington	Steem Rm Across from Gym	New Baltimore	MI	48047
		1	3907	5865915326	51880	Washington	Room 15	New Baltimore	MI	48047
		1	3906	5865915329	51880	Washington	Art Next to Room 19	New Baltimore	MI	48047
		1	3905	5865914044	51880	Washington	Room 5	New Baltimore	MI	48047

APPENDIX C (Telephone Handset Schedule)

		1	3904	5865914036	51880	Washington	Room 10	New Baltimore	MI	48047
		1	3903	5865915307	51880	Washington	Room 21	New Baltimore	MI	48047
		1	3900	5865915322	51880	Washington	Work room	New Baltimore	MI	48047
	1		2044	5866482515	51880	Washington	Technology Off across from Main Office	New Baltimore	MI	
	1		2043	5865915337	51880	Washington	Technology Off across from Main Office	New Baltimore	MI	48047
	1		2042	5865914049	51880	Washington	Technology Off across from Main Office	New Baltimore	MI	48047
	1		2041	5866482530	51880	Washington	Technology Office	New Baltimore	MI	48047
		1	1930	5866482505	51880	Washington	Kitchen	New Baltimore	MI	48047
		1	1926	5865914046	51880	Washington	Room 3	New Baltimore	MI	48047
		1	1922	5865915334	51880	Washington	Custodial off	New Baltimore	MI	48047
		1	1920	5865915304	51880	Washington	Media Center	New Baltimore	MI	48047
		1	1912	5865914034	51880	Washington	Room 12	New Baltimore	MI	48047
		1	1911	5865914037	51880	Washington	Student Service-Next to RM 8	New Baltimore	MI	48047
	1		1910	5866482506	51880	Washington	Main Office	New Baltimore	MI	48047
		1	1909	5865915332	51880	Washington	Cafeteria	New Baltimore	MI	48047
		1	1908	5865915330	51880	Washington	Room 19	New Baltimore	MI	48047
		1	1907	5865914035	51880	Washington	Room 11	New Baltimore	MI	48047
		1	1906	5865915331	51880	Washington	PTG Next to Room 19	New Baltimore	MI	48047
	1		1904	5865915300	51880	Washington	Main Office	New Baltimore	MI	48047
	1		1903	5865915302	51880	Washington	Media Office	New Baltimore	MI	48047
	1		1902	5865915301	51880	Washington	Main Office	New Baltimore	MI	48047
	1		1901	5865915302	51880	Washington	Main Office	New Baltimore	MI	48047
	1		1900	5865915303	51880	Washington	Main Office	New Baltimore	MI	48047
Totals:	10	40								

APPENDIX C (Telephone Handset Schedule)

<i>Lottie Elementary</i>	<i>AVT</i>	<i>SVT</i>	<i>Ext</i>	<i>DID#</i>	<i>Address#</i>	<i>Street</i>	<i>Location within facility</i>	<i>City</i>	<i>State</i>	<i>Zip</i>
		1	3223	5865914167	33700	Hooker	Music	New Baltimore	MI	48047
		1	3222	5865914164	33700	Hooker	Lab	New Baltimore	MI	48047
		1	3221	5865914184	33700	Hooker	C-12	New Baltimore	MI	48047
		1	3220	5865914183	33700	Hooker	C-10	New Baltimore	MI	48047
		1	3219	5865914180	33700	Hooker	C-8	New Baltimore	MI	48047
		1	3218	5865914178	33700	Hooker	C-6	New Baltimore	MI	48047
		1	3217	5865914179	33700	Hooker	C-4	New Baltimore	MI	48047
		1	3216	5865914177	33700	Hooker	C-2	New Baltimore	MI	48047
		1	3215	5865914176	33700	Hooker	C-1	New Baltimore	MI	48047
		1	3214	5865915402	33700	Hooker	B-3	New Baltimore	MI	48047
		1	3213	5865914169	33700	Hooker	A-4	New Baltimore	MI	48047
		1	3212	5865914171	33700	Hooker	A-6	New Baltimore	MI	48047
		1	3211	5865914173	33700	Hooker	A-12	New Baltimore	MI	48047
		1	3210	5865914174	33700	Hooker	A-13	New Baltimore	MI	48047
		1	3209	5865914172	33700	Hooker	A-11	New Baltimore	MI	48047
		1	3206	5865914186	33700	Hooker	A-7	New Baltimore	MI	48047
		1	3205	5865914170	33700	Hooker	A-5	New Baltimore	MI	48047
		1	3204	5865914168	33700	Hooker	A-3	New Baltimore	MI	48047
		1	3203	5865914161	33700	Hooker	A-1	New Baltimore	MI	48047
		1	3201	5865915405	33700	Hooker	B-1	New Baltimore	MI	48047
		1	3200	5865915403	33700	Hooker	B-2	New Baltimore	MI	48047
		1	1231	5865915404	33700	Hooker	B-1	New Baltimore	MI	48047
		1	1231	5865914160	33700	Hooker	A-2	New Baltimore	MI	48047
		1	1230	5866482514	33700	Hooker	Kitchen	New Baltimore	MI	48047
		1	1230	5865914175	33700	Hooker	Sack/kitchen	New Baltimore	MI	48047
		1	1224	5865914166	33700	Hooker	Gym	New Baltimore	MI	48047
		1	1222	5865914165	33700	Hooker	Custodian	New Baltimore	MI	48047
		1	1222	5865914182	33700	Hooker	Maintenance	New Baltimore	MI	48047
		1	1220	5865914163	33700	Hooker	Media center	New Baltimore	MI	48047

APPENDIX C (Telephone Handset Schedule)

		1	1213	5865914263	33700	Hooker	A-11	New Baltimore	MI	48047
	1		1210	5866482513	33700	Hooker	Main Office	New Baltimore	MI	48047
		1	1209	5865914181	33700	Hooker	A-9	New Baltimore	MI	48047
	1		1208	5865915401	33700	Hooker	Main Office	New Baltimore	MI	48047
		1	1207	5865914185	33700	Hooker	Speech	New Baltimore	MI	48047
		1	1206	5865914162	33700	Hooker	Staff Lounge	New Baltimore	MI	48047
		1	1205	5865914271	33700	Hooker	Speech Rm	New Baltimore	MI	48047
	1		1203	5865915399	33700	Hooker	Main Office	New Baltimore	MI	48047
	1		1201	5865915398	33700	Hooker	Main Office	New Baltimore	MI	48047
	1		1200	5865915400	33700	Hooker	Main Office	New Baltimore	MI	48047
Totals:	5	34								

APPENDIX C (Telephone Handset Schedule)

<i>Maconce Elementary School</i>	<i>AVT</i>	<i>SVT</i>	<i>Ext</i>	<i>DID#</i>	<i>Address#</i>	<i>Street</i>		<i>Location within facility</i>	<i>City</i>	<i>State</i>	<i>Zip</i>
		1	3430	5865914206	6300	Church	RD	Music Room across from library	Ira	MI	48023
		1	3427	5865914220	6300	Church	RD	Gym	Ira	MI	48023
		1	3426	5865914209	6300	Church	RD	Art room across from Cafeteria	Ira	MI	48023
		1	3422	5865914197	6300	Church	RD	Computer lab	Ira	MI	48023
		1	3420	5865914219	6300	Church	RD	Room 20	Ira	MI	48023
		1	3419	5865914218	6300	Church	RD	Room 19	Ira	MI	48023
		1	3418	5865914217	6300	Church	RD	Room 18	Ira	MI	48023
		1	3417	5865914216	6300	Church	RD	Room 17	Ira	MI	48023
		1	3416	5865914215	6300	Church	RD	Room 16	Ira	MI	48023
		1	3415	5865914214	6300	Church	RD	Room 15	Ira	MI	48023
		1	3414	5865914213	6300	Church	RD	Room 14	Ira	MI	48023
		1	3413	5865914212	6300	Church	RD	Room 13	Ira	MI	48023
		1	3412	5865914211	6300	Church	RD	Room 12	Ira	MI	48023
		1	3411	5865914268	6300	Church	RD	Room 11	Ira	MI	48023
		1	3409	5865914205	6300	Church	RD	Room 9	Ira	MI	48023
		1	3408	5865914194	6300	Church	RD	Room 8	Ira	MI	48023
		1	3407	5865914195	6300	Church	RD	Room 7	Ira	MI	48023
		1	3406	5865914192	6300	Church	RD	Room 6	Ira	MI	48023
		1	3405	5865914193	6300	Church	RD	Room 5	Ira	MI	48023
		1	3403	5865915407	6300	Church	RD	Room 3	Ira	MI	48023
		1	1430	5866482510	6300	Church	RD	Kitchen	Ira	MI	48023
		1	1425	5865915408	6300	Church	RD	Library off	Ira	MI	48023
		1	1422	5865914187	6300	Church	RD	Custodial Behind Gym	Ira	MI	48023
		1	1420	5865914198	6300	Church	RD	Library	Ira	MI	48023
		1	1416	5865914207	6300	Church	RD	Copy room south of main office	Ira	MI	48023
		1	1414	5865914196	6300	Church	RD	Room 10	Ira	MI	48023
	1		1410	5866482517	6300	Church	RD	Main Office	Ira	MI	48023
		1	1409	5865914189	6300	Church	RD	Media Center/office	Ira	MI	48023
		1	1408	5865915406	6300	Church	RD	Room 3	Ira	MI	48023
	1		1407	5865914188	6300	Church	RD	Main Office	Ira	MI	48023
		1	1406	5865914204	6300	Church	RD	Social Worker east of main office	Ira	MI	48023
		1	1405	5865914208	6300	Church	RD	Staff lounge across from Cafeteria	Ira	MI	48023

APPENDIX C (Telephone Handset Schedule)

	1		1404	5865914270	6300	Church	RD	Main Office	Ira	MI	48023
	1		1403	5865914202	6300	Church	RD	Main Office	Ira	MI	48023
	1		1402	5865914203	6300	Church	RD	Main Office	Ira	MI	48023
	1		1401	5865914201	6300	Church	RD	Main Office	Ira	MI	48023
	1		1400	5865914200	6300	Church	RD	Main Office	Ira	MI	48023
Totals:	7	30									

APPENDIX C (Telephone Handset Schedule)

<i>MacDonald/Central Office</i>	<i>AVT</i>	<i>SVT</i>	<i>Ext</i>	<i>DID#</i>	<i>Address#</i>	<i>Street</i>		<i>Location within facility</i>	<i>City</i>	<i>State</i>	<i>Zip</i>
		1	3324	5865915016	5201	County Line	Rd	Gym Office	Casco Twp	MI	48064
		1	3321	5865915015	5201	County Line	Rd	Art Room	Casco Twp	MI	48064
	1		3319	5865915014	5201	County Line	Rd	Office	Casco Twp	MI	48064
		1	3316	5865915013	5201	County Line	Rd	Work Room	Casco Twp	MI	48064
		1	3312	5865915012	5201	County Line	Rd	Room 12	Casco Twp	MI	48064
		1	3311	5865915011	5201	County Line	Rd	Room 11	Casco Twp	MI	48064
		1	3308	5865915010	5201	County Line	Rd	room 8	Casco Twp	MI	48064
		1	3306	5865915009	5201	County Line	Rd	Room 6	Casco Twp	MI	48064
		1	3305	5865915008	5201	County Line	Rd	Room 5	Casco Twp	MI	48064
		1	3304	5865915007	5201	County Line	Rd	Room 4	Casco Twp	MI	48064
		1	3303	5865915006	5201	County Line	Rd	Room 3	Casco Twp	MI	48064
		1	3301	5865915005	5201	County Line	Rd	Room 1	Casco Twp	MI	48064
	1		1825	5865915006	5201	County Line	Rd	Office	Casco Twp	MI	48064
	1		1824	5865915007	5201	County Line	Rd	Office	Casco Twp	MI	48064
	1		1823	5865915008	5201	County Line	Rd	Office First hallway on the right	Casco Twp	MI	48064
	1		1822	5865915009	5201	County Line	Rd	Office	Casco Twp	MI	48064
	1		1821	5865915010	5201	County Line	Rd	Office	Casco Twp	MI	48064
	1		1820	5865915011	5201	County Line	Rd	Office	Casco Twp	MI	48064
	1		1819	5865915012	5201	County Line	Rd	Office First hallway on the right	Casco Twp	MI	48064
	1		1818	5865915013	5201	County Line	Rd	Office First hallway on the right	Casco Twp	MI	48064
	1		1817	5865915014	5201	County Line	Rd	Office First hallway on the left	Casco Twp	MI	48064
	1		1816	5865915015	5201	County Line	Rd	Office First hallway on the left	Casco Twp	MI	48064
	1		1815	5865915016	5201	County Line	Rd	Office	Casco Twp	MI	48064
	1		1814	5865915017	5201	County Line	Rd	Office First hallway on the right	Casco Twp	MI	48064
	1		1813	5865915018	5201	County Line	Rd	Office	Casco Twp	MI	48064
	1		1812	5865915019	5201	County Line	Rd	Office Second hallway on the right	Casco Twp	MI	48064
	1		1811	5865915020	5201	County Line	Rd	Office Second hallway on the right	Casco Twp	MI	48064
	1		1810	5865915021	5201	County Line	Rd	Office Third hallway on the right	Casco Twp	MI	48064
	1		1809	5865915022	5201	County Line	Rd	Main Office	Casco Twp	MI	48064
	1		1808	5865915023	5201	County Line	Rd	Office Second hallway on the right	Casco Twp	MI	48064
	1		1807	5865915024	5201	County Line	Rd	Office Second hallway on the right	Casco Twp	MI	48064
	1		1806	5865915025	5201	County Line	Rd	Office Second hallway on the right	Casco Twp	MI	48064
	1		1805	5865915026	5201	County Line	Rd	Main Office	Casco Twp	MI	48064
	1		1804	5865915027	5201	County Line	Rd	Office Third hallway on the right	Casco Twp	MI	48064
	1		1803	5865915028	5201	County Line	Rd	Office- Third hallway on the right	Casco Twp	MI	48064
	1		1802	5865915029	5201	County Line	Rd	Main Office	Casco Twp	MI	48064
	1		1801	5865915030	5201	County Line	Rd	Main Office	Casco Twp	MI	48064
	1		1800	5865914952	5201	County Line	Rd	Main Office	Casco Twp	MI	48064
	1		1625	5865915004	5201	County Line	Rd	Police Office	Casco Twp	MI	48064
		1	1331	5865915003	5201	County Line	Rd	Kitchen	Casco Twp	MI	48064
		1	1325	5865915002	5201	County Line	Rd	Media Office	Casco Twp	MI	48064
		1	1322	5865915001	5201	County Line	Rd	Custodian Office	Casco Twp	MI	48064

APPENDIX C (Telephone Handset Schedule)

		1	1320	5865914284	5201	County Line	Rd	Media Center	Casco Twp	MI	48064
	1		1316	5865914274	5201	County Line	Rd	Hall Office	Casco Twp	MI	48064
	1		1314	5865914273	5201	County Line	Rd	Hall Office	Casco Twp	MI	48064
	1		1312	5865914266	5201	County Line	Rd	Main Office	Casco Twp	MI	48064
	1		1310	5866482520	5201	County Line	Rd	Main Office	Casco Twp	MI	48064
	1		1307	5865915415	5201	County Line	Rd	Hall Office	Casco Twp	MI	48064
	1		1303	5865914283	5201	County Line	Rd	Hall Office	Casco Twp	MI	48064
	1		1302	5865915417	5201	County Line	Rd	Main Office	Casco Twp	MI	48064
	1		1300	5865915416	5201	County Line	Rd	Main Office	Casco Twp	MI	48064
Totals:	36	15									

APPENDIX C (Telephone Handset Schedule)

<i>Middle School North</i>	<i>AVT</i>	<i>SVT</i>	<i>Ext</i>	<i>DID#</i>	<i>Address#</i>	<i>Street</i>		<i>Location within facility</i>	<i>City</i>	<i>State</i>	<i>Zip</i>
		1	3755	#VALUE!	52805	Ashley	Street	E11	New Baltimore	MI	48047
		1	3751	5865914267	52805	Ashley	Street	E16	New Baltimore	MI	48047
		1	3750	5865914268	52805	Ashley	Street	D7	New Baltimore	MI	48047
		1	3749	5865914269	52805	Ashley	Street	E17	New Baltimore	MI	48047
		1	3748	5865914270	52805	Ashley	Street	E19	New Baltimore	MI	48047
		1	3747	5865914271	52805	Ashley	Street	E18	New Baltimore	MI	48047
		1	3746	5865914272	52805	Ashley	Street	E20	New Baltimore	MI	48047
		1	3745	5865914273	52805	Ashley	Street	E21	New Baltimore	MI	48047
		1	3744	5865914274	52805	Ashley	Street	A22	New Baltimore	MI	48047
		1	3743	5865914275	52805	Ashley	Street	E6	New Baltimore	MI	48047
		1	3742	5865914276	52805	Ashley	Street	E8	New Baltimore	MI	48047
		1	3741	5865914277	52805	Ashley	Street	E10	New Baltimore	MI	48047
		1	3740	5865914278	52805	Ashley	Street	E12	New Baltimore	MI	48047
		1	3739	5865914279	52805	Ashley	Street	E14	New Baltimore	MI	48047
		1	3738	5865914280	52805	Ashley	Street	E16	New Baltimore	MI	48047
		1	3737	5865914281	52805	Ashley	Street	E15	New Baltimore	MI	48047
		1	3736	5865914281	52805	Ashley	Street	E13	New Baltimore	MI	48047
		1	3734	5865914282	52805	Ashley	Street	E9	New Baltimore	MI	48047
		1	3733	5865914283	52805	Ashley	Street	E5/7	New Baltimore	MI	48047
		1	3731	5865914284	52805	Ashley	Street	C2	New Baltimore	MI	48047
		1	3730	5865914285	52805	Ashley	Street	C6	New Baltimore	MI	48047
		1	3729	5865914286	52805	Ashley	Street	A21	New Baltimore	MI	48047
		1	3728	5865914287	52805	Ashley	Street	MUSIC across from Room C6	New Baltimore	MI	48047
		1	3727	5865914288	52805	Ashley	Street	C5	New Baltimore	MI	48047
		1	3726	5865914289	52805	Ashley	Street	C1	New Baltimore	MI	48047
		1	3725	5865914290	52805	Ashley	Street	D1	New Baltimore	MI	48047
		1	3724	5865914291	52805	Ashley	Street	D6	New Baltimore	MI	48047
		1	3723	5865914292	52805	Ashley	Street	D8	New Baltimore	MI	48047
		1	3722	5865914293	52805	Ashley	Street	B7	New Baltimore	MI	48047
		1	3720	5865914294	52805	Ashley	Street	COUNS Across from Media Center	New Baltimore	MI	48047
		1	3719	5865914295	52805	Ashley	Street	A20	New Baltimore	MI	48047
		1	3718	5865914296	52805	Ashley	Street	F1	New Baltimore	MI	48047
		1	3716	5865914297	52805	Ashley	Street	A2	New Baltimore	MI	48047
		1	3715	5865914298	52805	Ashley	Street	A4	New Baltimore	MI	48047
		1	3714	5865914299	52805	Ashley	Street	A6	New Baltimore	MI	48047
		1	3713	5865914300	52805	Ashley	Street	A8	New Baltimore	MI	48047
		1	3712	5865914301	52805	Ashley	Street	A10	New Baltimore	MI	48047
		1	3711	5865914302	52805	Ashley	Street	A12	New Baltimore	MI	48047
		1	3710	5865914303	52805	Ashley	Street	A14	New Baltimore	MI	48047
		1	3709	5865914304	52805	Ashley	Street	A16	New Baltimore	MI	48047
		1	3708	5865914305	52805	Ashley	Street	A19	New Baltimore	MI	48047

APPENDIX C (Telephone Handset Schedule)

<i>Middle School South</i>	<i>AVT</i>	<i>SVT</i>	<i>Ext</i>	<i>DID#</i>	<i>Address#</i>	<i>Street</i>	<i>Location within facility</i>	<i>City</i>	<i>State</i>	<i>Zip</i>
		1	4159	5865915441	48650	Sugarbush	Room 509	New Baltimore	MI	48047
		1	4158	5865915442	48650	Sugarbush	Room 508	New Baltimore	MI	48047
		1	4156	5865915447	48650	Sugarbush	Room 506	New Baltimore	MI	48047
		1	4155	5865914427	48650	Sugarbush	Room 505	New Baltimore	MI	48047
		1	4154	5865915444	48650	Sugarbush	Room 504	New Baltimore	MI	48047
		1	4153	5865915443	48650	Sugarbush	Room 503	New Baltimore	MI	48047
		1	4150		48650	Sugarbush	Room 500	New Baltimore	MI	48047
		1	4149	5865915455	48650	Sugarbush	Room 408	New Baltimore	MI	48047
		1	4148	5865915456	48650	Sugarbush	Room 406	New Baltimore	MI	48047
		1	4147	5865915457	48650	Sugarbush	Room 407	New Baltimore	MI	48047
		1	4146	5865915454	48650	Sugarbush	Room 405	New Baltimore	MI	48047
		1	4145	5865915453	48650	Sugarbush	Room 404	New Baltimore	MI	48047
		1	4143	5865915452	48650	Sugarbush	Room 403	New Baltimore	MI	48047
		1	4142	5865915451	48650	Sugarbush	Room 402	New Baltimore	MI	48047
		1	4141	5865915438	48650	Sugarbush	Room 604	New Baltimore	MI	48047
		1	4139	5865915428	48650	Sugarbush	Room 204	New Baltimore	MI	48047
		1	4138	5865915427	48650	Sugarbush	Room 203	New Baltimore	MI	48047
		1	4137	5865915426	48650	Sugarbush	Room 202	New Baltimore	MI	48047
		1	4136	5865915425	48650	Sugarbush	Room 201	New Baltimore	MI	48047
		1	4135	5865915424	48650	Sugarbush	Room 200	New Baltimore	MI	48047
		1	4134	5865915419	48650	Sugarbush	Room 108	New Baltimore	MI	48047
		1	4133	5865914297	48650	Sugarbush	Room 104	New Baltimore	MI	48047
		1	4132	5865915418	48650	Sugarbush	Room 107	New Baltimore	MI	48047
		1	4131	5865914299	48650	Sugarbush	Room 106	New Baltimore	MI	48047
		1	4130	5865914298	48650	Sugarbush	Room 105	New Baltimore	MI	48047
		1	4129	5865915435	48650	Sugarbush	Room 606	New Baltimore	MI	48047
		1	4128	5865914296	48650	Sugarbush	Room 103	New Baltimore	MI	48047
		1	4127	5865914295	48650	Sugarbush	Room 102	New Baltimore	MI	48047
		1	4126	5865915434	48650	Sugarbush	Room 607	New Baltimore	MI	48047
		1	4125	5865914294	48650	Sugarbush	Room 101	New Baltimore	MI	48047
		1	4124	5865915460	48650	Sugarbush	Horticulture across from Food service office	New Baltimore	MI	48047
		1	4123	5865915420	48650	Sugarbush	Room 311	New Baltimore	MI	48047
		1	4122	5865915439	48650	Sugarbush	Room 513	New Baltimore	MI	48047

APPENDIX C (Telephone Handset Schedule)

		1	4120	5865915440	48650	Sugarbush	Room 510	New Baltimore	MI	48047
		1	4116	5865915421	48650	Sugarbush	Student service across from main office	New Baltimore	MI	48047
		1	4113	5865915431	48650	Sugarbush	Room 303	New Baltimore	MI	48047
		1	4111	5865915433	48650	Sugarbush	Room 304	New Baltimore	MI	48047
		1	4110	5865915432	48650	Sugarbush	Room 305	New Baltimore	MI	48047
		1	4108	5865915458	48650	Sugarbush	Room 309	New Baltimore	MI	48047
		1	4105	5865915449	48650	Sugarbush	Room 307	New Baltimore	MI	48047
		1	4104	5865915459	48650	Sugarbush	Media Center	New Baltimore	MI	48047
		1	4103	5865914279	48650	Sugarbush	Media Center	New Baltimore	MI	48047
		1	4102	5865914278	48650	Sugarbush	Media Center	New Baltimore	MI	48047
		1	4100	5865915450	48650	Sugarbush	Room 401	New Baltimore	MI	48047
		1	3731	5865914475	48650	Sugarbush	Room 306	New Baltimore	MI	48047
	1		2282	5865914444	48650	Sugarbush	Food service Office	New Baltimore	MI	48047
	1		2281	5865914443	48650	Sugarbush	Food service Office	New Baltimore	MI	48047
	1		2280	5865914442	48650	Sugarbush	Food service Office	New Baltimore	MI	48047
		1	2254	5865915429	48650	Sugarbush	Gym	New Baltimore	MI	48047
		1	2250		48650	Sugarbush	Room Speech	New Baltimore	MI	48047
		1	2130	5866482501	48650	Sugarbush	Kitchen	New Baltimore	MI	48047
		1	2126	5865915437	48650	Sugarbush	Room 601	New Baltimore	MI	48047
		1	2125	5865915436	48650	Sugarbush	Room 605 Auto Shop	New Baltimore	MI	48047
	1		2123	5865914445	48650	Sugarbush	Food service Office	New Baltimore	MI	48047
		1	2122	5865915430	48650	Sugarbush	Custodial Next to Gym	New Baltimore	MI	48047
		1	2117	5865915422	48650	Sugarbush	Student service across from main office	New Baltimore	MI	48047
	1		2116	5865914276	48650	Sugarbush	Main Office	New Baltimore	MI	48047
	1		2114	5865914264	48650	Sugarbush	Social Service	New Baltimore	MI	48047
	1		2112	5865914293	48650	Sugarbush	Main Office	New Baltimore	MI	48047
	1		2111	5865914292	48650	Sugarbush	Main Office	New Baltimore	MI	48047
	1		2110	5865914290	48650	Sugarbush	Main Office	New Baltimore	MI	48047
		1	2109		48650	Sugarbush	Room 603	New Baltimore	MI	48047
	1		2108	5865915423	48650	Sugarbush	Student service across from main office	New Baltimore	MI	48047
	1		2107	5865914291	48650	Sugarbush	Main Office	New Baltimore	MI	48047
	1		2104	5865914286	48650	Sugarbush	Main Office	New Baltimore	MI	48047
	1		2103	5865914285	48650	Sugarbush	Main Office	New Baltimore	MI	48047
	1		2102	5865914288	48650	Sugarbush	Main Office	New Baltimore	MI	48047
	1		2101	5865914287	48650	Sugarbush	Main Office	New Baltimore	MI	48047

APPENDIX C (Telephone Handset Schedule)

	1		2100	5865914289	48650	Sugarbush	Main Office	New Baltimore	MI	48047
Totals:	16	53								

APPENDIX C (Telephone Handset Schedule)

<i>Naldrett Elementary School</i>	<i>AVT</i>	<i>SVT</i>	<i>Ext</i>	<i>DID#</i>	<i>Address#</i>	<i>Street</i>	<i>Location within facility</i>	<i>City</i>	<i>State</i>	<i>Zip</i>
		1	3529	5865915352	47800	Sugarubsh	Room 34	New Baltimore	MI	48047
		1	3528	5865915353	47800	Sugarubsh	Room 32	New Baltimore	MI	48047
		1	3527	5865915351	47800	Sugarubsh	Room 33	New Baltimore	MI	48047
		1	3526	5865915350	47800	Sugarubsh	Room 31	New Baltimore	MI	48047
		1	3524	5865915377	47800	Sugarubsh	Gym	New Baltimore	MI	48047
		1	3522	5865914262	47800	Sugarubsh	Room 20	New Baltimore	MI	48047
		1	3521	5865915369	47800	Sugarubsh	Psych West of Media Center Door	New Baltimore	MI	48047
		1	3520	5865915378	47800	Sugarubsh	Conf In front of Gym	New Baltimore	MI	48047
		1	3519	5865915361	47800	Sugarubsh	Room 19	New Baltimore	MI	48047
		1	3518	5865915360	47800	Sugarubsh	Room 18	New Baltimore	MI	48047
		1	3517	5865915359	47800	Sugarubsh	Room 17	New Baltimore	MI	48047
		1	3516	5865915358	47800	Sugarubsh	Room 16	New Baltimore	MI	48047
		1	3515	5865915357	47800	Sugarubsh	Room 15	New Baltimore	MI	48047
		1	3514	5865915356	47800	Sugarubsh	Room 14	New Baltimore	MI	48047
		1	3513	5865915355	47800	Sugarubsh	Room 13	New Baltimore	MI	48047
		1	3511	5865915354	47800	Sugarubsh	Room 11	New Baltimore	MI	48047
		1	3510	5865915349	47800	Sugarubsh	Room 10	New Baltimore	MI	48047
		1	3509	5865915348	47800	Sugarubsh	Room 9	New Baltimore	MI	48047
		1	3508	5865915347	47800	Sugarubsh	Room 8	New Baltimore	MI	48047
		1	3507	5865915346	47800	Sugarubsh	Room 7	New Baltimore	MI	48047
		1	3506	5865914099	47800	Sugarubsh	Room 6	New Baltimore	MI	48047
		1	3505	5865914098	47800	Sugarubsh	Room 5	New Baltimore	MI	48047
		1	3504	5865914097	47800	Sugarubsh	Room 4	New Baltimore	MI	48047
		1	3502	5865914095	47800	Sugarubsh	Room 2	New Baltimore	MI	48047
		1	3501	5865914094	47800	Sugarubsh	Room 1	New Baltimore	MI	48047
		1	3500	5865915379	47800	Sugarubsh	RSC Next to Room 2	New Baltimore	MI	48047
		1	1530	5866482511	47800	Sugarubsh	Kitchen	New Baltimore	MI	48047
		1	1525	5865915367	47800	Sugarubsh	Computer Lab Inside of Media Center	New Baltimore	MI	48047
		1	1522	5865915371	47800	Sugarubsh	Custodial Just Inside Door 8	New Baltimore	MI	48047
		1	1520	5865915366	47800	Sugarubsh	Library	New Baltimore	MI	48047
		1	1513	5865914096	47800	Sugarubsh	Room 3	New Baltimore	MI	48047
		1	1512	5865915362	47800	Sugarubsh	Room 21	New Baltimore	MI	48047
		1	1510	5866482512	47800	Sugarubsh	Main Office	New Baltimore	MI	48047
		1	1509	5865915364	47800	Sugarubsh	Room 23	New Baltimore	MI	48047
		1	1508	5865915370	47800	Sugarubsh	Psych West of Media Center Door	New Baltimore	MI	48047
		1	1507	5865915363	47800	Sugarubsh	Room 22	New Baltimore	MI	48047
		1	1506	5865915368	47800	Sugarubsh	Speech West of Media Center Door	New Baltimore	MI	48047
		1	1505	5865915376	47800	Sugarubsh	Cafeteria	New Baltimore	MI	48047

APPENDIX C (Telephone Handset Schedule)

		1	1504	5865915365	47800	Sugarubsh	Teachers Lounge across from Main Office	New Baltimore	MI	48047
	1		1503	5865915375	47800	Sugarubsh	Main Office	New Baltimore	MI	48047
	1		1502	5865915374	47800	Sugarubsh	Main Office	New Baltimore	MI	48047
	1		1501	5865915373	47800	Sugarubsh	Main Office	New Baltimore	MI	48047
	1		1500	5865915372	47800	Sugarubsh	Main Office	New Baltimore	MI	48047
Totals:	4	39								

APPENDIX C (Telephone Handset Schedule)

<i>Transportation</i>	<i>AVT</i>	<i>SVT</i>	<i>Ext</i>	<i>DID#</i>	<i>Address#</i>	<i>Street</i>	<i>Locatoin within facility</i>	<i>City</i>	<i>State</i>	<i>Zip</i>
	1		2085	5865915380	51890	Washington	Main Office	New Baltimore	MI	48047
	1		2086	5865915381	51890	Washington	Supervisor Behind Front Office	New Baltimore	MI	48047
		1	2083	5865915382	51890	Washington	Conf Rm In Fron of Main Office	New Baltimore	MI	48047
		1	2084	5866482521	51890	Washington	Garage	New Baltimore	MI	48047
	1		2081	5865915383	51890	Washington	Transportation Desk	New Baltimore	MI	48047
	1		2082	5865915384	51890	Washington	Transportation Director	New Baltimore	MI	48047
	1		2080	5865915385	51890	Washington	Transportation Desk	New Baltimore	MI	48047
Totals:	5	2								