2017

project manual

hale area schools
secured entry renovation project
22 may 2017

dlp designs, LLC

SECTION - 00 00 05 TABLE OF CONTENTS

END OF SECTION 00 00 05

SECTION - 00 01 00

PROJECT DIRECTORY

PROJECT:	Hale Area Schools 2017 Secured Entry Renovation
PROJECT LOCATION:	Hale Area Schools 311 North M-65, Hale, MI 48739
ARCHITECT:	dlp designs, LLC 4521 North Saginaw Bay Shore Drive Pinconning, MI 48650

END OF SECTION 00 01 00

SECTION 00 10 00 – ADVERTISEMENT FOR BID

Notice is hereby given that Hale Area Public Schools is receiving bids from trade contractors for the following project:

Hale Area Schools, Secured Entry Renovation Project

This project consists of the installation of a set of secured entry doors to direct public traffic into the administration office prior to the release into the educational portion of the facility.

Complete proposals will be received for the following work in accordance with drawing and specifications as prepared by the Architect.

BID ITEM 1: SECURED ENTRY WAY

Bids will be received at the Office of the Superintendent until 2:00 p.m. on June 8, 2017 at which time the bids will be publicly opened and read aloud.

The cover of the envelope shall be clearly marked
Hale Area Schools Secured Entry Renovation.
Bid Item 1

Proposals should be submitted in DUPLICATE AND BE ADDRESSED TO
Mr. Loren Vannest– Superintendent
Hale Area Schools
311 North M-65
Hale, MI 48739

The Owner reserves the right to reject any, part or all bids and to waiver all informalities in the bidding procedures. The Owner reserves the right to reject any bid when Bidder fails to submit data required by the Bidding Documents, or if the bid is submitted incomplete or irregular. **NO** telephonic, telegraphic, email, fax bids or modification to a submitted bid will be received or considered by the owner.

Each bid that exceeds Fifty Thousand Dollars ($50,000) must be submitted with an attached certified check or bid bond from a surety company approved to do business in the State of Michigan, payable to the Owner in and amount not less that five percent (5%) of the base bid.

Bids may not be withdrawn for a period of sixty (60) days after the bid date.

FAMILIAL DISCLOSURE
Bidders ***must*** provide familial disclosure in compliance with MCL 380.1267 and attach this information to the bid. The bid shall be accompanied by a sworn and notarized statement disclosing any familial relationship that exists between the Owner or the employee of the bidder and any member of the board, intermediate school board, or board of directors, or the superintendent of the school district, intermediate superintendent of the intermediate school district or chief executive office of the public school academy. **The District shall not accept a bid that does not include this sworn and notarized disclosure statement.**

PRE-BID CONFERENCE

There is no pre-bid conference scheduled. If you feel the need to visit the site prior to your submittal, please contact Daniel La Pan at dlpdesignsaia@gmail.com and arrangements will be made for your on site review.

QUESTIONS/RFI'S

All questions regarding the plans and specifications are to be emailed to dlp designs,LLC at dlpdesignsaia@gmail.com.

DRAWINGS, SPECIFICATIONS AND ADDENDUMS

Plans, Specifications and Addendums will be available upon request at dlpdesignsaia@gmail.com.

Addendums will be sent via email to all listed bidders. It is the responsibility of every bidder to note the receipt of each addendum on the bid form.

END OF SECTION 00 10 00

SECTION 00 20 00 INSTRUCTIONS TO BIDDERS

PART 1 – GENERAL

1.1 DEFINITIONS

Definitions set forth in the General Conditions of the Contract Construction, AIA Document A201 – Current Edition, and in other contract documents are applicable to the Bidding Documents.

Bidding Documents: Bidding Documents include the Drawings, Specifications, Addenda prepared by the Architect and anything referenced within those documents.

Addenda: Addenda are written or graphic instruments issued prior to the execution of the Contract which modify or interpret the Bidding Documents by additions, deletions, clarifications or corrections.

Bid: A bid is a complete and properly signed proposal to do the work for a stipulated sum, submitted in accordance with the Bidding Documents.

Base Bid: The sum stated in the Bid Form for which the Bidder offers to perform the work described in the Bidding Documents as the Base Bid.

Alternate: An alternate is an amount stated in the Bid to be added or deducted from the Base Bid if the corresponding change in the work, as described in the Bidding Documents, is accepted.

Unit Price: An amount stated as a price per unit of measurements for materials or services described in the Bidding Documents.

Bidder: A person or entity who submits a bid.

Furnish: This term is used to mean supply and deliver to the Project site, ready for unloading, unpacking, assembly, installation and similar operations.

Install: This term is used to describe operations at the Project site including the actual unloading, unpacking, assembly, erection, placing, anchoring, applying, working to dimension, finishing, curing, protection, cleaning, and similar operations.

Provide: To furnish and install, complete and ready for the intended use.

1.2 CONSTRUCTION MANAGER

Hale Area Schools will be acting as its own Construction Manager and will direct the complete construction of the project.

1.3 BIDDING PROCEDURE

Bidders are to bid COMPLETE Bid Categories only. Bids for partial categories or noting any exceptions may cause your bid to be rejected. If you feel that something is part of your category that should not be included, please submit a Pre-Bid RFI.

Bidder shall include all work noted in the Bid Category Description as well as General Bid Category Notes which apply to ALL Categories.

Each Bidder by submitting this Bid to the Owner represents that they have read and understand the Bidding Documents. Each bidder also represents that they have made a site inspection, familiarized themselves with the local conditions under which the work is to be performed, and have correlated observations with requirements of the Bidding Documents.

Bids shall be submitted in DUPLICATE. (1) One Original and (1) Copy of the Bid Form is required. Fill in ALL blanks on the bid form. Information must be typed or in ink. Express sums in both words and figures. The amount in words will govern in case of a discrepancy. The signer of the bid must initial all interlineations, alterations and erasures.

Enclose the bid and other documents required in a sealed envelope. If the Bid is sent by mail, enclose the sealed envelope in a separate mailing envelope with "Sealed Bid Enclosed" printed on the envelope.

Address the envelope to the party receiving the bids and state project name, the bidder's name and address, and the designated Bid Category, each bid must be in its own **clearly marked** envelope.

Bids will be PUBLICLY opened approximately five (5) minutes after the deadline to submit bids. Only properly identified bids received on time will be opened.

1.4 ALTERNATES

Alternates are listed on the Bid Form and are described in further detail in the Architectural Specification. Each bidder should review all alternates and determine if what is described in the Specification and shown on the Drawings causes an addition or deduction to their Base Bid. Bidders shall indicate on the Bid Form if the Alternate is an ADD or DEDICT to the base Bid and indicate the costs associated. If the Alternate does not affect your scope of work, enter "No Change" in the space provided. The Owner will have the right to accept Alternates in any order or combination and to determine the low bidder on the basis of the sum of the base bid and the accepted Alternate.

1.5 VOLUNTARY ALTERNATES

The bidder may submit voluntary alternates with their bid. Voluntary Alternates are changes in scope or a specification. Voluntary alternates shall be listed in the appropriate space on the Bid Form. If additional pages are necessary, attach them to the end of the Bid Form on your company letterhead. Voluntary alternates will be reviewed after the award of the contract and the Owner reserves the right to accept or reject any Voluntary Alternate.

1.6 QUESTIONS AND DISCREPENCIES

Notify the Architect at least five (5) days prior to bid of ambiguities, inconsistencies, or error discovered upon examination of the Bidding Documents, site or local conditions. Submit requests for clarification or interpretation of the Bidding Documents in writing. Interpretation, correction, or change of the Bidding Documents will be made by Addendum, all other forms will be non-binding. Questions should be **EMAILED** to the Architect.

1.7 SUBSTITUTIONS

The materials, products, and equipment described in the Bidding Documents establish a standard of required function, dimension, appearance and quality. Pre-Bid substitution requests must be submitted in writing and received by the Architect at least ten (10) days prior to bid date. The burden of proof of the merit of the proposed substitute is upon the proposer. The Owner's decision of acceptance or rejection of a proposed substitution will be final.

Requests for substitutions shall include:

A. The name of the material or equipment for which it is to be substituted and a complete description of the proposed substitute including drawings, cut sheet, performance, test data an other information necessary for an evaluation.
B. A statement setting forth any changes in other materials, equipment, other work that incorporation of the substitute would require, shall be included.

1.8 MODIFICATION OR WITHDRAWAL OF A BID

A bid may not be modified or withdrawn following the time and date designated for the receipt of bids. Prior to the time and date designated for receipt of bids, a submitted bid may be withdrawn by notice to the party receiving bids at the place designated for receipt of bids. Notice shall be in writing over the signature of the bidder or in person. Withdrawal notice shall be submitted by mail, telegram, or fax postmarked on or before the date and time for receipt of bids. Withdrawn bids may be resubmitted up to the time designated for the receipt of bids.

1.9 OWNER'S RESERVATION OF RIGHTS

The owner reserves the right to reject any, part of any or all bids and to waive all informalities in the bidding procedures. The Owner reserves the right to reject any bid when Bidder fails to submit data required by the Bidding Documents, or if the bid is submitted incomplete or irregular, **No** telephonic, telegraphic, email, fax bids or modification to a submitted bid will be received or considered by the Owner.

The Owner will have the right to accept Alternates in any order or combination and to determine the low bidder on the basis of the sum of the base bid and the accepted Alternate.

It is the Owner's intent to award a contract to the lowest responsible and competent bidder provided the bid has been submitted in accordance with the requirements of the bidding documents and does not exceed the funds available for construction.

The Owner reserves the right to cancel the project and contract at any point. The contractor will be reimbursed for work performed up to cancellation based upon the amount of work completed.

1.10 BONDS

Bid Bond: Each bid which exceeds $50,000 must be submitted with an attached certified check, money order, or a bid bond from a surety company approved to do business in the State of Michigan, payable to the OWNER in an amount not less that 5% of the base bid sum of the work.

Performance Bond & Labor and Material Payment Bond: Prior to the execution of the contract, furnish bonds covering the faithful performance of the contract and the payment of all obligations arising there under. Include cost of bonds in the base bid. The bidder shall require the attorney-in-fact who executes the required bonds on behalf of the surety to affix thereto a certified and current copy of their power of attorney.

1.11 POST BID INFORMATION

The Bidder shall within seven (7) days of notification of selection for the award of the Contract for the work, submit the following information.

A. Designation of the Work to be performed by the Bidder with his own forces.
B, Proprietary names and the suppliers of principal items or systems of materials and equipment proposed for the Work.
C. List of names of the subcontractors or other persons or entities (including those who are to furnish materials or equipment fabricated to the special design) proposed for the principal portions of the Work.
D. A list of proposed job site staff and home office staff directly involved with this Project. Indicate the qualification, pay rates, titles, responsibilities, and duties of each person.
E. Certificates evidencing insurance coverage in the amounts and types specified.
F. An interim construction schedule in a bar graph format.

1.12 SCHEDULE OF VALUES

Submit a completed Schedule of Values in the format provided by the Owner. The Bidder will be required to establish to the satisfaction of the Owner, the reliability and responsibility of the persons or entities proposed to furnish and perform the Work described in the Bidding Documents.

Prior to the award of the Contract, the Bidder will be notified in writing. If the Owner has reasonable objection to any proposed person or entity, the Bidder may at his option, (1) withdraw his bid or (2) submit an acceptable substitute person or entity with an adjustment in cost occasioned by such substitution. The Owner may at its discretion, accept the adjusted bid price or disqualify the Bidder.

The Owner reserves the right to request financial statements from the bidder before the award of a contract.

1.13 PRE-AWARD INTERVIEW

The Selected Contractor as determined by the Owner will be required to attend a pre-contract award interview at the job site for the purpose of reviewing the submitted bid for compliance with specified products, methods of installation, warranties, general job procedures, post bid information and related items.

Meeting minutes of the pre-contract interview will be taken by a representative of the Owner. Before concluding the interview, the minutes will be signed by those in attendance.

1.14 TAXES

Each bidder shall include in their proposal, and agree to pay, all fees and taxes including Sales and Use which they may be required to pay in connection with the performance of the contract. Also, the bidder includes and agrees to pay for all contributions to unemployment compensation, health and welfare, appropriate benefits, or other purposes now or hereafter during the term of the contract and the Owner shall not be liable for any additional charges.

1.16 INDEMNIFICATION AND GENERAL LIABILITY INSURANCE

Each trade contractor shall agree to indemnify and hold harmless the Owner and Architect from and against any and all general liability claims whatsoever arising out of or occurring during and occasioned directly or indirectly by its negligence or fault. Prior to entering into a contract, each trade contractor shall provide evidence satisfactory to the Owner and Architect of adequate

general liability insurance coverage which names the Owner and Architect as additional insured. Each trade contractor shall also provide evidence of Worker's Compensation Insurance in the amounts required by the State of Michigan.

1.17 LOCAL PRODUCTS

All prime bidders, subcontractors and suppliers shall utilize products that are local to the region or State whenever possible where price, quality and performance are equal to or better than non-local products.

1.18 NON-COLLUSION CLAUSE

By submitting and signing the proposal form, the bidder declares that neither the bidding firm nor agents of the bidding firm or any other members of the proposed team have entered into any collusion or agreement concerning any aspect of the proposal.

1.19 CONSTRUCTION DOCUMENT RESPONSIBILITIES

All bidders are responsible for the COMPLETE set of drawing and specifications. Bidders are to familiarize themselves with the work of other trades and participate in the coordination of work activities.

All bidders are to include, in their entirety, the work and instructions described in DIVISION 0 – "Bidding and Contract Requirements" and DIVISION 1 – "General Requirements."

1.20 WARRANTY

All work shall be guaranteed for a period of twelve (12) months from the date of substantial completion of the entire Bid Package unless more specifically stated in the contract documents. All service during this 12-month period prior shall be rendered without charge to the Owner. This 12 month warranty does not replace any longer warranties required by the specification

END OF SECTION 00 20 00

SECTION 00 22 00 BID CATEGORY GENERAL NOTES

The following are General Notes that apply to all bid categories

1. **All bid categories are to include all sections in DIVISION 0 and DIVISION 1 in their entirety.**
2. Full compliance with all the safety regulations and requirements of Federal OSHA, MIOSHA, State Authorities, Local Authorities and the Owner, failure to do so will cause this contractor to be removed from the site. (Hard Hats and Work Boots must be worn at all times.)
3. Smoking and use of Drugs or Alcohol on School property is strictly prohibited!
4. Each Contractor shall be responsible for the removal of any trash created by their company.
5. Contractor and Employee name shall be displayed on all hard hats.
6. Drinking water is the responsibility of contractors for their crews.
7. Contractors are required to perform daily and weekly cleanup. This is to include proper dust control as generated by their construction activities.
8. Each contractor is responsible for all layout and field dimensions associated with their work.
9. Fill out and turn in Daily Report form to the Owner.
10. Provide all start-up documents to Owner within 10 working days from the receipt of Notice to Proceed. Start up document to include signed contracts, Schedule of Values, Certificate of Insurance, Shop Drawings and Submittals, Contractors Safety Program and Current MSDS Files.
11. Contractors are to review all drawings and notes, include all work as defined in their respective bid category.
12. Include sales tax and bond premiums in base bids.
13. Contractors are to put forth their best effort to protecting existing finishes and newly installed products from damage.
14. Provide all lifting, hoisting, scaffolding, etc. as required for the full installation of your work. Schedule deliveries during normal working hours.
15. Contractors must attend a weekly progress meeting with the Owner while on site.
16. Contractor-supplied materials shall be stored in contractor provided storage units unless arrangements are made in advance with the Owner.
17. Owner will not unload any materials for any contractor.
18. All contractors are to participate in keeping the site secure and locked down at the end of each workday.
19. All openings made by the contractors shall be covered and maintained by the contractor creating the opening until the permanent finishes have been installed.
20. The owner shall pay for the building permit only, if required.

END OF SECTION 00 22 00

SECTION 00 31 46 PERMITS

PART 1 – GENERAL

1.1. RELATED DOCUMENTS

A Drawings and general provisions of the Contract, including General and Supplementary Conditions and other DIVISION 1 Specification Sections, apply to this Section.

1.2. PERMITS AND FEES

A The Owner shall pay for and furnish the general Building Permit, if required.
B Other than the Building Permit, each Trade Contractor shall pay for all permits and fees necessary for their scope of work.
C The Owner will schedule the General Building Inspection, if required. Trade Contractors will be notified verbally or in writing of the date of inspection(s).
D It is the responsibility of each Trade Contractor to schedule appropriate inspections of the work by the authorized inspector of the permit they secured. The Owner is to be notified immediately of any scheduled inspection(s).

END OF SECTION 00 31 46

SECTION 00 40 00 BID FORM

TO: Mr. Loren Vannest, Superintendent
Hale Area Schools
Hale, MI 48739

RE: Hale Area Schools
Secured Entry Renovation

Having carefully reviewed the bidding documents described in Section 00 10 00 and understanding the scope of work involved in the proposed Bid Category and those that interface with it, we hereby propose to furnish labor, materials, tools, equipment, supervision, insurance and services required for the completion of all work required for the Bid Category indicated in accordance with the Bid Category Description and the Contract Documents prepared by the Architect.

BID ITEM #1, SECURED ENTRY: _____

BIDDERS NAME: _____

ADDENDA:

And having Received and Examined the Following Addenda: (include date for acknowledgement)

Addendum Number_____, dated_____, 2017

Addendum Number_____, dated_____, 2017

ALTERNATES:

There are no alternates listed.

UNIT PRICES:

There are no unit prices on this project.

SUBSTITUTIONS:

Bidder is cautioned to bid on the “Standards” specified. The following substitutions for the “Standards” specified are listed herein for consideration, and if accepted, the contract sum may be adjusted in accordance with the following:

_____Add / Deduct $_____

_____Add / Deduct $_____

CONTRACT:

The undersigned agrees that the above Base Bid Prices shall hold for 60 days and Alternate Prices for 120 days after receipt of proposals, to accept provisions of “Instructions to Bidders”

IRAN BUSINESS RELATIONSHIP AFFIDAVIT:

Pursuant to the Michigan Iran Economic Sanctions Act, 2012 P.A. 517, by submitting a bid, proposal or response, Respondent certifies, under civil penalty for false certification, that it is fully eligible to do so under law and that it is not an "Iran Linked Business," as that term is defined in the Act.

SUBMITTED BY:

Firm Name:_____

Address:_____

Email Address:_____

Signed:_____

Typed Name:_____

Date:_____ Title:_____

Phone:_____ Fax:_____

If bidder is a Corporation, indicate State of Incorporation:_____

If a Partnership, give full names of all Partners:_____

_____

Please submit (2) two copies and retain (1) one copy for your records.

END OF SECTION 00 40 00

SECTION 00 41 00

FAMILIAL DISCLOSURE STATEMENT

All bidders must complete the following familial disclosure from in compliance with MCL 380.1267 (Public Act 232 of 2004) and attach this information to the bid.

By the attached sworn and notarized statement we are disclosing the following familial relationship(s) that exist between the owner or any employee of the bidder and any member of the board, intermediate school board, or board of directors or the superintendent of the school district, intermediate superintendent of the intermediate school district, or chief executive officer of the public school academy. The Owner shall not accept a bid that does not include this sworn and notarized disclosure statement.

Disclose any familial relationship and complete the form below in its entirety:

The following are familial relationships as described above (provide employee name, family contact name, family contact position, and familial relationship or NONE.)

Signature(s): Title: Name of Firm:

STATE OF MICHIGAN
SS COUNTY OF

On this day of _____, 20____, before me a Notary Public in and for ,

Said county, personally appeared agent of the said firm

And acknowledged the same to be his free act and deed as such agent.

Notary Public

END OF SECTION 00 41 00

SECTION 00 50 00 CONTRACT / AGREEMENT FORM

PART 1 – GENERAL

1.1. RELATED DOCUMENTS

A Drawings and general provisions of the Contract, including General and Supplementary Conditions and other DIVISION 1 Specifications, apply to this Section

1.2. CONTRACT / AGREEMENT FORM

A Contract will be direct between the Owner and the Trade Contractor.
B The form of agreement will be the Standard Form of Agreement Between Owner and Contractor, AIA Document A132-2009
C A sample copy of the agreement form is available upon request with the Architect. You can contact him at dlpdesignsaia@gmail.com.

END OF SECTION 00 50 00

SECTION 00 61 00 BONDS

PART 1 – GENERAL

1.1. RELATED DOCUMENTS

A Drawings and general provisions of the Contract, including General and Supplementary Conditions and other DIVISION 1 Specification Sections apply to this Section.

1.2. BID BONDS

A Each bid which exceeds $50,000 must be submitted with and attached certified check, money order, or a bid bond form a surety company approved to do business in the State of Michigan, payable to the **Owner** in an amount not less than 5% of the base bid sum of the work.

1.3. PERFORMANCE AND PAYMENT BONDS

A Prior to the execution of the contract, furnish bonds covering the faithful performance of the contract and the payment of all obligations arising there under. Include cost of bonds in the base bid. The bidder shall require the attorney-in-fact who executes the required bonds on behalf of the surety to affix thereto a certified and current copy o their power of attorney.

END OF SECTION 00 61 00

SECTION 00 72 00 GENERAL CONDITIONS

PART 1 – GENERAL

1.1. RELATED DOCUMENTS

A Drawings and general provisions of Contract, including General and Supplementary Conditions and other DIVISION 1 Specification Sections, apply to this Section.

1.2. GENERAL CONDITIONS

A The General Conditions which shall become a part of the agreement will be the General Conditions of the Contract for Construction, AIA Document A232-2009.

B A sample copy of the General Conditions is available upon request from the Architect at dlpdesignsaia@gmail.com.

END OF SECTION 00 72 00

SECTION 00 73 00 SUPPLEMENTARY GENERAL CONDITIONS

The General Conditions of this contract are the American Institute of Architects Standard Document A232-2009; titled "General Conditions of the Contract for Construction, Construction Manager as Adviser Edition" This document is hereby made part of the Contract Documents.

The following supplements modify AIA Document A232-2009, General Conditions of the Contract for Construction, Construction Manager as Adviser Edition. Where a portion of the General Conditions is modified or deleted by these Supplementary Conditions, the unaltered portions of the General Conditions shall remain in effect.

Wherever the term Construction Manager is used, substitute the term Owner. The Owner will act as its own Construction Manager on this project.

ARTICLE 2 – OWNER

Delete subparagraph 2.2.5 and substitute

2.2.5 The Contractor will be furnished, subject to a deposit, all copies of drawings and specifications reasonably necessary for execution of the work as determined by the Architect.

ARTICLE 3 – CONTRACTOR

Add Section 3.4.2.1 to Section 3.4.2:

3.4.2.1 After the Contract has been executed, the Owner and Architect will consider requests for substitution of products in place of those specified only under the conditions set forth in the General Requirements (DIVISION 1 of the Specifications). By making requests for substitutions, the Contractor:

.1 represents that it has personally investigated the proposed substitute product and determined that it is equal or superior in all respects to that specified;

.2 represents that it will provide the same warranty for the substitution as it would have provided for the product specified:

.3 certifies that the cost data presented is complete and includes all related costs for the substituted product and for Work that must be changed as a result of the substitution, except for the Architect's redesign costs, and waives all claims for additional costs related to the substitution that subsequently become apparent: and

.4 shall coordinate the installation of the accepted substitute, making such changes as may be required for the Work to be completed in all respects.

Delete subparagraph 3.4.3 and substitute:

3.4.3 The Contractor shall at all times enforce strict discipline and good order among the Contractor's employees and any subcontractor employed by the contractor and shall not employ on the work any unfit person or anyone not skilled in the task assigned to them.

Add subparagraph 3.7.6

3.7.6 Regarding OSHA fines: The Contractor for any fines incurred as a result of the Contractor shall reimburse the Owner for similar fines against the Owner.

Add subparagraph 3.9.4

3.9.4 Owner reserves the right to cause the replacement of the superintendent, assistant superintendent or employee of the contractor woe is not qualified, in the opinion of the Owner to do the work.

ARTICLE 5 – SUBCONTRACTORS

RE: Subparagraphs 5.2.1, 5.2.2, 5.2.3, and 5.2.4 Delete the words, “the Construction Manager or Architect” and insert the words, “the Owner and Architect.“

ARTICLE 7 – CHANGES IN THE WORK

Add Subparagraph 7.1.4

7.1.4 The maximum allowable markup on Changes in the Work shall be eleven percent (11%) which includes overhead, profit, estimating expensed, other office expense, bond and insurance costs.”

RE; Subparagraph 7.3.7 Delete the words, “the Agreement, if no such amount is set forth in the Agreement, a reasonable amount.” And insert the words. “Section 7.1.4”

ARTICLE 8 – TIME

Add Subparagraph 8.3.4

8.3.4 Claims for Delay: In the event the contractor is delayed in completing the work by the Owner for any reason, whether intentional or otherwise, and the delay does not preclude the contractor from completing the work within the time period specified in the contract agreement, the contractor shall be entitled to no remedy for such delay.

ARTICLE 9 – PAYMENTS AND COMPLETION

Add subparagraph 9.3.1.3

9.3.1.3 Up to time the work is substantially complete, the owner will make monthly payments to the contractor, based on the schedule of values of 90% of the value of labor and materials incorporated in the work and of 90% of all tangible materials stored at the site during that month. The Owner will have retained five percent (5%) of the total contract price for “closeout Materials” and five percent (5%) of the total contract price for “Punch List Completion” The Contractor may request payment of the retained percentages upon completion of that portion of their Work.

Add subparagraph 9.3.1.4

9.3.1.4 Deliver estimates to the Owner for approval as agreed upon. The form of application for payment shall be AIA Document G732-2009 notarized by Contractor and supported by AIA Document G703-Continuation Sheet.

Add clause .8 to subparagraph 9.5.1

.8 Unsatisfactory clean-up in accordance with subparagraph 3.15.

INSURANCE AND BONDS

Add the following sections 11.1.2.1 through 11.1.2.4 to Section 11.1.2:

11.1.2.1 The limits for Worker’s Compensation and Employers’ Liability insurance shall meet statutory limits mandated by State and Federal laws. If (1) limits in excess of those required by statute are to be provided, (2) the employer is not statutorily bound to obtain such insurance coverage, or (3) additional coverages are required, additional coverages and limits for such insurance shall be as follows:

WORKER'S COMPENSATION AND EMPLOYER'S LIABILITY INSURANCE:

Worker's Compensation: State of Michigan Statutory Limits

Employer's Liability: $500,000 – each accident
$500,000 – disease (each employee)
$500,000 – disease (policy limit)

11.1.2.2 The limits for Commercial General Liability insurance including -coverage for Premises-Operations, Independent Contractors' Protective, Products-Completed Operations, Contractual Liability, Personal Injury and Broad Form Property Damage (including coverage for Explosion, Collapse, and Underground Hazards) shall be as follows:

COMMERCIAL GENERAL LIABILITY INSURANCE:

Each occurrence $2,000,000 – aggregate

Each occurrence $2,000,000 – aggregate

Fire Damage (any one fire) $100,000

Medical Expense (any one person) $5,000

The Contractor shall furnish and maintain during the entire period of construction, a Protective/Contractual Liability policy written in the name of the Owner and Architect with the following limits:

Bodily Injury $1,000,000 – each occurrence
Property Damage $1,000,000 – each occurrence
Property Damage $1,000,000 – aggregate

Notes;

1.17.1 Products-Completed Operations Insurance shall be maintained for a minimum period of one (1) year after final payment.

1.17.2 The Owner and Architect shall be listed as additional insured. The Owner shall be the certificate holder.

11.1.2.3 Automobile Liability insurance (owned, non-owned and hired vehicles) for bodily injury and property damage:

AUTOMOBILE LIABILITY INSURANCE:

Bodily Injury $1,000,000
Property Damage $1,000,000

11.1.2.4 Umbrella or Excess Liability Coverage: UMBRELLA/EXCESS LIABILITY INSURANCE:

Umbrella/Excess Insurance $2,000,000 – each occurrence
$2,000,000 – aggregate

Add Subparagraph 11.3.11

11.3.11 The provisions of this paragraph 11.3 shall not operate to relieve the Contractor of responsibility for loss or damage to the Contractor's own or rented property or property of Contractor's employees of whatever kind or nature, including but not limited to: tools, equipment, forms, scaffolding and temporary structures, including their contents. The Owner shall in no event be liable for loss of damage to the aforementioned items or other property of the contractor that is not included in the permanent construction.

Delete Subparagraph 11.3.7 Waivers of Subrogation

ARTICLE 13 – MISCELLANEOUS PROVISIONS

Delete subparagraph 13.6 – Interest in its entirety.

END OF SECTION 00 73 00

SECTION 00 73 16 INSURANCE REQUIREMENTS

1.1 GENERAL

A. RELATED DOCUMENTS

1. Drawings and general provisions of Contract, including General and Supplementary conditions and other DIVISION 1 Specification Sections, apply to this Section.

B. INSURANCE REQUIREMENTS

1. Each contractor shall provide, to the Owner, a certificate of insurance indicating that all required insurance coverages are in effect. This certificate shall be provided before any Work begins.

2. Limits of required insurance are listed in the Supplementary Conditions, Section 00 73 00 – Article 11. Contractors are to provide at least the limits stated in that section.

3. The Owner and Architect shall be listed as “additional insured” on the insurance certificate.

C. INSURANCE FOR STORED MATERIAL

1. If a Contractor wishes to be paid for stored material that is not presently on the jobsite, they will be required to furnish photographic evidence of the material as well as an insurance certificate for the material.

D. BUILDERS RISK INSURANCE

1. Per the General Conditions, the Owner shall secure and pay for Builder’s Risk Insurance for the Project.

END OF SECTION 00 73 16

SECTION 00 81 00 SAFETY REQUIREMENTS

PART 1 – GENERAL

1.1. RELATED DOCUMENTS

A Drawings and general provisions of Contract, including General and Supplementary Conditions and other DIVISION 1 Specifications Sections, apply to this Section.

1.2. SAFETY REQUIREMENTS

A Each Trade Contractor is responsible to have their own Company Safety Program in place and shall conduct Work operations in accordance with it.

1. Each Trade Contractor shall provide the Owner a copy of their company safety program either electronically or as a hard copy before the commencement of any Work activities.

B. All trade Contractors are required to comply with OSHA, MIOSHA as well as any other agency that has jurisdiction over the Project. In addition, each Trade Contractor shall be responsible for payment of all fines and/or claims levied against the Owner or Architect for deficiencies relating to the Work or Conduct of a Trade Contractor.

END OF SECTION 00 81 00

SECTION 01 11 00 SUMMARY

PART 1 – GENERAL

1.1. RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other DIVISION 1 Specification Sections apply to this Section.

1.2. SUMMARY

A. This Section includes the following:

1. Work covered by the Contract Documents
2. Type of Contract
3. Owner-furnished products
4. Use or premises
5. Owner's occupancy requirements
6. Work restrictions
7. Specification formats and conventions

1.1. WORK COVERED BY CONTRACT DOCUMENTS

A. Project Identification: Hale Area Schools – Secured Entry Renovation

B. Owner: Hale Area Schools

C. Architect: dlp designs, LLC

1.2. TYPE OF CONTRACT

A. Project will be constructed under one prime contract direct with the Owner.

1.3. OWNER-FURNISHED PRODUCTS

A. There are no Owner furnished products.

1.4. USE OF PREMISES

A. General: Each Contractor shall have limited use of premises for construction operations as indicated on the Drawings by the Contract limits.

B. Use of Site: Limit use of premises to areas as directed by the Owner. Do not disturb portions of Project site beyond areas in which the Work is indicated
   1. Owner Occupancy: Allow for Owner occupancy of Project site.
   2. Driveways and Entrances: Keep driveways and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials.
      a. Schedule deliveries to minimize use of driveways and entrances
      b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.

C. Use of Existing Building: Maintain existing building in a weather-tight condition throughout construction period. Repair damage caused by construction operations. Protect building and its occupants during construction period.

1.5. OWNER'S OCCUPANCY REQUIREMENTS

A. Full Owner Occupancy: Owner will occupy site and existing building during entire construction period. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's day to day operations. Maintain existing exits, unless otherwise indicated.
B. Maintain access to existing walkways, corridors, and other adjacent occupied or use facilities. Do not close or obstruct walkways, corridors, or other occupied or used facilities without written permission from Owner and authorities having jurisdiction.
C. Provide not less that five (5) calendar days' notice to Owner of activities that will affect Owner's operations.

1.6. WORK RESTRICTIONS

A. Contractor shall complete/infill openings created during the daily construction for security purposes.

END OF SECTION 01 11 00

SECTION 01 77 00 PROJECT CLOSEOUT PROCEDURES

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other DIVISION 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
   1. Substantial Completion and Inspection Procedures.
   2. Final Completion and Inspection Procedures
   3. Warranties.
   4. List of incomplete items (punch lists).
   5. Payment Procedures.
   6. Project Record Documents
   7. Operation and Maintenance Manuals
   8. Final Cleaning

1.3 SUBSTANTIAL COMPLETION

A. Preliminary Procedures: Before requesting inspection for determining date of Substantial Completion, complete the following. List items below that are incomplete in request.
   1. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.
   2. Advise Owner of pending insurance changeover requirements.
   3. Submit specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
   4. Obtain and submit releases permitting Owner unrestricted use of the Work.
   5. Prepare and submit Project Record Documents, operation and maintenance manuals, Final Completion construction photographs, and similar final record information.
   6. Deliver tools, spare parts, extra materials, and similar items to location designated by Owner. Label with manufacturer's name and model number where applicable.
   7. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.
   8. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
   9. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.
   10. Complete final cleaning requirements, including touchup painting.
   11. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

B. Inspection: Submit a written request for inspection for Substantial Completion. On receipt of request, Architect and Owner will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Architect, that must be completed or corrected before certificate will be issued.

1. Re-inspection: Request re-inspection when the Work identified in previous inspections as incomplete is completed or corrected.
2. Results of completed inspection will form the basis of requirements for Final Completion.

1.4 FINAL COMPLETION

A. Preliminary Procedures: Before requesting final inspection for determining date of Final Completion, complete the following:
    1. Submit a final Application for Payment
    2. Submit certified copy of Architect's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Architect. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
    3. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
    4. Instruct Owner's personnel in operation, adjustment, .and maintenance of products, equipment, and systems.

B. Inspection: Submit a written request for final inspection for acceptance. On receipt of request, Architect and Owner will either proceed with inspection or notify Contractor of unfulfilled requirement. Architect will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.
    1. Re-inspection: Request re-inspection when the Work identified in previous inspections as incomplete is completed or corrected.

1.5 WARRANTIES

A. Submittal Time: Submit written warranties of request of Architect for designated portions of the work where commencement of warranties other that date of Substantial Completion is indicated.
B. Organize warranty documents into an orderly sequence based on the table of contents of the Project Manual.
    1. Bind warranties and bonds in heavy-duty, 3-ring, vinyl-covered, loose leaf binder, thickness as necessary to accommodate contents and sized to receive 8-1/2" by 11" paper.

PART 2 – PRODUCTS

2.1 MATERIALS

A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

PART 3 – EXECUTION

3.1 DEMONSTRATION AND TRAINING

A. Instruction: Instruct Owner's personnel to adjust, operate, and maintain systems, subsystems, and equipment not part of a system.
   1. Provide instructors experienced in operation and maintenance procedures.
   2. Schedule training with Owner with at least seven (7) calendar days advance notice.
   3. Coordinate instructors, including providing notification of dates, times, length of instruction, and course content.
   4. Submit two (2) copies of instructions and demonstration of training procedures.

3.2 FINAL CLEANING

A. General: Provide final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and federal and local environmental and antipollution regulations and all other governing agencies having jurisdiction on the project.

B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
   1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a portion of Project as acceptable to the Owner.
      a. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development area, of rubbish, waste material, litter, and other foreign substances.
      b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
      c. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
      d. Remove tools, construction equipment, machinery, and surplus material from Project site.
      e. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
      f. Vacuum carpet and similar soft surfaces, removing debris and excess nap; shampoo if visible soil or stains remain.
      g. Clean transparent materials, including glass in doors and windows. Remove glazing compounds and other noticeable, vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials. Polish glass, taking care not to scratch surfaces.
      h. Remove labels that are not permanent.
      i. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.
         1) Do not paint over "UL" and similar labels.
      j. Leave Project clean and ready for occupancy.

C. Pest Control: Engage an experienced, licensed exterminator to make a final inspection and rid the Project of rodents, insects, and other pests. Submit a report.

D. Comply with safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on Owner's property. Do not discharge volatile, harmful, or dangerous materials into drainage systems. Remove waste materials for Project site and dispose of lawfully.

END OF SECTION 01 77 00

SECTION 07 92 00 – JOINT SEALANTS

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and DIVISION 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes joint sealants for the following applications.
   1. Exterior joints in, but not limited to the following vertical surfaces and horizontal non-traffic surfaces.
      a. Perimeter joint between frames of doors, windows and louvers.

   2. Interior joints in, but not limited to the following vertical surfaces and horizontal non-traffic surfaces.
      a. Perimeter joint between interior wall surfaces and frames of doors, windows and louvers.

B. Related Sections include the following:
   1. Division 08 80 00 Section “Glazing” for glazing sealants.

1.3 PERFORMANCE REQUIREMENTS

A. Provide elastomeric joint sealants that establish and maintain watertight and airtight continuous joint seals without staining or deteriorating joint substrates.
B. Provide joint sealants for interior applications that establish and maintain watertight and airtight resistant continuous joint seals without staining or deteriorating joint substrates.

1.4 SUBMITTALS

A. Product Data: For each joint-sealant product indicated.
B. Samples for Verification: For each type and color of joint sealant required, provide Samples with joint sealants in ½ inch wide joints formed between two 6 inch long strips of material matching the appearance of exposed surfaces adjacent to joint sealants.
C. Product Certificates: For each type of joint sealant and accessory, signed by product manufacturer.
D. SWRI Validation Certificate: For each elastomeric sealant specified to be validated by SWRI’s Sealant Validation Program.
E. Compatibility and Adhesion test Reports: From sealant manufacturer, indication the following:
   1. Materials forming joint substrates and joint-sealant backings have been tested for compatibility and adhesion with joint sealants.
   2. Interpretation of test results and written recommendations for primers and substrate preparation needed for adhesion.

F. Warranties: Special warranties specified in this Section.

1.5 QUALITY ASSURANCE

A. Installer Qualifications: Manufacturer's authorized Installer in continuous business at least three (3) years who is approved or licensed for installation of elastomeric sealants required for this Project.

B. Source Limitations: Obtain each type of joint sealant through one source for a single manufacturer.

C. Mockups; Build in-place mockups incorporation sealant joints, as follows, to verify selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution:
   1. Joints in mockups of assemblies specified in other sections that are indicated to receive elastomeric joint sealants, which are specified by reference to this Section.

D. Pre-installation Conference: Conduct conference at Project site prior to installation of joint sealant.

1.6 PROJECT CONDITIONS

A. Do not proceed with installation of joint sealants under the following conditions:
   1. When Ambient and substrate temperature conditions are outside limits permitted by joint-sealant manufacturer or are below 40 deg F.
   2. When joint substrates are wet.
   3. Where joint widths are less that those allowed by joint-sealant manufacturer for applications indicated.
   4. Contaminants capable of interfering with adhesion have not yet been removed from joint substrates.

1.7 WARRANTY

A. Special Installer's Warranty: Installer's standard form in which Installer agrees to repair or replace elastomeric joint sealants that do not comply with performance and other requirements specified in this Section within specified warranty period.
   1. Warranty Period: Five (5) years from date of Substantial Completion.

B. Special Manufacturer's Warranty: Manufacturer's standard form in which elastomeric sealant manufacturer agrees to furnish elastomeric joint sealants to repair or replace those that do not comply with performance and other requirements specified in this Section within specified warranty period.
   1. Warranty Period: Ten (10) years from date of Substantial Completion.

C. Special warranties specified in this Article exclude deterioration or failure of elastomeric joint sealants from the following:
   1. Movement of the structure resulting in stresses on the sealant exceeding sealant manufacturer's written specifications for sealant elongation and compression caused by structural settlement or errors attributable to design or construction.
   2. Disintegration of joint substrates from natural causes exceeding design specifications.
   3. Mechanical damage caused by individuals, tools, or other outside agents.
   4. Changes in sealant appearance caused by accumulation of dirt or other atmospheric contaminants.

PART 2 – PRODUCTS

2.1 MANUFACTURERS

A. Manufacturer's Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to products listed in other Part 2 articles.
   1. Manufacturer's sealant products are indicated for Manufacturer's "Basis of Design" only. Other manufacturer's products complying with specified criteria comparable to the Basis of Design Product will be reviewed for acceptability.

B. Silicone Sealants (Low-Modulus)
   1. Dow Corning Corp.
   2. GE Silicones
   3. Pecora

C. Acrylic Emulsion Latex Sealants
   1. Pecora.
   2. Tremco
   3. Sonneborn Building Products

D. Polyurethane Sealants
   1. Sika Corp.
   2. Pecora
   3. Tremco
   4. Sonneborn Building Products

2.2 MATERIALS, GENERAL

A. Compatibility: Provide joint sealants, backings, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by sealant manufacturer, based on testing and field experience.
B. Colors of Exposed Joint Sealants As selected by Architect/Owner for manufacturer's full range.

2.3 SEALANT TYPES

A. Manufacturer's products indicated are Basis of Design. Other manufacturers products complying to specified criteria will be considered
B. Silicone Sealant for Exterior: ASTM C 920, Grade NS, Class 25, Uses NT, A, G, M,O; single component, neutral curing, non-sagging, non-staining, fungus resistant, non-bleeding.
   1. Product: 790 manufactured by Dow Corning Building Sealant.
   2. Movement Capability: Plus 100 percent, minus 25 percent.
   3. Service Temperature Range: -65 to 180 degrees F.
   4. Shore A Hardness Range: 15 to 35
   5. Location Applications:
      a. Exterior joints
      b. Joints between concrete and other materials
      c. Joints between metal frames and other materials

C. Silicone Sealant for Structural Glazing: ASTM C 1184
   1 Product: 995 Silicone Structural Sealant by Dow Corning.
   2 Location Applications:
      a. Glass to aluminum framing

D. General Purpose Interior Sealant: Acrylic emulsion latex; ASTM C 834, single component, paintable.
   1. Product: Sonolac manufactured by Sonneborn Building Products Div.
   2. Product: Tremco Acrylic Latex 834 manufactured by Tremco Inc..
   3. Product: AC-20 manufactured by Pecora Corp.
   4. Location Applications:
      a. Joints between door and window frames and wall surfaces
      b. Other interior joints for which no other type of sealant is indicated.

2.4 JOINT-SEALANT BACKING (BACKER ROD)

A. General: Provide sealant backing of material and type that are non-staining; are compatible with joint substrates, sealants, primers, and other joint fillers; and are approved for applications indicated by sealant manufacturer based on field experience and laboratory testing.
B. Cylindrical Sealant Backings: ASTM C1330, Type C (closed-cell material with a surface skin), O (open-cell material), B (bi-cellular material with a surface skin), or any of the preceding types, as approved in writing by joint-sealant manufacturer for joint application indicated, and of size and density to control sealant depth and otherwise contribute to producing optimum sealant performance:
C. Elastomeric Tubing Sealant Backings: Neoprene, butyl., EPDM, or silicone tubing complying with ASTM D 1056, nonabsorbent to water and gas, and capable of remaining resilient at temperatures down to -26 deg F. Provide products with low compression set and of size and shape to provide a secondary seal, to control sealant depths, and to otherwise contribute to optimum sealant performance.
D. Bond-Breaker Tape: Polyethylene tape or other plastic tape recommended by sealant manufacturer for preventing sealant from adhering to rigid, inflexible joint-filler materials or joint surfaces at back of joint where such adhesion would result in sealant failure. Provide self adhesive tape where applicable.

2.5 MISCELLANEOUS MATERIALS

A. Primer: Material recommended by joint-sealant manufacturer where required for adhesion of sealant to joint substrates indicated, as determined from preconstruction joint sealant-substrate tests and field tests.
B. Cleaners for Nonporous Surfaces: Chemical cleaners acceptable to manufacturers of sealants and sealant backing materials, free of oily residues or other substances capable of staining or harming joint substrates and adjacent nonporous surfaces in any way, and formulated to promote optimum adhesion of sealants to joint substrates.
C. Masking Tape: Non-staining, nonabsorbent material compatible with joint sealants and surfaces adjacent to joints.

PART 3 – EXECUTION

3.1 EXAMINATION

A. Examine joints indicated to receive joint sealants, with Installer present, for compliance with requirements for joint configuration, installation tolerances, and other conditions affecting joint-sealant performance.
B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealants to comply with joint-sealant manufacturer's written instructions and the following requirements:
   1. Remove all foreign material from joint substrates that could interfere with adhesion of joint sealant, including dust, paints (except for permanent, protective coatings tested and approved for sealant adhesion and compatibility by sealant manufacturer), old joint sealants, oil, grease, waterproofing, water repellents, water, surface dirt, and frost.
   2. Clean porous joint substrate surfaces by brushing, grinding, blast cleaning, mechanical abrading, or a combination of these methods to produce a clean, sound substrate capable of developing optimum bond with joint sealants. Remove loose particles remaining after cleaning operations above by vacuuming or blowing out joints with oil-free compressed air.
   3. Clean nonporous surfaces with chemical cleaners or other means that do not stain, harm substrates, or leave residues capable of interfering with adhesion of joint sealants. Nonporous joint substrates.

B. Joint Priming: Prime joint substrates where required, based on preconstruction joint-sealant-substrate tests or prior experience. Apply primer to comply with joint-sealant manufacturer's written instructions. Confine primers to areas of joint-sealant bond: do not allow spillage or migration onto adjoining surfaces

C. Masking Tape: Use masking tape where required to prevent contact of sealant with adjoining surfaces that otherwise would be permanently stained or damaged by such contact or by cleaning methods required to remove sealants smears. Remove tape immediately after tooling without disturbing joint seal.

3.3 INSTALLATION OF JOINT SEALANTS

A. General: Comply with joint-sealant manufacturer's written installation instructions for products and applications indicated, unless more stringent requirements apply.

B. Sealant Installation Standard: Comply with recommendations in ASTM C 1193 for use of joint sealants as applicable to materials, applications, and conditions indicated.

C. Install sealant backings of type indicated to support sealants during application and at position required to produce cross-sectional shapes and depth of installed sealants relative to joint widths that allow optimum sealant movement capability.

D. Install bond-breaker tape behind sealants where sealant backings are not used between sealants and backs of joints.

E. Install sealants using proven techniques that comply with the following and at the same time backings are installed:
   1. Place sealants so they directly contact and fully wet joint substrates.
   2. Completely fill recesses in each joint configuration.
   3. Produce uniform, cross-sectional shapes and depth relative to joint widths that allow optimum sealant movement capability.

F. Tooling of Non-sag Sealants: Immediately after sealant application and before skinning or curing begins, tool sealants according to requirements specified below to form smooth, uniform beads of configuration indicated: to eliminate air pockets: and to ensure contact and adhesion of sealant with sides of joint.
   1. Remove excess sealant for surfaces adjacent to joints.
   2. Use tooling agents that are approved in writing by sealant manufacturer and that do not discolor sealants of adjacent surfaces.
   3. Provide concave joint, unless otherwise indicated.

3.4 FIELD QUALITY CONTROL

A. Field-Adhesion Testing: Field test joint-sealant adhesion to joint substrates.
   1. Inspect joints for complete fill, for absence of voids, and for joint configuration complying with specified requirements. Record results in a field-adhesion-test log.

B. Evaluation of Field Test Results: Sealants not evidencing adhesive failure from testing or noncompliance with other indicated requirements will be considered satisfactory. Remove sealants that fail to adhere to joint substrates during testing or to comply with other requirements. Retest failed applications until test results prove sealants comply with indicated requirements.

3.5 CLEANING

A. Clean off excess sealant or sealant smears adjacent to joints as the Work progresses by methods and with cleaning materials approved in writing by manufacturers of joint sealants and of products in which joints occur.

3.6 PROTECTION

A. Protect joint sealants during and after curing period from contact with contaminating substances and from damage resulting from construction operations or other causes so sealants are without deterioration of damage at time of Substantial Completion. If, despite such protection, damage or deterioration occurs, cut out and remove damaged or deteriorated joint sealants immediately so installations with repaired areas are indistinguishable from original work.

END OF SECTION 07 92 00

SECTION 08-80 00 – GLAZING (GLASS)

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This section includes glazing for the following products and applications, including those specified in other Sections where glazing requirements are specified.
   1. Windows

B. Related Sections include the following:
   1. Divisions 07 9200 Section “Joint Sealants”

1.3 DEFINITIONS

A. Glass Manufacturer: A firm that develops and produces glass from their factory.
B. Glass Fabricator: A company that fabricates glass purchased from a Glass Manufacturer.
C. Deterioration of Coated Glass: Defects include peeling, cracking, and other indications of deterioration in metallic coating.
D. Deterioration of Laminated Glass: Defects include edge separation, delamination materially obstructing vision through glass, and blemishes.
E. Deterioration of Insulating Glass: Failure of the hermetic seal. Evidence of failure is the obstruction of vision by dust, moisture or film on interior surfaces of glass.

1.4 PERFORMANCE REQUIREMENTS

A. General: Provide glazing systems capable of withstanding normal thermal movement and wind and impact loads (where applicable) without failure, including loss or glass breakage attributable to the following: defective manufacture, fabrication, and installation; failure of sealants or gaskets to remain watertight and airtight; deterioration of glazing materials; or other defects in construction.
B. Glass Design: Glass thicknesses indicated are minimums and are for detailing only. Confirm glass thicknesses by analyzing Project loads and in-service conditions. Provide glass lites for various size openings in nominal thicknesses indicated, but not less that thicknesses and in strengths (annealed, heat-treated or tempered) required to meet of exceed the following criteria:
   1. Glass Thicknesses: Select minimum glass thicknesses to comply with ASTME E 1300, according to the following requirements:
      a. Specified Design Wind Loads: Determine design wind loads applicable to Project from basic wind speed indicated in miles per hour (meters per second) at 33 feet (10 m) above grade, according to ASCE 7 “Minimum Design Loads for Buildings and Other Structures”: Section 6.4.2 “Analytic Procedure, “based on mean roof heights above grade indicated on Drawings
      b. Limit glass deflection to L/240 or flex use limit of glass, whichever is less with full recovery of glazing materials.
      c. Probability of Breakage for Vertical Glazing: 8 lites per 1000 for lites set vertically or not more that 15 degrees off vertical and under wind action.

d. Maximum Lateral Deflection: For the following types of glass supported on all four edges, provide thickness required that limits center deflection at design wind pressure to 1/50 times the short side length or ¾ inch (19 mm) whichever is less.
   1) For monolithic-glass lites heat treated to resist wind loads.
   2) For insulated glass.
   3) For laminated-glass lites.

e. Minimum Glass Thickness for Exterior Lites: Not less that 1/4 inch (6 mm).
f. Thickness of Tinted and Heat-Absorbing Glass: Provide the same thickness for each tint color indicated throughout Project.

2. Safety and Fire-rated glass shall comply with CPSC – 16 CFR 1201 safety standards.

C. Thermal Movements: Provide glazing that allows for thermal movements resulting from the following maximum change (range) in ambient and surface temperatures acting on glass framing members and glazing components. Base engineering calculation on surface temperatures of materials due to both solar heat gain and nighttime –sky heat loss.
   1. Temperature Change (Range): 120 deg F (67 deg C), ambient; 180 deg F (100 deg C), material surfaces.
   2. Glass Wind Load Design: 25 psi (1196 mm) minimum or higher to comply with exterior wall and roof design loads indicated. Comply with criteria of Governing Authorities and Agencies having jurisdiction.

1.5 SUBMITTALS

A. Product Data: For each glass product and glazing material indicated.
B. Samples: For the following products, in the for of 12 inch (300 mm) square Samples for glass.
   1. The name of the glass manufacturer and all technical data shall be included on the glass sample
   2. The name of the glass fabricator or supplier shall be included on the glass sample.
   3. For each type of glass provided on the project. Refer to glazing glass types.
   4. For each color of exposed glazing sealant.

C. Glazing Schedule: Use same designations indicated on Drawings or Specifications for glazed opening in preparing a schedule listing glass types and thicknesses for each size opening and location.
D. Product Certificates: Signed by manufacturers of glass and glazing products certifying that products furnished comply with requirements.
E. Qualification Data: For firms and persons specified in “Quality Assurance” Article to demonstrate their capabilities and experience. Include lists of completed projects with project names and addresses, names and addresses of architects and owners.
F. Product Data on Glass Types: Provide manufacturer’s structural, physical and environmental characteristics, size limitations and installation requirements.
G. SWRI Validation Certificate: For each elastomeric glazing sealant specified to be validated by SWRI’s Sealant Validation Program.
H. Warranties: Special warranties specified in this Section.

1.6 QUALITY ASSURANCE

A. Fabricator and Installer Qualifications: An experienced firm with at least five (5) years in business who has completed glazing similar in material, design, and extent to this Project; and who employs glass installers for this Project who are certified under the National Glass Association Glazier Certification Program and acceptable to the glass manufacturer.

B. Source Limitations for Glass Types: Obtain glass fro one primary-glass manufacturer for each glass type listed.

C. Adhesion and Compatibility Testing: Use manufacturer's standard test methods to determine whether priming and other specific preparation techniques are required to obtain rapid, optimum adhesion of glazing sealants to glass, tape sealants, gaskets, and glazing channel substrates.
   1. Testing will not be required if elastomeric glazing sealant manufacturers submit data base on previous testing of current sealant products for adhesion to , and compatibility with , glazing materials matching those submitted.

D. Glazing Fire-Rated Door Assemblies: Assemblies complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire ratings indicated, based on testing according to NFPA 252.

E. Glazing Fire-Rated Window Assemblies: Assemblies complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities have jurisdiction, for fire ratings indicated, based on testing according to NFPA 257.

F. Safety Glazing Products: Comply with testing requirements of CPSC in 16 CFR 1201 and for CPSC CAT-1 and CPSC CAT-11.
   1. Subject to compliance with requirements, obtain safety glazing products permanently marked with certification label of the Safety Glazing Certification Council or another certification agency or manufacturer acceptable to authorities having jurisdiction.
   2. Where glazing unit, including Kind FT glass and laminated glass, are specified in Part 2 articles for glazing lites more than 9 sq. ft. in exposed surface area of on side, provide glazing products that comply with category II Materials, for lites 9 sq. ft. or less in exposed surface area of one side, provide glazing products that comply with Category I or II materials, except for hazardous locations where Category II materials are required by 16 CFR 1201 and regulations of authorities having jurisdiction.
   3. Glazing Requirements: Comply with all Rules and Standards for Safety Glazing of the current Michigan Construction Code and other agencies and authorities having jurisdiction.

G. Glazing Publications: Comply with published recommendations of glass product manufacturers and organizations below.
   1. GANA Publications: GANA'S "Glazing Manual" and "Laminated Glass Design Guide."
   2. AAMA Publications: AAMA GDSG-1, "Glass Design for Sloped Glazing," and AAMA TIR-A7, "Sloped Glazing Guidelines"
   3. SIGMA Publications: SIGMA TM-3000, "Vertical Glazing Guidelines," and SIGMA TB-3001, "Sloped Guidelines."

H. Mockups (In-place): Before glazing, build mockups for each glass product indicated below to verify selections made under sample Submittals and to demonstrate aesthetic effect and qualities of materials and execution. Build mockups to comply with the following requirements, using materials indicated for the completed Work:
   1. Construct mockups in the exterior building wall at the location and size indicated as directed by the Architect.

2. Build mockups with the following kinds of glass to match gazing systems required for the Project, including typical lite size, framing systems, and glazing methods for Architect's review before proceeding with general installation:
   a. Insulated and spandrel glass.
3. Obtain Architect's acceptance of mockups before proceeding with construction.

I. Pre-installation Conference: Conduct conference at Project site to comply with the requirements in Division 01 3100 Section "Project Management and Coordination."

1.7 DELIVERY, STORAGE, AND HANDLING

A. Protect glazing materials according to manufacturer's written instructions and as needed to prevent damage to glass and glazing materials fro condensation, temperature changes, direct exposure to sun, or other causes.
B. For insulating-glass units that will be exposed to substantial altitude changes, comply with insulating–glass manufacturer's written recommendations for venting and sealing to avoid hermetic seal ruptures.

1.8 PROJECT CONDITIONS

A. Environmental Limitations: Do not proceed with glazing when ambient and substrate temperature conditions are outside limits permitted by glazing material manufacturers and when glazing channel substrates are wet from rain, frost, condensation, or other causes.
   1. Do not install liquid glazing sealants when ambient and substrate temperature conditions are outside limits permitted by glazing sealant manufacturer or below 40 deg F.

1.9 WARRANTY

A. General Warranty: Special warranties specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.
B. Manufacturer's Special Warranty on Coated-Glass Products: Written Warranty, made out to Owner and signed by coated-glass manufacturer agreeing to remove existing and furnish and install replacements for those coated-glass units that are deteriorated.
   1. Warranty Period: ten (10) years fro the date of Substantial Completion.

C. Manufacturer's Special Warranty on Laminated and Tempered Glass: Written warranty, made out to Owner and signed by glass manufacturer agreeing to remove existing and furnish and install replacement for glass units that deteriorate as defined in "Definitions" Article.
   1. Warranty Period: Ten (10) years from date of Substantial Completion.

D. Manufacturer's Special Warranty on Insulation Glass: Written Warranty, made out to owner and signed by insulation-glass manufacturer agreeing to remove existing and furnish and install replacements for insulating-glass units that deteriorate as defined in "Definitions" Article.
   1. Warranty Period: Ten (10) years for date of Substantial Completion.

PART 2 – PRODUCTS

1. MANUFACTURES

A. Glass Manufacturers-General
   1. Obtain materials from only one manufacturer or fabricator for each type; obtain tinted primary glass (if any) used for each type from only one manufacturer
   2. Where manufacturer's product names are indicated, only comparable products of the manufacturers listed as the Basis of Design will be considered.

B. Glass Manufacturers
   1. Glass Products: The following listed glass manufacturers, provided they comply with the requirements of the contract documents, will be among the firms considered acceptable: Substitutions of other non-listed glass manufacturers will **not** be permitted.
      a. AFG Industries
      b. Guardian Industries
      c. PPG Industries, Inc.
      d. Pilkington
      e. Visteon
      f. Vetrotech Saint-Gobain
      g. Cardinal Industries Corp.
      h. Paragon Architectural Products

C. Glass Fabricators
   1. Obtain materials from only one manufacturer or fabricator fro each type; obtain tinted primary glass (if any) used for each type from only one manufacturer.
   2. Where manufacturer's product names are indicated, comparable products of the glass manufacturers listed as the Basis of Design will be considered.
      a. Spec-temp/Atwood Inc.
      b. Oldcastle Glass Group
      c. PDC Glass of Michigan
      d. SAFTI, a division of O'Keefe's Inc.
      e. Viracon
      f. Vetrotech Saint-Gobain
      g. Other glass Fabricators in continuous business at least ten (10) years. Submit "Substitution Request" on form located in Specification Division 01 6000 Section "Product Requirements" to the Architect for evaluation

D. Glass types: General Information
   1. Not all glass types indicated her-in will be used on the project. Refer to the drawings for applicable glass types to be provided.
   2. Provide glass to comply with building codes and other Authorities and Agencies having jurisdiction.
   3. Notify Architect of any conflict Glass fire-ratings shall be the same fire-rating as for the door or wall partitions indicated on the drawings.

E. GLASS TYPES

Gl-1 ¼ inch thick CLEAR Annealed (AF) Glass
Annealed Float Glass

GL-2 ¼ inch thick TINTED Annealed (AF) Glass
Annealed Float Glass

GL-3 ¼ inch thick CLEAR Tempered (FT) Glass
Fully-Tempered glass – Safety glass

GL-4 ¼ inch thick TINTED Tempered (FT) Bronze
Fully Tempered – Safety glass

GL-5 ¼ inch total thickness – CLEAR Laminated Safety Glass
Two (2) 1/8 inch Annealed Float glass panes with PVB interlayer between panes.

GL-6 1" Insulated Tinted Annealed Float (AF) Glass Unit – Bronze
1" Total thickness; Double pane with silicone sealant edge seal.
Exterior pane: ¼ inch thick, Clear, Tint #2 surface, Annealed Float glass
Low-E (transparent coating) (locate on #3 surface)
½ inch Air space
Interior pane: ¼ inch thick, Clear, Annealed Float glass
Visible light; % transmittance – 42
Shading coefficient - .37
Winter U-value - .29
Summer U-value - .29
Manufacturer (Basis-of-Design); Guardian Industries

GL-7 1" Insulated Tinted Fully-Tempered (FT) Glass Unit – Bronze
1" Total thickness; Double pane with silicone sealant edge seal.
Exterior pane: ¼ inch thick, Tint #2 surface, Fully-Tempered
Low-E (transparent coating) (locate on #3 surface)
½ inch Air space
Interior pane: ¼ inch thick, Clear, Fully-Tempered
Visible light; % transmittance – 42
Shading coefficient - .37
Winter U-value - .29
Summer U-value - .29
Manufacturer (Basis-of-Design); Guardian Industries

GL-8 I" Insulated Composite Laminated Aluminum Spandrel Sandwich Panels
Exterior face sheet: Thickness = 0.24 smooth surface
Color: Match Architect's special "Kynar 500" color sample

Core Construction: 1" Polyisocyanurate insulation.
Interior face sheet: Thickness – 0.24 smooth surface
Color: Match Architect's special "Kynar 500" color sample

Composite panel detail must fit into window frame glazing pocket with water-tight gasket seals.
R- Value: R = 6.0 minimum

NOTE: The Glass Contractor shall provide and install the spandrel panels as par of their integral responsibility.

1. Manufacturer's Product – Basis-of Design: Laminators Inc. Water Resistant Thermolite panel: **Laminators Inc. (743-777-6788)
2. Citadel Architectural, GlazeGuard 1000 WR. **Statre Corp. (248-307-0800)
3. Copper Sales, Inc. – UNA.CORE Panel Units as specified and detailed.

4. Other Manufacturers complying to ctiteria and acceptable to the Architect.

2.2 ELASTOMERIC GLAZING SEALANTS

A. General: Provide products of type indicated, complying with the following requirements:
   1. Compatibility: Select glazing sealants that are compatible with one another and with other materials that will contact, including glass products, seals of insulation-glass units, and glazing channel substrates, under conditions of service and application, as demonstrated by sealant manufacturer based on testing and field experience
   2. Colors of Exposed Glazing Sealants: As selected by the Architect for manufacturer's full range of custom and special colors.

B. Elastomeric Glazing Sealant Standard: Comply with ASTM C 920 and other requirements indicated for each liquid-applied, chemically curing sealant in the Glazing Sealant Schedule at the end of Part 3, including those referencing ASTM C 920 classifications for type, grade, class, and uses.

2.3 GLAZING TAPES

A. Back-Bedding Mastic Glazing Tape: Preformed, butyl-based elastomeric tape with a solids content of 100 percent; non-staining and non-migrating in contact with nonporous surfaces; with or without spacer rod as recommended in writing by tape and glass manufacturers, and complying with ASTM C 1281 and AAMA 800.

B. Expanded Cellular Glazing Tape.: Closed-cell, PVC foam tape; factory coated with adhesive on both surfaces; packaged on rolls with release liner protecting adhesive; and complying with AAMA 800 for the following types:
   1. Type 1, for glazing applications in wich tape acts as the primary sealant.
   2. Type 2, for glazing applications in which tape is used in combination with a full bead of liquid sealant.

2.4 GLAZING GASKETS

A. Dense Compression Gaskets: Molded or extruded gaskets of material indicated below, complying with standards referenced with name of elastomer indicated below, and of profile and hardness required to maintain watertight seal:
   1. Neoprene, ASTM C 864
   2. EPDM, ASTM C 864
   3. Silicone, ASTM C 1115
   4. Thermoplastic polyolefin rubber, ASTN C 1115

B. Soft Compression Gaskets: Extruded or molded, closed-cell, integral-skinned gaskets of material indicated below; complying with ASTM C 509, Type II black: and of profile and hardness required to maintain watertight seal:
   1. Neoprene
   2. EPDM
   3. Silicone
   4. Thermoplastic polyolefin rubber

2.5 MISCELLANEOUS GLAZING MATERIALS

A. General: Provide products of material size, and shape complying with referenced glazing standard, requirements of manufacturers of glass and other glazing materials for application indicated.

B. Cleaners, Primers, and Sealers: Types recommended by sealant of gasket manufacturer.
C. Setting Blocks: Elastomeric material with a Shore A durometer hardness of 85, plus or minus 5.
D. Spacers: Elastomeric blocks or continuous extrusions with a Shore A durometer hardness required by glass manufacturer to maintain glass lites in place for installation indicated.
E. Edge Blocks: Elastomeric material of hardness needed to limit glass lateral movement (side walking).

PART 3 – EXECUTION

3.1 EXAMINATION

A. Examine framing glazing, with Installer present, for compliance with the following:
1. Manufacturing and installation tolerances, including those for size, squareness, and offsets at corners.
2. Presence and functioning of weep system.
3. Minimum required face of edge clearances.
4. Effective sealing between joints of glass-framing members.

3.2 PREPARATION

A. Clean glazing channels and other framing members receiving glass immediately before glazing. Remove coatings not firmly bonded to substrates.

3.3 GLAZING, GENERAL

A. Comply with combined written instructions of manufacturers of glass, sealants, gaskets, and other glazing materials.
B. Glazing channel dimensions, provide necessary bite on glass, minimum edge and face clearances, and adequate sealant thicknesses, with reasonable tolerances.
C. Protect Glass edges from damage during handling and installation. Remove imperfections and damaged glass fro Project site and legally dispose of off Project site.
D. Apply primers to joint surfaces where required for adhesion of sealants.
E. Install setting blocks is sill rabbets, sized and located to comply with referenced glazing publications, unless otherwise required by glass manufacturer. Set blocks in thin course of compatible sealant suitable for heel bead.
F. Do not exceed edge pressures stipulated by glass Manufacturers for installing glass lites.
G. Provide spacers for glass-lites where the length plus width is larger that 50 inches as follows:
1. Locate spacers directly opposite each other on both inside and outside faces of glass. Install correct size and spacing to preserve required face clearances, unless gaskets and glazing tapes are used that have demonstrated ability to maintain required face clearances and to comply with system performance requirements.
2. Provide 1/8 inch minimum bite of spacers on glass and use thickness equal to sealant width. With glazing tape, or thickness slightly less that final compressed thickness of tape.

H. Provide edge blocking where needed to prevent glass-lites from moving sideways in glazing channel.

I. Where wedge–shaped gaskets are driven into on side of channel to pressurize sealant or gasket on opposite side, provide adequate anchorage so gasket cannot walk out when installation is subjected to movement.

J. Square cut wedge-shaped gaskets at corners and install gaskets in a manner recommended by gasket manufacturer to prevent corners from pulling away; seal corner joints and butt joints with sealant recommended by gasket manufacturer.

3.4 TAPE GLAZING

A. Position tapes on fixed stops so that when compressed by glass their exposed edges are flush with or protrude slightly above sightline of stops.

B. Install tape continuously, but not necessarily in one continuous length. Do not stretch tapes to make them fit opening.

C. Where framing joints are vertical, cover these joints by applying tapes to heads and sills first and then to jambs. Where framing joints are horizontal, cover these joints by applying tapes to heads and sills first and then to jambs.

D. Place joints in tapes at corners of opening with adjoining lengths butted together, not lapped. Seal joints in tapes with compatible sealant approved by tape manufacturer.

E. Apply cap bead of elastomeric sealant over exposed edge of tape.

3.5 GASKET GLAZING (DRY)

A. Fabricate compression gaskets in lengths recommended by gasket manufacturer to fit openings exactly, with stretch allowance during installation.

B. Insert soft compression gasket between glass and frame or fixed stop so it is securely in place with joints miter cut and bonded together at corners.

C. Compress gaskets to produce a weather-tight seal without developing bending stresses in glass. Seal gasket joints with sealant recommended by gasket manufacturer.

D. Install gaskets so they protrude past face of glazing stops.

3.6 SEALANT GLAZING (WET)

A. Install continuous spacers or spacers combined with cylindrical sealant backing, between glass lites and glazing stops to maintain glass face clearances and to prevent sealant fro extruding into glass channel and blocking weep systems until sealants cure. Secure spacers or spacers and backing in place and in position to control depth of installed sealant relative to edge clearance for optimum sealant performance.

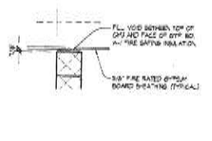
B. Force sealants into glazing channels to eliminate voids and to ensure complete wetting or bond of sealant to glass and channel surfaces.

C. Tool exposed surfaces of sealants to provide a substantial wash away from glass.

3.7 PROTECTION AND CLEANING

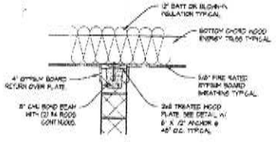
A. Protect exterior glass from damage immediately after installation by attaching crossed streamers to framing held away from glass. Do not apply markers to glass surface. Remove nonpermanent labels, and clean surfaces.
B. Protect glass from contact with contaminating substances resulting from construction operations including weld spatter. Remove them immediately as recommended by glass manufacturer.
C. Promptly remove and replace glass that is broken, chipped, cracked, abraded, or damaged in any way, including natural causes, accidents, and vandalism.
D. Wash glass on both exposed surfaces in each area of Project not more that four days before date scheduled for inspections that establish date of Substantial Completion. Wash glass as recommended by glass manufacturer.

END OF SECTION 08 80 00



TYPICAL NON-BR'G. WALL DETAIL

SCALE: 3/4" = 1'-0"



TYPICAL BEARING WALL DETAIL

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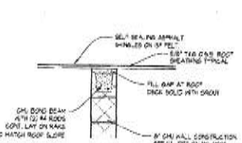

TYP. 2HR. SEPARATION WALL DETAIL

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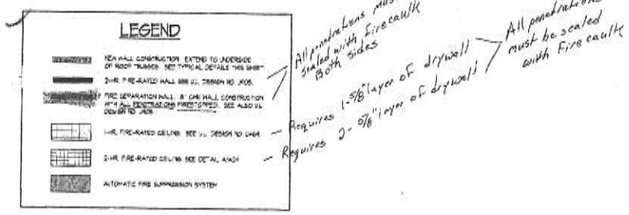
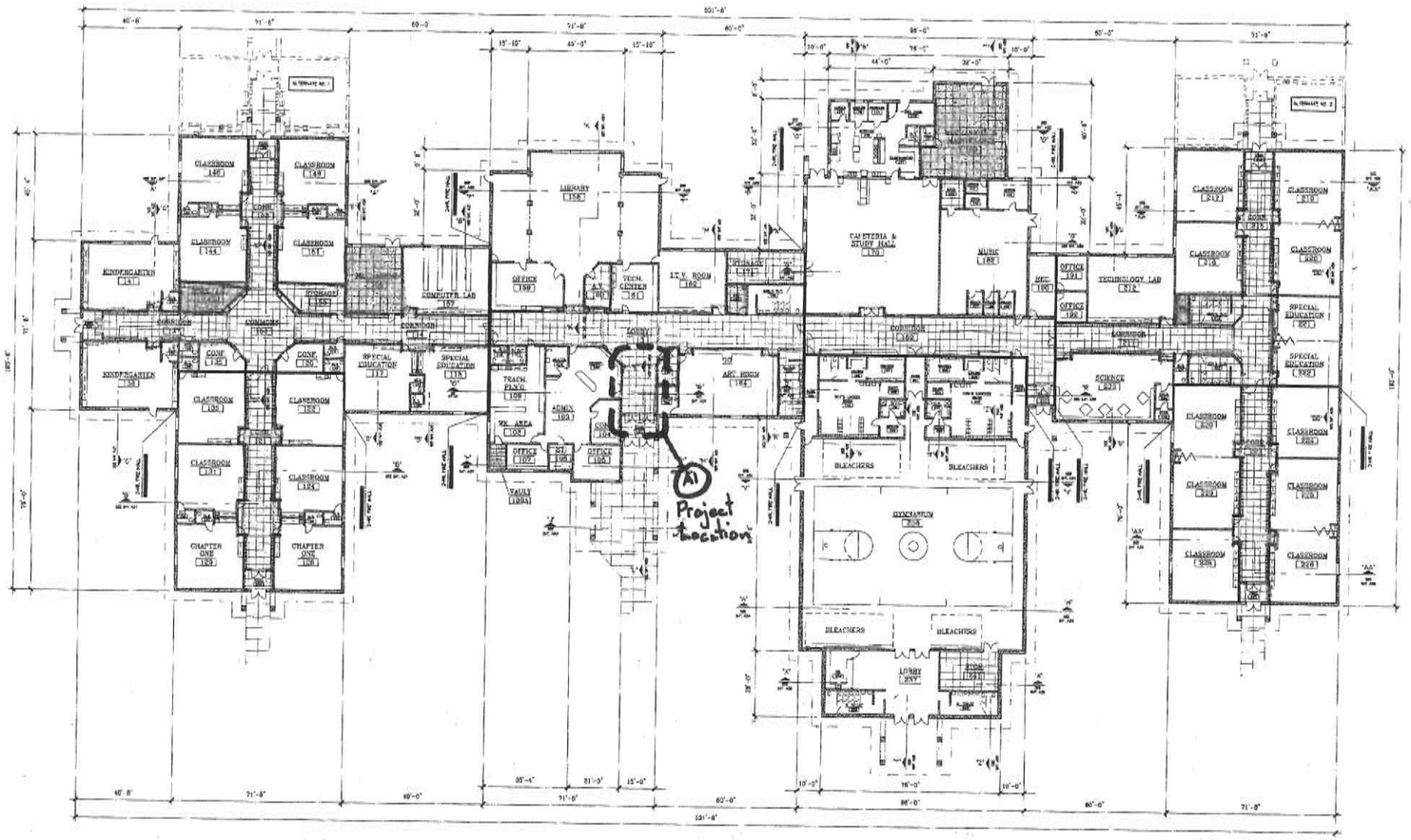
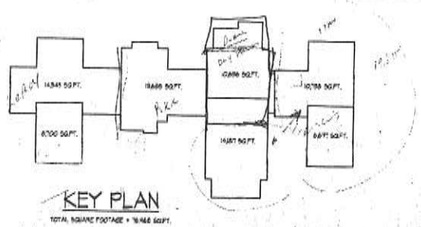




COMPOSITE FLOOR/FIRE-PROTECTION PLAN

SCALE: 1/16"=1'-0"

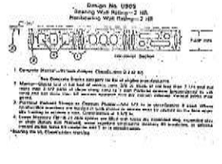
"COPY OF ORIGINAL DOCUMENT"



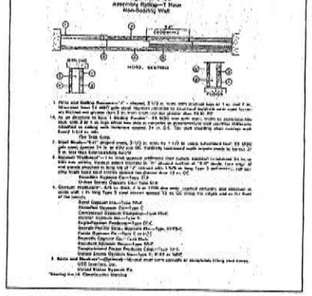
KEY PLAN

TOTAL SQUARE FOOTAGE = 76,945 SQFT.

U.L. DESIGN NO. U905



U.L. DESIGN NO. U469



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saginaw, michigan 48602

A SECURED ENTRY FOR
HALE AREA SCHOOLS
311 NORTH M-65
HALE, MI 48739

project no.
21786
issue date
19 February 2017
revisions

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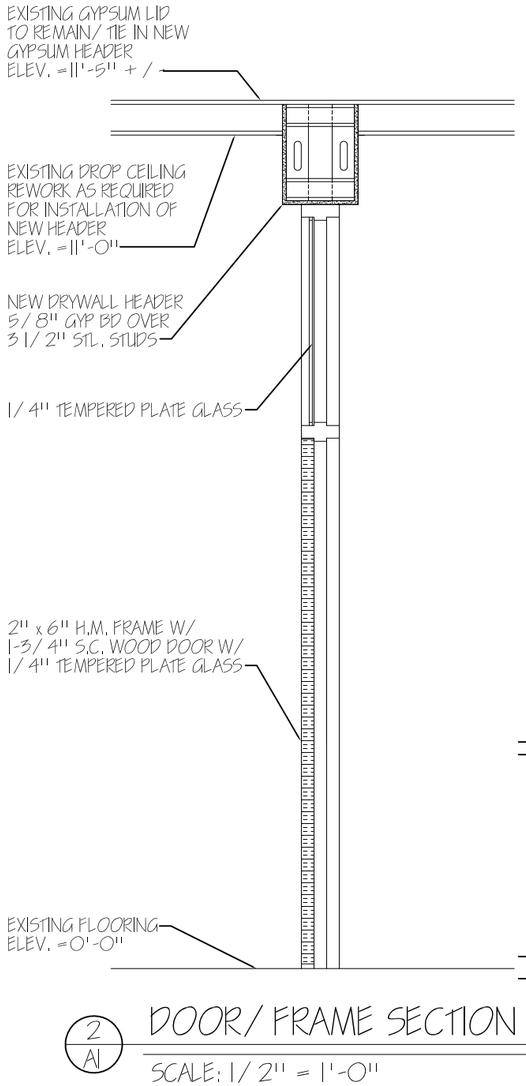
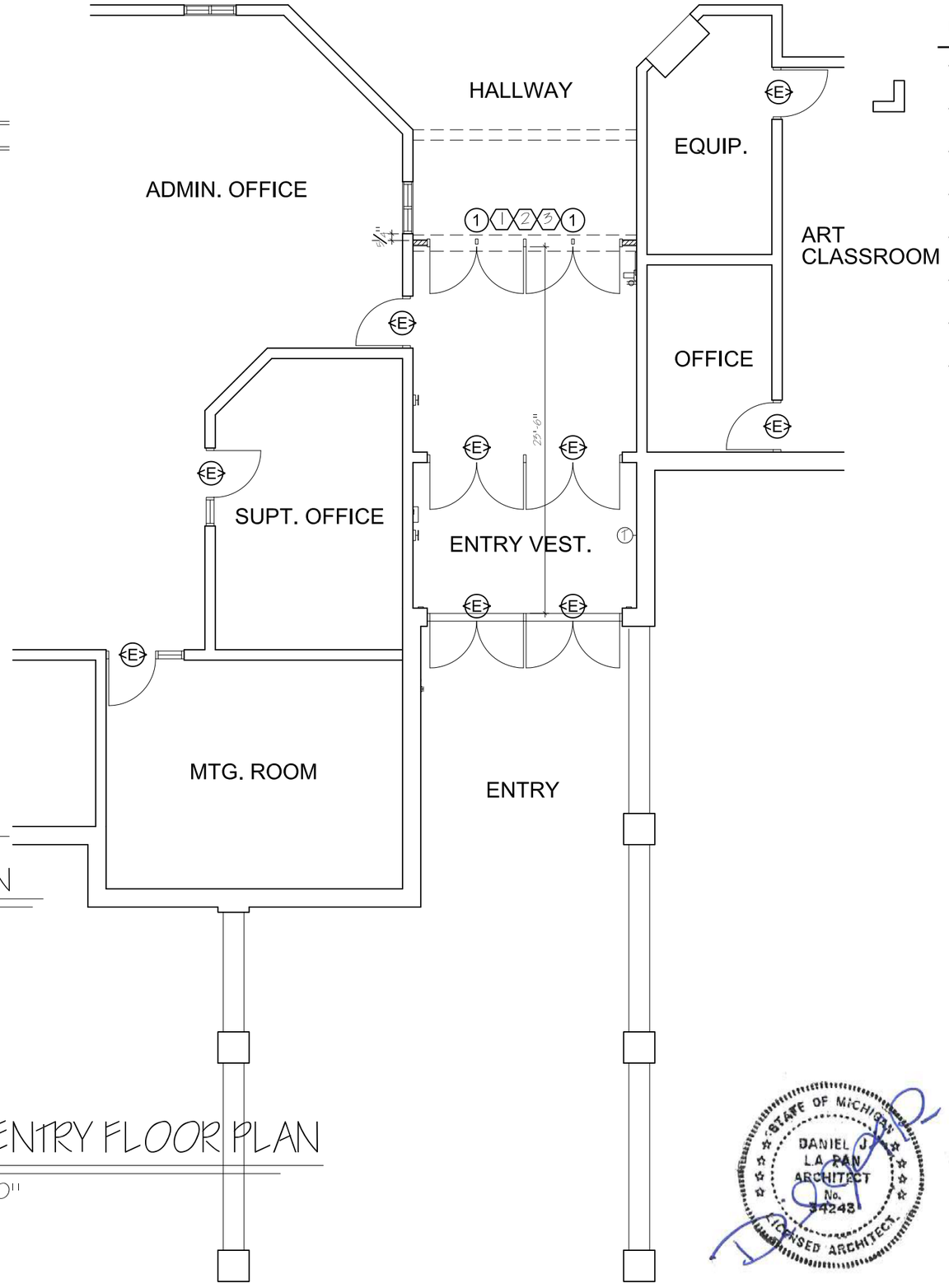


2 A1 DOOR/ FRAME SECTION

SCALE: 1/2" = 1'-0"



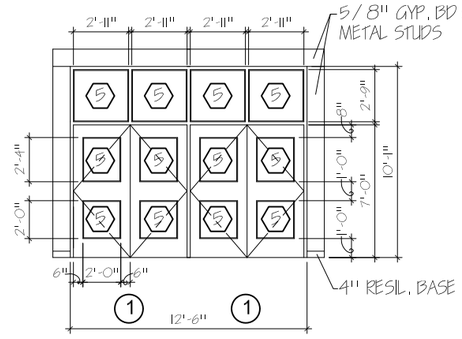
NORTH

SECURED ENTRY FLOOR PLAN

SCALE: 1/8" = 1'-0"

CONST. NOTES:

1. REWORK EXISTING CEILING, INSTALL NEW DOOR HEADER PER DETAIL 2/ A1.
2. INSTALL NEW PAIR DOUBLE WOOD DOORS WITH REMOVABLE MULLION. SEE DOOR AND FRAME ELEVATION 1/ A1 BELOW.
3. INSTALL NEW VON DUPRIN DOOR PANIC HARDWARE WITH ELECTRONIC LATCH AND PULL HANDLE.
4. PROVIDE NEW LCN CLOSERS, CONTINUOUS HINGE AND WITH 9" X 32" PLASTIC KICK PLATE, TYPICAL EACH DOOR.
5. DOOR GLASS AND TRANSOMS SHALL BE 1/ 4" TEMPERED PLATE. PROVIDE ALTERNATE GLASS 1/ 4" LAMINATED.
6. SECURITY HARDWARE AND POWER FOR OPERATION IS TO BE PROVIDED BY THIS CONTRACTOR. SECURITY WIRING BY OWNER.
7. SECURITY HARDWARE AND POWER FOR OPERATION IS TO BE PROVIDED BY THIS CONTRACTOR. SECURITY WIRING BY OWNER.
8. CAULK PERIMETER OF HM FRAME AND DRYWALL TO MASONRY CONDITIONS WITH LATEX CAULK.



1 A1 FRAME ELEV.

SCALE: 1/8" = 1'-0"

SYMBOLS:

NOTE: ALL ITEMS ARE EXISTING UNLESS NOTED OTHERWISE

- HC HANDICAP PUSH DOOR CONTROL
- SAP SECURITY ALARM PANEL
- KEYED LIGHTING SWITCH
- FAP FIRE ALARM PULL STATION
- EXIT SIGN
- CB CALL BUTTON
- SEC SECURITY ACCESS STATION
- THERMOSTAT
- FIRE ALARM STROBE
- DUPLEX OUTLET
- <E> EXISTING

STATE OF MICHIGAN DANIEL J LA PAN ARCHITECT No. 34243 LICENSED ARCHITECT

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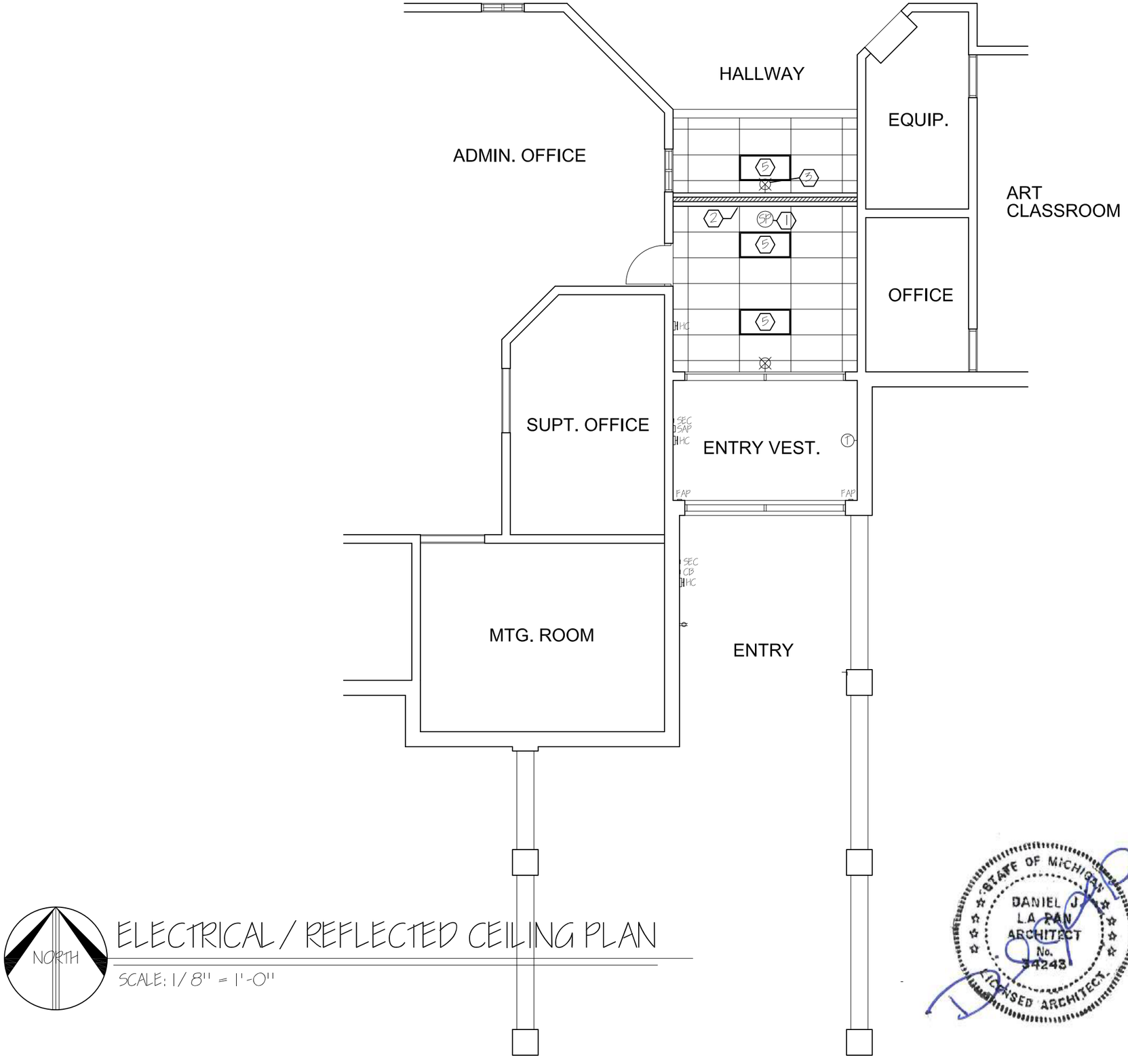

CONST. NOTES:

1. RELOCATE EXISTING SPEAKER.
2. REWORK EXISTING DROP CEILING FOR THE INSTALLATION OF THE NEW DOOR HEADER.
3. INSTALL NEW EXIT SIGN TO MATCH EXISTING.
4. EXISTING DROP CEILING TO REMAIN
5. EXISTING LIGHTING TO REMAIN

NORTH

ELECTRICAL / REFLECTED CEILING PLAN

SCALE: 1/8" = 1'-0"

STATE OF MICHIGAN
DANIEL J. LA PAN
ARCHITECT
No. 34243
LICENSED ARCHITECT

SYMBOLS:

NOTE: ALL ITEMS ARE EXISTING UNLESS NOTED OTHERWISE

- HC HANDICAP PUSH DOOR CONTROL
- SAP SECURITY ALARM PANEL
- K KEYED LIGHTING SWITCH
- FAP FIRE ALARM PULL STATION
- EXIT SIGN
- CB CALL BUTTON
- SEC SECURITY ACCESS STATION
- THERMOSTAT
- FIRE ALARM STROBE
- DUPLEX OUTLET
- <E> EXISTING

1/8"=1'
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