HURST-ROSCHE, INC.

PROJECT MANUAL FOR

CALHOUN HIGH SCHOOL DOOR REPLACEMENT
CALHOUN UNIT DISTRICT 40
HARDIN, CALHOUN COUNTY, ILLINOIS
H-R # 270-2896

Prepared for

Calhoun Unit District 40
101 Calhoun Avenue
Hardin, Illinois 62047

Dr. Kate Sievers, Superintendent

February 17, 2020

Bid Package No. _____

HURST – ROSCHE INC.
1400 East Tremont Street Hillsboro, Illinois 62049 (217) 532-3959

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CALHOUN HIGH SCHOOL DOOR REPLACEMENT
CALHOUN UNIT DISTRICT 40
HARDIN, CALHOUN COUNTY, ILLINOIS
H-R # 270-2896

Section Title

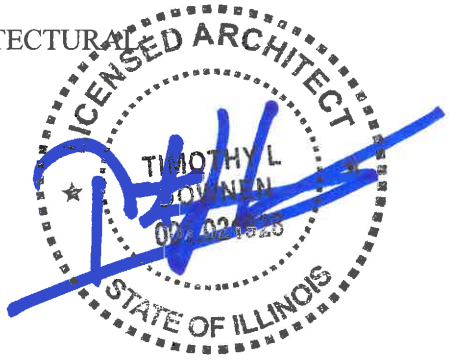
FACILITY CONSTRUCTION SUBGROUP
DIVISION 07 - THERMAL AND MOISTURE PROTECTION

DIVISION 08 - OPENINGS

DIVISION 09 - FINISHES

Specifier: Phone: 217-532-3959

GENERAL/ARCHITECTURAL Timothy L. Downen, AIA, LEED AP



2-17-2020
EXP: 11-30-2020

END OF SECTION

DOCUMENT 001116 - INVITATION TO BID

Project: **CALHOUN HIGH SCHOOL DOOR REPLACEMENT**
CALHOUN UNIT DISTRICT 40
HARDIN, CALHOUN COUNTY, ILLINOIS

Owner: **CALHOUN UNIT DISTRICT 40**
101 CALHOUN AVENUE
HARDIN, ILLINOIS 62047

Architect/Engineer: **HURST-ROSCHE, INC.**
1400 E. TREMONT STREET
HILLSBORO, ILLINOIS 62049

Date: **FEBRUARY 17, 2020**

The Owner will receive Bids until 2:00 PM local prevailing time on Tuesday, the 10th day of March, 2020, at Calhoun Unit District 40 Unit Office, 101 Calhoun Avenue, Hardin, Illinois 62047 for the following work:

BASE BID: Work includes repair and replacement of existing doors, door frames, glazing and hardware at Calhoun High School.

ALTERNATE BID #1: Work includes repair and replacement of additional existing doors, door frames, glazing and hardware at Calhoun High School.

ALTERNATE BID #2: Work includes repair and replacement of additional existing doors, door frames, glazing and hardware at Calhoun High School.

ALTERNATE BID #3: Work includes preparation, priming and painting of doors and door frames at Calhoun High School.

A Pre-bid Meeting will be held on Tuesday, the 25th day of February 2020, at 10:00 AM, prevailing time, at Calhoun Unit District 40 Unit Office, 101 Calhoun Avenue, Hardin, Illinois 62047.

Drawings and specifications may be obtained at the office of Hurst-Rosche, Inc., 1400 E. Tremont Street, Hillsboro, Illinois, after February 17, 2020 by paying a non-refundable amount of $25.00 ($35.00 if mailed) for each set of drawings and specifications.

Bidding Documents, Drawings and Specifications, may be examined by prospective bidders and material suppliers at the offices of Hurst-Rosche, Inc., 1400 E. Tremont Street, Hillsboro, Illinois, and the following Plan Rooms:

Central Illinois Plan Room, 1620 S. 5th Street, Springfield, IL 62703
Greater Peoria Contractors & Suppliers Association, 1811 West Altorfer Drive, Peoria, IL 61615
Southern Illinois Builders Association, 1468 Green Mount Road, O'Fallon, Illinois 62269
McGraw Hill Construction, www.dodgeprojects.construction.com

Drawings and specifications will be available for viewing on the internet at: www.hurst-rosche.com. The documents are being provided for reference purposes only. Bidders are encouraged to obtain a signed and sealed hard copy set of the bidding documents. At a minimum, bidders must obtain clean copies of bid forms from the offices of Hurst-Rosche, Inc. by paying a non-refundable amount of $10.00 to submit a bid for this project.

The Owner requires the project to be substantially complete by Friday, August 7, 2020.

Bidders will be required to provide Bid security of a sum no less than 10 percent of the Bid Sum. The bid security shall be either certified check, cashier's check, bank money order or bid bond issued by surety licensed to conduct business in the State of Illinois. Hereinafter this bid security shall be referred to as the bid bond.

Submit two copies of your Bid on the Bid Form provided. Bidders may supplement this form as appropriate.

Your Bid will be required to be submitted under a condition of irrevocability for a period of 30 days after submission.

The Owner reserves the right to accept or reject any or all Bids or any part thereof, to waive any informality in bidding, and to accept bids deemed most favorable to the Owner.

CALHOUN UNIT DISTRICT 40

DR. KATE SIEVERS, SUPERINTENDENT

END OF DOCUMENT

DOCUMENT 002114 - INSTRUCTIONS TO BIDDERS - AIA

1.1 SUMMARY

A. Document Includes:
   1. Instructions to Bidders.
   2. Site examination.
   3. Prebid conference.

B. Related Documents:
   1. Document 001116 - Invitation To Bid.
   2. Document 004113 - Bid Form - Stipulated Sum.
   3. Document 004300 - Procurement Form Supplements: Appendix A.
   4. Document 007214 - General Conditions – AIA Stipulated Sum.
   5. Document 007313 - Supplementary Conditions – AIA.

1.2 INSTRUCTIONS TO BIDDERS

A. These Instructions to Bidders amend or supplement AIA Document A701-1997 - Instructions to Bidders and other provisions of Bidding Documents and Contract Documents.

B. To be considered all bids must in accordance with these Instructions to Bidders.

C. Those interested parties may obtain sets of Drawings and Specifications from the Architects (or Engineer) upon non-refundable deposit of $25.00 ($35.00 if mailed) per set. At a minimum, bidders must obtain clean copies of bid forms by paying a non-refundable amount of $10.00 to submit a bid for this project.

1.3 SITE EXAMINATION

A. Bidders shall carefully examine documents and construction site to obtain first-hand knowledge of existing conditions. Contractors will not be given extra payments for conditions which can be determined by examining site and these documents.

B. Contact Mr. Rod Hart at the following phone number to arrange date and time to visit Project site:
   1. Telephone: (618) 576-2722.

C. A visit to Project site has been arranged for Bidders following the Pre-Bid Meeting at 10:00 AM on February 25, 2020.

1.4 THE SCHEDULE FOR BIDDING THIS PROJECT IS AS FOLLOWS

A.	**Plans Available:**	**February 17, 2020**
B.	**Pre-Bid Meeting:**	**February 25, 2020** **10:00 AM** **Calhoun Unit District 40** **101 Calhoun Avenue** **Hardin, Illinois 62047**
C.	**Latest Time to Submit Request for Interpretation:**	**March 3, 2020 @ 4:30 PM**
D.	**Latest Time to Issue an Addendum:**	**March 5, 2020 @ 4:30 PM**
E.	**Bid Opening**	**March 10, 2020** **2:00 PM** **Calhoun Unit District 40** **101 Calhoun Avenue** **Hardin, Illinois 62047**

F. All requests for interpretations shall be in writing via mail or e-mail addressed to the Architect/Engineer and must be received seven (7) calendar days prior to date fixed for opening of bids in order to be given consideration. All questions must be submitted on the "Request for Interpretation Pre-Bid Question and Comment Form" included at the end of this section, and questions not submitted in accordance with this form and specified time frame will not be accepted. Any and all interpretations and supplemental instructions will be made by addendum to the Drawings and Specifications and forwarded to all bidders either by mail or e-mail transmittal. All responses by the Architect/Engineer must be in writing to be binding. Any response general in nature or affecting these Instructions to Bidders shall be sent via addendum as previously described. All bidders are required to return the signature page of the addendum signed to the Architect within 24 hours after receipt. Failure of any bidder to receive any such addendum or interpretations shall not relieve such bidder from an obligation under the bid as submitted. All addenda so issued shall become part of the Contract Documents. No addendum will be issued later than three (3) calendar days prior to bid date except one withdrawing the request for Bids or one postponing date for receiving Bids. Oral interpretations, changes or corrections will not be binding and Bidders shall not rely upon such interpretations, changes and corrections. Each Bidder shall ascertain prior to submitting Bid that all addenda issued have been received and shall acknowledge receipt in Bid.

Questions shall be directed to:
e-mail: tdownen@hurst-rosche.com

G. Materials, products and equipment described in Bidding Documents establish a standard of required function, dimension, appearance and quality to be met by any proposed substitution. No substitution will be considered prior to receipt of Bids unless written request for approval has been received by the Architect at least ten days prior to the date for receipt of Bids. Each such request shall include name of material or equipment for which it is to be substituted and a complete description of the proposed substitute including drawings, cuts, performance and test data and any other information necessary for an evaluation. A statement setting forth any changes in other materials, equipment or other work that incorporation of the substitute would require shall be included. The burden of proof of the merit of proposed substitute is upon the proposer. Architect's decision of approval or disapproval of a proposed substitution shall be final. If the Architect approves any proposed substitution prior to receipt of Bids, such approval will be set forth in an addendum. Bidders shall not rely upon approvals made in any other manner. No substitutions will be considered after the contract award unless specifically provided in the Contract Documents.

H. Bids shall be made on unaltered Bid Forms furnished by the Architect. Fill in all blank spaces and submit two (2) copies. Bids shall be signed with name typed below signature. Where bidder is a corporation, bids must be signed with legal name of corporation followed by name of state of incorporation and legal signature of an officer authorized to bind the corporation to a contract.

I. Each bidder submitting a bid shall submit on form provided a list of any subcontractors and major suppliers he proposes to use with the bid. Failure to do so could disqualify the bid.

J. Each bidder shall designate on the attached bid form one person who shall serve as the bidder’s contact person for all matters pertaining to the bid. In absence of such designation, the person who signs the bid shall be deemed the bidder contact.

K. Each bid shall be accompanied by bid bond made payable to the Owner, in the amount of ten percent (10%) of the bid sum. Security shall be either certified check, cashier's check, bank money order or bid bond issued by surety licensed to conduct business in the State of Illinois. Successful bidder's security will be retained until he has signed the contract and furnished required payment and performance bonds. Owner reserves the right to retain security of the next two (2) lowest bidders until the lowest bidder enters into contract or until thirty (30) days after bid opening, whichever is shorter. All other bid security will be returned as soon as practicable. If any bidder refuses to enter into a contract, Owner will retain bid security as liquidated damages, but not as a penalty.

L. All costs associated with the preparation and submission of a bid are the sole responsibility of the bidder. These costs shall not be chargeable to the Owner by any successful or unsuccessful bidder. All bids become the property of the Owner and shall not be returned except in the case of a late submission.

M. Simultaneously, with delivery of the executed contract, the successful bidder, at its own expense, shall furnish surety in the form of a performance bond and a labor and material payment bond in the amount of one hundred percent (100%) of the contract amount. Surety for such bonds shall be a company duly authorized and licensed in the State of

Illinois and acceptable to the Owner. The Attorney-In-Fact who signs bid bonds or contract bonds must file with each bond a certified and effectively dated copy of their power of attorney.

N. All copies of the bid, bid security and any other documents required to be submitted with bid shall be enclosed in a sealed opaque envelope. Envelope shall be addressed to **Calhoun Unit District 40, Unit Office, 101 Calhoun Avenue, Hardin, Illinois 62047**, and shall be identified with project name, bidder's name and address. Mailed bid envelopes shall be enclosed in a separate mailing envelope with the notation "SEALED BID ENCLOSED" on the face thereof. Oral, telephonic or telegraphic Bids are invalid and will not receive consideration. Bids shall be deposited at the location designated in the Invitation to Bid prior to time and date designated for opening, or any extension thereof made by addendum. Bidder shall assume full responsibility for timely delivery at location designated for receipt of Bids. Bids received after time and date for receipt of bids will be returned unopened.

O. A bid may not be modified, withdrawn or canceled during the thirty (30) days immediately following bid opening, and each bidder so agrees in submitting his Bid. Any bidder may withdraw, cancel or modify its bid, at any time prior to scheduled time for opening of bids, by letter or telegram actually received by Owner prior to bid time, or, with proper identification, by personally securing bid submitted; if by telegram, written confirmation over signature of bidder shall be mailed and postmarked on or before date and time of bid opening. Withdrawn bids may be resubmitted up to bid opening time provided that they are in full compliance with these Instructions to Bidders.

P. Protests

1. Any bidder who submitted a bid and believes the bid was improperly rejected or that the bid selected by the Owner is not in the best interest of the Owner may submit a written notice of intent to protest the bid to the Owner within seven (7) days. The Owner shall consider all protests before execution of a contract. Each protest must specify the reasons supporting the protest. The Owner may require that additional information be provided. Failure to supply such required information shall be cause for dismissal of the protest.
2. The Owner shall immediately investigate the allegations against the Owners actions and shall issue a written response to the protest.
3. This provision allowing for the submission of protest shall not confer any right on any bidder but is intended solely to assist the Owner in determining the best responsible bid.

Q. Any complaint or protest of the bidding procedure must be filed by the bidder to the Owner. Within 7 days of bid opening the bidder shall notify the Owner in writing of his intent to protest bidding. The bidder shall perfect this notice of intent within 7 days.

R. Owner reserves right to disqualify bids and bidders, before or after opening, upon evidence of collusion with intent to defraud or other illegal practices upon part of bidder, lack of responsibility as evidenced by poor workmanship and progress of past work, incomplete work which, in judgment of Owner, might hinder or prevent prompt completion of additional work if awarded, for being in arrears on existing contracts, in litigation with the Owner, or having defaulted on a previous contract.

S. Bidder's attention is directed to the fact that all Federal and Illinois State Laws, municipal ordinances and regulations of any and all authority having jurisdiction over construction of the project shall apply to the contract throughout, and they will be deemed to be included in the contract the same as though herein written out in full. Successful Bidders shall be required to comply with 775 ILCS 10 concerning equal employment opportunities; comply with 30 ILCS 570 concerning the employment of citizens of the State of Illinois; comply with 820 ILCS 265 concerning substance abuse prevention on public works projects; and comply with 820 ILCS 130 concerning prevailing wages.

T. Any successful bidder that is a corporation organized in a state other than Illinois shall furnish to the Owner, upon request, a properly certified copy of its current Certificate of Authority to do business in the State of Illinois, such certificate is to remain on file with the Owner.

U. Any successful bidder that is a corporation organized in the State of Illinois shall furnish at its own cost to the Owner, if requested, a Certificate of Good Standing issued by the Secretary of State, such certificate is to remain on file with the Owner.

V. Owner is exempt from payment of Federal & Illinois Department of Revenue's Use and Sales Tax on material entering permanently into structure. Retail sales tax shall not be included in the bid amount.

W. Bids will be opened as announced in Invitation for Bids.

X. Owner reserves the right to reject any or all bids or any part thereof, to waive any informalities in bidding and to accept bids deemed most favorable to the Owner.

Y. Notwithstanding any delay in preparation and execution of the formal Contract Agreement, each bidder shall be prepared, upon written notice of bid acceptance, to commence work within ten (10) days following receipt of official written Notice to Proceed, or on date stipulated in such notice.

Z. Any work in providing or preparing to provide the services specified herein that is commenced by the successful bidder prior to execution of a written contract agreement shall be at the bidder’s expense.

AA. Accepted bidder shall assist and cooperate with the Owner in preparing the formal Contract Agreement, and, within fifteen (15) days following its presentation, shall execute same and return it to Owner.

BB. Contract Time: Time of Substantial Completion for the project shall not be later than August 7, 2020.

1.5 REQUIRED CONTRACTOR/SUBCONTRACTOR BACKGROUND SCREENING

A. Calhoun Unit District 40 requires background screening to be completed on all contractor/subcontractor employees. All employees must have documentation that a background screening has been completed on them prior to working on any district projects. All costs associated with the background screening are to be the responsibility of

the contractor. The background screening must be conducted by a company acceptable to the Calhoun Unit District 40.

B. All contractor/subcontractor employees working on the school grounds of Calhoun Unit District 40 are required to submit to background screening. Each employee must complete, sign, and date the Consent and Waiver Release form. These forms will be submitted, and the applicant cleared before the applicant may work on any part of the school grounds.

C. The contractor is responsible for submitting the forms to a company acceptable to the Calhoun Unit District 40, and for any costs involved in the screening. All information received as a result of a background check will be strictly confidential. A notice of automatic disqualification will be sent to the hiring or using entity. After the screenings, the contractor is also responsible for sending Calhoun Unit District 40 copies of approved background checks for their records.

END OF DOCUMENT

HR Project No.: 270-2896

Hurst-Rosche, Inc. E-Mail: tdownen@hurst-rosche.com

REQUEST FOR INTERPRETATION PRE-BID QUESTION AND COMMENT FORM

(All information entered shall be typed in black).

PROJECT NAME: CALHOUN HIGH SCHOOL DOOR REPLACEMENT, CALHOUN UNIT DISTRICT 40, HARDIN, CALHOUN COUNTY, ILLINOIS

BIDDER: SUBMITTED BY (Name): Date:

ADDRESS: CITY: STATE: PHONE: Sheet of

Question No.	Page (or Drawing Sheet) Number	Drawing No. or Spec. Section Article & Paragraph Number	Question by Bidder

NOTE: ***ANY AND ALL QUESTIONS PERTAINING TO THIS BID MUST BE TYPED AND SUBMITTED ON THIS FORM AND MAILED OR E-MAILED TO RECEIVE A RESPONSE.***

END OF SECTION 002114.

DOCUMENT 004113 - BID FORM - STIPULATED SUM

To: **CALHOUN UNIT DISTRICT 40**
101 CALHOUN AVENUE
HARDIN, ILLINOIS 62047

Project: **CALHOUN HIGH SCHOOL DOOR REPLACEMENT**
CALHOUN UNIT DISTRICT 40
HARDIN, CALHOUN COUNTY, ILLINOIS

Date: _____

Submitted by: _____
(full name)

(full address) _____
_____
_____

Contact Name: _____

1. OFFER

Having examined the Place of The Work and all matters referred to in the Instructions to Bidders and the Contract Documents prepared by Hurst-Rosche, Inc. for the above mentioned project, we, the undersigned, hereby offer to enter into a Contract to perform the Work for the Sum of _____ dollars, ($_____), in lawful money of the United States of America.

We have included the security Bid Bond as required by the Instruction to Bidders.

All applicable federal taxes are excluded, and State of Illinois and City of Hardin taxes are excluded from the Bid Sum.

2. REVIEW OF BID DOCUMENTS

The bidder represents that he is skilled and experienced in the use and interpretation of drawings and specifications such as those included in the bid documents for this contract. He has carefully reviewed the drawings, specifications and other bid documents, and has found them free of ambiguities and sufficient for bid purposes. Further, the Bidder has carefully examined the site of the work and, from his own observations, has satisfied himself as to the nature and location of the work; the character, quality and quantity of materials; the difficulties likely to be encountered; and any other items which may affect the performance of the Work. He has based his bid solely on these documents and observations, and has not relied in any way on any explanation or interpretation, oral or written, from any other source.

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3. CONTRACTOR'S FEE FOR CHANGES IN WORK

Undersigned herein indicates a single percentage, not to exceed 12% for own forces and not to exceed 8% for subcontractors, for overhead and profit to be added to net extra job cost for changes in the work required to be performed by:

a) Own Forces ____% b) Subcontractors ____%

Undersigned herein indicates a single percentage, not less than 10% for own forces and not less than 5% for subcontractors, for overhead and profit to be added to net credit for job costs for changes in the work required to be performed by:

a) Own Forces ____% b) Subcontractors ____%

Percentages named above shall not include any items of insurance, bond or taxes since these are considered job cost items in contractor's quotations for changes in the work.

Any percentages indicated which are higher or lower than the maximum or minimum in the typewritten language herewith, shall be disregarded and typewritten figure used.

4. CONTRACT TIME

Undersigned agrees that, if awarded the Contract for Work bid upon herein, work will start on date designated in a written Notice to Proceed order issued by the Architect and will be completed in accordance with the contract documents, with all phases of work completed and operational and ready for acceptance by the Owner no later than as required by the Contract Agreement.

5. ADDENDA

The following Addenda have been received. The modifications to the Bid Documents noted below have been considered and all costs are included in the Bid Sum.

Addendum # _____ Dated _____; Addendum # _____ Dated _____
Addendum # _____ Dated _____; Addendum # _____ Dated _____

6. APPENDICES

The following documents are attached to and made a condition of the Bid:

Bid Bond in form of .....
Document 004300 - Procurement Form Supplements including:
Appendix A - List of Subcontractors.
Appendix B – List of Alternates

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7. EQUAL EMPLOYMENT OPPORTUNITY

During performance of this contract, Contractor agrees as follows:

a. The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex or national origin. Such action shall include, but not be limited to, the following: Employment, upgrading, demotion, or transfer, recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.

b. The contractor will in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex or national origin.

c. The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract of understanding, notice advising the labor union or worker's representative of the contractor's commitments under Section 202 of Executive Order 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

d. The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and by the rules, regulations, and relevant orders of the Secretary of Labor.

e. The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by the rules, regulations, and order of the Secretary of Labor pursuant thereto, and will permit access to his books, records and accounts by the Department of the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations and orders.

f. In the event of the contractor's non-compliance with the nondiscrimination clauses of this contract or with any such rules, regulations or orders, this contract may be canceled, terminated or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies involved as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation or order of the Secretary of Labor, or as otherwise provided by law.

g. The contractor will include the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the Department may direct as a means of enforcing such provisions including

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sanctions for noncompliance: Provided, however, that in the event the contractor becomes involved in, or is threatened with, litigation with the subcontractor or vendor as a result of such direction by the Department, the contractor may request the United States to enter into such litigation to protect the interest of the United States.

8. NOT BARRED

The contractor by submitting its bid certifies that the Contractor is not barred from bidding on the contract as a result of a conviction for either bid-rigging or bid-rotating. 720 ILCS 5/33/E-11.

9. DRUG FREE WORKPLACE

The Contractor by submitting its bid certifies that it will provide a drug free workplace and that it is in compliance with the requirements of the Drug Free Workplace Act 30 ILCS 580.1 et. seq., and the Substance Abuse Prevention on Public Works Projects Act PA095-0635.

10. SEXUAL HARASSMENT POLICY

The Contractor by submitting its bid certifies that it has a written sexual harassment, (ii) a description of sexual harassment, utilizing examples; (iv) an internal complaint process including penalties (v) the legal resource, investigative and compliant process through the Illinois Department of Human Rights: (vi) directions on how to contact the Department and Commission; and (vii) protection against retaliation for exercising rights under the policy in accordance with 775 ILCS 5/2-105(A)(4).

11. DEBARMENT AND SUSPENSION

Contracts funded with Federal grant monies may not be awarded to contractors that have been debarred or suspended from receiving Federal monies pursuant to the Federal Excluded Parties List System.

12. CRIMINAL RECORDS CHECKS

The Contractor by submitting its bid certifies that it will submit to background screening those employees, including subcontract employees, which will be working on any district project. This information is to be provided in accordance with the requirements of 105 ILCS 5/10-21.9. The Contractor by submitting its bid understands that employees found to be in violation of the Illinois School Code will not be permitted to work on school grounds.

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13. BID FORM SIGNATURES

The Corporate Seal of

_____
(Bidder - print the full name of your firm)
was hereunto affixed in the presence of:

_____
(Authorized signing officer Title)

(Seal)

_____
(Authorized signing officer Title)

(Seal)

If the Bid is a joint venture or partnership, add additional forms of execution for each member of the joint venture in the appropriate form or forms as above.

END OF DOCUMENT

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DOCUMENT 004300 - PROCUREMENT FORM SUPPLEMENTS

To: **CALHOUN UNIT DISTRICT 40**
101 CALHOUN AVENUE
HARDIN, ILLINOIS 62047

Project: **CALHOUN HIGH SCHOOL DOOR REPLACEMENT**
CALHOUN UNIT DISTRICT 40
HARDIN, CALHOUN COUNTY, ILLINOIS

Date: _____

Submitted by: _____
(full name)

(full address) _____
_____
_____

Contact Name: _____

In accordance with Document 002114 - Instructions to Bidders - AIA and Document 004113 - Bid Form - Stipulated Sum, we include the Appendices to Bid Form Supplements listed below. The information provided shall be considered an integral part of the Bid Form.

The following Appendices are attached to this document:

Appendix A - List of Subcontractors: Include names of all Subcontractors and portions of the Work each Subcontractor will perform.

Appendix B - List of Alternates: Include cost variation to Bid Sum applicable to the Work described in Section 01 20 00-Price and Payment Procedures.

BID FORM SUPPLEMENTS SIGNATURES

The Corporate Seal of

_____
(Bidder - print the full name of your firm)

was hereunto affixed in the presence of:

_____
(Authorized signing officer Title)

(Seal)

_____
(Authorized signing officer Title)

(Seal)

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APPENDIX A - LIST OF SUBCONTRACTORS

Herewith is the list of subcontractors referenced in the bid submitted by:

(Bidder) _____

To (Owner) CALHOUN UNIT DISTRICT 40

Dated _____ and which is an integral part of the Bid Form.

The following work will be performed (or provided) by subcontractors and coordinated by us:

WORK SUBJECT	NAME

DO NOT COPY

APPENDIX B - LIST OF ALTERNATES

The following is the list of alternates referenced in the bid submitted by:

(Bidder) _____

To (Owner) CALHOUN UNIT DISTRICT 40

Dated _____ and which is an integral part of the Bid Form.

The following amounts shall be added to or deducted from the Bid Sum. Refer to Section 012000 - Price and Payment Procedures: Schedule of Alternates for description of alternates.

Alternate Bid #1 (Add) $ _____

Alternate Bid #2 (Add) $ _____

Alternate Bid #3 (Add) $ _____

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END OF DOCUMENT

DOCUMENT 005214 - AGREEMENT FORM - AIA

1.1 SUMMARY

A. Document Includes:
1. Contract Agreement.

B. Related Documents:
1. Document 007214 - General Conditions – AIA Stipulated Sum.
2. Document 007313 - Supplementary Conditions - AIA.

1.2 CONTRACT AGREEMENT BETWEEN OWNER AND CONTRACTOR

A. THIS AGREEMENT, made and entered into as of the _____ day of _____ in the year of Two Thousand and _____by and between _____ hereinafter and in the Contract Documents called "Contractor" and the **CALHOUN UNIT DISTRICT 40**, hereinafter and in the Contract Documents called "Owner."

B. WITNESSETH: That for and in consideration of the mutual covenants and agreements, hereinafter stated, Contractor and Owner covenant and agree as follows:

C. THE CONTRACT WORK:

1. Contractor covenants and agrees to furnish all labor, materials, equipment, transportation, construction plant and facilities necessary to perform all Work required by the Contract Documents, for the Project entitled:

a. CALHOUN HIGH SCHOOL DOOR REPLACEMENT
CALHOUN UNIT DISTRICT 40
HARDIN, CALHOUN COUNTY, ILLINOIS

as shown on Drawings and described in Specifications prepared by Hurst-Rosche, Inc., Hillsboro, Illinois, acting as, and in these Contract Documents referred to as Architect/Engineer and covenants and agrees to do and perform all acts and things required of Contractor by this Contract and the Contract Documents.

D. TIME OF COMPLETION:

1. Work performed under this Contract shall be commenced on date stipulated in written Notice to Proceed and, subject to authorized adjustments, work at the site may begin June 1, 2020. Substantial Completion shall be achieved no later than August 7, 2020.

E. CONTRACT SUM AND TERMS OF PAYMENT:

1. Contract Sum: The Owner, if Contractor shall faithfully fulfill and perform this Contract, covenants and agrees to pay Contractor in current funds, subject to

additions and deductions by Change Order as provided in the Contract Documents, the sum of _____Dollars ($_____), which sum shall constitute the Contract Sum, said Contract Sum being derived from Contractor's Bid dated _____. It is understood and agreed that should there be any increase in wage rates, or in cost of materials or equipment, or in any other of Contractor's costs or should Contractor be compelled to pay premium wages, or for overtime work, during the life of this Contract and/or prior to completion of Contractor's work thereunder, Contractor shall absorb all such increased costs, without addition to the Contract Sum except when otherwise expressly provided in Contract Documents.

2. Payments: Owner shall make payments for work performed under the Contract as provided in Article Nine of the General Conditions and in accordance with other applicable articles of the Supplementary Conditions and Contract Documents.

3. Contractor's Fees for Changes in Work: In accordance with Contractor's bid, it is agreed that the following percentages for overhead and profit shall be applied on work added to or omitted from the Contract by written Change Order approved by Architect and Owner in advance of performance of the work.

Additional Work performed by:

1. Own Forces ____% 2. Subcontractors ___%

Omitted Work originally required by:

1. Own Forces ____% 2. Subcontractors ____%

Note: Taxes (when applicable) are considered as incidentals, as well as bonds and insurance costs and are not included in the percentages listed above nor should they be added to change orders submitted.

F. CONTRACT DOCUMENTS:

1. Contract Documents include the Contract Agreement, Contractor's Bid as accepted by Owner, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, and all Addenda issued prior to and all Modifications issued after execution of the Contract Agreement.

2. Bidder’s attention is directed to the fact that all Federal and Illinois State Laws, municipal ordinances and regulations of any and all authority having jurisdiction over construction of the project shall apply to the contract throughout, and they will be deemed to be included in the contract the same as though herein written out in full. Successful Bidders shall be required to comply with 777 ILCS 10 concerning equal employment opportunities; comply with 30 ILCS 570 concerning the employment of citizens of the State of Illinois; comply with 820 ILCS 265 concerning substance abuse prevention on public works projects; and

comply with 820 ILCS 130 concerning prevailing wages.

G. ILLINOIS LABOR:

Contractor shall comply with all Illinois statutory requirements regarding labor, including, but not limited to, the following:

1. Illinois Public Act 77-1552 and Chapter 48, Sections 39S-1 through 39S-12 of the Illinois Revised Statutes regulating wages of laborers, mechanics and other workers employed in any public works and known as the "Prevailing Wage Act," which provides in part that all laborers, mechanics and workers performing work under the Contract shall be paid not less than the prevailing rate of wages as determined by the Illinois Department of Labor (820 ILCS 130).

2. Illinois Public Act 83-1472, Article 2 and Chapter 48, Sections 2201 through 2207, 1984 of the Illinois Revised Statutes pertaining to hiring of Illinois labor and known as the "Illinois Preference Act (30 ILCS 570)."

3. "Illinois Human Rights Act of 1980," Chapter 68, Illinois Revised Statutes, and the Rules and Regulations, Title 44, Section 750 of the Illinois Administrative Code, Illinois Department of Human Rights; pertaining to equal employment opportunity (777 ILCS 10).

H. PERFORMANCE BOND AND LABOR AND MATERIAL PAYMENT BOND:

1. Within ten (10) days immediately following date of his receipt of this contract, Contractor shall furnish Owner the signed Contract and Performance Bond and Labor and Material Payment Bond as required by and in accordance with the terms of Contract Documents in a penal sum of one hundred percent (100%) of the Contract sum.

2. In the event Contractor fails to furnish Owner such Contract and Bonds within said period, this Contract shall thereupon become null and void at Owner's option, exercised by written registered notice and mailed to Contractor by said Owner within five (5) days thereafter. Owner may then retain and enforce as liquidated damages, bid guarantee heretofore deposited with it in connection with Contractor's proposal for this Contract or the difference between his bid and a subsequent awarded bid, whichever is lesser.

I. IN WITNESS HEREOF, the parties hereto have executed this agreement as of the day and year first written above.

OWNER:

CALHOUN UNIT DISTRICT 40

BY_____

TITLE_____

CONTRACTOR:

Attest: _____

BY_____ BY_____

Secretary

TITLE_____

(Corporate Seal)

END OF DOCUMENT

CONTRACTOR'S AFFIDAVIT FOR FINAL COMPLETION
(To be filed with final request for payment)

STATE OF_____)

COUNTY OF _____)

_____, being first duly sworn upon oath deposes and says:

That he/she is _____ of _____
_____

hereinafter termed "The Contractor" for all work upon the hereinafter termed "Said Project," work for the CALHOUN UNIT DISTRICT 40, under that certain contract between said Contractor and said Owner, bearing date of _____ pertaining to said work.

Affiant further states, of his/her own knowledge, that all bills incurred by the Contractor, for services, labor and material furnished, for work done by the Contractor under said Contract, or in connection with said project have been paid and all subcontractors who have furnished services, labor or materials have no claim or demand against Owner for any services, labor and/or materials furnished and/or work done by them upon said Project.

Affiant further states that this affidavit is made on behalf of the Contractor for the purpose of obtaining payment of the sum of _____($_____) dollars, which affiant states, upon his/her own knowledge, constitutes the full balance due the Contractor for all services, labor and materials furnished and work done to and upon Said Project by the Contractor whether under and pursuant to provisions of said Contract and all subsequent modifications thereof and changes therein or otherwise; and that payment of the sum to the Contractor will constitute payment in full on everything due for such services, labor, materials and work, and will fully satisfy any and all claims or demands which Contractor may have or assert against said Owner, arising out of anything done or furnished by the Contractor or occurring in connection with said Project and/or Contract.

_____
CONTRACTOR

By _____

Title _____

Subscribed and Sworn to before me the _____ day of_____, 20____.

_____
NOTARY PUBLIC

(PARTIAL) (FINAL)
WAIVER OF LIEN

STATE OF _____
}SS
COUNTY OF _____

TO WHOM IT MAY CONCERN:

WHEREAS the undersigned has been employed by CALHOUN UNIT DISTRICT 40, hereinafter known as the OWNER,

To Furnish: _____

For the project known as: DOOR REPLACEMENT

For the premises known as: CALHOUN HIGH SCHOOL

Address: CALHOUN UNIT DISTRICT 40, HARDIN, ILLINOIS

THE undersigned, for and in consideration of the dollar amount shown below and other good and valuable considerations, do(es) hereby waive and release under the mechanics' lien statutes of the State where the project premises are located, to the extent of the payment recited below is received by the undersigned and is applicable to lienable labor, services, materials, fixtures, or apparatus, any and all lien or claim or right of lien on the above-described premises and the improvements, fixtures and appurtenances thereon, and on the monies or other considerations due or to become due from the Owner and on all other project-related monies from whatever source, on the account of the above-mentioned labor, services, materials, fixtures, or apparatus furnished by the undersigned for or in connection with the above-described premises.

_____
(Payment amount written in long form)

PAYMENT AMOUNT _____

_____
(Company Name)

_____
(Address)

_____
(City/State/Zip)

_____
(Signature of Officer)

Sworn to and subscribed before me this _____ day of _____.

(Notary Public)

My commission expires: _____

AFFIDAVIT OF PAYMENT TO MATERIAL SUPPLIERS AND SUBCONTRACTORS

STATE OF _____

COUNTY OF _____

_____, being first duly sworn upon oath deposes and says, that he/she entered into a Contract with the CALHOUN UNIT DISTRICT 40, known as the Owner, for furnishing of labor, work services, materials, fixtures, and supplies for DOOR REPLACEMENT at the following described real estate: CALHOUN HIGH SCHOOL.

That for the purpose of said Contract, the following persons, firms or corporations have been contracted with to furnish, have furnished or prepared, or will furnish or prepare labor, services, materials, fixtures, apparatus, machinery or supplies, or are furnishing and preparing material for said construction; that there are due or to become due to them respectively, the amounts set opposite their names for said labor, services, materials, fixtures, apparatus, machinery and supplies as stated; that there are no other contractors outstanding and there is nothing due or to become due any person, firm, or corporation, for labor, services, materials, fixtures, machinery, apparatus, or supplies, other than as stated herewith.

MATERIAL SUPPLIER AND/OR SUBCONTRACTOR	CONTRACT ITEM	CONTRACT AMOUNT	AMOUNT PAID TO DATE	AMOUNT DUE OR TO BECOME DUE

_____
CONTRACTOR

Subscribed and sworn to before me, a Notary Public, this _____day of _____; A.D. 20____.

_____
NOTARY PUBLIC

CONSENT OF SURETY COMPANY TO FINAL PAYMENT
(To be filed with final request for payment)

PROJECT: CALHOUN HIGH SCHOOL DOOR REPLACEMENT
CALHOUN UNIT DISTRICT 40
HARDIN, CALHOUN COUNTY, ILLINOIS

TO: CALHOUN UNIT DISTRICT 40
101 CALHOUN AVENUE
HARDIN, ILLINOIS 62047

CONTRACTOR:
(Name, address)

CONTRACT DATE: BOND NO.:

In accordance with the provisions between Owner and Contractor indicated above, _____
_____
_____ SURETY COMPANY, hereby approves of final payment to Contractor, and agrees that final payment to Contractor shall not relieve Surety Company of any of its obligations to Owner, as set forth in Surety Company's bond.

IN WITNESS WHEREOF, Surety Company has hereunto set its hand this _____ day of _____, 20___.

_____ _____
Attest: Surety Company

(Seal):

_____
Signature of Authorized Representative

_____
Title

DOCUMENT 007214 - GENERAL CONDITIONS – AIA STIPULATED SUM

1.1 SUMMARY

A. Document Includes:
   1. General Conditions.

B. Related Documents:
   1. Document 005214 – Agreement Form – AIA Stipulated Sum.
   2. Document 007313 – Supplementary Conditions - AIA.

1.2 GENERAL CONDITIONS

A. AIA Document A201-2007, General Conditions of the Contract for Construction, is the General Conditions of the Contract.

1.3 SUPPLEMENTARY CONDITIONS

A. Refer to Document 007313 for modifications to General Conditions.

END OF DOCUMENT

DOCUMENT 007313 - SUPPLEMENTARY CONDITIONS - AIA

1.1 SUMMARY

A. Document Includes:
   1. General Conditions.
   2. Supplementary Conditions.

B. Related Documents:

   1. Document 004113 – Bid Form – Stipulated Sum
   2. Document 005214 – Agreement Form - AIA

1.2 GENERAL CONDITIONS

A. The General Conditions of the Contract for Construction, AIA Document A201, Sixteenth Edition, 2007, Articles 1 through 15, is a part of this Contract and is incorporated herein as fully as if here set forth. Copies of the General Conditions are on file and may be reviewed at the offices of the Architect, or may be obtained from the American Institute of Architects, St. Louis Chapter, 911 Washington St., #225, St. Louis, Missouri 63101-1203.

1.3 SUPPLEMENTARY CONDITIONS

A. The following supplements modify, change, delete from or add to the "General Conditions of the Contract for Construction," AIA Document A201, Sixteenth Edition, 2007. Where any Article of the General Conditions is modified or changed or any Paragraph, Subparagraph or Clause thereof is modified, changed or deleted by these supplements, the unaltered provisions of that Article, Paragraph, Subparagraph or Clause shall remain in effect.

1.4 REFERENCE TO DIVISION 01

A. Where provisions of General Conditions relate to project administrative or work-related requirements of the Contract, and those provisions differ from those specified in Division 01, provisions outlined in Division 01 shall prevail.

1.5 ARTICLE 1: GENERAL PROVISIONS

A. 1.5.1 In the second line following the word "Specifications" insert the words "and Project Manual,".

B. 1.6 TRANSMISSION OF DATA IN DIGITAL FORM: Add new subparagraph 1.6.1:

   1.6.1 Electronic drawings provided by the Owner or Architect are for informational purposes only and are not intended for any other use. The paper copies provided are a true representation of the completed design and if discrepancies should exist

between the paper copy and the electronic copy, the paper copy shall govern.

C. Delete Subparagraph 1.1.8 its entirety and substitute the following:

1.1.8 INITIAL DECISION MAKER

The Initial Decision Maker is the person identified in the Agreement to render initial decisions on Claims in accordance with Section 15.2 and certify termination of the Agreement under Section 14.2.2. If the Initial Decision Maker is not specifically identified in the Agreement, the responsibilities of the Initial Decision Maker shall default to the Architect.

D. DEFINITIONS: Add Paragraph 1.1.9

1.1.9 PROJECT MANUAL

The Project Manual is the collection of documents which includes the bidding requirements, sample forms and, certain Contract Documents such as the Conditions of the Contract and the Specifications.

1.6 ARTICLE 2: OWNER

A. 2.2 INFORMATION AND SERVICES REQUIRED OF THE OWNER:

B. Delete Subparagraphs 2.2.3 and 2.2.5 in their entireties and substitute the following:

2.2.3 The Owner shall, at the request of the Contractor, furnish to Contractor any survey or other similar descriptive information of project site that Owner has in his possession. Upon demonstration of need by Contractor for specific additional survey information, Owner shall obtain and furnish such information to Contractor.

2.2.5 Contractor will be furnished, free of charge, 4 copies of Drawings, Specifications, and Project Manual as set forth in Division 1 of the Specifications. Additional copies will be furnished to Contractor at cost of reproduction, postage and handling.

1.7 ARTICLE 3: CONTRACTOR

3.2. REVIEW OF CONTRACT DOCUMENTS AND FIELD CONDITIONS BY CONTRACTOR: Add Subparagraphs 3.2.5 and 3.2.6:

3.2.5 The Contractor by executing the Contract represents that he has carefully examined the Site of the Work at each location and that he has full knowledge of and fully understands the facilities, site conditions, difficulties and restrictions attending performance of the Work. Contractor further represents that he has taken all required measurements and carefully inspected existing constructions, irregularities and interferences which may affect the Work. No additional compensation will be allowed for conditions increasing Contractor’s cost which were not known to or appreciated by him prior to executing the Contract if they

could have been discovered by him following the foregoing procedures and thoroughly informing himself of all existing conditions affecting the Work.

3.2.6 Contractor will not, however, be required to excavate, penetrate or demolish any constructions or other work and conditions prior to executing the Contract in order to uncover and/or expose concealed conditions that affect the Work. If, during course of construction, Contractor uncovers conditions that affect the work that could not have been known and understood by the above described careful examination of conditions affecting the Work, he shall promptly notify the Architect, in writing, who will determine if claims for additional costs or extensions of time are justified. If such claims are found to be justified, Contract will be modified in accordance with Article 7 of the General Conditions.

1.8 ARTICLE 4: ARCHITECT

A. 4.1 GENERAL: Delete Subparagraph 4.1.1 in its entirety and substitute the following:

4.1.1 The Owner shall retain an architect or engineer lawfully licensed to practice architecture or engineering or an entity lawfully practicing architecture or engineering in the jurisdiction where the Project is located. That person or entity is identified as the Architect in the Agreement and is referred to throughout the Contract Documents as if singular in number.

1.9 ARTICLE 5: SUBCONTRACTORS

A. 5.2 AWARD OF SUBCONTRACTS AND OTHER CONTRACTS FOR PORTIONS OF THE WORK: Add new Subparagraph 5.2.1.1.:

5.2.1.1. Within ten (10) days of notification of acceptance of his proposal, Contractor shall submit the names of those to whom he intends to award a Subcontract.

1.10 ARTICLE 6: CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

A. 6.1 OWNER'S RIGHT TO PERFORM CONSTRUCTION AND TO AWARD SEPARATE CONTRACTS: Delete Subparagraph 6.1.3 in its entirety and substitute the following:

6.1.3 General Contractor shall have responsibility of coordinating efforts of all contractors and to maintain overall direction of job progress. Each Contractor shall coordinate operational methods with other contractors and encourage communications among all trades. All Contractors shall make other contractors aware of any problems, delays in materials shipments or lack of work force, and assist other contractors in maintaining job momentum and direction of overall project.

1.11 ARTICLE 9: PAYMENTS AND COMPLETION

A. 9.3 APPLICATIONS FOR PAYMENT: Add new Subparagraph 9.3.1.3

9.3.1.3.: Until Substantial Completion, the Owner will pay 90 percent of the amount due Contractor on account of approved progress payments.

1.12 ARTICLE 11: INSURANCE AND BONDS

A. 11.1.1 In the first line following the word "maintain," insert the words "in a company or companies licensed to do business in the state in which the project is located and rated 'A' or better by A.M. Best Co.."

B. Add new Subparagraph 11.1.1.9:

11.1.1.9 General Liability Insurance shall be comprehensive, on occurrence, and shall include:

- Premises and Operations.
- Independent Contractors.
- Products and Completed Operations.
- Broad Form Property Damage.
- Personal Injury.
- Explosion, Collapse and Underground damage where the hazard exists.
- Contractual liability.

C. Add the following Sub-Subparagraphs to Subparagraph 11.1.2:

11.1.2.1 The insurance required by Subparagraph 11.1.1 shall be on a project specific basis and written for not less than the following, or greater if required by law:

1. Worker's Compensation:

a. State: Statutory
b. Applicable Federal: Statutory
c. Employer's Liability: $500,000

2. Comprehensive General Liability:

a. Bodily Injury:

$1,000,000 Combined Single Limit

b. Property Damage:

$1,000,000 Combined Singled Limit

Limit Coverage for bodily injury and property damage per occurrence and in the same aggregate limit will be accepted in lieu of the separate limits specified above.

3. Personal Injury:

$ 1,000,000	Combined single limit including owned non-owned, and hired motor vehicle.

4. Comprehensive Automobile Liability:

a. Bodily Injury:

$1,000,000	Combined single limit including owned, non-owned, and hired motor vehicle.

b. Property Damage:

$1,000,000	Combined single limit including owned, non-owned, and hired motor vehicle

c.	$1,000,000	Combined Single

Limit coverage for bodily injury and property damage per occurrence and in the same aggregate limit will be accepted in lieu of the separate limits specified above.

11.1.2.2 Umbrella Form Liability Coverage:

An Umbrella Form Liability coverage to not less than $2,000,000 for any one occurrence and subject to the same aggregate over the Employer's Liability, Comprehensive General Liability, and Comprehensive Automobile Liability coverage is required.

D. Add the following Subparagraph 11.1.3.1:

11.1.3.1 Contractor shall furnish one copy each of Certificates of Insurance herein required for each copy of the Agreement which shall specifically set forth evidence of all coverage required by Paragraph 11.1. The Certificate of Insurance is to be accompanied by AIA Document G715TM-1997 (Supplemental Attachment for ACORD Certificate of Insurance 25-S). Contractor shall furnish to the Owner copies of any endorsements that are subsequently issued amending coverage or limits. The Contractor shall furnish to the Owner notice of any policy cancellation at least 30 days (10 days for non payment of premiums) prior to the effective date of cancellation. The Contractor shall submit copies of subcontractor's Certificates of Insurance prior to the beginning of work.

E. Add the following Subparagraph 11.1.4.1:

11.1.4.1 The Owner and Architect shall be named as additional insureds on ISO form 20331001 by endorsement for the purpose of coverage only with no liability for premium payments. All policies and coverages shall include a waiver of subrogation in favor of the Owner, Architect, and all subconsultants.

F. 11.3. PROPERTY INSURANCE: Delete Subparagraph 11.3.1 in its entirety and substitute the following:

11.3.1: The General Contractor shall be responsible to maintain property (builder's risk) insurance upon the completed value of all work at the site under this contract to the full insurable value thereof. This insurance shall include the interests of the Owner, the General Contractor, Subcontractors, and Sub-subcontractors in the work and as their interests may appear in the work, and shall be an all-risk type policy, including theft, subject to the exclusions generally accepted in the insurance industry. This coverage is not intended to, and shall not, provide coverage for tools, equipment, scaffolding, forms, or other devices used by the Contractors or Subcontractors in performing work under this contract.

11.3.1.2 Delete this Paragraph in its entirety.

G. Delete Subparagraphs 11.3.1.3 in its entirety and substitute the following:

11.3.1.3 If the property insurance requires deductibles, the Contractor shall pay costs not covered because of such deductibles.

1.13 ARTICLE 13: MISCELLANEOUS PROVISIONS

A. Add new paragraph 13.8 as follows:

13.8 REFERENCED STANDARDS

13.8.1 No provision of any referenced standard specification, manual or code; whether or not specifically incorporated by reference in the Contract Documents; shall be effective to change the duties and responsibilities of Owner, Contractor or Architect, or any of their consultants, agents or employees from those set forth in the Contract Documents, nor shall it be effective to assign to Architect, or any of Architect's consultants, agents or employees, any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of Articles 1 through 15.

END OF SECTION

ARTICLE 25: PREVAILING RATE OF WAGES

25.1 Pursuant to Illinois Compiled Statutes 820 ILCS 130/0.01 et seq., these specifications list on the following pages, the Illinois Department of Labor prevailing rate of wages for the county where the contract is being performed and for each craft or type of worker needed to execute the contract.

Calhoun County Prevailing Wage Rates posted on 1/28/2020

Trade Title	Rg	Type	C	Base	Foreman	M-F Overtime	H/W	Pension	Vac	Trng
ASBESTOS ABT-GEN	All	ALL		31.19	31.69	1.5	6.70	17.78	0.00	0.80
ASBESTOS ABT-MEC	All	BLD		31.75	32.75	1.5	8.00	6.25	2.00	0.55
BOILERMAKER	All	BLD		39.00	41.50	1.5	7.07	24.52	0.00	1.05
BRICK MASON	All	BLD		33.38	35.38	1.5	9.10	12.82	0.00	0.87
CARPENTER	All	ALL		39.58	41.08	1.5	7.42	9.25	0.00	0.50
CEMENT MASON	All	ALL		35.25	36.25	1.5	10.00	14.75	0.00	0.45
CERAMIC TILE FINISHER	All	BLD		28.29	28.29	1.5	7.45	6.86	0.00	0.81
ELECTRIC PWR EQMT OP	All	ALL		44.38		1.5	8.75	12.43	0.00	0.44
ELECTRIC PWR GRNDMAN	All	ALL		28.54		1.5	8.75	8.00	0.00	0.29
ELECTRIC PWR LINEMAN	All	ALL		51.79	54.71	1.5	8.75	14.50	0.00	0.52
ELECTRIC PWR TRK DRV	All	ALL		33.17		1.5	8.75	9.29	0.00	0.33
ELECTRICIAN	All	ALL		43.41	45.66	1.5	9.50	12.96	0.00	0.22
ELECTRONIC SYSTEM TECH	All	BLD		32.09	34.09	1.5	9.50	7.11	0.00	0.40
ELEVATOR CONSTRUCTOR	All	BLD		50.09	56.35	2.0	15.57	17.51	4.50	0.62
FLOOR LAYER	All	BLD		34.21	34.96	1.5	7.42	9.25	0.00	0.50
GLAZIER	All	BLD		35.91	37.91	1.5	6.25	11.23	0.00	0.68
HEAT/FROST INSULATOR	All	BLD		38.86	39.96	1.5	10.50	12.86	0.00	0.75
IRON WORKER	All	ALL		34.50	36.50	1.5	10.46	17.00	0.00	0.42
IRON WORKER	All	HWY		33.11	34.86	1.5	34.86	15.59	0.00	0.70
LABORER	All	ALL		30.69	31.19	1.5	6.70	17.78	0.00	0.80
MACHINIST	All	BLD		48.93	51.43	1.5	7.68	8.95	1.85	1.32
MARBLE FINISHER	All	BLD		27.48	0.00	1.5	6.45	5.70	0.00	0.58
MILLWRIGHT	All	ALL		39.58	41.08	1.5	7.42	9.25	0.00	0.50
OPERATING ENGINEER	All	BLD	1	38.80	41.80	1.5	13.35	18.65	0.00	1.05
OPERATING ENGINEER	All	BLD	2	37.67	41.80	1.5	13.35	18.65	0.00	1.05
OPERATING ENGINEER	All	BLD	3	33.19	41.80	1.5	13.35	18.65	0.00	1.05
OPERATING ENGINEER	All	BLD	4	33.25	41.80	1.5	13.35	18.65	0.00	1.05
OPERATING ENGINEER	All	BLD	5	32.92	41.80	1.5	13.35	18.65	0.00	1.05
OPERATING ENGINEER	All	BLD	6	41.35	41.80	1.5	13.35	18.65	0.00	1.05
OPERATING ENGINEER	All	BLD	7	41.65	41.80	1.5	13.35	18.65	0.00	1.05
OPERATING ENGINEER	All	BLD	8	41.93	41.80	1.5	13.35	18.65	0.00	1.05

Calhoun County Prevailing Wage Rates posted on 1/28/2020

Trade Title	Rg	Type	C	Base	Foreman	M-F Overtime	H/W	Pension	Vac	Trng
OPERATING ENGINEER	All	BLD	9	39.80	41.80	1.5	13.35	18.65	0.00	1.05
OPERATING ENGINEER	All	HWY	1	37.30	40.30	1.5	13.35	18.65	0.00	1.05
OPERATING ENGINEER	All	HWY	2	36.17	40.30	1.5	13.35	18.65	0.00	1.05
OPERATING ENGINEER	All	HWY	3	31.69	40.30	1.5	13.35	18.65	0.00	1.05
OPERATING ENGINEER	All	HWY	4	31.75	40.30	1.5	13.35	18.65	0.00	1.05
OPERATING ENGINEER	All	HWY	5	31.42	40.30	1.5	13.35	18.65	0.00	1.05
OPERATING ENGINEER	All	HWY	6	39.85	40.30	1.5	13.35	18.65	0.00	1.05
OPERATING ENGINEER	All	HWY	7	40.15	40.30	1.5	13.35	18.65	0.00	1.05
OPERATING ENGINEER	All	HWY	8	40.43	40.30	1.5	13.35	18.65	0.00	1.05
OPERATING ENGINEER	All	HWY	9	38.30	40.30	1.5	13.35	18.65	0.00	1.05
PAINTER	All	BLD		31.55	33.05	1.5	6.20	12.02	0.00	0.70
PAINTER	All	HWY		32.75	34.25	1.5	6.20	12.02	0.00	0.70
PAINTER OVER 30 FT.	All	BLD		32.55	34.05	1.5	6.20	12.02	0.00	0.70
PAINTER PWR EQMT	All	BLD		32.55	34.05	1.5	6.20	12.02	0.00	0.70
PAINTER PWR EQMT	All	HWY		33.75	35.25	1.5	6.20	12.02	0.00	0.70
PILEDRIVER	All	ALL		39.58	41.08	1.5	7.42	9.25	0.00	0.50
PIPEFITTER	All	BLD		43.96	46.16	1.5	5.00	10.00	0.00	0.60
PLASTERER	All	BLD		33.75	35.25	1.5	10.00	9.90	0.00	0.50
PLUMBER	All	BLD		43.96	46.16	1.5	5.00	10.00	0.00	0.60
ROOFER	All	BLD		33.30	35.30	1.5	9.10	8.90	0.00	0.41
SHEETMETAL WORKER	All	BLD		30.38	32.48	1.5	7.14	12.21	0.00	0.73
SPRINKLER FITTER	All	BLD		42.31	45.31	1.5	8.72	12.95	0.00	1.10
TERRAZZO FINISHER	All	BLD		31.24	0.00	1.5	6.45	4.37	0.00	0.42
TERRAZZO MASON	All	BLD		32.53	32.83	1.5	6.45	5.87	0.00	0.45
TRUCK DRIVER	All	ALL	1	38.17	42.29	1.5	13.00	6.60	0.00	0.25
TRUCK DRIVER	All	ALL	2	38.71	42.29	1.5	13.00	6.60	0.00	0.25
TRUCK DRIVER	All	ALL	3	39.01	42.29	1.5	13.00	6.60	0.00	0.25
TRUCK DRIVER	All	ALL	4	39.34	42.29	1.5	13.00	6.60	0.00	0.25
TRUCK DRIVER	All	ALL	5	40.39	42.29	1.5	13.00	6.60	0.00	0.25
TRUCK DRIVER	All	O&C	1	30.54	33.83	1.5	13.00	6.60	0.00	0.25
TRUCK DRIVER	All	O&C	2	30.97	33.83	1.5	13.00	6.60	0.00	0.25
TRUCK DRIVER	All	O&C	3	31.21	33.83	1.5	13.00	6.60	0.00	0.25
TRUCK DRIVER	All	O&C	4	31.47	33.83	1.5	13.00	6.60	0.00	0.25
TRUCK DRIVER	All	O&C	5	32.31	33.83	1.5	13.00	6.60	0.00	0.25

DRAWING NO.	TITLE
GENERAL	
G-101	COVER SHEET
A-101	PARTIAL FLOOR PLAN
A-102	PARTIAL FLOOR PLAN
A-103	PARTIAL FLOOR PLAN

All drawings dated February 17, 2020

END 008600.

SECTION 011000 - SUMMARY

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Contract description.

B. Contractor's use of site and premises.

C. Owner occupancy.

D. Specification Conventions.

E. Contractor’s Duties.

F. Contract Documents.

1.2 CONTRACT DESCRIPTION

BASE BID: Work includes repair and replacement of existing doors, door frames, glazing and hardware at Calhoun High School.

ALTERNATE BID #1: Work includes repair and replacement of additional existing doors, door frames, glazing and hardware at Calhoun High School.

ALTERNATE BID #2: Work includes repair and replacement of additional existing doors, door frames, glazing and hardware at Calhoun High School.

ALTERNATE BID #3: Work includes preparation, priming and painting of doors and door frames at Calhoun High School.

1.3 CONTRACTOR'S USE OF SITE AND PREMISES

A. Limit use of site and premises to allow:
   1. Owner occupancy.
   2. Work by Others and Work by Owner.
   3. Use of site and premises by the public.

B. Construction Operations: Limited to areas noted on Drawings.

C. Utility Outages and Shutdown: Coordinate with owner to avoid interruption of normal operations.

D. Allow for public use of all adjoining streets and sidewalks.

E. Light duty vehicle parking is permitted. All parking lots and sidewalks are to be restored to their original condition.

1.4 OWNER OCCUPANCY

A. The Owner will occupy the premises during the entire period of construction for the conduct of normal operations.

B. Cooperate with Owner to minimize conflict, and to facilitate Owner's operations.

C. Schedule the Work to accommodate Owner occupancy.

1.5 SPECIFICATION CONVENTIONS

A. These specifications are written in imperative mood and streamlined form. This imperative language is directed to the Contractor, unless specifically noted otherwise. The words “shall be” are included by inference where a colon (:) is used within sentences or phrases.

1.6 CONTRACTOR’S DUTIES

A. Except as specifically noted, Contractor shall provide and pay for:
   1. All labor, materials, and equipment used for construction of and/or incorporated into the project.
   2. All tools, construction equipment and machinery.
   3. Required building permits, and all inspection fees by governmental authorities.
   4. Other facilities and services necessary for proper execution and complete of work.

B. Owner is exempt from sales tax on product permanently incorporated in work.
   1. Obtain sales tax exemption certificate number from Owner.
   2. Place exemption certificate number on invoices for materials incorporated in work.
   3. Upon completion of work, file with Owner a notarized statement that all purchases made under exemption certificate were entitled to be exempt and furnish copies of invoice to Owner.
   4. Pay legally assessed penalties for improper use of exemption certificate number.

C. Comply with codes, ordinances, rules, regulations, orders, and other legal requirements of public authorities which bear on performance of work.

D. Promptly submit written notice to Architect/Engineer of observed variance of contract documents from legal requirements.
   1. It is not the Contractor’s responsibility to make certain that drawings and specifications comply with codes and regulations.
      a. Appropriate modifications to contract documents will account for/reflect necessary changes.
      b. Assume responsibility for work known to be contrary to such requirements if written notice is not provided by the Contractor to the Architect.

E. Enforce strict discipline and good order among employees.

F. Do not unreasonably encumber site with materials or equipment.

G. Do not load structure with weight that will endanger structure.

H. Assume full responsibility for protection and safe-keeping of products stored on premises.

I. Move any stored products which interfere with operations of Owner or other Contractors.

J. Obtain and pay for use of additional storage or work areas needed for operations.

K. The School Board shall prohibit the use of tobacco on school property when the property is being used for any school purposes. Tobacco shall mean cigarette, cigar, pipe or tobacco in any other form including smokeless tobacco which is any loose, cut, shredded, ground, powdered, compressed or leaf tobacco that is intended to be placed in the mouth without being smoked. All members of work crews must remain fully clothed and refrain from using obscene or profane language during these same time parameters. School purposes include, but are not limited to, all interscholastic or extracurricular athletic, academic, or other events sponsored by the School Board or in which students of the District participate.

L. Contractor shall maintain building free from entrance of water at all times during construction.

M. Contractor shall furnish, erect and maintain temporary ladders, ramps, or hoists as may be required for performance of his work.
   1. All such equipment shall be substantially designed, constructed, and maintained in accordance with applicable federal, state, and local laws, ordinances, and regulations, and shall be promptly removed when no longer needed.

N. Contractor shall design, furnish, erect, maintain, and move all ladders and scaffolding required for this work.
   1. All ladders and scaffolding shall be designed, constructed, and maintained in accordance with applicable federal, state, and local law, ordinances, and regulations, and shall be promptly removed when no longer needed.

1.7 CONTRACT DOCUMENTS

A. Contractor will be furnished free of charge four (4) copies of drawings and specifications.

B. On request, additional copies will be furnished to Contractor at cost of reproduction, postage and handling.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION

SECTION 012000 - PRICE AND PAYMENT PROCEDURES

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Schedule of values.

B. Applications for payment.

C. Change procedures.

D. Defect assessment.

E. Alternates.

1.2 SCHEDULE OF VALUES

A. Submit printed schedule on AIA Form G703 - Continuation Sheet for G702. Contractor's standard form or electronic media printout will be considered.

B. Submit Schedule of Values in duplicate within 10 days after date established in Notice to Proceed.

C. Format: Utilize Table of Contents of this Project Manual. Identify each line item with number and title of major specification Section. Identify site mobilization, bonds and insurance.

D. Include separately from each line item, direct proportional amount of Contractor's overhead and profit.

E. Revise schedule to list approved Change Orders, with each Application For Payment.

1.3 APPLICATIONS FOR PAYMENT

A. Submit three copies of each application on AIA Form G702-Application and Certificate for Payment. Contractor’s standard form or electronic media printout will be considered.

B. Content and Format: Utilize Schedule of Values for listing items in Application for Payment.

C. Submit updated construction schedule with each Application for Payment.

D. Payment Period: Submit at intervals stipulated in the Agreement.

E. Submit lien waivers.

F. Application for Progress Payment No. 1 shall be accompanied by a notarized statement on Contractor's letterhead as follows:
   1. I certify that the funds requested for the accompanying Pay Request No. 1 will be used to pay all just and lawful bills against the undersigned and his subcontractors for labor, material and equipment employed in the performance of the work. I further certify that such bills will be paid no later than ten (10) calendar days from date of receipt of the Owner's disbursement.
   2. Execute statement with signature of a responsible officer of contracting firm.

G. Each subsequent application for progress payment shall be accompanied by the following supporting documents:
   1. Partial or final waivers of lien in monetary amount from Contractor, each material supplier and/or subcontractor reflecting amounts incorporated into preceding request for progress payment.
   2. A notarized Affidavit of Payment to Material Suppliers and Subcontractors.
      1. Affidavit shall be submitted in exact text as exhibit furnished by Architect/Engineers, signed by Contractor or Subcontractor.
      2. Include unit item, actual amount of contract without overhead or profit, amount paid to date, and amount to become due (balance of account).

H. Progress payments will be made for materials and equipment not incorporated in the work provided that:
   1. Such materials and equipment have been delivered to and suitable stored at site or some other location approved in writing by Owner and Architect/Engineer. All such materials stored off-site shall be marked or tagged with identification of project to which they are assigned.
   2. Contractor submits evidence of title to such materials and equipment.
   3. Care and custody of such materials and equipment and all costs incurred for movement and storage shall be responsibility of Contractor.
   4. Such materials and equipment are suitably insured by Contractor. Contractor shall submit a certificate of insurance showing the Owner as an additional insured and showing amount of insurance coverage of suitable proof that material and equipment are stored in a bonded warehouse.

I. Refer to Section 017000 for additional and related closeout procedures and requirements.

1.4 CHANGE PROCEDURES

A. Submittals: Submit name of individual authorized to receive change documents and be responsible for informing others in Contractor's employ or Subcontractors of changes to the Work.

B. The Architect/Engineer will advise of minor changes in the Work not involving adjustment to Contract Sum/Price or Contract Time by issuing supplemental instructions in writing.

C. The Architect/Engineer may issue a Proposal Request including a detailed description of proposed change with supplementary or revised Drawings and specifications, a change in Contract Time for executing the change with stipulation of overtime work required and

the period of time during which the requested price will be considered valid. Contractor will prepare and submit estimate within four days.

D. Contractor may propose changes by submitting a request for change to Architect/Engineer, describing proposed change and its full effect on the Work. Include a statement describing reason for the change, and effect on Contract Sum/Price and Contract Time with full documentation.

E. Stipulated Sum/Price Change Order: Based on Proposal Request and Contractor's fixed price quotation or Contractor's request for Change Order as approved by Architect/Engineer.

F. Architect/Engineer may issue directive, on Hurst-Rosche, Inc. Change Order form signed by Owner, instructing Contractor to proceed with change in the Work, for subsequent inclusion in a Change Order. Document will describe changes in the Work, and designate method of determining any change in Contract Sum/Price or Contract Time. Promptly execute change.

G. Execution of Change Orders: Architect/Engineer will issue Change Orders for signatures of parties as provided in Conditions of the Contract.

H. Correlation Of Contractor Submittals:
   1. Promptly revise Schedule of Values and Application for Payment forms to record each authorized Change Order as separate line item and adjust Contract Sum/Price.
   2. Promptly revise progress schedules to reflect change in Contract Time, revise sub-schedules to adjust times for other items of work affected by the change, and resubmit.
   3. Promptly enter changes in Project Record Documents.

1.5 DEFECT ASSESSMENT

A. Replace the Work, or portions of the Work, not conforming to specified requirements.

B. If, in the opinion of the Architect/Engineer, it is not practical to remove and replace the Work, the Architect/Engineer will direct appropriate remedy or adjust payment.

C. The defective Work may remain, but unit sum/price will be adjusted to new sum/price at discretion of Architect/Engineer.

D. Defective Work will be partially repaired to instructions of Architect/Engineer, and unit sum/price will be adjusted to new sum/price at discretion of Architect/Engineer.

E. Individual specification sections may modify these options or may identify specific formula or percentage sum/price reduction.

F. Authority of Architect/Engineer to assess defects and identify payment adjustments, is final.

G. Non-Payment For Rejected Products: Payment will not be made for rejected products for any of the following:
   1. Products wasted or disposed of in a manner that is not acceptable.
   2. Products determined as unacceptable before or after placement.
   3. Products not completely unloaded from transporting vehicle.
   4. Products placed beyond lines and levels of required Work.
   5. Products remaining on hand after completion of the Work.
   6. Loading, hauling, and disposing of rejected products.

1.6 ALTERNATES

A. Alternates quoted on Bid Forms will be reviewed and accepted or rejected at Owner's option. Accepted Alternates will be identified in Owner-Contractor Agreement.

B. Coordinate related work and modify surrounding work.

C. Schedule of Alternates:
   1. Alternate Bid #1: Work includes repair and replacement of additional existing doors, door frames, glazing and hardware at Calhoun High School.
   2. Alternate Bid #2: Work includes repair and replacement of additional existing doors, door frames, glazing and hardware at Calhoun High School.
   3. Alternate Bid #3: Work includes preparation, priming and painting of doors and door frames at Calhoun High School.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION

SECTION 013000 - ADMINISTRATIVE REQUIREMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Coordination and project conditions.

B. Preconstruction meeting.

C. Progress meetings.

D. Pre-installation meetings.

E. Cutting and patching.

F. Special procedures.

1.2 COORDINATION AND PROJECT CONDITIONS

A. Coordinate scheduling, submittals, and Work of various sections of Project Manual to ensure efficient and orderly sequence of installation of interdependent construction elements.

B. Verify utility requirements and characteristics of operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, operating equipment.

C. Coordinate space requirements, supports, and installation of mechanical and electrical Work indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts, and conduit, as closely as practicable; place runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.

D. In finished areas except as otherwise indicated, conceal pipes, ducts, and wiring within construction. Coordinate locations of fixtures and outlets with finish elements.

E. Coordinate completion and clean-up of Work of separate sections in preparation for Substantial Completion and for portions of Work designated for Owner's occupancy.

F. After Owner occupancy of premises, coordinate access to site for correction of defective Work and Work not in accordance with Contract Documents, to minimize disruption of Owner's activities.

1.3 PRECONSTRUCTION MEETING

A. Architect/Engineer will schedule meeting after Notice of Award.

B. Attendance Required: Owner, Architect/Engineer, and Contractor.

C. Agenda:
1. Execution of Owner-Contractor Agreement.
2. Submission of executed bonds and insurance certificates.
3. Distribution of Contract Documents.
4. Submission of list of Subcontractors, list of products, schedule of values, and progress schedule.
5. Designation of personnel representing parties in Contract and Architect/Engineer.
6. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders, and Contract closeout procedures.
7. Scheduling.

D. Architect/Engineer will record minutes and distribute copies with reasonable promptness after meeting to participants, with copies to Owner, and those affected by decisions made.

1.4 PROGRESS MEETINGS

A. Schedule and administer meetings throughout progress of the Work at maximum monthly intervals.

B. Architect/Engineer will make arrangements for meetings, prepare agenda with copies for participants, preside at meetings.

C. Attendance Required: Job superintendent, major subcontractors and suppliers, Owner, Architect/Engineer, as appropriate to agenda topics for each meeting.

D. Agenda:
1. Review minutes of previous meetings.
2. Review of Work progress.
3. Field observations, problems, and decisions.
4. Identification of problems impeding planned progress.
5. Review of submittals schedule and status of submittals.
6. Review of off-site fabrication and delivery schedules.
7. Maintenance of progress schedule.
8. Corrective measures to regain projected schedules.
9. Planned progress during succeeding work period.
10. Coordination of projected progress.
11. Maintenance of quality and work standards.
12. Effect of proposed changes on progress schedule and coordination.
13. Other business relating to Work.

E. Architect/Engineer will record minutes and distribute copies with reasonable promptness after meeting to participants, with copies to Owner, and those affected by decisions made.

1.5 PRE-INSTALLATION MEETINGS

A. When required in individual specification sections, convene pre-installation meetings at Project site prior to commencing work of specific section.

B. Require attendance of parties directly affecting, or affected by, Work of specific section.

C. Notify Architect/Engineer four days in advance of meeting date.

D. Prepare agenda and preside at meeting:
   1. Review conditions of installation, preparation and installation procedures.
   2. Review coordination with related work.

E. Architect/Engineer will record minutes and distribute copies with reasonable promptness after meeting to participants, with copies to Owner, and those affected by decisions made.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

3.1 CUTTING AND PATCHING

A. Employ skilled and experienced installer to perform cutting and patching.

B. Submit written request in advance of cutting or altering elements affecting:
   1. Structural integrity of element.
   2. Integrity of weather-exposed or moisture-resistant elements.
   3. Efficiency, maintenance, or safety of element.
   4. Visual qualities of sight exposed elements.
   5. Work of Owner or separate contractor.

C. Execute cutting, fitting, and patching to complete Work, and to:
   1. Fit the several parts together, to integrate with other Work.
   2. Uncover Work to install or correct ill-timed Work.
   3. Remove and replace defective and non-conforming Work.
   4. Remove samples of installed Work for testing.
   5. Provide openings in elements of Work for penetrations of mechanical and electrical Work.

D. Execute work by methods to avoid damage to other Work, and to provide proper surfaces to receive patching and finishing.

E. Cut masonry and concrete materials using masonry saw or core drill.

F. Restore Work with new products in accordance with requirements of Contract Documents.

G. Fit Work tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.

H. Maintain integrity of wall, ceiling, or floor construction; completely seal voids.

I. At penetrations of fire rated walls, partitions, ceiling, or floor construction, completely seal voids with fire rated material to full thickness of penetrated element.

J. Refinish or restore surfaces and finished to match existing finishes. For continuous surfaces, refinish to nearest intersection; for assembly, refinish entire unit.

K. Identify hazardous substances or conditions exposed during the Work to Architect/Engineer for decision or remedy.

3.2 SPECIAL PROCEDURES

A. Materials: As specified in product sections; match existing with new products for patching and extending work.

B. Employ skilled and experienced installer to perform alteration work.

C. Cut, move, or remove items as necessary for access to alterations and renovation Work. Replace and restore at completion.

D. Remove unsuitable material not marked for salvage, including rotted wood, corroded metals, and deteriorated masonry and concrete. Replace materials as specified for finished Work.

E. Remove debris and abandoned items from area and from concealed spaces.

F. Prepare surface and remove surface finishes to permit installation of new work and finishes.

G. Close openings in exterior surfaces to protect existing work from weather and extremes of temperature and humidity.

H. Remove, cut, and patch Work in manner to minimize damage and to permit restoring products and finishes to original condition.

I. Refinish existing visible surfaces to remain in renovated rooms and spaces, to renewed condition for each material, with neat transition to adjacent finishes.

J. Where new Work abuts or aligns with existing, provide smooth and even transition. Patch Work to match existing adjacent Work in texture and appearance.

K. When finished surfaces are cut so that smooth transition with new Work is not possible, terminate existing surface along straight line at natural line of division and submit recommendation to Architect/Engineer for review.

L. Where change of plane of 1/4 inch or more occurs, submit recommendation for providing smooth transition; to Architect/Engineer for review.

M. Trim existing doors to clear new floor finish. Refinish trim to specified condition.

N. Patch or replace portions of existing surfaces which are damaged, lifted, discolored, or showing other imperfections.

O. Finish surfaces as specified in individual product sections.

END OF SECTION

SECTION 013300 - SUBMITTAL PROCEDURES

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Submittal procedures.

B. Construction progress schedules.

C. Proposed products list.

D. Product data.

E. Shop drawings.

F. Samples.

G. Design data.

H. Certificates.

I. Manufacturer's instructions.

1.2 SUBMITTAL PROCEDURES

A. Transmit each submittal with shop drawing submittal form found at the end of this section. A copy of the submittal form must be attached to each copy of the submittal; if not, the submittal will be rejected and returned to the Contractor.

B. Sequentially number transmittal forms. Mark revised submittals with original number and sequential alphabetic suffix.

C. Identify Project, Contractor, subcontractor and supplier; pertinent drawing and detail number, and specification section number, appropriate to submittal.

D. Apply Contractor's stamp, signed or initialed certifying that review, approval, verification of products required, field dimensions, adjacent construction Work, and coordination of information is in accordance with requirements of the Work and Contract Documents.

E. Schedule submittals to expedite Project and deliver to Architect/Engineer at business address. Coordinate submission of related items.

F. For each submittal for review, allow 15 days excluding delivery time to and from Contractor.

G. Identify variations from Contract Documents and product or system limitations which may be detrimental to successful performance of completed Work.

H. Allow space on submittals for Contractor and Architect/Engineer review stamps.

I. When revised for resubmission, identify changes made since previous submission.

J. Distribute copies of reviewed submittals as appropriate. Instruct parties to promptly report inability to comply with requirements.

K. Submittals not requested will not be recognized or processed.

1.3 CONSTRUCTION PROGRESS SCHEDULES

A. Submit initial schedules within 15 days after date of Owner-Contractor Agreement. After review, resubmit required revised data within ten days.

B. Submit revised Progress Schedules with each Application for Payment.

C. Distribute copies of reviewed schedules to Project site file, subcontractors, suppliers, and other concerned parties.

D. Instruct recipients to promptly report, in writing, problems anticipated by projections indicated in schedules.

E. Submit computer generated horizontal bar chart with separate line for each major portion of Work or operation, identifying first work day of each week.

F. Show complete sequence of construction by activity, identifying Work of separate stages and other logically grouped activities. Indicate early and late start, early and late finish, float dates, and duration.

G. Indicate estimated percentage of completion for each item of Work at each submission.

H. Submit separate schedule of submittal dates for shop drawings, product data, and samples, including products identified under Allowances, and dates reviewed submittals will be required from Architect/Engineer. Indicate decision dates for selection of finishes.

I. Indicate delivery dates for products identified under Allowances.

J. Revisions To Schedules:
   1. Indicate progress of each activity to date of submittal, and projected completion date of each activity.
   2. Identify activities modified since previous submittal, major changes in scope, and other identifiable changes.
   3. Prepare narrative report to define problem areas, anticipated delays, and impact on Schedule. Report corrective action taken, or proposed, and its effect including effect of changes on schedules of separate contractors.

1.4 PROPOSED PRODUCTS LIST

A. Within 15 days after date of Owner-Contractor Agreement, submit list of major products proposed for use, with name of manufacturer, trade name, and model number of each product.

B. For products specified only by reference standards, give manufacturer, trade name, model or catalog designation, and reference standards.

1.5 PRODUCT DATA

A. Product Data: Submit to Architect/Engineer for review for limited purpose of checking for conformance with information given and design concept expressed in Contract Documents.

B. Submit number of copies Contractor requires, plus 3 copies Architect/Engineer will retain.

C. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.

D. Indicate product utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.

E. After review, produce copies and distribute in accordance with SUBMITTAL PROCEDURES article and for record documents described in Section 017000.

1.6 SHOP DRAWINGS

A. Shop Drawings: Submit to Architect/Engineer for review for limited purpose of checking for conformance with information given and design concept expressed in Contract Documents.

B. Indicate special utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.

C. When required by individual specification sections, provide shop drawings signed and sealed by professional engineer responsible for designing components shown on shop drawings.
   1. Include signed and sealed calculations to support design.
   2. Submit drawings and calculations in form suitable for submission to and approval by authorities having jurisdiction.
   3. Make revisions and provide additional information when required by authorities having jurisdiction.

D. Submit number of opaque reproductions Contractor requires, plus 3 copies Architect/Engineer will retain.

E. After review, produce copies and distribute in accordance with SUBMITTAL PROCEDURES article and for record documents described in Section 017000.

1.7 SAMPLES

A. Samples: Submit to Architect/Engineer for review for limited purpose of checking for conformance with information given and design concept expressed in Contract Documents.

B. Samples For Selection as Specified in Product Sections:
   1. Submit to Architect/Engineer for aesthetic, color, or finish selection.
   2. Submit samples of finishes from full range of manufacturers' standard colors, textures, and patterns for Architect/Engineer selection.

C. Submit samples to illustrate functional and aesthetic characteristics of Products, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.

D. Include identification on each sample, with full Project information.

E. Submit number of samples specified in individual specification sections; Architect/Engineer will retain one sample.

F. Reviewed samples which may be used in the Work are indicated in individual specification sections.

G. Samples will not be used for testing purposes unless specifically stated in specification section.

H. After review, produce duplicates and distribute in accordance with SUBMITTAL PROCEDURES article and for record documents purposes described in Section 017000.

1.8 DESIGN DATA

A. Submit for Architect/Engineer's knowledge as contract administrator or for Owner.

B. Submit for information for limited purpose of assessing conformance with information given and design concept expressed in Contract Documents.

1.9 CERTIFICATES

A. When specified in individual specification sections, submit certification by manufacturer, installation/application subcontractor, or Contractor to Architect/Engineer, in quantities specified for Product Data.

B. Indicate material or product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.

C. Certificates may be recent or previous test results on material or Product, but must be acceptable to Architect/Engineer.

1.10 MANUFACTURER'S INSTRUCTIONS

A. When specified in individual specification sections, submit printed instructions for delivery, storage, assembly, installation, adjusting, and finishing, to Architect/Engineer for delivery to Owner in quantities specified for Product Data.

B. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION

HURST-ROSCHE, INC.

SHOP DRAWING SUBMITTAL

PROJECT: CALHOUN HIGH SCHOOL DOOR REPLACEMENT
CALHOUN UNIT DISTRICT 40
HARDIN, CALHOUN COUNTY, ILLINOIS

DATE: _____

A/E PROJECT NO: H-R # 270-2896

CONTRACTOR: _____

PRESENTED BY:
(Subcontractor/Supplier)

_____
Company Name

_____
Address

_____
Phone/Fax

_____
Contact Person

ITEM: _____

SPEC SECTION: _____

By approving and submitting these shop drawings, product data and samples, we represent that we have determined and verified all materials, field measurements and field construction criteria related thereto, or will do so, and that we have checked and coordinated information contained within submittal with requirements of the work and contract documents.

_____
Contractor's Signature

_____
Date

SECTION 014000 - QUALITY REQUIREMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Quality control and control of installation.

B. Tolerances.

C. References.

D. Examination.

E. Preparation.

1.2 QUALITY CONTROL AND CONTROL OF INSTALLATION

A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality.

B. Comply with manufacturers' instructions, including each step in sequence.

C. When manufacturers' instructions conflict with Contract Documents, request clarification from Architect/Engineer before proceeding.

D. Comply with specified standards as minimum quality for the Work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.

E. Perform Work by persons qualified to produce required and specified quality.

F. Verify field measurements are as indicated on Shop Drawings or as instructed by manufacturer.

G. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, or disfigurement.

1.3 TOLERANCES

A. Monitor fabrication and installation tolerance control of products to produce acceptable Work. Do not permit tolerances to accumulate.

B. Comply with manufacturers' tolerances. When manufacturers' tolerances conflict with Contract Documents, request clarification from Architect/Engineer before proceeding.

C. Adjust products to appropriate dimensions; position before securing products in place.

1.4 REFERENCES

A. For products or workmanship specified by association, trade, or other consensus standards, comply with requirements of standard, except when more rigid requirements are specified or are required by applicable codes.

B. Conform to reference standard by date of issue current on date of Contract Documents, except where specific date is established by code.

C. Obtain copies of standards where required by product specification sections.

D. When specified reference standards conflict with Contract Documents, request clarification from Architect/Engineer before proceeding.

E. Neither contractual relationships, duties, nor responsibilities of parties in Contract nor those of Architect/Engineer shall be altered from Contract Documents by mention or inference otherwise in reference documents.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

3.1 EXAMINATION

A. Verify existing site conditions and substrate surfaces are acceptable for subsequent Work. Beginning new Work means acceptance of existing conditions.

B. Verify existing substrate is capable of structural support or attachment of new Work being applied or attached.

C. Examine and verify specific conditions described in individual specification sections.

D. Verify utility services are available, of correct characteristics, and in correct locations.

3.2 PREPARATION

A. Clean substrate surfaces prior to applying next material or substance.

B. Seal cracks or openings of substrate prior to applying next material or substance.

C. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying new material or substance in contact or bond.

END OF SECTION

SECTION 015000 - TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Temporary Utilities:
   1. Temporary electricity.
   2. Temporary cooling.
   3. Temporary water service.
   4. Temporary sanitary facilities.

B. Construction Facilities:
   1. Vehicular access.
   2. Parking.
   3. Progress cleaning and waste removal.

C. Temporary Controls:
   1. Barriers.
   2. Water control.
   3. Dust control.
   4. Noise control.
   5. Pest control.
   6. Pollution control.
   7. Rodent control.

D. Removal of utilities, facilities, and controls.

1.2 TEMPORARY ELECTRICITY

A. Owner will pay cost of energy used. Exercise measures to conserve energy. Utilize Owner’s existing power service.

B. Complement existing power service capacity and characteristics as required for construction operations.

C. Permanent convenience receptacles may not be utilized during construction.

D. Provide flexible power cords as required for portable construction tools and equipment.

1.3 TEMPORARY COOLING

A. Owner will pay cost of temporary cooling. Exercise measures to conserve energy. Utilize Owner's existing cooling plant, extend and supplement with temporary cooling devices as needed to maintain specified conditions for construction operations.

B. Maintain maximum ambient temperature of 80 degrees F in areas where construction is in progress, unless indicated otherwise in specifications.

1.4 TEMPORARY WATER SERVICE

A. Owner will pay cost of temporary water. Exercise measures to conserve energy. Utilize Owner's existing water system, extend and supplement with temporary devices as needed to maintain specified conditions for construction operations.

1.5 TEMPORARY SANITARY FACILITIES

A. Existing facilities shall be used.

B. At end of construction, return existing facilities used for construction operations to same or better condition as original condition.

1.6 VEHICULAR ACCESS

A. Use designated existing on-site roads for construction traffic.

1.7 PARKING

A. Use of designated existing on-site streets and driveways used for construction traffic is permitted. Tracked vehicles not allowed on paved areas.

B. Use of designated areas of existing parking facilities used by construction personnel is permitted.

C. Do not allow heavy vehicles or construction equipment in parking areas.

D. Maintenance:
   1. Maintain traffic and parking areas in sound condition.
   2. Maintain existing and permanent paved areas used for construction; promptly repair breaks, potholes, low areas, standing water, and other deficiencies, to maintain paving and drainage in original, or specified, condition.

1.8 PROGRESS CLEANING AND WASTE REMOVAL

A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in clean and orderly condition.

B. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, prior to enclosing spaces.

C. Broom and vacuum clean interior areas prior to start of surface finishing, and continue cleaning to eliminate dust.

D. Collect and remove waste materials, debris, and rubbish from site weekly and dispose off-site.

E. Open free-fall chutes are not permitted. Terminate closed chutes into appropriate containers with lids.

1.9 BARRIERS

A. Provide barriers to prevent unauthorized entry to construction areas, to allow for Owner's use of site, and to protect existing facilities and adjacent properties from damage from construction operations and demolition.

B. Provide barricades and covered walkways required by authorities having jurisdiction for public rights-of-way and for public access to existing building.

C. Protect non-owned vehicular traffic, stored materials, site, and structures from damage.

1.10 WATER CONTROL

A. Grade site to drain. Maintain excavations free of water. Provide, operate, and maintain pumping equipment.

B. Protect site from puddling or running water.

1.11 DUST CONTROL

A. Execute Work by methods to minimize raising dust from construction operations.

B. Provide positive means to prevent air-borne dust from dispersing into atmosphere.

1.12 NOISE CONTROL

A. Provide methods, means, and facilities to minimize noise produced by construction operations.

1.13 PEST CONTROL

A. Provide methods, means, and facilities to prevent pests and insects from damaging the Work or entering facility.

1.14 POLLUTION CONTROL

A. Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by construction operations.

1.15 RODENT CONTROL

A. Provide methods, means, and facilities to prevent rodents from accessing or invading premises.

1.16 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

A. Remove temporary utilities, equipment, facilities, materials, prior to Substantial Completion inspection.

B. Clean and repair damage caused by installation or use of temporary work.

C. Restore existing and permanent facilities used during construction to original condition. Restore permanent facilities used during construction to specified condition.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION

SECTION 016000 - PRODUCT REQUIREMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Products.

B. Product delivery requirements.

C. Product storage and handling requirements.

D. Product options.

E. Product substitution procedures.

F. Equipment electrical characteristics and components.

1.2 PRODUCTS

A. Furnish products of qualified manufacturers suitable for intended use. Furnish products of each type by single manufacturer unless specified otherwise.

B. Do not use materials and equipment removed from existing premises, except as specifically permitted by Contract Documents.

C. Furnish interchangeable components from same manufacturer for components being replaced.

1.3 PRODUCT DELIVERY REQUIREMENTS

A. Transport and handle products in accordance with manufacturer's instructions.

B. Promptly inspect shipments to ensure products comply with requirements, quantities are correct, and products are undamaged.

C. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.

1.4 PRODUCT STORAGE AND HANDLING REQUIREMENTS

A. Store and protect products in accordance with manufacturers' instructions.

B. Store with seals and labels intact and legible.

C. Store sensitive products in weather tight, climate controlled, enclosures in an environment favorable to product.

D. For exterior storage of fabricated products, place on sloped supports above ground.

E. Provide bonded off-site storage and protection when site does not permit on-site storage or protection.

F. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.

G. Store loose granular materials on solid flat surfaces in well-drained area. Prevent mixing with foreign matter.

H. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.

I. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

1.5 PRODUCT OPTIONS

A. Products Specified by Reference Standards or by Description Only: Any product meeting those standards or description.

B. Products Specified by Naming One or More Manufacturers: Products of one of manufacturers named and meeting specifications, no options or substitutions allowed.

C. Products Specified by Naming One or More Manufacturers with Provision for Substitutions: Submit request for substitution for any manufacturer not named in accordance with the following article.

1.6 PRODUCT SUBSTITUTION PROCEDURES

A. Instructions to Bidders specify time restrictions for submitting requests for Substitutions during bidding period to requirements specified in this section.

B. Substitutions may be considered when a product becomes unavailable through no fault of Contractor.

C. Document each request with complete data substantiating compliance of proposed Substitution with Contract Documents.

D. A request constitutes a representation that Contractor:
   1. Has investigated proposed product and determined that it meets or exceeds quality level of specified product.
   2. Will provide same warranty for Substitution as for specified product.
   3. Will coordinate installation and make changes to other Work which may be required for the Work to be complete with no additional cost to Owner.
   4. Waives claims for additional costs or time extension which may subsequently become apparent.
   5. Will reimburse Owner and Architect/Engineer for review or redesign services associated with re-approval by authorities having jurisdiction.

E. Substitutions will not be considered when they are indicated or implied on Shop Drawing or Product Data submittals, without separate written request, or when acceptance will require revision to Contract Documents.

F. Substitution Submittal Procedure:
1. Submit three copies of request for Substitution for consideration. Limit each request to one proposed Substitution.
2. Submit Shop Drawings, Product Data, and certified test results attesting to proposed product equivalence. Burden of proof is on proposer.
3. Architect/Engineer will notify Contractor in writing of decision to accept or reject request.

PART 2 PRODUCTS

2.1 EQUIPMENT ELECTRICAL CHARACTERISTICS AND COMPONENTS

A. Wiring Terminations: Furnish terminal lugs to match branch circuit conductor quantities, sizes, and materials indicated. Include lugs for terminal box.

B. Cord and Plug: Furnish minimum 6 foot cord and plug including grounding connector for connection to electric wiring system. Cord of longer length is specified in individual specification sections.

PART 3 EXECUTION

Not Used.

END OF SECTION

SECTION 017000 - EXECUTION AND CLOSEOUT REQUIREMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Closeout procedures.

B. Final cleaning.

C. Protecting installed construction.

D. Project record documents.

E. Operation and maintenance data.

F. Manual for materials and finishes.

G. Product warranties and product bonds.

1.2 CLOSEOUT PROCEDURES

A. Submit written certification that Contract Documents have been reviewed, Work has been inspected, and that Work is complete in accordance with Contract Documents and ready for Architect/Engineer's review.

B. Provide submittals to Architect/Engineer required by authorities having jurisdiction.

C. Submit final Application for Payment identifying total adjusted Contract Sum, previous payments, and sum remaining due.

D. Provide a notarized Affidavit for Final Completion in exact text as exhibit furnished by Architect/Engineer, signed by Contractor.

E. Owner will occupy all of building as specified in Section 011000.

1.3 FINAL CLEANING

A. Execute final cleaning prior to final project assessment.

B. Clean interior and exterior glass, surfaces exposed to view; remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces, vacuum carpeted and soft surfaces.

C. Clean equipment and fixtures to sanitary condition with cleaning materials appropriate to surface and material being cleaned.

D. Clean site; sweep paved areas, rake clean landscaped surfaces.

E. Remove waste and surplus materials, rubbish, and construction facilities from site.

1.4 PROTECTING INSTALLED CONSTRUCTION

A. Protect installed Work and provide special protection where specified in individual specification sections.

B. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.

C. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.

D. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.

E. Prohibit traffic or storage upon waterproofed or roofed surfaces. When traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.

F. Prohibit traffic from landscaped areas.

1.5 PROJECT RECORD DOCUMENTS

A. Maintain on site one set of the following record documents; record actual revisions to the Work:
   1. Drawings.
   2. Specifications.
   3. Addenda.
   4. Change Orders and other modifications to the Contract.
   5. Reviewed Shop Drawings, Product Data, and Samples.
   6. Manufacturer's instruction for assembly, installation, and adjusting.

B. Ensure entries are complete and accurate, enabling future reference by Owner.

C. Store record documents separate from documents used for construction.

D. Record information concurrent with construction progress, not less than weekly.

E. Specifications: Legibly mark and record at each product section description of actual products installed, including the following:
   1. Manufacturer's name and product model and number.
   2. Product substitutions or alternates utilized.
   3. Changes made by Addenda and modifications.

F. Record Drawings and Shop Drawings: Legibly mark each item to record actual construction including:
   1. Field changes of dimension and detail.
   2. Details not on original Contract drawings.

G. Submit documents to Architect/Engineer with claim for final Application for Payment.

1.6 OPERATION AND MAINTENANCE DATA

A. Submit data bound in 8-1/2 x 11 inch (A4) text pages, three D side ring binders with durable plastic covers.

B. Prepare binder cover with printed title "OPERATION AND MAINTENANCE INSTRUCTIONS", title of project, and subject matter of binder when multiple binders are required.

C. Internally subdivide binder contents with permanent page dividers, logically organized as described below; with tab titling clearly printed under reinforced laminated plastic tabs.

D. Drawings: Provide with reinforced punched binder tab. Bind in with text; fold larger drawings to size of text pages.

E. Contents: Prepare Table of Contents for each volume, with each product or system description identified, typed on white paper, in three parts as follows:
   1. Part 1: Directory, listing names, addresses, and telephone numbers of Architect/Engineer, Contractor, Subcontractors, and major equipment suppliers.
   2. Part 2: Operation and maintenance instructions, arranged by system and subdivided by specification section. For each category, identify names, addresses, and telephone numbers of Subcontractors and suppliers. Identify the following:
      a. Significant design criteria.
      b. List of equipment.
      c. Parts list for each component.
      d. Operating instructions.
      e. Maintenance instructions for equipment and systems.
      f. Maintenance instructions for special finishes, including recommended cleaning methods and materials, and special precautions identifying detrimental agents.
   3. Part 3: Project documents and certificates, including the following:
      a. Shop drawings and product data.
      b. Air and water balance reports.
      c. Certificates.
      d. Photocopies of warranties and bonds.

1.7 MANUAL FOR MATERIALS AND FINISHES

A. Submit two copies of preliminary draft or proposed formats and outlines of contents before start of Work. Architect/Engineer will review draft and return one copy with comments.

B. For equipment, or component parts of equipment put into service during construction and operated by Owner, submit documents within ten days after acceptance.

C. Submit one copy of completed volumes 15 days prior to final inspection. Draft copy be reviewed and returned after final inspection, with Architect/Engineer comments. Revise content of document sets as required prior to final submission.

D. Submit two sets of revised final volumes in final form within 10 days after final inspection.

E. Building Products, Applied Materials, and Finishes: Include product data, with catalog number, size, composition, and color and texture designations. Include information for re-ordering custom manufactured products.

F. Instructions for Care and Maintenance: Include manufacturer's recommendations for cleaning agents and methods, precautions against detrimental agents and methods, and recommended schedule for cleaning and maintenance.

G. Moisture Protection and Weather Exposed Products: Include product data listing applicable reference standards, chemical composition, and details of installation. Include recommendations for inspections, maintenance, and repair.

H. Additional Requirements: As specified in individual product specification sections.

I. Include listing in Table of Contents for design data, with tabbed fly sheet and space for insertion of data.

1.8 PRODUCT WARRANTIES AND PRODUCT BONDS

A. Obtain warranties and bonds executed in duplicate by responsible subcontractors, suppliers, and manufacturers, within ten days after completion of applicable item of work.

B. Execute and assemble transferable warranty documents and bonds from subcontractors, suppliers, and manufacturers.

C. Verify documents are in proper form, contain full information, and are notarized.

D. Co-execute submittals when required.

E. Include Table of Contents and assemble in three D side ring binder with durable plastic cover.

F. Submit prior to final Application for Payment.

G. Time Of Submittals:
   1. For equipment or component parts of equipment put into service during construction with Owner's permission, submit documents within ten days after acceptance.
   2. Make other submittals within ten days after Date of Substantial Completion, prior to final Application for Payment.
   3. For items of Work for which acceptance is delayed beyond Date of Substantial Completion, submit within ten days after acceptance, listing date of acceptance as beginning of warranty or bond period.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION

SECTION 07 90 00 - JOINT PROTECTION

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Preparing sealant substrate surfaces.
   2. Sealant and backing.

1.2 REFERENCES

A. American Society for Testing and Materials (ASTM):
   1. ASTM C717 - Standard Terminology of Building Seals and Sealants.
   2. ASTM C834 - Specification for Latex Sealants.
   3. ASTM C920 - Specification for Elastomeric Joint Sealants.
   4. ASTM D1056 - Flexible Cellular Material- Sponge or Expanded Rubber.

B. Federal Specifications (FS):
   1. FS SS-S-200 - Sealing Compounds, Two Component, Elastomeric, Polymer Type, Jet-Fuel Resistant, Cold Applied.
   2. FS TT-S-1657 - Sealing Compound, Single Component Butyl Rubber Based Solvent Release Type (for Buildings and other Types of Construction).
   3. COORDINATION

1.3 COORDINATION

A. Section 01 30 00 - Administrative Requirements: Requirements for coordination.

B. Coordinate Work of this Section with Sections referencing this Section.

1.4 SUBMITTALS

A. Section 01 33 00 – Submittal Procedures: Procedures for submittals.
   1. Product Data: Product chemical characteristics, performance criteria, substrate preparation, limitations, and color availability.

1.5 QUALITY ASSURANCE

A. Installer Qualifications: Company specializing in performing Work of this Section with minimum 5 years documented experience.

1.6 DELIVERY, STORAGE AND HANDLING

A. Section 01 60 00 - Product Requirements: Transport, handle, store, and protect products.

B. Deliver Products in manufacturer's original unopened containers or packages with labels intact, identifying product and manufacturer, date of manufacture, lot number, shelf life, curing time, and mixing instructions, where applicable.

C. Store and handle materials to prevent deterioration or damage due to moisture, temperature changes, contaminants, or other causes.

D. Protection:
   1. Protect materials from moisture and dust by storing in clean, dry location remote from construction operations areas.
   2. Provide additional protection according to manufacturer instructions.

1.7 PROJECT CONDITIONS OR SITE CONDITIONS

A. Environmental Requirements: Install sealant during manufacturer's recommended temperature ranges and weather conditions for application and cure. Consult manufacturer when sealant cannot be applied during recommended conditions.

1.8 WARRANTY

A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for warranties.

B. Warranty:
   1. Submit written warranty signed by sealant manufacturer agreeing to replace sealants and accessories which fail because of loss of cohesion or adhesion or which do not cure.
   2. Warranty Period: 5 years or longer per the manufacturers' standard warranties.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Subject to compliance with project requirements, manufacturers offering specified items which may be incorporated into the work include the following:
   1. Bostik, Inc, Huntingdon Valley, PA, (800) 523-2678, (125) 674-5600.
   2. Dow Corning, Midland, MI (517) 496-4000.
   3. GE Silicones, Waterford, NY (518) 233-3330.
   4. Mameco International, Cleveland, OH, (800) 321-6412, (216) 752-4400.
   5. W.R. Meadows, Inc, Elgin, IL (800) 342-5976, (847) 683-4500.
   6. Nomaco, Inc., Zebulon, NC, (919) 269-6500.
   7. Pecora Corporation, Harleysville, PA, (800) 523-6688, (215) 723-6051.

8. Sika Corporation, Lyndhurst, NJ, (800) 933-7452, (201) 933-8800.
9. Sonneborn Building Products Div. ChemRex, Inc., Shakopee, MN (800) 243-6739, (612) 496-6000.
10. Tremco, Beachwood, OH, (800) 852-3821, (216) 292-5000.
11. USG Corp., Chicago, IL (800) 874-4968, (312) 606-4000.

2.2 BUILDING SEALANTS (See Sealant Schedule at the end of this Section for specific use of sealants.)

A. Urethanes:
1. Type 1: Two-Part Urethane: Self-Leveling, ASTM C920, Type M, Grade P, Class 25.
   a. Chem-Calk CC-550, by Bostik.
   b. Vulkem 245, by Mameco.
   c. Vulkem 255, Wide-Joint, by Mameco.
   d. NR-200 Urexpan, by Pecora Corporation.
2. Type 2: Two-Part Urethane: Non-Sag, ASTM C920, Type M, Grade NS, Class 25.
   a. Chem-Calk 500, by Bostik.
   b. Vulkem 227, by Mameco.
   c. Sonolastic NP 2, by Sonneborn Building Products, ChemRex Inc.
3. Type 3: One-Part Urethane: Self-Leveling, ASTM C920, Type S, Grade P, Class 25.
   a. Vulkem 45, by Mameco.
   b. Urexpan NR-201, by Pecora Corporation.
   c. Sonolastic SL1, by Sonneborn Building Products, ChemRex Inc.
   d. Sikaflex 1C-SL by Sika.
4. Type 4: One-Part Urethane: Non-Sag, ASTM C920, Type S, Grade NS, Class 25.
   a. Chem-Calk 900, by Bostik.
   b. Vulkem 116, by Mameco.
   c. Sonolastic NP I, by Sonneborn Building Products, ChemRex Inc.

B. Silicones:
1. Type 1: One-Part Silicones: ASTM C920, Type S, Grade NS, Class 50.
   a. 795 Silicone Building Sealant, by Dow Corning.
   b. 864 Architectural Silicone Sealant, by Pecora Corporation.
2. Type 2: One-Part Silicones: ASTM C920, Type S, Grade NS, Class 25.
   a. 999-A Silicone Building & Glazing Sealant, Dow Corning.
   b. Construction 1200 Sealant, General Electric Company.
3. Type 3: One-Part Silicones: ASTM C920, Type S, Grade NS, Class 25. Vertical Surfaces Only.
   a. Construction 1200 Sealant, General Electric Company.
   b. 999-A, Dow Corning.
   c. 860 Glaziers and Contractors Silicone Sealant, by Pecora Corporation. (colors only)
4. Type 4: One-Part Silicones: ASTM C920, Type S, Grade NS, Class 25 or 50.
   a. 786 Mildew Resistant Silicone Sealant, Dow Corning.
   b. SCS 1700 Sanitary Sealant, General Electric.
   c. 898 Silicone Sanitary Sealant, Pecora Corporation.

C. Acrylics, Latex:
   1. Type 1: One-Part Acrylic Latex, Non-Sag, ASTM-C-834-76.
      a. Chem-Calk 600, by Bostik.
      b. LC-130, by MACCO Adhesives, The Glidden Company.
      c. Easa-ply ALS, by W. R. Meadows, Inc.
      d. AC-20+Silicone Acrylic Latex, by Pecora Corporation.
      e. Sonolac, Sonneborn Building Products, ChemRex Inc.

D. Acoustical Sealants:
   1. Type 1: AC-20 FTR Acoustical and Insulation Sealant, by Pecora Corporation.
   2. Type 2: 60+ Unicrylic, by Pecora Corporation.
   3. Type 3: Sheetrock Acoustical Sealant, by United States Gypsum.

E. Butyls:
   1. Type 1: One-Part Butyl, Non-Sag, FS TT-S-1657.
      a. Chem-Calk 300, by Bostik.
      b. BC-158 Butyl Rubber, by Pecora Corporation. (ASTM C1085)

F. Preformed Compressible & Non-Compressible Fillers:
   1. Type 1: Backer Rod - Closed cell polyethylene foam:
      a. HBR Backer Rod, by Nomaco.
      b. #92 Greenrod, by Nomaco.
      c. Sonofoam Closed-Cell Backer Rod, Sonneborn Building Products, ChemRex Inc.
   2. Type 2: Backer Rod - Open cell polyurethane foam:
      a. Denver Foam, by Backer Rod Mfg Inc.
      b. Foam Pack II, by Nomaco.
   3. Type 3: Neoprene compression seals:
      a. WE, WF, and WG Series, by Watson Bowman & Acme Corp.
      b. Will-Seal 150 Precompressed Expanding Foam Sealants, by Will-Seal, a Division of Illbruck.
   4. Type 4: Butyl Rod: Kirkhill Rubber Co. (714)529-4901.

G. Bond Breaker Tape: Polyethylene tape of plastic as recommended by sealant manufacturer, to be applied to sealant-contact surfaces where bond to substrate of joint filler must be avoided for proper performance of sealant

2.3 COLORS

A. Generally use sealant colors matching color of material joint is located in.

Where a joint occurs between two materials of differing colors and Contractor cannot determine which material to match, contact Architect / Engineer for selection.

2.4 ACCESSORIES

A. Joint Cleaner: Provide type of non-corrosive and non-staining joint cleaning compound recommended by sealant manufacturer for joint surfaces to be cleaned.

B. Primer: Non-staining as recommended by sealant manufacturer.

C. Masking tape and similar accessories to protect surfaces from damage.

D. Joint Backing:
   1. Round foam rod, compatible with sealant.
   2. Size: Oversized 30 to 50 percent larger than joint width.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for application examination.

B. Verification of Conditions: Verify that field measurements, surfaces, substrates and conditions are as required, and ready to receive Work.
   1. Verify that joint widths are in conformance with sealant manufacturer allowable limits.
   2. Verify that contaminants capable of interfering with adhesion have been cleaned form joint and joint properly prepared.
   3. Verify that joint backing and release tapes are compatible with sealant.

C. Report in writing to Architect / Engineer prevailing conditions that will adversely affect satisfactory execution of the Work of this Section. Do not proceed with Work until unsatisfactory conditions have been corrected.

D. By beginning Work, Contractor accepts conditions and assumes responsibility for correcting unsuitable conditions encountered at no additional cost to the Owner.

3.2 PREPARATION

A. Section 01 70 00 – Execution and Closeout Requirements: Requirements for application preparation.

B. Comply with ASTM C1193.

C. Clean and prime joints.

D. Prepare and size joints in accordance with manufacturer's instructions. Clean substrates of dirt, laitance, dust, or mortar using solvent, abrasion, or sandblasting as recommended by manufacturer. Remove loose materials and foreign matter which might impair adhesion of sealant.

E. Verify that joint backing and release tapes are compatible with sealant. Verify sealant is suitable for substrate. Verify that sealant is paintable if painted finish is indicated.

F. Protect materials surrounding work of this Section from damage or disfiguration.

3.3 INSTALLATION

A. Comply with ASTM C1193.

B. Install sealant in accordance with manufacturer's published instructions.

C. Prime or seal joint surfaces where recommended by sealant manufacturer. Do not allow primer or sealer to spill or migrate onto adjoining surfaces.

D. Install backer rod and bond breaker tape where required by manufacturer.

E. Install preformed compressible and non-compressible fillers in accordance with manufacturer's published instructions.

F. Install sealants to depths recommended by sealant manufacturer in uniform, continuous ribbons free of air pockets, foreign embedded matter, ridges, and sags, "wetting" joint bond surfaces equally on both sides.

G. Tool joints concave unless shown otherwise. Where horizontal joints are between a horizontal surface and a vertical surface, fill joint to form slight cove so that joint will not trap moisture and foreign matter. Dry tool joints. Do not use soap, water, or solvent to tool joints.

3.4 CURING

A. Cure sealants in compliance with manufacturer's published instructions.

3.5 CLEANING

A. Section 01 70 00 – Execution and Closeout Requirements: Requirements for protecting finished Work.

B. Remove excess and spillage of sealants promptly as the work progresses, using materials and methods as recommended by sealant and substrate manufacturers. Clean adjoining surfaces to eliminate evidence of spillage without damage to adjoining surfaces or finishes.

3.6 SEALANT SCHEDULE

A. Interior Joints:
   1. Seal interior perimeters of exterior openings.
   2. Expansion and control joints on interior of exterior cast-in-place concrete walls.
   3. Expansion and control joints on interior of exterior precast, architectural wall panels.
   4. Expansion and control joints on interior of exterior masonry walls.
   5. Perimeters of interior hollow metal and aluminum frames.
   6. Interior masonry vertical control joints and intersecting masonry walls; CMU-to-CMU, CMU-to-concrete.
   7. Joints at intersection of exterior masonry walls and interior gypsum board partitions.
   8. For all of the above interior joints:
      a. Sealant Urethane Type 2
      b. Sealant Urethane Type 4
      c. Sealant Silicone Type 1 (for prefinished materials only)
   9. Exposed interior control joints in drywall and concealed joints.
      a. Sealant Acrylic, Latex, Type 1
      b. Sealant Acoustical Type 1
      c. Sealant Acoustical Type 3
      d. Sealant Butyl Type 1
   10. Joints of underside of precast beams or planks.
      a. Sealant Urethane Type 2
      b. Sealant Urethane Type 4
   11. Joints at tops of non-load bearing masonry walls at underside of cast-in-place concrete.
      a. Sealant Urethane Type 2
      b. Sealant Urethane Type 4
   12. Perimeter of bath fixtures: sinks, tubs, urinals, waterclosets, basins, vanities, etc.
      a. Sealant Silicone Type 4
   13. Interior expansion and control joints in floor surfaces exposed to foot traffic.
      a. Sealant Urethane Type 2
      b. Sealant Urethane Type 4
      c. Preformed Compressible & Non-Compressible Filler Type 1
   14. Interior saw-cut contraction joints in exposed concrete floors exposed to forklift traffic.
      a. Paving Sealant Type 1
   15. Interior non-moving joints, including control, contraction, or construction joints, in interior floor slabs exposed to heavy duty traffic.
      a. Paving Sealant Type 1
   16. Painted metal lap joints.
      a. Sealant Silicone Type 1

END OF SECTION

SECTION 08 12 14 - STANDARD STEEL FRAMES

PART 1 GENERAL

1.1 SUMMARY

A. Section includes fire rated steel frames.

B. Related Sections:
   1. Section 08 13 14 – Standard Steel Doors.
   2. Section 08 14 16 – Flush Wood Doors.
   3. Section 08 71 00 - Door Hardware.
   4. Section 08 80 00 – Glazing.
   5. Section 09 90 00 – Painting and Coating: Field painting of frames.

1.2 REFERENCES

A. National Fire Protection Association:
   1. NFPA 80 - Standard for Fire Doors, Fire Windows.
   2. NFPA 105 - Standard for the Installation of Smoke Door Assemblies and other Opening Protectives.
   3. NFPA 252 - Standard Methods of Fire Tests of Door Assemblies.

B. Underwriters Laboratories Inc.:
   1. UL 10B - Fire Tests of Door Assemblies.
   2. UL 10C - Positive Pressure Fire Tests of Door Assemblies.
   3. UL 1784 - Air Leakage Tests of Door Assemblies.

C. American National Standards Institute:
   1. ANSI A250.8 - Recommended Specifications for Standard Steel Doors and Frames.

D. ASTM International:
   1. ASTM A653 - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.

1.3 SUBMITTALS

A. Section 01 33 00 - Submittal Procedures: Submittal procedures.

B. Shop Drawings: Indicate frame elevations, reinforcement, anchor types and spacing, location of cut-outs for hardware, and finish.

C. Product Data: Submit frame configuration and finishes.

D. Manufacturer's Installation Instructions: Submit special installation instructions.

E. Manufacturer's Certificate: Certify products meet or exceed specified requirements.

1.4 QUALITY ASSURANCE

A. Conform to requirements of ANSI A250.8.

B. Fire Rated Frame Construction: Conform to NFPA 252.

C. Installed Fire Rated Frame Assembly: Conform to NFPA 80 for fire rated class same as fire door.

D. Attach label from agency approved by authority having jurisdiction to identify each fire rated door frame.

1.5 QUALIFICATIONS

A. Manufacturer: Company specializing in manufacturing products specified in this section with minimum three years documented experience.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Section 01 60 00 - Product Requirements: Product storage and handling requirements.

B. Accept frames on site in manufacturer's packaging. Inspect for damage.

C. Break seal on-site to permit ventilation.

1.7 COORDINATION

A. Section 01 30 00 - Administrative Requirements: Coordination and project conditions.

B. Coordinate Work with frame opening construction, door, and hardware installation.

PART 2 PRODUCTS

2.1 STANDARD STEEL FRAMES

A. Manufacturers:
   1. Amweld Building Products, Inc.
   2. Ceco Door Products.
   3. Republic Builders Products.
   4. Steelcraft.
   5. Curries Company.
   6. Mesker Door Inc.
   7. Substitutions: Not Permitted.

B. Product Description: Standard shop fabricated steel frames, fire rated types.
   1. Interior Frames: Zinc-Iron Alloy-Coated galvannealed steel, ASTM A 653, Class A60, 16 gage/0.053 inch galvannealed steel.

C. Include galvannealed components and internal reinforcements with galvannealed frames.

2.2 ACCESSORIES

A. Removable Stops: Rolled steel channel shape, mitered corners, prepared for countersunk, tamper proof screws.

B. Primer: ANSI A250.10 rust inhibitive type.

C. Silencers: Resilient rubber fitted into drilled hole.

D. Glazing: 1 inch thick fire rated, as specified in Section 08 80 00.

2.3 FABRICATION

A. Fabricate frames as welded unit. Knock down frames shall not be acceptable without written permission from Architect / Engineer.

B. Transom Bars for Glazed Lights: Fixed type, of same profiles as jamb and head.

C. Fabricate frames with hardware reinforcement plates welded in place.

D. Reinforce frames wider than 48 inches with roll formed steel channels fitted tightly into frame head, flush with top.

E. Prepare frames for silencers. Provide three single silencers for single doors and mullions of double doors on strike side. Provide two single silencers on frame head at double doors without mullions.

F. Attach fire rated label to each fire rated frame.

2.4 SHOP FINISHING

A. Steel Sheet: Galvannealed to ASTM A653 A60.

B. Primer: Frames and frame components are required to be cleaned, phosphatized, and finished with one coat of baked-on rust inhibiting prime paint in accordance with the ANSI/SDI A250.10 “Test Procedures and Acceptance Criteria for Prime Painted Steel Surfaces for Steel Doors and Frames.”

C. Field finish per Section 09 90 00.

PART 3 EXECUTION

3.1 EXAMINATION

A. Section 01 30 00 - Administrative Requirements: Coordination and project conditions.

B. Verify opening sizes and tolerances are acceptable.

3.2 INSTALLATION

A. Install frames in accordance with ANSI A250.8.

B. Coordinate installation of glass and glazing specified in Section 08 80 00.

C. Coordinate installation of frames with installation of hardware specified in Section 08 71 00 and doors in Section 08 13 14 and 08 14 16.

3.3 ERECTION TOLERANCES

A. Section 01 40 00 - Quality Requirements: Tolerances.

B. Maximum Diagonal Distortion: 1/16 inch measured with straight edges, crossed corner to corner.

3.4 SCHEDULE

A. Refer to Door and Frame Schedule on Drawings.

END OF SECTION

SECTION 08 13 14 - STANDARD STEEL DOORS

PART 1 GENERAL

1.1 SUMMARY

A. Section includes fire rated steel doors.

B. Related Sections:
   1. Section 08 12 14 - Standard Steel Frames.
   2. Section 08 71 00 - Door Hardware.
   3. Section 08 80 00 - Glazing: Glass for doors.
   4. Section 09 90 00 - Painting and Coating: Field painting of doors.

1.2 REFERENCES

A. American National Standards Institute:
   1. ANSI A250.8 - Recommended Specifications for Standard Steel Doors and Frames.

B. ASTM International:
   1. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
   2. ASTM C1363 - Standard Test Method for the Thermal Performance of Building Assemblies by Means of a Hot Box Apparatus.
   3. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
   4. ASTM E413 - Classification for Rating Sound Insulation.

C. Hollow Metal Manufacturers Association:
   1. HMMA 810 - Hollow Metal Doors.

D. National Fire Protection Association:
   1. NFPA 80 - Standard for Fire Doors, Fire Windows.
   2. NFPA 105 - Standard for the Installation of Smoke Door Assemblies and other Opening Protectives.
   3. NFPA 252 - Standard Methods of Fire Tests of Door Assemblies.

E. Underwriters Laboratories Inc.:
   1. UL 10B - Fire Tests of Door Assemblies.
   2. UL 10C - Positive Pressure Fire Tests of Door Assemblies.
   3. UL 1784 - Air Leakage Tests of Door Assemblies.

F. Steel Door Institute:
   1. SDI 108 - Recommended Selection and Usage Guide for Standard Steel Doors.

1.3 SUBMITTALS

A. Section 01 33 00 - Submittal Procedures: Requirements for submittals.

B. Shop Drawings: Indicate door elevations, internal reinforcement, closure method, and cut-outs for glazing, and finishes.

C. Product Data: Submit door configurations, location of cut-outs for hardware reinforcement.

D. Manufacturer's Installation Instructions: Submit special installation instructions.

E. Manufacturer's Certificate: Certify Products meet or exceed specified requirements.

1.4 QUALITY ASSURANCE

A. Perform Work in accordance with ANSI A250.8.

B. Fire Rated Door Construction: Conform to NFPA 252.

C. Installed Fire Rated Door Assembly: Conform to NFPA 80 for fire rated class as indicated on Drawings.

D. Attach label from agency approved by authority having jurisdiction to identify each fire rated door.

E. Surface Burning Characteristics:
   1. Foam Insulation: Maximum 75/450 flame spread/smoke developed index when tested in accordance with ASTM E84.

1.5 QUALIFICATIONS

A. Manufacturer: Company specializing in manufacturing Products specified in this section with minimum three years documented experience.

B. Installer: Company specializing in performing Work of this section with minimum three years documented experience.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Section 01 60 00 - Product Requirements: Requirements for transporting, handling, storing, and protecting products.

B. Accept doors on site in manufacturer's packaging. Inspect for damage.

C. Break seal on site to permit ventilation.

1.7 COORDINATION

A. Section 01 30 00 - Administrative Requirements: Requirements for coordination.

B. Coordinate Work with door frame, and door hardware installation.

PART 2 PRODUCTS

2.1 STANDARD STEEL DOORS

A. Manufacturers: (All hollow metal doors and frames shall be from the same manufacturer).
   1. Amweld Building Products, Inc.
   2. Ceco Door Products.
   3. Republic Builders Products.
   4. Steelcraft.
   5. Curries.
   6. Mesker Door Inc.
   7. Substitutions: Not permitted.

B. Product Description:
   1. Interior Doors (Fire Rated): ANSI A250.8, SDI 108, 1-3/4 inch thick.
      a. Level 3 - Extra heavy Duty, Model 3, stile and rail flush design.

2.2 COMPONENTS

A. Face: Steel sheet in accordance with ANSI A250 and SDI 108.

B. End Closure: Channel, 0.04 inches thick, flush.

2.3 ACCESSORIES

A. Removable Stops: Rolled steel, channel shape, mitered corners; prepared for countersink style tamper proof screws.

B. Primer: ANSI A250.10 rust inhibitive type.

C. Glazing: 1 inch thick fire rated, as specified in Section 08 80 00.

2.4 FABRICATION

A. Fabricate doors with hardware reinforcement welded in place.

B. Attach fire rated label to each fire rated door.

2.5 SHOP FINISHING

A. Steel Sheet: Galvannealed to ASTM A653 A60.

B. Primer: Frames and frame components are required to be cleaned, phosphatized, and finished with one coat of baked-on rust inhibiting prime paint in accordance with the ANSI/SDI A250.10 “Test Procedures and Acceptance Criteria for Prime Painted Steel Surfaces for Steel Doors and Frames.”

C. Field finish as specified in Section 09 90 00.

PART 3 EXECUTION

3.1 EXAMINATION

A. Section 01 30 00 - Administrative Requirements: Verification of existing conditions before starting Work.

B. Verify opening sizes and tolerances are acceptable.

3.2 INSTALLATION

A. Install doors in accordance with ANSI A250.8.

B. Coordinate installation of glass and glazing specified in Section 08 80 00.

C. Coordinate installation of doors with installation of frames specified in Section 08 12 14 and hardware specified in Section 08 71 00.

D. Touch-up damaged shop finishes.

3.3 ERECTION TOLERANCES

A. Section 01 40 00 - Quality Requirements: Tolerances.

B. Maximum Diagonal Distortion: 1/16 inch measured with straight edge, corner to corner.

3.4 ADJUSTING

A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for adjusting.

B. Adjust door for smooth and balanced door movement.

3.5 SCHEDULE

A. Refer to Door and Frame Schedule on Drawings.

END OF SECTION

SECTION 08 14 16 - FLUSH WOOD DOORS

PART 1 GENERAL

1.1 SUMMARY

A. Section includes flush wood doors; flush configuration; fire rated and non-rated.

B. Related Requirements:
   1. Section 08 12 14 - Standard Steel Frames.
   2. Section 08 71 00 - Door Hardware.
   3. Section 08 80 00 – Glazing.
   4. Section 09 90 00 - Painting and Coating: Touch-up of factory finish.

1.2 REFERENCE STANDARDS

A. American National Standards Institute:
   1. ANSI A135.4 - Basic Hardboard.

B. Architectural Woodwork Institute:
   1. AWI AWS - Architectural Woodwork Standards 1st edition (2009).

C. Hardwood Plywood and Veneer Association:
   1. HPVA HP-1 - American National Standard for Hardwood and Decorative Plywood.

D. Intertek Testing Services (Warnock Hersey Listed):
   1. ITS-WH – Certification Listings.

E. National Fire Protection Association:
   1. NFPA 80 – Standard for Fire Doors, Fire Windows
   2. NFPA 105 – Standard for the Installation of Smoke Door Assemblies and other Opening Protectives.
   3. NFPA 252 - Standard Methods of Fire Tests of Door Assemblies.

F. Underwriters Laboratories Inc.:
   1. UL 10C – Positive Pressure Fire Test of Door Assemblies.
   2. UL 1784 – Air Leakage Tests of Door Assemblies.

G. Wood Window and Door Manufacturers Association:
   1. WDMA I.S 1A - Architectural Wood Flush Doors.

1.3 COORDINATION

A. Section 01 30 00 - Administrative Requirements: Coordination and project conditions.

B. Coordinate Work with door opening construction, door frame and door hardware installation.

1.4 SUBMITTALS

A. Section 01 33 00 - Submittal Procedures: Submittal procedures.

B. Product Data:
   1. Submit data for door core materials and construction.
   2. Submit data for veneer species, type and characteristics.
   3. Submit data for factory finishes.

C. Shop Drawings:
   1. Indicate door opening criteria, elevations, sizes, types, swings, undercuts required, special beveling, special blocking for hardware, and factory machining criteria.

D. Samples:
   1. Submit two samples of door veneer, 6 x 6 inch in size illustrating wood grain, stain color, and sheen.

E. Manufacturers' Instructions: Submit special installation instructions.

F. Manufacturer’s Certificate: Certify products meet or exceed specified requirements.

1.5 QUALITY ASSURANCE

A. Perform Work in accordance with AWI AWS Custom Grade.

B. Finish doors in accordance with AWI AWS Custom Grade.

C. Fire Rated Door Construction: Conform to one of the following:
   1. NFPA 252; with neutral pressure level at 40 inches maximum above sill at 5 minutes into test.
   2. UL 10C.
   3. 20 Minute Fire Rated Corridor Doors: Fire tested without hose stream test.

D. Installed Fire Rated Door Assembly: Conform to NFPA 80 for fire rated class indicated on Drawings.

E. Attach label from agency approved by authority having jurisdiction to identify each fire rated door.

1.6 QUALIFICATIONS

A. Manufacturer: Company specializing in manufacturing products specified in this section with minimum three years documented experience.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Section 01 60 00 - Product Requirements: Product storage and handling requirements.

B. Package, deliver and store doors in accordance with AWI AWS Section 2.

C. Accept doors on site in manufacturer's packaging. Inspect for damage.
   1. Break seal on site to permit ventilation.

1.8 WARRANTY

A. Section 01 70 00 - Execution and Closeout Requirements: Product warranties and product bonds.

B. Include coverage for delamination of veneer, warping beyond specified installation tolerances, defective materials, and telegraphing core construction. Include reasonable costs of re-finishing and re-installation.

C. Interior Doors:
   1. Factory Finished Doors: Furnish manufacturer’s life of installation warranty.

PART 2 PRODUCTS

2.1 FLUSH WOOD DOORS

A. Manufacturers:
   1. Eggers Industries.
   2. Algoma Hardwoods Inc.
   3. Masonite / Graham Manufacturing Corp.
   4. Marshfield Door Systems.
   5. Oshkosh Door Company.
   6. VT Industries.
   7. Section 01 60 00 – Not Permitted.

B. Flush Interior Doors: Solid core flush wood doors; wood veneer facing material; fire rated and non-rated types; flush design; without louvers; factory pre-fit; and factory finished.
   1. Flush Interior Doors: 1-3/4 inches thick, unless noted otherwise on Drawings; solid core, five or seven ply construction.
   2. Color: As selected by Architect / Engineer from manufacturer’s full range of color selections.

2.2 MATERIALS

A. Door Cores: AWI AWS Section 9.
   1. Solid Core, Non-Fire Rated:
      a. Type: PC; particleboard.
   2. Solid Core, Fire Rated:
      a. Type: FD; fire resistive composite.

B. Interior Door Faces: AWI AWS Section 4.
   1. Hardwood wood veneer, plain sliced, book matched grain, for transparent finish. Pair match multiple door leaves in single opening.
      a. Species: Red Oak.

C. Facing Adhesive: Type I – water proof.

2.3 FABRICATION

A. Fabricate doors in accordance with AWI AWS Section 9 requirements.

B. Astragals fir Fire Rated Double Doors: Steel, T –shaped, overlapping and recessed at face edge, specifically for double doors.

C. Furnish blocking as needed to eliminate through bolt holes and maintain warranty.

D. Vertical Exposed Edge of Stiles: Hardwood of same species and finish as veneer facing.

E. Fit door edge trim to edge of stiles after applying veneer facing.

F. Bond edge banding to cores.

G. Factory machine doors for finish hardware in accordance with hardware requirements and dimensions. Do not machine for surface hardware.

H. Factory fit doors for frame opening dimensions identified on shop drawings.

I. Provide edge clearances in accordance with AWI AWS Section 9.

2.4 ACCESSORIES

A. Door Glazing: As specified in Section 08 80 00.

B. Glazing Stops: Wood, of same species as door facing at non-rated doors.

C. Glazing Stops: Wood with metal clips for fire rated doors.

2.5 FINISHES

A. Finish work in accordance with AWI AWS Section 5; Custom Grade.

B. Transparent Finish System: Stained, transparent color; satin sheen, as indicated.
   1. System 9; UV curable polyester, urethane.

C. Factory finish doors in accordance with approved sample.

D. Factory seal door top edge with clear sealer. Re-seal in field if field fitting is required.

PART 3 EXECUTION

3.1 EXAMINATION

A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for installation examination.

B. Verify opening sizes and tolerances are acceptable.

C. Do not install doors in frame openings that are not plumb or are out-of-tolerance for size or alignment.

3.2 INSTALLATION

A. Install doors in accordance with AWI AWS Section 9, and manufacturer's instructions.

B. Field Fitting and Trimming:
   1. Trim non-rated door width by cutting equally on both jamb edges.
   2. Trim door height by cutting bottom edges to maximum of 3/4 inch.
      a. Trim fire rated door height at bottom edge only, in accordance with fire rating requirements.
   3. Machine cut doors for hardware installation.

C. Coordinate installation of doors with installation of frames specified in Section 08 12 14 and hardware specified in Section 08 71 00.

D. Coordinate installation of glass and glazing specified in Section 08 80 00.

3.3 TOLERANCES

A. Section 01 40 00 - Quality Requirements: Tolerances.

B. Conform to AWI AWS Section 9 requirements for fit and clearance tolerances and WDMA standards and testing methods for warp, cup, bow and telegraphing.

3.4 ADJUSTING

A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for starting and adjusting.

B. Adjust door for smooth and balanced door movement. Adjust door closer for full closure.

3.5 SCHEDULE

A. Refer to Door and Frame Schedule on Drawings.

END OF SECTION

SECTION 08 71 00 - DOOR HARDWARE

PART 1 GENERAL

1.1 SUMMARY

A. Section includes hardware for wood doors.

B. Related Sections:
   1. Section 08 12 14 - Standard Steel Frames: Silencers integral with steel frames.
   2. Section 08 14 16 - Flush Wood Doors.

1.2 REFERENCES

A. American National Standards Institute:
   1. ANSI A156.1 - Butts and Hinges.
   2. ANSI A156.2 - Bored and Preassembled Locks and Latches.
   3. ANSI A156.4 - Door Controls - Closures.
   4. ANSI A156.5 - Auxiliary Locks and Associated Products.
   5. ANSI A156.6 - Architectural Door Trim.
   6. ANSI A156.7 - Template Hinge Dimensions.
   7. ANSI A156.8 - Door Controls - Overhead Holders.
   8. ANSI A156.18 - Materials and Finishes
   9. ANSI A156 - Complete Set of 24 BHMA Standards (A156 Series) with Binder.

B. Builders Hardware Manufacturers Association:
   1. BHMA Directory of Certified Products.

C. Intertek Testing Services (Warnock Hersey Listed):
   1. WH - Certification Listings.

1.3 SUBMITTALS

A. Section 01 33 00 - Submittal Procedures: Submittal procedures.

B. Shop Drawings:
   1. Indicate locations and mounting heights of each type of hardware, schedules, catalog cuts, and connection requirements.
   2. Submit manufacturer's parts lists, and templates.

C. Manufacturer's Installation Instructions: Submit special procedures, and perimeter conditions requiring special attention.

D. Keys and Keying:
   1. All keying nomenclature shall be prepared using symbols, nomenclature and overall method as described in ASAHC NBHA Handbook – AIA File.
   2. Hardware supplier shall provide keying in accordance with instructions of Owner and Architect/Engineer.
   3. Before hardware is ordered, a complete keying schematic drawing shall be furnished to Architect/Engineer for approval.
   4. All bitting records shall be delivered to Owner for use/reference on future projects.

1.4 CLOSEOUT SUBMITTALS

A. Section 01 70 00 - Execution and Closeout Requirements: Closeout procedures.

B. Operation and Maintenance Data: Submit data on operating hardware, lubrication requirements, and inspection procedures related to preventative maintenance.

1.5 QUALITY ASSURANCE

A. Perform Work in accordance with the following requirements:
   1. ANSI A156 series.
   2. NFPA 80.
   3. UL 305.

B. Furnish hardware marked and listed in BHMA Directory of Certified Products.

1.6 QUALIFICATIONS

A. Manufacturer: Company specializing in manufacturing products specified in this section with minimum ten years experience.

B. Hardware Supplier: Company specializing in supplying commercial and institutional door hardware with minimum ten years documented experience.

C. Hardware Supplier Personnel: Employ Architectural Hardware Consultant (AHC) to assist in work of this section.

1.7 PRE-INSTALLATION MEETINGS

A. Section 01 30 00 - Administrative Requirements: Pre-installation meeting.

B. Convene minimum one week prior to commencing work of this section.

C. Include persons involved with installation of doors, frames, and hardware.

1.8 DELIVERY, STORAGE, AND HANDLING

A. Section 01 60 00 - Product Requirements: Product storage and handling requirements.

B. Package hardware items individually with necessary fasteners, instructions, and installation templates, when necessary; label and identify each package with door opening code to match hardware schedule.

1.9 COORDINATION

A. Section 01 30 00 - Administrative Requirements: Coordination and project conditions.

B. Coordinate Work with other directly affected sections involving manufacture or fabrication of internal reinforcement for door hardware and recessed items.
   1. Provide templates or actual hardware as required to ensure proper preparation of doors and frames.

C. Sequence installation to accommodate required utility connections.

D. Coordinate Owner's keying requirements during course of Work.

1.10 WARRANTY

A. Section 01 70 00 - Execution and Closeout Requirements: Product warranties and product bonds.

B. Furnish five year manufacturer warranty for locksets and door closers.

1.11 MAINTENANCE MATERIALS

A. Section 01 70 00 - Execution and Closeout Requirements: Maintenance materials.

B. Furnish special wrenches, tools, and accessories applicable for each different and for each special hardware component supplied by hardware component manufacturer.

PART 2 PRODUCTS

2.1 DOOR HARDWARE

A. Manufacturers: Catalog numbers of manufacturers listed have been used to establish quality required. Only manufacturers listed in Paragraph B below are approved. Other manufacturers seeking approval shall do so in writing per General Requirements and shall list exact catalog numbers and description of items he proposes to furnish; include reference to this specification section for equal product reference; include cut sheets.

B. Designations: Following abbreviations identify listed manufacturers.
   1. BAL Baldwin Hardware Mfg. Corp., Reading, PA.
   2. BES Best Access Systems, Indianapolis, IN.
   3. COR Corbin-Russwin Architectural Hardware, Berlin, CT.
   4. DOR Dorma Architectural Hardware, Reamstown, PA.
   5. GJ Glynn-Johnson, Div. of Dayton-Walter Corp, Chicago, IL.
   6. HAG Hager Hinge Co., St. Louis, MO.
   7. HOR Horton Automatics, Corpus Christi, TX.
   8. IVE Ives, Div. of Leigh Products, New Haven, CT.
   9. LAW Lawrence Brothers, Inc., Sterling, IL.
   10. LCN LCN Closer, Princeton, IL.
   11. MCK McKinney Products Co., Scranton, PA.
   12. NAT National Guard Products, Memphis, TN.
   13. NOR Norton Door Controls, Charlotte, NC.
   14. PEM Pemko, Ventura, CA.
   15. RED Reed Exit Hardware, Charlotte, NC.
   16. REE Reese Enterprises, Inc., Rosemount, MN.
   17. RIX Rixson-Firemark, Franklin Park, IL.
   18. ROC Rockwood Manufacturing Co., Rockwood, PA.
   19. SAR Sargent, Div. of Kidde, New Haven, CT.
   20. SCH Schlage Lock Co., Palatine, IL.
   21. STA Stanley Hardware, New Britain, CT.
   22. VON Von DuPrin, Indianapolis, IN.

2.2 COMPONENTS

A. General Hardware Requirements: Where not specifically indicated, comply with applicable ANSI A156 standard for type of hardware required. Furnish each type of hardware with accessories as required for applications indicated and for complete, finished, operational doors.
   1. Templates: Furnish templates or physical hardware items to door and frame manufacturers sufficiently in advance to avoid delay in Work.
   2. Reinforcing Units: Furnished by door and frame manufacturers; coordinated by hardware supplier or hardware manufacturer.
   3. Fasteners: Furnish as recommended by hardware manufacturer and as required to secure hardware.
   4. Finish: Match hardware item being fastened.

B. Hinges: Continuous hinge, manufactured of 6063-T6 aluminum.
   1. Components: Two interlocking geared leaves and a cover channel applied the full length of the door without mortising (concealed).
      a. Ensure separation of different metals to avoid galvanic corrosion.

C. Locksets: Furnish locksets compatible with specified cylinders. Typical 2-3/4 inch backset for interior doors and 3-3/4 inch backset for exterior doors. Furnish standard strikes with extended lips to protect trim from being marred by latch bolt.
   1. Bored (Cylindrical) Locksets: ANSI A156.2, Series 4000, Grade 1 unless otherwise indicated.
   2. Auxiliary Locksets: ANSI A156.5, Grade 1, mortise dead locks unless otherwise indicated.

D. Exit Devices: ANSI A156.3, Grade 1 surface mounted vertical rod type and rim type, with push pad, unless otherwise indicated. Furnish standard strikes with extended lips to protect trim from being marred by latch bolt verify type of cutouts provided in metal frames, with dust-proof floor strikes.
   1. Types: Suitable for doors requiring exit devices.
   2. Coordinators: Furnish overhead concealed in frame type at pairs of doors.
   3. All exit devices shall be UL listed for panic. Exit devices for labeled doors shall be UL listed as "Fire Exit Hardware".
   4. Provide exit devices factory cut to door width and height. Locate exit devices at a height recommended by the exit device manufacturer, allowable by governing building codes, and approved by the Architect/Engineer.
   5. Provide hex key cylinder-dogging feature for non-rated exit devices.

E. Closers: ANSI A156.4 modern type with cover, surface mounted closers; full rack and pinion type with steel spring and non-freezing hydraulic fluid; closers required for fire rated doors unless otherwise indicated.
   1. Adjustability: Furnish controls for regulating closing, latching, speeds, and back checking.
   2. Arms: Type to suit individual condition; parallel-arm closers at reverse bevel doors and where doors swing full 180 degrees.
   3. Location: Mount closers on inside of exterior doors, room side of interior doors typical; mount on pull side of other doors.
   4. Operating Pressure: Maximum operating pressure as follows.
      a. Interior Doors: Maximum 5 pounds.
      b. Exterior Doors: 8.5 pounds.
      c. Fire Rated Doors: As required for fire rating, maximum 15 pounds.

F. Weatherstripping: Furnish continuous weatherstripping at top and sides of exterior doors.

G. Thresholds: Maximum 1/2 inch height; thermally broken.

H. Kickplates: Furnish as indicated in Schedule, with accessories as required for complete operational door installations.
   1. Kickplates: ANSI A156.6, metal; height indicated in Schedule by 2 inch less than door width; minimum 0.050 inch thick stainless steel.

I. Deadbolts:

J. Push / Pulls:

K. Gaskets: Fire rated, furnish continuous fire rated gaskets at top and sides of fire rated doors.

2.3 ACCESSORIES

A. Lock Trim: Furnish levers as indicated in Schedule.
   1. Do not permit through bolts on solid wood core doors.

B. Through Bolts: Do not permit through bolts and grommet nuts on door faces in occupied areas unless no alternative is possible.
   1. Do not use through bolts on solid wood core doors.

2.4 FINISHING

A. Finishes: ANSI A156.18; furnish following finishes except where otherwise indicated in Schedule at end of section.
   1. Typical Exterior Exposed and High Use Interior Door Hardware:
      a. BHMA 630, satin finished stainless steel.
      b. BHMA 626, satin chromium plated brass or bronze.
   2. Typical Interior Door hardware:
      a. BHMA 626, satin chromium plated brass or bronze.
      b. BHMA 630, satin finished stainless steel.
   3. Closers: Finish appearance to match door hardware on same face of door.
      a. BHMA 628, satin aluminum, clear anodized.
   4. Thresholds: Finish appearance to match door hardware on exterior face of door.
      a. BHMA 628, satin aluminum, clear anodized.
      b. BHMA 630, satin finished stainless steel.
   5. Other Items: Furnish manufacturer's standard finishes to match similar hardware types on same door, and maintain acceptable finish considering anticipated use and BHMA category of finish.

2.5 PRODUCTS

A. Hinges:
   1. Hinges: Continuous, geared aluminum, heavy duty, concealed left 180 degree opening, clear anodized at interior doors.
      a. Manufacturers:
         1) HAG – 780-112HD.
         2) MCK – 12 HD.
         3) PEM – CFM83 SLFHD.

B. Locksets:
   1. Lockset: Cylindrical, heavy duty, classroom function (F84).
      a. Manufacturer:
         1) SCH – ND 94 PD -RHO.
         2) No substitutions.
   2. Lockset: Cylindrical, heavy duty, office function (F82).
      a. Manufacturer:
         1) SCH - ND 91 PD -RHO.
         2) No substitutions.
   3. Lockset: Cylindrical, heavy duty, privacy function (F76).
      a. Manufacturer:
         1) SCH - ND 40 S -RHO.
         2) No substitutions.

C. Exit Devices: (Lockset manufacturer shall provide cylinders for exit devices).
   1. Fire rated, touch bar, surface mounted, rim type, lever handle, interchangeable core, US26D X US32D push bar.
      a. Manufacturer:
         1) VON-99L-F.
         2) COR – ED5200A X N9.
         3) SAR – 12 8810 X ETL
   2. Fire rated, touch bar, surface mounted, vertical rod, lever handle, interchangeable core, dustproof flush floor strike, extension rods as required, US26D X US32D push bar.
      a. Manufacturer:
         1) VON – 9927L-f
         2) COR – ED5400 X N9.
         3) SAR – 12-8713 X ETL.

D. Closers:
   1. Closer: Universal, non-handed, parallel arm.
      a. Manufacturer:
         1) LCN – 4041 Series.
         2) COR – DC8200 Series.
         3) SAR – 281 P Series.
   2. Closer: Universal, non-handed, parallel arm with built-in cushioned stop.
      a. Manufacturer:
         1) LCN – 4041 Series with Spring Cush Arm.
         2) COR – DC8200 X A11 Series.
         3) SAR – 281-CPS Series.
   3. Closer: Universal, non-handed, parallel arm with built-in cushioned stop and hold-open function.
      a. Manufacturer:
         1) LCN – 4041-3049 SC Series.
         2) COR – DC8200 X A12 Series.
         3) SAR – 281-CPSH Series.

E. Weatherstrip:
   1. Doorframe: Head and jamb, surface mount.
      a. Manufacturer:
         1) NAT – 130NA.
         2) PEM – 315CR
         3) REE – DS 78A.
   2. Door Bottom: Sill protection.
      a. Manufacturer:
         1) NAT – 200NA.
         2) PEM – 315CN
         3) REE – 323A.
   3. Door Top: Drip strip, frame mount.
      a. Manufacturer:
         1) NAT – 16AD.
         2) PEM – 346C
         3) REE – R201A.

F. Thresholds:
   1. Flat saddle, aluminum, 6 inches x ½ inch.
      a. Manufacturer:
         1) NAT – 426.
         2) PEM – 172A
         3) REE – S206A.

G. Kickplates:
   1. Kickplate: Stainless steel, 0.050 inch thick, beveled three sides, 12 inches high x 2 inches less door width.
      a. Manufacturer:
         1) IVE – 8400 Series.
         2) HAG – 193S Series.

H. Cylinders:
   1. Cylinder, 6 pin.
      a. Provide and install Schlage core and key blank to match Owner's keying system. Contractor to provide all components related to locking and latching of doors. No substitutions.
         1) Contractor to provide temporary construction cylinders and cores.
         2) Contractor to provide all final cylinders and cores.
         3) Owner to provide keying.

I. Deadbolt: Auxiliary Locksets: ANSI A156.5, Grade 1, bored dead locks unless otherwise indicated.
   1. SCH - Deadbolt matching grade, quality and keying requirements of specified locksets, cylinders and cores.

J. Push / Pull: Wrought, 0.050 inches thick, beveled edges, pull cast.
   a. Manufacturers:
      1) BAL – 2123 push x 2365 push/pull.
      2) IVE – 8200 3.5 x 15 push; 8200 x 15 x 8102-8 push/pull.
      3) ROC – 70B push x 107 x 70B push/pull.

K. Gaskets: Smoke and draft control.
   1. Doorframe: Head and jamb, surface mount, self-adhesive silicone bulb, color as selected by Architect/Engineer.
      a. Manufacturer:
         1) NAT – 5050.
         2) PEM – S88
         3) REE – 638CH.

PART 3 EXECUTION

3.1 EXAMINATION

A. Section 01 30 00 - Administrative Requirements: Coordination and project conditions.

B. Verify doors and frames are ready to receive door hardware and dimensions are as indicated on shop drawings.

3.2 INSTALLATION

A. Coordinate mounting heights with door and frame manufacturers. Use templates provided by hardware item manufacturer.

B. Mounting Heights From Finished Floor to Center Line of Hardware Item: Comply with manufacturer recommendations and applicable codes where not otherwise indicated.
   1. Locksets: 38 inch.
   2. Push/Pulls: 42 inch.
   3. Push Pad Type Exit Devices: 42 inch.
   4. Dead Locks: 48 inch.

3.3 FIELD QUALITY CONTROL

A. Section 01 70 00 - Execution Requirements: Testing, adjusting, and balancing.

B. Architectural Hardware Consultant inspect installation and certify hardware and installation has been furnished and installed in accordance with manufacturer's instructions and as specified.

3.4 ADJUSTING

A. Section 01 70 00 - Execution Requirements: Testing, adjusting, and balancing.

B. Adjust hardware for smooth operation.

3.5 PROTECTION OF INSTALLED CONSTRUCTION

A. Section 01 70 00 - Execution Requirements: Protecting installed construction.

B. Do not permit adjacent work to damage hardware or hardware finish.

3.6 SCHEDULES

A. The following hardware sets are intended to establish type and standard of quality when used together with these section requirements. **Equal products from other manufacturers approved in Part 2 are acceptable. Equal products shall be compatible with all other components of hardware sets (including items indicated "No Substitutions"), and Owner's specified cylinder, core and keying system.** Examine Drawings and Specifications **and furnish proper hardware** for door openings.

B. Where a pair of doors is installed, items listed are per leaf, except locks where inactive door is listed.
   1. Group 1: Doors C1, C2 and W7.
      a. Closer: #2.
      b. All other hardware is existing hardware.
   2. Group 2: Doors E2 and Z4.
      a. Lockset: #2.
      b. All other hardware is existing.
      c. Remove existing lockset.
   3. Group 3: Doors A, A2, B, C, D1, D2, F, G, G2, I1, I2, J, K, L, M, N, P, Q, R and X.
      a. Hinge: #1.
      b. Kickplate: #1.
      c. Closer: #2.
      d. Salvage and reinstall existing lockset.
   4. Group 4: Doors E, H, U1, U8, W1, W2, W3, Z2.
      a. Hinge: #1.
      b. Kickplate: #1.
      c. Closer: #2.
      d. Lockset: #2.
      e. Gasket: #1 (less Door U8).
   5. Group 5: Doors 16, 17, 18 and 19.
      a. Hinge: #1.
      b. Kickplate: #1.
      c. Closer: #3.
      d. Push / Pull: #1.
   6. Group 6: Doors F1, G1, X1, X2, X3, X4, U2, U3, U4, Z3 and Z7.
      a. Hinge: #1.
      b. Closer: #2.
      c. Lockset: #1.
      d. Gasket: #1.
   7. Group 7: Doors AV and V (2).
      a. Hinge: #1.
      b. Closer: #1.
      c. Exit Device: #2 (night latch).
      d. Gasket: #1.
      e. Salvage and reinstall existing fire alarm magnets.

8. Group 8: Door W5.
    a. Hinge: #1.
    b. Kickplate: #1.
    c. Closer: #3.
    d. Lockset: #3.
9. Group 9: Door U5.
    a. Hinge: #1.
    b. Closer: #3.
    c. Push / Pull: #1.
    d. Deadbolt: #1 (keyed both sides of door).
10. Group 10: Doors 6A and 7.
    a. Hinge: #1.
    b. Closer: #3.
    c. Exit Device: #2.
    d. Threshold: #1.
    e. Weatherstriping: #1, #2, #3.

END OF SECTION

SECTION 08 80 00 - GLAZING

PART 1 GENERAL

1.1 SUMMARY

A. Section includes glass glazing, rated and non-rated for hollow metal doors, hollow metal door frames and flush wood doors.

B. Related Sections:
   1. Section 07 90 00 - Joint Protection: Sealant and back-up material other than glazing sealants.
   2. Section 08 87 13 – Glazing Film.

1.2 REFERENCES

A. American National Standards Institute:
   1. ANSI Z97.1 - Safety Glazing Materials Used in Buildings Safety.

B. American Society of Civil Engineers:
   1. ASCE 7 - Minimum Design Loads for Buildings and Other Structures.

C. ASTM International:
   1. ASTM C864 - Standard Specification for Dense Elastomeric Compression Seal Gaskets, Setting Blocks, and Spacers.
   2. ASTM C920 - Standard Specification for Elastomeric Joint Sealants.
   3. ASTM C1036 - Standard Specification for Flat Glass.
   4. ASTM C1048 - Standard Specification for Heat-Treated Flat Glass-Kind HS, Kind FT Coated and Uncoated Glass.
   5. ASTM C1172 - Standard Specification for Laminated Architectural Flat Glass.
   6. ASTM C1193 - Standard Guide for Use of Joint Sealants.
   7. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
   8. ASTM E90 - Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements.
   9. ASTM E119 - Standard Test Methods for Fire Tests of Building Construction and Materials.
   10. ASTM E330 - Standard Test Method for Structural Performance of Exterior Windows, Curtain Walls, and Doors By Uniform Static Air Pressure Difference.
   11. ASTM E576 - Standard Test Method for Frost Point of Sealed Insulating Glass Units in the Vertical Position.
   12. ASTM E773 - Standard Test Methods for Seal Durability of Sealed Insulating Glass Units.
   13. ASTM E774 - Standard Specification for Sealed Insulating Glass Units.

D. Consumer Products Safety Commission:
   1. CPSC 16 CFR 1201 - Safety Standard for Architectural Glazing.

E. Glass Association of North America:
   1. GANA - Sealant Manual.
   2. GANA - Glazing Manual.

F. National Fire Protection Association:
   1. NFPA 80 - Standard for Fire Doors, Fire Windows.
   2. NFPA 252 - Standard Methods of Fire Tests of Door Assemblies.

G. Underwriters Laboratories Inc.:
   1. UL 10C - Positive Pressure Fire Tests of Door Assemblies.
   2. UL - Building Materials Directory.

1.3 PERFORMANCE REQUIREMENTS

A. Interior Glass Deflection: Design glass partition system to withstand live loads in accordance with 2009 International Building Code with maximum L/120 deflection.

1.4 SUBMITTALS

A. Section 01 33 00 - Submittal Procedures: Submittal procedures.

B. Product Data:
   1. Glass: Provide structural, physical, and thermal and solar optical performance characteristics, size limitations, special handling or installation requirements.
   2. Glazing Sealants, Compounds and Accessories: Provide chemical, functional, and environmental characteristics, limitations, special application requirements. Identify full range of available colors where exposed.

C. Design Data:
   1. Submit design calculations for glass resisting wind loads and live loads signed and sealed by a professional engineer licensed in the State of Missouri.

D. Samples:
   1. Glass: Submit two samples 12 x 12 inch in size, illustrating each glass units, coloration and design.
   2. Glazing Materials: Submit 12 inch long bead of glazing sealant and gaskets, color as selected.

E. Manufacturer's Certificate: Certify sealed insulating glass, meets or exceeds specified requirements.

1.5 QUALITY ASSURANCE

A. Perform Work in accordance with GANA Glazing Manual for glazing installation methods.

B. Fire Rated Door Glazing: Tested in accordance with one of the following and complying with NFPA 80.

C. Apply label from agency approved by authority having jurisdiction to identify each fire rated glass lite.

1.6 QUALIFICATIONS

A. Installer: Company specializing in performing Work of this section with minimum three years experience.

B. Design glass resisting wind and live loads under direct supervision of Professional Engineer experienced in design of this Work and licensed in State of Missouri.

1.7 ENVIRONMENTAL REQUIREMENTS

A. Section 01 60 00 - Product Requirements.

B. Do not install glazing when ambient temperature is less than 50 degrees F.

C. Maintain minimum ambient temperature before, during and 24 hours after installation of glazing compounds.

1.8 WARRANTY

A. Section 01 70 00 - Execution and Closeout Requirements: Product warranties and product bonds.

B. Furnish ten year warranty to include coverage for sealed glass units from seal failure, interpane dusting or misting, and replacement of same.

PART 2 PRODUCTS

2.1 GLAZING

A. Manufacturers:
   1. PPG Industries, Inc.
   2. Pilkington LOF.
   3. Nippon Electric Glass Company, Ltd.
   4. SAFTI *FIRST* Fire Rated Glazing Solutions.
   5. Substitutions: Section 01 60 00 – Product Requirements.

2.2 FLOAT GLASS PRODUCTS

A. Safety Glass (Type SG): CPSC 16 CFR 1201 Category II, minimum thickness 1/4 inch unless otherwise indicated. Safety glass shall be labeled and label shall be visible after glazing.
   1. Clear Tempered Glass (Type SG-CT): ASTM C1048, Kind FT Fully tempered, Condition A, uncoated, Type 1 transparent flat, Class 1 clear, Quality q3 glazing select; with horizontal tempering and Low E coating.

2.3 FIRE RESISTIVE GLASS PRODUCTS

A. Fire Protective Glass (Type FP): FireLite Plus or Pyran Platimum L, laminated ceramic safety glazing conforming to NFPA 252 and ANSI Z97.1. Fire Protective Glass shall be permanently labeled and label shall be visible after glazing.
   1. Fire Rating: 60 and 20 minutes as indicated on Drawings.
   2. Glass Thickness: 5/16 to 3/8 inch.
   3. Visible Light Transmittance: 85 percent minimum.
   4. Weight: 4 pounds per square foot.
   5. STC: 36 minimum.
   6. Safety Rating: CPSC Category II.

2.4 INSULATED METAL PANELS

A. Manufacturers:
   1. Mapes.
   2. Laminators Inc.
   3. Citadel Architectural Products.

B. Panel Fabrication:
   1. Exterior Skin: Pre-finished aluminum.
   2. Exterior Substrate: Solid plastic.
   3. Core: Polystyrene.
   4. Interior Substrate: Solid plastic.
   5. Interior Skin: Pre-finished aluminum.
   6. Tolerance: 0.8 percent of panels dimension length and width.
   7. Panel Thickness: 1 inch.

C. Finish:
   1. Exterior: Standard Kynar.
   2. Interior: Standard Kynar.
   3. Color: As selected by Architect / Engineer from manufacturer’s full color range.
   4. Surface Texture: Smooth.

2.5 ACCESSORIES

A. Elastomeric Glazing Sealants: Materials compatible with adjacent materials including glass, insulating glass seals, and glazing channels.
   1. Silicone Glazing Sealant: ASTM C920, Type S, Grade NS, Class and Use suitable for glazing application indicated; single component; chemical curing; capable of water immersion without loss of properties; non-bleeding, non-staining, cured Shore A hardness of 15 to 25.
      a. Acceptable Manufacturers and products:
         1) General Electric – “Silpruf”.
         2) General Electric – “Silglaze 2400”.
         3) Woodmount Products – “Chem-Caulk 1000”.
         4) Dow Corning – “790”.
         5) Pecora – “863”.

b. Color: As selected by Architect / Engineer.
c. Structural Silicone: Furnish high-modulus structural silicone glazing materials where sealant bonds glass to substrate.

B. Glazing Gaskets: ASTM C864 Option I or II, resilient polyvinyl chloride extruded shape to suit glazing channel retaining slot.
1. Color: Black.

C. Pre-Formed Glazing Tape: Size to suit application.
1. Glazing Tape: Closed cell polyvinyl chloride foam, coiled on release paper over adhesive on two sides, maximum water absorption by volume of 2 percent, designed for compression of 25 percent to effect an air barrier and vapor retarder seal.

D. Setting Blocks: ASTM C864 Option I, Neoprene, 80 to 90 Shore A durometer hardness, length of 0.1 inch for each square foot of glazing or minimum 4 inch x width of glazing rabbet space minus 1/16 inch x height to suit glazing method and pane weight and area.

E. Spacer Shims: ASTM C864 Option I, Neoprene, 50 to 60 Shore A durometer hardness, minimum 3 inch long x one half the height of glazing stop x thickness to suit application, self adhesive on one face.

PART 3 EXECUTION

3.1 EXAMINATION

A. Section 01 30 00 - Administrative Requirements: Coordination and project conditions.

B. Verify openings for glazing are correctly sized and within acceptable tolerance.

C. Verify surfaces of glazing channels or recesses are clean, free of obstructions impeding moisture movement, weeps are clear, and ready to receive glazing.

3.2 PREPARATION

A. Clean contact surfaces with solvent and wipe dry.

B. Seal porous glazing channels or recesses with substrate compatible primer or sealer.

C. Prime surfaces scheduled to receive sealant.

3.3 INSTALLATION

A. Perform installation in accordance with GANA Glazing Manual.
1. Glazing Sealants: Comply with ASTM C1193.
2. Fire Rated Openings: Comply with NFPA 80.

B. Interior Wet/Dry Method (Tape and Sealant) Installation:
   1. Cut glazing tape to length and install against permanent stops, projecting 1/16 inch above sight line.
   2. Place setting blocks at 1/4 points with edge block no more than 6 inches from corners.
   3. Rest glazing on setting blocks and push against tape to ensure full contact at perimeter of pane or unit.
   4. Install removable stops, spacer shims inserted between glazing and applied stops at 24 inch intervals, 1/4 inch below sight line.
   5. Fill gaps between pane and applied stop with elastomeric glazing sealant to depth equal to bite on glazing, to uniform and level line.
   6. Trim protruding tape edge.

C. Interior Wet Method (Compound and Compound) Installation:
   1. Install glazing resting on setting blocks. Install applied stop and center pane by use of spacer shims at 24-inch centers, kept 1/4 inch below sight line.
   2. Locate and secure glazing pane using glazers' clips.
   3. Fill gaps between glazing and stops with glazing compound until flush with sight line. Tool surface to straight line.

3.4 FIELD QUALITY CONTROL

A. Section 01 70 00 - Execution and Closeout Requirements: Field inspecting, testing, adjusting, and balancing.

B. Monitor quality of glazing.

3.5 CLEANING

A. Section 01 70 00 - Execution and Closeout Requirements: Final cleaning.

B. Remove glazing materials from finish surfaces.

C. Remove labels after Work is complete.

D. Clean glass and adjacent surfaces.

3.6 PROTECTION OF INSTALLED CONSTRUCTION

A. Section 01 70 00 - Execution and Closeout Requirements: Protecting installed construction.

B. After installation, mark pane with an 'X' by using removable plastic tape or paste.

END OF SECTION

SECTION 08 87 13

GLAZING FILM

PART 1 GENERAL

1.1 SUMMARY

A. Section includes safety and security films.
   1. Glass glazing materials and installation requirements are included in this section for other sections referencing this section.

B. Related Sections:
   1. Section 08 80 00 – Glazing.

1.2 REFERENCES

A. ASHRAE – American Society for Heating, Refrigeration, and Air Conditioning Engineers; Handbook of Fundamentals

B. ASTM International:
   1. ASTM D882 - Standard Test Method for Tensile Properties of Thin Plastic Sheeting.
   2. ASTM D1004 - Standard Test Method for Tear Resistance (Graves Tear) of Plastic Film and Sheeting.
   3. ASTM D1044 - Standard Method of Test for Resistance of Transparent Plastics to Surface Abrasion (Taber Abrader Test).
   4. ASTM D2582 - Standard Test Method for Puncture-Propagation Tear Resistance of Plastic Film and Thin Sheeting.
   5. ASTM D4830 - Standard Test Methods for Characterizing Thermoplastic Fabrics Used in Roofing and Waterproofing.
   6. ASTM E84 - Standard Method of Test for Surface Burning Characteristics of Building Materials.
   7. ASTM E308 – Standard Recommended Practice for Spectophotometry and Description of Color in CIE 1931 System.
   8. ASTM E903 – Standard Methods of Test for Solar Absorbance, Reflectance and Transmittance of Materials Using Integrating Spheres.
   9. ASTM E1886 – Standard Test Method for Performance of Exterior Windows, Curtain Walls, Doors, and Impact Protective Systems Impacted by Missile(s) and Exposed to Cyclic Pressure Differentials.
   10. ASTM E1996 – Standard Specification for Performance of Exterior Windows, Curtain Walls, Doors and Impact Protective Systems Impacted by Windborne Debris in Hurricanes.

C. ANSI Z97.1 – American National Standard for Safety Glazing Materials Used in Buildings – Safety Performance Specifications and Methods of Test.

D. Consumer Products Safety Commission:
   1. CPSC 16 CFR 1201 - Safety Standard for Architectural Glazing.

E. GSA Standard Test for Glazing and Glazing Systems Subject to Airblast Loadings.

F. ISO 16933 – International Standard for Glass in Building:
   1. Explosion-resistant security glazing – Test and classification for arena air-blast testing

G. Underwriters Laboratories Inc.:
   1. UL 972 – Burglary Resisting Glazing Materials.

1.3 PERFORMANCE REQUIREMENTS

A. Fire Performance: Surface burning characteristics – ASTM E84:
   1. Flame Spread: 30, maximum.
   2. Smoke Developed: 450, maximum.

B. Abrasion Resistance: Film must have a surface coating that is resistant to abrasion such that, less than 5 percent increase of transmitted light haze will result in accordance with ASTM D1044.

1.4 SUBMITTALS

A. Section 01 33 00 - Submittal Procedures: Submittal procedures.

B. Product Data – Manufacturer’s data sheets on each product to be used, including:
   1. Preparation instructions and recommendations.
   2. Storage and handling requirements and recommendations.
   3. Installation methods.

C. Samples:
   1. Submit two samples 12 x 12 inch in size, illustrating each film specified, representing coloration and design.

D. Manufacturer's Certificate: Certify film meets or exceeds specified requirements.

1.5 QUALIFICATIONS

A. Manufacturer: All primary products specified in this section shall be supplied by a single manufacturer with a minimum three years experience.

B. Installer: Company specializing in performing Work of this section with minimum three years experience.

C. Design glass resisting wind and live loads under direct supervision of Professional Engineer experienced in design of this Work and licensed in State of Illinois.

1.6 ENVIRONMENTAL REQUIREMENTS

A. Section 01 60 00 - Product Requirements.

B. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer. Do not install products under environmental conditions outside of manufacturer’s absolute limits.

1.7 WARRANTY

A. Section 01 70 00 - Execution and Closeout Requirements: Product warranties and product bonds.

B. Furnish minimum 10 year manufacturer's warranty.

PART 2 PRODUCTS

2.1 GLAZING

A. Manufacturers:
   1. 3M Window Film – Ultra S600 series.
   2. Substitutions: Section 01 60 00 – Product Requirements.

2.2 COMPONENTS

A. Clear Microlayered Safety and Security Window Film.
   1. Clear Microlayered Safety and Security Window Film – Optically clear micro-layered polyester film:
      a. Film Color: Clear.
      b. Thickness: Nominal 6.0 mils.
      c. Tensile Strength (ASTM D882): 30,000 pounds per square inch.
      d. Break Strength (ASTM D882): 180 punds (per inch width).
      e. Tear Resistance ASTM D1004): 1,150 pounds.
      f. Puncture Propagation Tear (ASTM D882): 500 kpsi.
   2. Uniformity – No noticeable pin holes, streaks, thin spots, scratches, banding, or other optical defects.
   3. Variation in Total Transmission Across the Width:
      a. Less than 2 percent over the average at any portion along the length.
   4. Solar Performance Properties:
      a. Visible Light Transmission (ASTM E903): 84 percent.
      b. Visible Reflection (ASTM E903): Not more than 9 percent.
      c. Solar Heat Gain Coefficient (ASTM E903): 0.82.
   5. Impact Resistance for Safety Glazing:
      a. Safety Rating (CPSC 16 CFR, Part 1201): Category II (400 ft.-lbs).
      b. Safety Rating (ANSI Z97.1): Class A, Unlimited Size.
   6. Windstorm Protection – Film shall pass impact of Medium Large Missile "C" and withstand subsequent pressure cycling (ASTM E1996 and E1886) at 50 psf Design Pressure.

2.3 ACCESSORIES

A. General:
   1. Provide accessories either manufactured by or acceptable to safety and security film manufacturer for application indicated, and with a proven record of compatibility with surfaces contacted in installation.

B. Adhesive:
   1. Weatherable, acrylic pressure-sensitive acrylic type as recommended by safety and security film manufacturer. Protect adhesive from contamination.

C. Cleaners, Primers, and Sealers:
   1. Types recommended by safety and security film manufacturer.

PART 3 EXECUTION

3.1 EXAMINATION

A. Section 01 30 00 - Administrative Requirements: Coordination and project conditions.

B. Verify glass surfaces receiving new film are free from defects and imperfections that deviate from the manufacturer's recommended installation tolerances and conditions, which will affect the final appearance.

3.2 PREPARATION

A. Clean surfaces thoroughly prior to installation.

B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

C. Protect window frames and surrounding surfaces to prevent damage during installation.

3.3 INSTALLATION

A. Install in accordance with manufacturer's instructions.

B. Install film continuously, with no gaps or overlaps.

C. Install film with mounting solution and custom cut film edges neatly and square at a uniform distance of 1/8 inch of window sealant.

D. Remove air bubbles, blister, and other defects.

3.4 FIELD QUALITY CONTROL

A. Section 01 70 00 - Execution and Closeout Requirements: Field inspecting, testing, adjusting, and balancing.

B. Monitor quality of film installation.

3.5 CLEANING

A. Section 01 70 00 - Execution and Closeout Requirements: Final cleaning.

B. Remove left over material and debris from Work area.

C. Clean film and adjacent surfaces.

3.6 PROTECTION OF INSTALLED CONSTRUCTION

A. Section 01 70 00 - Execution and Closeout Requirements: Protecting installed construction.

B. Use necessary means to protect film before, during, and after installation.

END OF SECTION

SECTION 09 90 00 - PAINTING AND COATING

PART 1 GENERAL

1.1 SUMMARY

A. Section includes surface preparation and field application of paints and other coatings.

1.2 REFERENCES

A. ASTM International:
   1. ASTM D16 - Standard Terminology Relating to Paint, Varnish, Lacquer, and Related Products.
   2. ASTM D4442 - Standard Test Methods for Direct Moisture Content Measurement of Wood and Wood-Base Materials.
   3. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.

B. Green Seal:
   1. GC-03 - Anti-Corrosive Paints.
   2. GS-11 - Product Specific Environmental Requirements.

C. National Fire Protection Association:
   1. NFPA 255 - Standard Method of Test of Surface Burning Characteristics of Building Materials.

D. Painting and Decorating Contractors of America:
   1. PDCA - Architectural Painting Specification Manual.

E. South Coast Air Quality Management District:
   1. SCAQMD Rule 1113 - Architectural Coatings.

F. SSPC: The Society for Protective Coatings:
   1. SSPC - Steel Structures Painting Manual.

G. Underwriters Laboratories Inc.:
   1. UL 723 - Tests for Surface Burning Characteristics of Building Materials.

1.3 DEFINITIONS

A. Conform to ASTM D16 for interpretation of terms used in this section.

1.4 SUBMITTALS

A. Section 01 33 00 - Submittal Procedures: Submittal procedures.

B. Product Data: Submit data on finishing products and special coatings.

C. Samples:
   1. Submit two paper chip samples illustrating full range of colors available for each surface finishing product scheduled.

D. Manufacturer's Installation Instructions: Submit special surface preparation procedures, and substrate conditions requiring special attention.

1.5 CLOSEOUT SUBMITTALS

A. Section 01 70 00 - Execution and Closeout Requirements: Closeout procedures.

B. Operation and Maintenance Data: Submit data on cleaning, touch-up, and repair of painted and coated surfaces.

1.6 QUALIFICATIONS

A. Manufacturer: Company specializing in manufacturing products specified in this section with minimum three years documented experience.

B. Applicator: Company specializing in performing Work of this section with minimum three years documented experience and approved by manufacturer.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Section 01 60 00 - Product Requirements: Product storage and handling requirements.

B. Deliver products to site in sealed and labeled containers; inspect to verify acceptability.

C. Container Label: Include manufacturer's name, type of paint, brand name, lot number, brand code, coverage, surface preparation, drying time, cleanup requirements, color designation, and instructions for mixing and reducing.

D. Paint Materials: Store at minimum ambient temperature of 45 degrees F and maximum of 90 degrees F, in ventilated area, and as required by manufacturer's instructions.

1.8 ENVIRONMENTAL REQUIREMENTS

A. Section 01 60 00 - Product Requirements.

B. Do not apply materials when surface and ambient temperatures are outside temperature ranges required by paint product manufacturer.

C. Minimum Application Temperatures for Latex Paints: 45 degrees F for interiors; 50 degrees F for exterior; unless required otherwise by manufacturer's instructions.

D. Provide lighting level of 80 foot candle measured mid-height at substrate surface.

1.9 SEQUENCING

A. Section 01 10 00 - Summary: Work sequence.

B. Verify existing conditions and requirements of other trades before starting Work.

C. Sequence application to the following:
1. Do not apply finish coats until paintable sealant is applied.
2. Back prime wood trim before installation of trim.

1.10 WARRANTY

A. Section 01 70 00 - Execution and Closeout Requirements: Product warranties and product bonds.

B. Furnish five-year manufacturer warranty for paints and coatings.

1.11 EXTRA MATERIALS

A. Section 01 70 00 - Execution and Closeout Requirements: Spare parts and maintenance products.

B. Supply 1 gallon of each color, type, and surface texture; store where directed by Owner.

C. Label container with color, type, and room locations, in addition to manufacturer's label.

PART 2 PRODUCTS

2.1 PAINTS AND COATINGS

A. Manufacturers:
1. The Glidden Co.
2. MAB Paints.
3. Benjamin Moore.
4. Sherwin-Williams.
5. Pittsburg Paints.
6. Substitutions: Not permitted.

2.2 COMPONENTS

A. Coatings: Ready mixed, except field catalyzed coatings. Prepare coatings:
1. To soft paste consistency, capable of being readily and uniformly dispersed to homogeneous coating.
2. For good flow and brushing properties.
3. Capable of drying or curing free of streaks or sags.

B. Accessory Materials: Linseed oil, shellac, turpentine, paint thinners and other materials not specifically indicated but required to achieve finishes specified; commercial quality.

C. Patching Materials: Latex filler.

D. Fastener Head Cover Materials: Latex filler.

PART 3 EXECUTION

3.1 EXAMINATION

A. Verify surfaces and substrate conditions are ready to receive Work as instructed by product manufacturer.

B. Examine surfaces scheduled to be finished prior to commencement of Work. Report conditions capable of affecting proper application.

C. Test shop applied primer for compatibility with subsequent cover materials.

D. Measure moisture content of surfaces using electronic moisture meter. Do not apply finishes unless moisture content of surfaces are below the following maximums:
   1. Plaster and Gypsum Wallboard: 12 percent.
   2. Masonry, Concrete and Concrete Unit Masonry: 12 percent.

3.2 PREPARATION

A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for application preparation.

B. Prepare coatings as follows:
   1. To soft paste consistency, capable of being readily and uniformly dispersed to homogeneous coating.
   2. For smooth flow and brushing properties.

C. Surface Appurtenances: Remove electrical plates, hardware, light fixture trim, escutcheons, and fittings prior to preparing surfaces or finishing.

D. Surfaces: Correct defects and clean surfaces capable of affecting Work of this section. Remove or repair existing coatings exhibiting surface defects.

E. Defects:
   1. Correct defects and clean surfaces capable of affecting Work of this Section.
   2. Remove or repair existing coatings exhibiting surface defects.

F. Marks: Seal with shellac those which may bleed through surface finishes.

G. Impervious Surfaces: Remove mildew by scrubbing with solution of tri-sodium phosphate and bleach. Rinse with clean water and allow surface to dry.

H. Aluminum Surfaces Scheduled for Paint Finish:
   1. Remove surface contamination by steam or high-pressure water.
   2. Remove oxidation with acid etch and solvent washing.
   3. Apply etching primer immediately following cleaning.

I. Galvanized Surfaces: Remove surface contamination and oils and wash with solvent. Apply coat of etching primer.

J. Shop Primed Steel Surfaces: Sand and scrape to remove loose primer and rust. Feather edges to make touch-up patches inconspicuous. Clean surfaces with solvent. Prime bare steel surfaces.

K. Uncoated Steel and Iron Surfaces: Remove grease, mill scale, weld splatter, dirt, and rust. Where heavy coatings of scale are evident, remove by hand wire brushing or sandblasting; clean by washing with solvent. Apply treatment of phosphoric acid solution, ensuring weld joints, bolts, and nuts are similarly cleaned. Spot prime paint after repairs.

L. Metal Doors Scheduled for Painting: Prime metal door top and bottom edge surfaces.

M. Existing Work:
   1. Extend existing paint and coatings installations using materials and methods compatible with existing installations and as specified.

3.3 APPLICATION

A. Multiple colors shall be selected and accent walls shall be a component of the Project.

B. Comply with MPI - Architectural Painting Manual.

C. Do not apply finishes to surfaces that are not dry.

D. Allow applied coats to dry before next coat is applied.

E. Apply each coat to uniform appearance.

F. Apply each coat of paint slightly darker than preceding coat unless specified otherwise.

G. Sand wood and metal surfaces lightly between coats to achieve required finish.

H. Cleaning:
   1. Vacuum surfaces to remove loose particles.
   2. Use tack cloth to remove dust and particles just prior to applying next coat.

I. Fillers:
   1. If clear finishes are required, tint fillers to match wood.
   2. Work fillers into grain before set, and wipe excess from surface.

J. Concealed Surfaces:
   1. Prime concealed surfaces of interior woodwork with primer paint.
   2. Prime concealed surfaces of interior wood surfaces scheduled to receive stain or varnish finish with gloss varnish reduced 25 percent with thinner.

3.4 FIELD QUALITY CONTROL

A. Section 01 70 00 - Execution and Closeout Requirements: Field inspecting, testing, adjusting, and balancing.

B. Inspect and test questionable coated areas.

3.5 CLEANING

A. Section 01 70 00 - Execution and Closeout Requirements: Final cleaning.

B. Collect waste material which may constitute fire hazard, place in closed metal containers, and remove daily from site.

3.6 PROTECTION OF INSTALLED CONSTRUCTION

A. Protect Work of other trades and surfaces not being painted.

B. Automatic fire sprinklers must not be painted and must be protected from paint over spray. Any sprinklers inadvertently painted must be replaced rather than cleaned.

C. Protect completed Work from damage by other trades.

3.7 SCHEDULE - INTERIOR SURFACES

A. Steel:
   1. One coat SW Pro Industrial Pro-Cryl Primer; B66-310 or approved equal.
      a. Two to four mils dry.
   2. Two coats SW ProMar 200 Alkyd Semi-Gloss; B34W200 or approved equal.
      a. Four mils wet, 1.7 mils dry.

B. Steel - Galvanized:
   1. One coat SW Pro Industrial Pro-Cryl Primer; B66-310 or approved equal.
      a. Two to four mils dry.
   2. Two coats SW ProMar 200 Alkyd Semi-Gloss; B34W200 or approved equal.
      a. Four mils wet, 1.7 mils dry per coat.

3.8 SCHEDULE – EXTERIOR SURFACES

A. Steel:
   1. One coat SW Pro Industrial Pro-Cryl Universal Primer, B66-310 Series or approved equal.
      a. Ten mils wet, 4 mils dry.
   2. Two coats SW Metalatex Acrylic Semi-Gloss, B42 Series or approved equal.
      a. Four mils wet, 1.5 mils dry per coat.

B. Steel Galvanized:
   1. Two coats SW Metalatex Semi-Gloss, B42 Series or approved equal.
      a. Four mils wet, 1.5 mils dry per coat.

END OF SECTION